



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING

**NOTICE OF AVAILABILITY**  
**Draft Program Environmental Impact Report (DPEIR) for the**  
**Fresno County General Plan Review and Zoning Ordinance Update**  
**Fresno County, California**  
**April 28, 2023**

**LEAD AGENCY/CONTACT:**

County of Fresno Department of Public Works and Planning  
Development Services Division  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721  
Contact: Chris Motta, Principal Planner

**PROJECT TITLE:** Fresno County General Plan Review and Zoning Ordinance Update  
(SCH#201803106)

**PURPOSE OF THE NOTICE OF AVAILABILITY:**

The County of Fresno Department of Public Works and Planning (County) is the Lead Agency and has prepared a Draft Program Environmental Impact Report (DPEIR) for the above-referenced project. We are requesting input from public agencies regarding information that is germane to the agencies' statutory responsibilities in connection with the Proposed Project. As applicable, those agencies will need to use the DEIR prepared by the County when considering a permit or other approval for the project. We also welcome comments from the members of the public.

The DPEIR is available for online viewing at:

[fresnocountygeneralplan.com](http://fresnocountygeneralplan.com) and CD/electronic copies are available for review at the following locations below, or contact Chris Motta at [cmotta@fresnocountyca.gov](mailto:cmotta@fresnocountyca.gov) or (559) 600-4227 to have a CD mailed to you:

County of Fresno  
Department of Public Works and  
Planning  
Development Services Division  
2220 Tulare Street, Suite B Counter  
Fresno, CA 93721

Fresno County  
Main/Central Library  
2420 Mariposa Street  
Fresno, CA 93721

Fresno County Library  
Auberry Branch  
33049 Auberry Road  
Auberry, CA 93602

Fresno County Library  
Bear Mountain Branch  
30733 E. Kings Canyon  
Squaw Valley, CA 93675

Fresno County Library  
Clovis Branch  
1155 Fifth Street  
Clovis, CA 93612

Coalinga Library  
305 N. 4th Street  
Coalinga, CA 93210

Fresno County Library  
Easton Branch  
25 East Fantz Avenue  
Easton, CA 93706

Fresno County Library  
Fowler Branch  
306 S 7th St.  
Fowler, CA 93625

Fresno County Library  
Kerman Branch  
15081 Kearney Plaza  
Kerman, CA 93630

Fresno County Library  
Laton Branch  
6313 DeWoody Street  
Laton, CA 93242

Fresno County Library Mendota  
Branch  
1246 Belmont Avenue  
Mendota, CA 93640

Fresno County Library  
Orange Cove Branch  
815 Park Blvd.  
Orange Cove, CA 93646

Fresno County Library  
Riverdale Branch  
20975 Malsbary Avenue  
Riverdale, CA 93656

Fresno County Library  
Sanger Branch  
1812 7th St.  
Sanger, CA 93657

Fresno County Library  
Shaver Lake Branch  
41344 Tollhouse Road  
Shaver Lake, CA 93664

Fresno County Library  
Tranquillity Branch  
25561 Williams Street  
Tranquillity, CA 93668

Fresno County Library  
West Fresno Branch  
188 E. California  
Fresno, CA 93706

Fresno County Library  
Woodward Park Branch  
944 E. Perrin  
Fresno, CA 93720

## PROJECT LOCATION

Fresno County is one of the eight counties that collectively form the greater San Joaquin Valley. The County covers approximately 6,000 square miles stretching from the Coast Range mountains to the west to the Sierra Nevada Range to the east. For the purposes of this EIR the Planning Area is defined as unincorporated Fresno County and is the land over which the County has land use authority and where the policies and goals proposed in the General Plan Review and Zoning Ordinance Update are applicable. The County has 15 incorporated cities, with the City of Fresno being the largest at 546,770 and the City of San Joaquin being the smallest with a population of 3,674 as of 2021. For the purpose of the General Plan Review and Zoning Ordinance Update, the County has been divided into five geographic sub-regions to provide greater context. This is because Fresno County is diverse not only in the size of its communities, but also the vast geographic area it covers. These five sub-regions do not have any policy status but are useful for general orientation and for framing and describing geographically unique planning issues. The sub-regions include Coast Range Foothills Area, Westside Valley Area, Eastside Valley Area, Sierra Foothill Area, and Sierra Nevada Mountain Area.

## PROJECT DESCRIPTION

The General Plan Review is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2042. The General Plan Review would accommodate County population growth projected through 2042. The 2042 General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The major themes of the current 2000 General Plan have been retained in the General Plan Review and include directing urban growth to existing communities, limiting the intrusion of development and incompatible land uses onto productive agricultural land, and limiting rural residential development. The revisions include only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document.

Section 65860(c) of the Government Code requires that when a General Plan is amended in a way that makes the Zoning Ordinance inconsistent with the General Plan, “the Zoning Ordinance shall be amended within a reasonable time so that it is consistent with the general plan as amended.” However, the Government Code does not define a specific time period that would constitute a reasonable time. In this instance, the proposed project includes updating the Fresno County Zoning Ordinance to be consistent with the proposed revisions to General Plan Policy Document included in the General Plan Review. Components of the Zoning Ordinance update that could result in physical changes to the environment include the revisions to the regulations for accessory dwelling units, density bonus and other State-mandated changes to California Zoning law which became effective since the adoption of the 2000 General Plan.

### **SIGNIFICANT ENVIRONMENTAL EFFECTS**

The County of Fresno has prepared a Draft EIR to address the specific environmental effects of implementing the General Plan Review and Zoning Ordinance Update. The Draft EIR identified the following potentially significant environmental issue areas requiring mitigation:

- Agriculture
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Noise
- Transportation
- Wildfire

Impacts to Agriculture, Air Quality, Cultural Resources, Greenhouse Gas Emissions, Transportation, Utilities, and Wildfire were found to be significant and unavoidable.

### **DRAFT EIR REVIEW AND COMMENT**

A 60-day review and comment period for this DEIR is provided, which exceeds the 45-day minimum review period provided under State law, **beginning on April 28, 2023**. The deadline for your comments is **5:00 p.m., June 27, 2023**. Please send your response to Chris Motta, Principal Planner, at the address shown above. Please reference “*GPR/ZOU (General Plan Review and Zoning Ordinance Update Project)*” and provide the name and address for a contact person.

### **RELEASE OF PUBLIC REVIEW DRAFTS: (DRAFT GENERAL PLAN POLICY DOCUMENT; GENERAL PLAN BACKGROUND REPORT; AND ZONING ORDINANCE)**

The County is notifying interested agencies, organizations, and individuals of that the release of revised draft documents associated with the General Plan Review and Zoning Ordinance Update will occur simultaneously with the release the DPEIR. A deadline for comments on these documents will coincide with the 60-day comment deadline for the DPEIR. Community meetings will be scheduled soon to provide the public an opportunity to comment on these documents, although comments may be sent to County staff at any time.

April 28, 2023

Fresno County General Plan Review and Zoning Ordinance Update NOA

Page 2

**SCHEDULED PUBLIC MEETING**

Community meetings will be scheduled to provide the public an opportunity to comment on these documents, although comments may be sent to County staff at any time. Meetings are anticipated to occur approximately 30 days after the document release

**FURTHER INFORMATION** on this item may be obtained at the County of Fresno Department of Public Works and Planning located at 2220 Tulare Street, Fresno, California, or by contacting Chris Motta, Principal Planner, at (559) 600-4227. Comments may be e-mailed to: [gpr@fresnocountyca.gov](mailto:gpr@fresnocountyca.gov)



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING

## AVISO DE DISPONIBILIDAD

**Proyecto de Informe de Impacto Ambiental del Programa (DPEIR) para el  
Revisión del Plan General del Condado de Fresno y Actualización de la Ordenanza de  
Zonificación  
Condado de Fresno (California)  
28 de abril de 2023**

### AGENCIA PRINCIPAL/CONTACTO:

Departamento de Obras Públicas y Planificación del Condado de Fresno  
División de Servicios de Desarrollo  
2220 Tulare Street, Sexto Piso  
Fresno, CA 93721  
Contacto: Chris Motta, Planificador Principal

**TÍTULO DEL PROYECTO:** Revisión del Plan General del Condado de Fresno y Actualización de la Ordenanza de Zonificación (SCH#201803106)

### FINALIDAD DEL AVISO DE DISPONIBILIDAD:

El Departamento de Obras Públicas y Planificación del Condado de Fresno (Condado) es la Agencia Principal y ha preparado un Borrador del Informe de Impacto Ambiental del Programa (DPEIR) para el proyecto mencionado anteriormente. Estamos solicitando aportes de las agencias públicas con respecto a la información que es pertinente a las responsabilidades estatutarias de las agencias en relación con el Proyecto Propuesto. Según corresponda, esas agencias deberán usar el DEIR preparado por el Condado al considerar un permiso u otra aprobación para el proyecto. También agradecemos los comentarios de los miembros del público.

El DPEIR está disponible para su visualización en línea en:

[fresnocountygeneralplan.com](http://fresnocountygeneralplan.com) y CD/copias electrónicas están disponibles para su revisión en las siguientes ubicaciones, o póngase en contacto con Chris Motta para que le envíen un CD por correo:

Condado de Fresno  
Departamento de Obras Públicas y  
Planificación  
División de Servicios de Desarrollo  
2220 Tulare Street, Suite B Counter  
Fresno, CA 93721

Biblioteca Principal/Central del  
Condado de Fresno  
2420 Mariposa Street  
Fresno, CA 93721

Biblioteca del Condado de  
Kerman  
15081 Kearney Plaza  
Kerman, CA 93630

Biblioteca Principal/Central del  
Condado de Fresno  
2420 Mariposa Street  
Fresno, CA 93721

Biblioteca  
de Coalinga  
305 N. 4th Street  
Coalinga, CA 93210

Biblioteca del Condado de  
Fresno  
Sucursal de Laton  
6313 DeWoody Street  
Laton, CA 93242

Biblioteca del Condado de Fresno  
Sucursal de Auberry  
33049 Auberry Road  
Auberry, CA 93602

Biblioteca del Condado de  
Fresno  
Sucursal de Easton  
25 East Fantz Avenue  
Easton, CA 93706

Biblioteca del Condado de  
Fresno  
Sucursal de Mendota  
1246 Belmont Avenue  
Mendota, CA 93640

Biblioteca del Condado de Fresno  
Sucursal de Bear Mountain  
30733 E. Kings Canyon  
Squaw Valley, CA 93675

Biblioteca del Condado de  
Fresno  
Sucursal de Fowler  
306 S 7th St.  
Fowler, CA 93625

Biblioteca del Condado de  
Fresno  
Sucursal de Orange Cove  
815 Park Blvd.  
Orange Cove, CA 93646

Biblioteca del Condado de Fresno  
Sucursal de Riverdale  
20975 Malsbary Avenue  
Riverdale, CA 93656

Biblioteca del Condado de  
Fresno Shaver Lake  
41344 Tollhouse Road  
Shaver Lake, CA 93664

Biblioteca del Condado de  
Fresno  
Sucursal de West Fresno  
188 E. California  
Fresno, CA 93706

Biblioteca del Condado de Fresno  
Sucursal de Sanger  
1812 7th St.  
Sanger, CA 93657

Biblioteca del Condado de  
Fresno  
Sucursal de Tranquillity  
25561 Williams Street  
Tranquillity, CA 93668

Biblioteca del Condado de  
Fresno  
Sucursal de Woodward Park  
944 E. Perrin  
Fresno, CA 93720

## UBICACIÓN DEL PROYECTO

El condado de Fresno es uno de los ocho condados que colectivamente forman el gran Valle de San Joaquín. El condado cubre aproximadamente 6,000 millas cuadradas que se extienden desde las montañas de la Cordillera de la Costa al oeste hasta la Cordillera de Sierra Nevada al este. Para los propósitos de este EIR, el Área de Planificación se define como el Condado de Fresno no incorporado y es la tierra sobre la cual el Condado tiene autoridad de uso de la tierra y donde se aplican las políticas y objetivos propuestos en la Revisión del Plan General y la Actualización de la Ordenanza de Zonificación. El condado tiene 15 ciudades incorporadas, siendo la ciudad de Fresno la más grande con 546,770 y la ciudad de San Joaquín la más pequeña con una población de 3,674 a partir de 2021. Para el propósito de la Revisión del Plan General y la Actualización de la Ordenanza de Zonificación, el Condado se ha dividido en cinco subregiones geográficas para proporcionar un mayor contexto. Esto se debe a que el condado de Fresno es diverso no solo en el tamaño de sus comunidades, sino también en la vasta área geográfica que cubre. Estas cinco subregiones no tienen ningún estatus político, pero son útiles para la orientación general y para enmarcar y describir cuestiones de planificación geográficamente únicas. Las subregiones incluyen Coast Range Foothills Area, Westside Valley Area, Eastside Valley Area, Sierra Foothill Area y Sierra Nevada Mountain Area.

## DESCRIPCIÓN DEL PROYECTO

La Revisión del Plan General está destinada a construir sobre las principales políticas del Plan General actual de 2000, pero ampliarlas y fortalecerlas para enfrentar los desafíos y las necesidades de la comunidad a través del horizonte de planificación del año 2042. La Revisión del Plan General acomodaría el crecimiento de la población del Condado proyectado hasta 2042. El Plan General 2042 busca preservar las tierras agrícolas y los recursos naturales; conservar los espacios públicos y los recursos recreativos; promover el bienestar de los residentes del Condado; mantener la vitalidad y el equilibrio económicos; y políticas directas de uso de la tierra que permitan un crecimiento sostenible y previsto en el Condado. Los temas principales del actual Plan General de 2000 se han mantenido en la revisión del Plan General e incluyen dirigir el crecimiento urbano a las comunidades existentes, limitar la intrusión del desarrollo y los usos incompatibles de la tierra en tierras agrícolas productivas, y limitar el desarrollo residencial rural. Las revisiones incluyen sólo cambios mínimos en las designaciones de uso de la tierra y los mapas de uso de la tierra en el Plan General existente de 2000. La mayoría de las revisiones son a metas, políticas y programas de implementación del Plan General. La revisión también incluye abordar las leyes que afectan el Plan General, incluida la adición de un Elemento de Justicia Ambiental al Documento de Política del Plan General.

La Sección 65860 (c) del Código de Gobierno requiere que cuando un Plan General se enmiende de una manera que hace que la Ordenanza de Zonificación sea incompatible con el Plan General, "la Ordenanza de Zonificación se enmendará dentro de un tiempo razonable para que sea consistente con el plan general enmendado". Sin embargo, el Código de Gobierno no define un período de tiempo específico que constituiría un tiempo razonable. En este caso, el proyecto propuesto incluye la actualización de la Ordenanza de Zonificación del Condado de Fresno para que sea consistente con las revisiones propuestas al Documento de Política del Plan General incluido en la Revisión del Plan General. Los componentes de la actualización de la Ordenanza de Zonificación que podrían resultar en cambios físicos en el medio ambiente incluyen las revisiones a las regulaciones para unidades de vivienda accesorias, bonificación de densidad y otros cambios ordenados por el Estado a la ley de zonificación de California que entraron en vigencia desde la adopción del Plan General de 2000.

### **EFFECTOS AMBIENTALES SIGNIFICATIVOS**

El Condado de Fresno ha preparado un borrador de EIR para abordar los efectos ambientales específicos de la implementación de la Revisión del Plan General y la Actualización de la Ordenanza de Zonificación. El borrador de EIR identificó las siguientes áreas de problemas ambientales potencialmente significativos que requieren mitigación:

- |                        |   |
|------------------------|---|
| 1. Agricultura         | 1. Emisiones de gases de efecto invernadero |
| 2. Calidad del aire    | 2. Ruido                                    |
| 3. Recursos biológicos | 3. Transporte                               |
| 4. Recursos culturales | 4. Incendios forestales                     |

Se encontró que los impactos en la agricultura, la calidad del aire, los recursos culturales, las emisiones de gases de efecto invernadero, el transporte, los servicios públicos y los incendios forestales eran significativos e inevitables.

### **BORRADOR DE REVISIÓN Y COMENTARIO DE EIR**

Se proporciona un período de revisión y comentarios de 60 días para este DEIR, que excede el período mínimo de revisión de 45 días provisto por la ley estatal, **a partir del 28 de abril de 2023**. La fecha límite para sus comentarios es **a las 5:00 p.m., 27 de junio de 2023**. Por favor, envíe su respuesta a Chris Motta, Planificador Principal, a la dirección indicada anteriormente. Por favor, haga referencia a "*GPR/ZOU (General Plan Review and Zoning Ordinance Update Project)*" y proporcione el nombre y la dirección de una persona de contacto.

### **PUBLICACIÓN DE BORRADORES DE REVISIÓN PÚBLICA: (BORRADOR DEL DOCUMENTO DE POLÍTICA DEL PLAN GENERAL; INFORME DE ANTECEDENTES DEL PLAN GENERAL; Y ORDENANZA DE ZONIFICACIÓN)**

El Condado está notificando a las agencias, organizaciones e individuos interesados que la publicación de los borradores revisados asociados con la Revisión del Plan General y la Actualización de la Ordenanza de Zonificación ocurrirá simultáneamente con la publicación del DPEIR. La fecha límite para comentarios sobre estos documentos coincidirá con la fecha límite de comentarios de 60 días para el DPEIR. Las reuniones comunitarias se programarán pronto para brindar al público la oportunidad de comentar sobre estos documentos, aunque los comentarios pueden enviarse al personal del Condado en cualquier momento.

### **REUNIÓN PÚBLICA PROGRAMADA**

Abril 28, 2023

Revisión del Plan General del Condado de Fresno y Actualización de la Ordenanza de Zonificación NOA  
Page 2

Se programarán reuniones comunitarias para brindar al público la oportunidad de comentar sobre estos documentos, aunque se pueden enviar comentarios al personal del Condado en cualquier momento. Se prevé que las reuniones se celebren aproximadamente 30 días después de la publicación del documento.

**MÁS INFORMACIÓN** sobre este artículo se puede obtener en el Departamento de Obras Públicas y Planificación del Condado de Fresno ubicado en 2220 Tulare Street, Fresno, California, o comunicándose con Chris Motta, Planificador Principal, al (559) 600-4227. Los comentarios pueden enviarse por correo electrónico a: [gpr@fresnocountyca.gov](mailto:gpr@fresnocountyca.gov)



# Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613  
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

**SCH # 2018031066**

**Project Title:** General Plan Review and Zoning Ordinance Update

Lead Agency: Fresno County Contact Person: Chris Motta  
 Mailing Address: 2220 Tulare Street Phone: 5596004497  
 City: Fresno Zip: 93721 County: Fresno

**Project Location:** County: Fresno City/Nearest Community: Entire unincorporated Fresno County

Cross Streets: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Longitude/Latitude (degrees, minutes and seconds): \_\_\_\_\_° \_\_\_\_\_' \_\_\_\_\_" N / \_\_\_\_\_° \_\_\_\_\_' \_\_\_\_\_" W Total Acres: Entire County  
 Assessor's Parcel No.: \_\_\_\_\_ Section: \_\_\_\_\_ Twp.: \_\_\_\_\_ Range: \_\_\_\_\_ Base: \_\_\_\_\_  
 Within 2 Miles: State Hwy #: \_\_\_\_\_ Waterways: \_\_\_\_\_  
 Airports: \_\_\_\_\_ Railways: \_\_\_\_\_ Schools: \_\_\_\_\_

**Document Type:**

CEQA:  NOP  Draft EIR NEPA:  NOI Other:  Joint Document  
 Early Cons  Supplement/Subsequent EIR  EA  Final Document  
 Neg Dec (Prior SCH No.) \_\_\_\_\_  Draft EIS  Other: \_\_\_\_\_  
 Mit Neg Dec Other: \_\_\_\_\_  FONSI \_\_\_\_\_

**Local Action Type:**

General Plan Update  Specific Plan  Rezone  Annexation  
 General Plan Amendment  Master Plan  Prezone  Redevelopment  
 General Plan Element  Planned Unit Development  Use Permit  Coastal Permit  
 Community Plan  Site Plan  Land Division (Subdivision, etc.)  Other: GP Review/ZO Update

**Development Type:**

Residential: Units 11275 Acres \_\_\_\_\_  
 Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  Transportation: Type \_\_\_\_\_  
 Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  Mining: Mineral \_\_\_\_\_  
 Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  Power: Type \_\_\_\_\_ MW \_\_\_\_\_  
 Educational: \_\_\_\_\_  Waste Treatment: Type \_\_\_\_\_ MGD \_\_\_\_\_  
 Recreational: \_\_\_\_\_  Hazardous Waste: Type \_\_\_\_\_  
 Water Facilities: Type \_\_\_\_\_ MGD \_\_\_\_\_  Other: Review and update General Plan and Zoning Ordinance

**Project Issues Discussed in Document:**

Aesthetic/Visual  Fiscal  Recreation/Parks  Vegetation  
 Agricultural Land  Flood Plain/Flooding  Schools/Universities  Water Quality  
 Air Quality  Forest Land/Fire Hazard  Septic Systems  Water Supply/Groundwater  
 Archeological/Historical  Geologic/Seismic  Sewer Capacity  Wetland/Riparian  
 Biological Resources  Minerals  Soil Erosion/Compaction/Grading  Growth Inducement  
 Coastal Zone  Noise  Solid Waste  Land Use  
 Drainage/Absorption  Population/Housing Balance  Toxic/Hazardous  Cumulative Effects  
 Economic/Jobs  Public Services/Facilities  Traffic/Circulation  Other: \_\_\_\_\_

**Present Land Use/Zoning/General Plan Designation:**

N/A

**Project Description:** *(please use a separate page if necessary)*

The revised General Plan is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2042. The revised General Plan would accommodate County population growth projected through 2042. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The major themes of the current 2000 General Plan have been retained in the General Plan Review and include directing urban growth to existing communities, limiting the intrusion of development and incompatible land uses onto productive agricultural land, and limiting rural residential development. The revisions include only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document.

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Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

## Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".  
If you have already sent your document to the agency please denote that with an "S".

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Air Resources Board                         | <input checked="" type="checkbox"/> Office of Historic Preservation          |
| <input type="checkbox"/> Boating & Waterways, Department of                     | <input type="checkbox"/> Office of Public School Construction                |
| <input type="checkbox"/> California Emergency Management Agency                 | <input type="checkbox"/> Parks & Recreation, Department of                   |
| <input type="checkbox"/> California Highway Patrol                              | <input type="checkbox"/> Pesticide Regulation, Department of                 |
| <input checked="" type="checkbox"/> Caltrans District # 6                       | <input type="checkbox"/> Public Utilities Commission                         |
| <input type="checkbox"/> Caltrans Division of Aeronautics                       | <input checked="" type="checkbox"/> Regional WQCB # 5                        |
| <input type="checkbox"/> Caltrans Planning                                      | <input type="checkbox"/> Resources Agency                                    |
| <input type="checkbox"/> Central Valley Flood Protection Board                  | <input type="checkbox"/> Resources Recycling and Recovery, Department of     |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy                     | <input type="checkbox"/> S.F. Bay Conservation & Development Comm.           |
| <input type="checkbox"/> Coastal Commission                                     | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board                                   | <input checked="" type="checkbox"/> San Joaquin River Conservancy            |
| <input checked="" type="checkbox"/> Conservation, Department of                 | <input type="checkbox"/> Santa Monica Mtns. Conservancy                      |
| <input type="checkbox"/> Corrections, Department of                             | <input checked="" type="checkbox"/> State Lands Commission                   |
| <input type="checkbox"/> Delta Protection Commission                            | <input type="checkbox"/> SWRCB: Clean Water Grants                           |
| <input type="checkbox"/> Education, Department of                               | <input checked="" type="checkbox"/> SWRCB: Water Quality                     |
| <input type="checkbox"/> Energy Commission                                      | <input type="checkbox"/> SWRCB: Water Rights                                 |
| <input checked="" type="checkbox"/> Fish & Game Region # 4                      | <input type="checkbox"/> Tahoe Regional Planning Agency                      |
| <input checked="" type="checkbox"/> Food & Agriculture, Department of           | <input checked="" type="checkbox"/> Toxic Substances Control, Department of  |
| <input checked="" type="checkbox"/> Forestry and Fire Protection, Department of | <input checked="" type="checkbox"/> Water Resources, Department of           |
| <input type="checkbox"/> General Services, Department of                        | <input type="checkbox"/> Other: _____  |
| <input type="checkbox"/> Health Services, Department of                         | <input type="checkbox"/> Other: _____  |
| <input checked="" type="checkbox"/> Housing & Community Development             |  |
| <input checked="" type="checkbox"/> Native American Heritage Commission         |  |

### Local Public Review Period (to be filled in by lead agency)

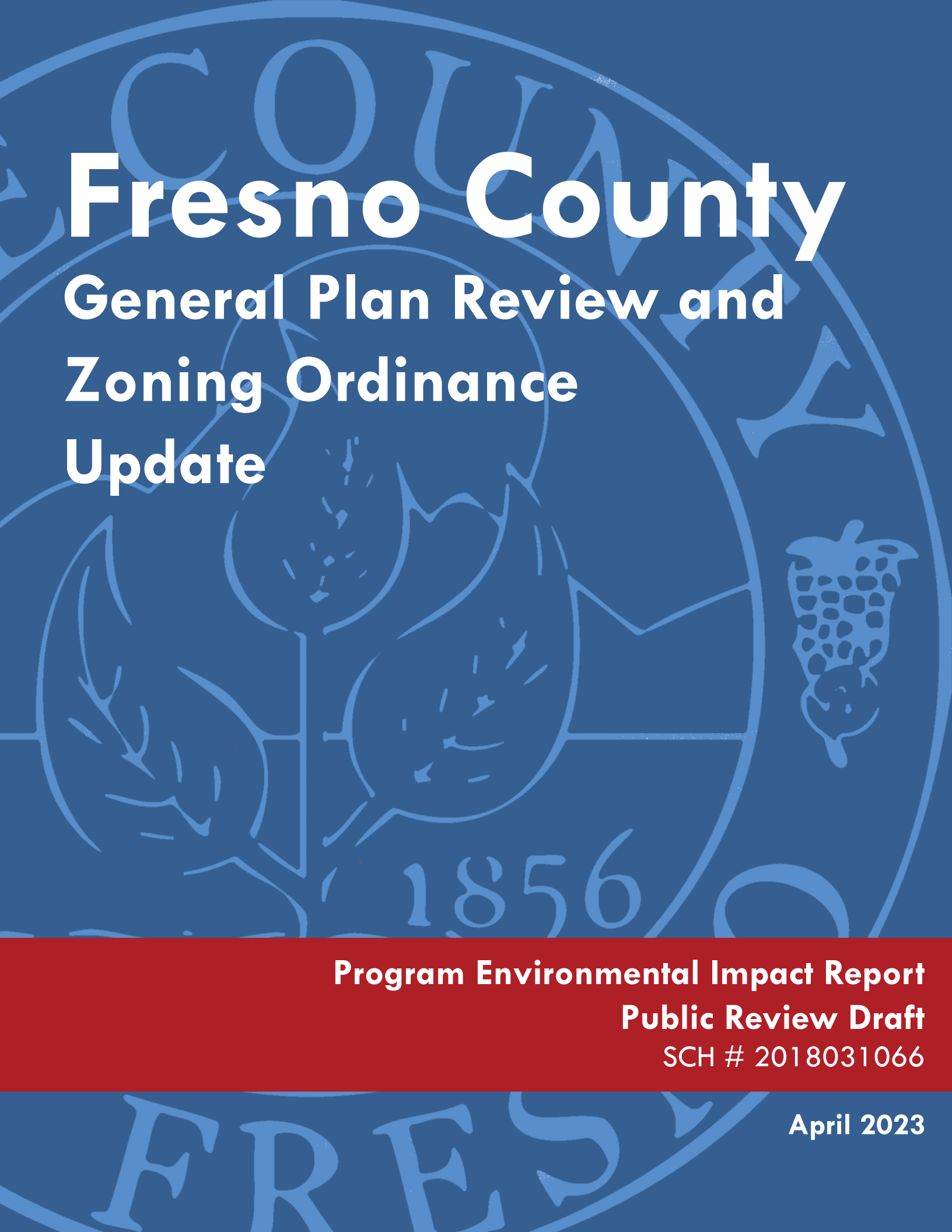
Starting Date April 28, 2023 Ending Date June 27, 2023

### Lead Agency (Complete if applicable):

Consulting Firm: <u>Rincon Consultants, Inc.</u>	Applicant: <u>Fresno County PW&amp;P c/o Chris Motta</u>
Address: <u>4825 J St Suite 200</u>	Address: <u>2220 Tulare Street, 6th Floor</u>
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Date: 2023.04.24 14:20:32 -0700 Date: April 24, 2023

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

The background of the cover features a large, light blue seal of Fresno County. The seal is circular and contains the text "FRESNO COUNTY" at the top and "1856" at the bottom. In the center, there is a depiction of a tulip flower and a bunch of grapes. The seal is partially obscured by the text and a red banner at the bottom.

# **Fresno County**

## **General Plan Review and Zoning Ordinance Update**

**Program Environmental Impact Report  
Public Review Draft  
SCH # 2018031066**

**April 2023**

# Table of Contents

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Executive Summary .....	ES-1
Project Synopsis .....	ES-1
Alternatives .....	ES-4
Summary of Impacts and Mitigation Measures .....	ES-4
1 Introduction .....	1-1
1.1 Overview of the General Plan Review and Zoning Ordinance Update .....	1-1
1.2 Purpose and Legal Authority .....	1-2
1.3 Scope and Content .....	1-4
1.4 Lead, Responsible, and Trustee Agencies .....	1-19
1.5 Intended Uses of the EIR .....	1-20
1.6 Environmental Review Process .....	1-21
2 Project Description .....	2-1
2.1 Project Proponent .....	2-1
2.2 Project Location .....	2-1
2.3 Fresno County General Plan .....	2-4
2.3.1 Characteristics of the Proposed General Plan Review .....	2-5
2.4 General Plan Buildout .....	2-19
2.5 Fresno County Zoning Ordinance Update .....	2-20
2.6 Project Objectives .....	2-21
2.7 Required Discretionary Approvals .....	2-23
3 Environmental Setting .....	3-1
3.1 Regional Setting .....	3-1
3.2 Physical Setting .....	3-1
3.2.1 General Geographic Setting .....	3-1
3.2.2 Topography and Waterways .....	3-2
3.2.3 Climate .....	3-2
3.2.4 Demographics .....	3-2
3.3 EIR Baseline .....	3-3
3.4 Cumulative Development .....	3-3
4 Environmental Impact Analysis .....	4-1
4.1 Aesthetics .....	4.1-1
4.1.1 Environment Setting .....	4.1-1
4.1.2 Regulatory Setting .....	4.1-9
4.1.3 Impact Analysis and Mitigation Measures .....	4.1-15
4.2 Agriculture and Forestry Resources .....	4.2-1
4.2.1 Setting .....	4.2-1

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

4.2.2	Impact Analysis .....	4.2-10
4.3	Air Quality .....	4.3-1
4.3.1	Environmental Setting .....	4.3-1
4.3.2	Regulatory Setting .....	4.3-7
4.3.3	Impact Analysis .....	4.3-14
4.3.4	Cumulative Impact Analysis.....	4.3-27
4.4	Biological Resources.....	4.4-1
4.4.1	Setting.....	4.4-1
4.4.2	Impact Analysis .....	4.4-23
4.5	Cultural Resources .....	4.5-1
4.5.1	Setting.....	4.5-1
4.5.2	Impact Analysis .....	4.5-12
4.5.3	Cumulative Impacts .....	4.5-16
4.6	Energy .....	4.6-1
4.6.1	Setting.....	4.6-1
4.6.2	Impact Analysis .....	4.6-9
4.7	Geology and Soils .....	4.7-1
4.7.1	Setting.....	4.7-1
4.7.2	Regulatory Setting .....	4.7-9
4.7.3	Impact Analysis .....	4.7-13
4.8	Greenhouse Gas Emissions .....	4.8-1
4.8.1	Environmental Setting .....	4.8-1
4.8.2	Regulatory Setting .....	4.8-5
4.8.3	Impact Analysis .....	4.8-11
4.9	Hazards and Hazardous Materials .....	4.9-1
4.9.1	Setting.....	4.9-1
4.9.2	Impact Analysis .....	4.9-16
4.10	Hydrology and Water Quality .....	4.10-1
4.10.1	Setting.....	4.10-1
4.10.2	Impact Analysis .....	4.10-6
4.10.3	Cumulative Impacts .....	4.10-16
4.11	Land Use and Planning.....	4.11-1
4.11.1	Setting.....	4.11-1
4.11.2	Impact Analysis .....	4.11-11
4.12	Noise .....	4.12-1
4.12.1	Setting.....	4.12-1
4.12.2	Regulatory Setting .....	4.12-11
4.12.3	Impact Analysis .....	4.12-18

4.13	Population and Housing.....	4.13-1
4.13.1	Setting.....	4.13-1
4.13.2	Impact Analysis.....	4.13-10
4.13.3	Cumulative Impacts.....	4.13-12
4.14	Public Services.....	4.14-1
4.14.1	Setting.....	4.14-1
4.14.2	Fire Protection.....	4.14-1
4.14.3	Police Protection Services.....	4.14-6
4.14.4	Schools.....	4.14-9
4.14.5	Impact Analysis.....	4.14-16
4.15	Transportation and Traffic Quality.....	4.15-1
4.15.1	Setting.....	4.15-1
4.15.2	Regulatory Setting.....	4.15-8
4.15.3	Impact Analysis.....	4.15-11
4.15.4	Cumulative Impacts.....	4.15-24
4.16	Tribal Cultural Resources.....	4.16-1
4.16.1	Tribal Cultural Setting.....	4.16-1
4.16.2	Regulatory Setting.....	4.16-3
4.16.3	AB 52 and SB 18 Tribal Consultation.....	4.16-5
4.16.4	Impact Analysis.....	4.16-6
4.16.5	Cumulative Impacts.....	4.16-7
4.17	Utilities and Service Systems.....	4.17-1
4.17.1	Setting.....	4.17-1
4.17.2	Regulatory Setting.....	4.17-6
4.17.3	Impact Analysis.....	4.17-14
4.17.4	Cumulative Impacts.....	4.17-29
4.18	Wildfire.....	4.18-1
4.18.1	Setting.....	4.18-1
4.18.2	Regulatory Setting.....	4.18-5
4.18.3	Impact Analysis.....	4.18-10
4.18.4	Cumulative Impacts.....	4.18-22
4.19	Effects Found Not to Be Significant.....	4.19-1
4.19.1	Mineral Resources.....	4.19-1
5	Other CEQA Required Discussions.....	5-1
5.1	Growth Inducement.....	5-1
5.1.1	Population and Employment Growth.....	5-1
5.1.2	Removal of Obstacles to Growth.....	5-1
5.2	Irreversible Environmental Effects.....	5-2
5.3	Significant and Unavoidable Impacts.....	5-3

6	Alternatives.....	6-1
6.1	Alternative 1: No Project Alternative (2000 General Plan).....	6-3
6.1.1	Description.....	6-3
6.1.2	Impact Analysis.....	6-4
6.2	Alternative 2: Increased Development near City of Fresno.....	6-4
6.2.1	Description.....	6-4
6.2.2	Impact Analysis.....	6-5
6.3	Alternative 3: Increased Development near Cities of Fresno and Clovis and in Community Plan Areas.....	6-13
6.3.1	Description.....	6-13
6.3.2	Impact Analysis.....	6-13
6.4	Environmentally Superior Alternative.....	6-21
7	References.....	7-1
7.1	Bibliography.....	7-1
7.2	List of Preparers.....	7-18

**Tables**

Table ES-1	Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts.....	ES-5
Table 1-1	NOP Comments and EIR Response.....	1-5
Table 2-1	Description of Land Use Designations.....	2-12
Table 2-2	Unincorporated County Growth Projections.....	2-20
Table 4.2-1	Ten Leading Crops in Fresno County.....	4.2-2
Table 4.2-2	Important Farmland in the Planning Area.....	4.2-3
Table 4.3-1	Annual Air Quality Data at the Fresno-Garland Air Monitoring Station.....	4.3-6
Table 4.3-2	Federal and State Ambient Air Quality Standards.....	4.3-8
Table 4.3-3	SJVAPCD Rule 8021 Measures.....	4.3-10
Table 4.3-4	SJVAPCD Air Quality Significance Thresholds.....	4.3-14
Table 4.3-5	SJVAPCD TCMs Contributing to PM2.5 and PM10 Improvement.....	4.3-18
Table 4.3-6	Total Unmitigated Operational Emissions.....	4.3-20
Table 4.3-7	Localized Construction Impacts.....	4.3-22
Table 4.3-8	Localized Operational Emissions.....	4.3-23
Table 4.4-1	Federal and/or State Listed Special-Status Wildlife Species Documented in or with the Potential to Occur in Fresno County.....	4.4-8
Table 4.4-2	Federal and/or State Listed Special-Status Plants Documented in or with the Potential to Occur in Fresno County.....	4.4-10
Table 4.6-1	2020 Annual Electricity Consumption.....	4.6-4
Table 4.6-2	2020 Annual Natural Gas Consumption.....	4.6-4
Table 4.6-3	2020 Annual Gasoline and Diesel Consumption.....	4.6-5
Table 4.6-4	Consistency with State Renewable Energy and Energy Efficiency Plans.....	4.6-16

Table 4.8-1 GHG Performance Threshold Determination ..... 4.8-13

Table 4.8-2 Amortized Construction Emissions..... 4.8-16

Table 4.8-3 Combined Annual GHG Emissions..... 4.8-17

Table 4.8-4 GPR/ZOU Consistency with 2018-2042 RTP/SCS..... 4.8-20

Table 4.9-1 Known Hazardous Materials and Waste Sites in the General Plan Area ..... 4.9-3

Table 4.9-2 Ambulance Service Providers: Fresno County 2016..... 4.9-15

Table 4.9-3 First Responder Agencies ..... 4.9-15

Table 4.11-1 2042 General Plan Consistency with the FCOG 2018-2042 RTP/SCS ..... 4.11-19

Table 4.12-1 Land Use Noise Compatibility Criteria for Fresno County Airports..... 4.12-13

Table 4.12-2 Fresno County Land Use Noise Compatibility Matrix..... 4.12-15

Table 4.12-3 Fresno County Exterior Noise Level Standards ..... 4.12-17

Table 4.12-4 Fresno County Interior Noise Level Standards ..... 4.12-18

Table 4.12-5 AASHTO Maximum Vibration Levels for Preventing Damage ..... 4.12-19

Table 4.12-6 Human Responses to Steady State Vibration..... 4.12-20

Table 4.12-7 Human Response to Transient Vibration ..... 4.12-20

Table 4.12-8 Vibration Levels Measured during Construction Activities ..... 4.12-21

Table 4.12-9 Typical Noise Levels for Construction Equipment..... 4.12-29

Table 4.13-1 Population Change: 1960 to 2015 Percentage of County Population; Fresno County and Cities..... 4.13-3

Table 4.13-2 Households in Fresno County (2010-2020) ..... 4.13-4

Table 4.13-3 California and San Joaquin Valley County Population Forecasts (2015 to 2060) ..... 4.13-5

Table 4.13-4 Fresno County Population Forecasts (2015 to 2050) ..... 4.13-7

Table 4.13-5 FCOG Unincorporated Area Housing Needs Allocations..... 4.13-9

Table 4.14-1 Fresno County Elementary School Districts (2020-2021)..... 4.14-10

Table 4.15-1 Baseline VMT for Fresno County..... 4.15-3

Table 4.15-2 Bikeways Within Fresno County..... 4.15-4

Table 4.15-3 FCRTA Productivity Statistics<sup>1</sup> ..... 4.15-5

Table 4.15-4 VMT Results Summary..... 4.15-16

Table 4.17-1 General Plan Goals and Policies - Water Supply Facilities..... 4.17-16

Table 4.17-2 General Plan Goals and Policies - Wastewater Treatment Facilities..... 4.17-17

Table 4.17-3 General Plan Goals and Policies - Stormwater Drainage Facilities..... 4.17-19

Table 4.17-4 General Plan Goals and Policies - Electric Power, Natural Gas, and Telecommunications Facilities ..... 4.17-20

Table 4.17-5 Per Capita Water Demands and Projections ..... 4.17-22

Table 4.17-6 General Plan Goals and Policies – Water Supply..... 4.17-23

Table 4.17-7 General Plan Goals and Policies – Solid Waste ..... 4.17-27

Table 6-1 Impact Comparison of Alternatives..... 6-22



**Figures**

Figure 2-1 Regional Location ..... 2-2

Figure 2-2 Fresno County Geographic Sub-regions ..... 2-3

Figure 2-3 County Wide General Plan Land Use Map ..... 2-7

Figure 2-4 Open Space Land Use Diagram..... 2-8

Figure 2-5 Rural Residential Land Use Diagram..... 2-9

Figure 2-6 Northeast FCAM Land Use Diagram ..... 2-10

Figure 2-7 Rural Settlement Areas Land Use Diagram ..... 2-11

Figure 4.1-1 Kings Canyon National Park..... 4.1-2

Figure 4.1-2 Huntington Reservoir Recreation Area ..... 4.1-2

Figure 4.1-3 Millerton Lake..... 4.1-3

Figure 4.1-4 San Joaquin River Trail..... 4.1-3

Figure 4.1-5 Orchard on the Fresno County Blossom Trail..... 4.1-4

Figure 4.1-6 Expansive View of Grasslands on Either Side of SR 180 Looking East toward  
Mountains in the Distance ..... 4.1-4

Figure 4.1-7 Expansive View of Valley Oak Woodland and Foothills from SR 198 West of  
Coalinga ..... 4.1-5

Figure 4.1-8 Agricultural Industrial Development: Wineland along Highway 99 between  
Kingsburg and Selma Looking North ..... 4.1-5

Figure 4.2-1 Farmland in Fresno County ..... 4.2-6

Figure 4.2-2 Williamson Act Contract Lands in Fresno County ..... 4.2-7

Figure 4.4-1 Wetlands and Mapped Waters in Fresno County ..... 4.4-6

Figure 4.4-2 Critical Habitat in Fresno County..... 4.4-13

Figure 4.4-3 Identified Essential Connectivity Areas in Western Fresno County ..... 4.4-15

Figure 4.7-1 Geologic Units within Fresno County ..... 4.7-4

Figure 4.7-2 Regional Faults ..... 4.7-5

Figure 4.9-1 Location of Open and Active Known Hazardous Materials and Waste Sites ..... 4.9-7

Figure 4.12-1 Unincorporated Fresno County Existing Noise Contours..... 4.12-4

Figure 4.12-2 Existing Noise Contours Unincorporated Fresno County in the Vicinity of  
Fresno ..... 4.12-5

Figure 4.12-3 Existing Noise Contours Unincorporated Fresno County in the Vicinity of  
Coalinga ..... 4.12-6

Figure 4.12-4 Existing Noise Contours Existing Noise Contours Unincorporated Fresno  
County in the Vicinity of Reedley ..... 4.12-7

Figure 4.12-5 Existing Noise Contours in Unincorporated Fresno County in the Vicinity  
of Sanger..... 4.12-8

Figure 4.12-6 Existing Noise Contours in Unincorporated Fresno County in the Vicinity of  
Selma ..... 4.12-9

Figure 4.12-7 Unincorporated Fresno County Future Noise Contours..... 4.12-22

Figure 4.12-8 Future Noise Contours Unincorporated Fresno County in the Vicinity of  
Fresno ..... 4.12-23

Figure 4.12-9 Future Noise Contours Unincorporated Fresno County in the Vicinity of Coalinga ..... 4.12-24

Figure 4.12-10 Future Noise Contours Unincorporated Fresno County in the Vicinity of Reedley ..... 4.12-25

Figure 4.12-11 Future Noise Contours Unincorporated Fresno County in the Vicinity of Sanger ..... 4.12-26

Figure 4.12-12 Future Noise Contours Unincorporated Fresno County in the Vicinity of Selma ..... 4.12-27

Figure 4.15-1 Freeways and Highways in Fresno County ..... 4.15-2

Figure 4.15-2 FCRTA Bus Routes ..... 4.15-6

Figure 4.18-1 SRA Fire Hazard Severity Zones ..... 4.18-4

**Appendices**

Appendix AQ California Emissions Estimator Model Inputs and Results

Appendix BIO Special Status Species Tables

Appendix NOP Notices of Preparation and Scoping Comments

Appendix TIS Vehicles Miles Traveled Technical Memorandum

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# Executive Summary

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This section summarizes the characteristics of 2042 General Plan, as well as the General Plan's environmental impacts and recommended mitigation measures.

## Project Synopsis

### Project Applicant

County of Fresno  
2200 Tulare Street  
Fresno, CA 93721

### Lead Agency

County of Fresno  
2200 Tulare Street  
Fresno, CA 93721

### Project Location

Fresno County is one of the eight counties that collectively form the greater San Joaquin Valley. The County covers approximately 6,000 square miles stretching from the Coast Range Mountains in the west to the Sierra Nevada Range in the east. The San Joaquin Valley region extends from the Sacramento-San Joaquin River Delta in the north to the Tehachapi Mountains in the south. The valley's primary river is the San Joaquin, which drains north through about half of the valley into the Sacramento-San Joaquin River Delta. The County has 15 incorporated cities, with the City of Fresno being the largest and the City of Jan Joaquin being the smallest.

### Project Description

The revised General Plan is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2042. The revised General Plan would accommodate County population growth projected through 2042. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The major themes of the current 2000 General Plan have been retained in the General Plan Review and include directing urban growth to existing communities, limiting the intrusion of development and incompatible land uses onto productive agricultural land, and limiting rural residential development. The revisions include only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document.

Section 65860(c) of the Government Code requires that when a General Plan is amended in a way that makes the Zoning Ordinance inconsistent with the General Plan, “the Zoning Ordinance shall be amended within a reasonable time so that it is consistent with the general plan as amended.” However, the Government Code does not define a specific time period that would constitute a reasonable time. In this instance, the proposed project includes updating the Fresno County Zoning Ordinance to be consistent with the proposed revisions to General Plan Policy Document included in the General Plan Review. Components of the Zoning Ordinance update that could result in physical changes to the environment include the revisions to the regulations for accessory dwelling units, density bonus and other State-mandated changes to California Zoning law which became effective since the adoption of the 2000 General Plan.

### *Project Objectives*

The primary objective of the GPR/ZOU are to ensure that the County’s guiding land use documents are consistent with State legislation that has been enacted subsequent to the adoption of the County 2000 General Plan Update. This includes, but is not limited to, the inclusion of an Environmental Justice Element. Additionally, the current effort proposes to revise and streamline some existing General Plan Policies and programs as well as Zoning Ordinance provision.

The General Plan Vision Statement is as follows:

This General Plan sets out a vision reflected in goals, policies, programs, and diagrams for Fresno County through the plan horizon year of 2042 and beyond. This plan carries forward major policies that have been in place since the mid-1970s, but expands and strengthens them to meet the challenges of the 21<sup>st</sup> century.

The County sees its primary role to be the protector of productive agricultural lands, open space, recreational opportunities, and environmental quality, and the coordinator of countywide efforts to promote economic development.

In consideration of the County’s General Plan Vision, this General Plan Review and Zoning Ordinance Update does not designate/expand new growth areas or new development, with the exception of those sites within urbanized areas to be identified for additional housing as required to meet the State mandated Regional Housing Needs Assessment (RHNA) for the sixth (6th) Cycle Housing Element.

The General Plan provides the following guiding themes:

#### **Economic Development**

The plan seeks to promote job growth and reduce unemployment through the enhancement and expansion of its agricultural economic basis plus facilitate business parks that include manufacturing, processing, and distribution.

#### **Agricultural Land Protection**

The plan seeks to protect its productive agricultural land as the County’s most valuable natural resource and the historic basis of its economy through directing new urban growth to cities and existing unincorporated communities and by limiting the encroachment of incompatible development upon agricultural lands.

#### **Growth Accommodation**

The plan is designed to accommodate population growth through the year 2042 consistent with the forecasted projection of 234,591 people in the unincorporated County by 2042. This represents an additional population of approximately 33,607.

**Urban-Centered Growth**

The plan promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where public facilities and infrastructure are available or can be provided consistent with the adopted General Plan or Community Plan to accommodate such growth. Accordingly, this plan prohibits designation of new areas as Planned Rural Community and restricts the designation of new areas for rural residential development while allowing for the orderly development of existing rural residential areas.

**Efficient and Functional Land Use Patterns**

The plan promotes compact, mixed-use, and pedestrian- and transit-oriented development within city spheres as well as in the County's unincorporated communities.

**Service Efficiency**

The plan provides for the orderly and efficient extension of infrastructure such as roadways, water, wastewater, drainage, and expansion services to support the county's economic development goals and to facilitate compact growth patterns. The plan supports development of a multi-modal transportation system that meets community economic and freight mobility needs, improves air quality, and shifts travel away from single-occupant automobiles to less-polluting transportation modes.

**Recreational Development**

The plan supports the expansion of existing recreational opportunities and the development of new opportunities, particularly along the San Joaquin and Kings Rivers, in the foothills, and in the Sierras, for the employment of County residents and to increase tourism as part of the County's diversified economic base.

**Resource Protection**

The plan seeks to protect and promote careful management of the County's natural resources, such as its soils, water, air quality, minerals, and wildlife and its habitat, to support the County's economic goals and to maintain the County's environmental quality.

**Health and Safety Protection**

The plan seeks to protect County residents and visitors through mitigation of hazards and nuisances such as geological and seismic hazards, flooding, wildland fires, transportation hazards, hazardous materials, noise, and air pollution.

**Health and Well-Being**

The plan seeks to promote the health and well-being of its residents, recognizing that the built environment affects patterns of living that influence health. The plan seeks to ensure long-term conservation of agricultural lands and environmentally sensitive landscapes; encourage walking and biking and provide linked transit systems; promote greater access to healthy foods and produce, particularly fresh locally-grown produce; and create community centers that provide access to employment, education, business, and recreation.

### **Enhanced Quality of Life**

The plan strives throughout all its elements to improve the attractiveness of the County to existing residents, new residents, and visitors through increased prosperity, attractive forms of new development, protection of open space and view corridors, promotion of cultural facilities and activities, efficient delivery of services, and expansion of recreational opportunities.

### **Affordable Housing**

The plan seeks to assure the opportunity for adequate and affordable housing for all residents in Fresno County. While directing most new growth to cities, the plan also seeks to provide for the maintenance of existing housing and for new construction in designated areas within the unincorporated area of the County.

### **Environmental Justice**

The plan is designed to create opportunities for every resident to live in healthy and safe communities regardless of race, color, national origin or income, and to create opportunities for meaningful community involvement in the development of laws and regulations that affect every community's natural surroundings, and the places people live, work, play and learn.

### *Required Discretionary Approvals*

With recommendations from the County's Planning Commission, the Fresno County Board of Supervisors will need to take the following discretionary actions in conjunction with the proposed project:

- Certification of the Final EIR
- Adoption of the proposed General Plan Review
- Approval of the revisions to the Zoning Map and Zoning Ordinance amendments to implement select programs of the General Plan.

## Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to 2042 General Plan. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project (Continuation of the 2000 General Plan)
- Alternative 2: Moderately Increased Density
- Alternative 3: Substantially Increased Density

CEQA requires that an environmentally superior alternative be identified among those analyzed. It further states that if the No Project Alternative is identified as environmentally superior, the next most environmentally superior alternative must also be identified. When taking into account every environmental impact area, Alternative 3 is the environmentally superior alternative, followed by Alternative 2, and Alternative 1.

## Summary of Impacts and Mitigation Measures

Table ES-1 the environmental impacts of 2042 General Plan, the proposed mitigation measures, and residual impacts or significance after mitigation. Impacts are defined as significant, unavoidable

adverse impacts that require a statement of overriding consideration, pursuant to Section 15093 of the *CEQA Guidelines* if 2042 General Plan is approved; significant, adverse impacts that can be feasibly mitigated to less than significant levels and that require findings to be made under Section 15091 of the *CEQA Guidelines*; adverse impacts that are less than those allowed by adopted significance thresholds; and no impact.

**Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts**

Impact	Mitigation Measure (s)	Residual Impact
<b>Aesthetics</b>		
<p><b>Impact AES-1.</b> The GPR/ZOU would facilitate growth that may lead to intensified development in Fresno County. General Plan policies and development standards would regulate development in areas with scenic vistas or views of natural scenic resources, reducing potential impacts. The impact on scenic vistas would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact AES-2.</b> The GPR/ZOU proposes no development in designated or eligible scenic highways. Further, development near scenic highways and scenic corridors is regulated by design standards that protect views. Impacts would be less than significant.</p>	None required.	Less than Significant.
<p><b>Impact AES-3.</b> The proposed General Plan could create land use patterns that would substantially alter the existing visual character of the region, including the quality of public views. In developed areas, changes in zoning designations could result in increased density and more mixed-use-style development. Goals and policies in the General Plan protect visual resources and guide new development in a way that is visually compatible with existing uses, such that impacts would be reduced. Furthermore, new development would be subject to design review. Impacts would be Less than significant.</p>	None required.	Less than Significant
<p><b>Impact AES-4.</b> New development facilitated by the GPR/ZOU could increase light and glare effects on sensitive receptors, such as residential uses. However, new development would be subject to existing regulations in the County's Zoning Ordinance and 2042 General Plan policies to protect dark skies at night. Therefore, the GPR/ZOU would have a less than significant impact associated with light and glare.</p>	None required.	Less than Significant



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<b>Agriculture</b>		
<p><b>Impact AG-1.</b> The GPR/ZOU is designed to encourage the continued operation of existing agriculture lands and Forest lands in The Planning Area. However, buildout of the GPR/ZOU could result in the conversion of Farmland or forestland to non-agricultural use. Therefore, impacts would be significant and unavoidable.</p>	<p><i>AG-1: Agriculture Conservation.</i></p> <p><b>Policy LU-A.23</b></p> <p>The County shall require discretionary land use projects which propose the permanent conversion of forty acres or more of Prime Farmland (as designated by the Farmland Mapping and Monitoring Program) to non-agricultural uses to undertake an evaluation of soil type, existing crop history and access to surface irrigation water to support the non-viability of the land for agricultural use. Should documentation indicate a loss of productive agricultural land would occur due to project development, consideration shall be given to offsetting land conversion through grants of perpetual conservation easements, deed restrictions, establishment of land trusts, in-lieu fee payment program or other County-approved farmland conservation mechanisms for the purpose of preserving agricultural land. This policy does not apply to land zoned or designated in the General Plan for non-agricultural land uses.</p> <p><b>Policy LU-A.24</b></p> <p>The County shall encourage the State of California Department of Conservation to update its Important Farmland Map in consideration of recent restrictions to groundwater pumping, reduced access to surface water and the potential loss of irrigable land.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact AG-2.</b> Buildout of the GPR/ZOU could result in conflicts to existing zoning for agricultural uses and Williamson Act contracts. Therefore, impacts would be significant and unavoidable.</p>	<p>None feasible.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact AG-3.</b> The proposed project is designed to encourage the continued operation of existing timber production within the Planning Area. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<b>Air Quality</b>		
<p><b>Impact AQ-1.</b> Development facilitated by the GPR/ZOU would generate construction and Operational-related emissions. Emissions generated by the GPR/ZOU would conflict with implementation of the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan. Implementation of policies in the GPR/ZOU, compliance with existing regulations, and mitigation measures would not be sufficient to demonstrate consistency with the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan. Impacts would be significant and unavoidable.</p>	<p><i>AQ-1: Architectural Coating ROG Content Limits</i></p> <p><b>Policy OS-G.12: Architectural Coating Reactive Organic Gases Content Limits</b></p> <p>The County shall review development projects, and encourage the use of architectural coating materials, as defined in the San Joaquin Valley Air Pollution Control District’s Rule 4601, that are zero-emission or have a low-ROG content (below 10 grams per liter). Where such ROG coatings are not available, the coating with the lowest ROG rating available shall be used.</p> <p><i>AQ-2: Diesel Engine Tier Requirements</i></p> <p><b>Policy OS-G.13: Diesel Engine Tier Requirements</b></p>	<p>Significant and Unavoidable</p>

Impact	Mitigation Measure (s)	Residual Impact
	<p>The County shall require development projects to implement diesel construction equipment meeting California Air Resources Board (CARB) Tier 4 or equivalent emission standards for off-road heavy-duty diesel engines. If use of Tier 4 equipment is not possible due to availability, diesel construction equipment meeting Tier 3 emission standards shall be used. Tier 3 equipment shall use a Level 3 Diesel Particulate Filter.</p>	
<p><b>Impact AQ-2.</b> Individual development projects carried out under the GPR/ZOU would generate construction and operational-related emissions. Implementation of Plan policies, compliance with existing regulations, and implementation of proposed mitigation would reduce construction and operational emissions, but emissions would remain above applicable thresholds. impacts would be significant and unavoidable.</p>	<p><i>AQ-1: Architectural Coating ROG Content Limits</i>  <b>Policy OS-G.12: Architectural Coating Reactive Organic Gases Content Limits</b>                      The County shall review development projects, and encourage the use of architectural coating materials, as defined in the San Joaquin Valley Air Pollution Control District’s Rule 4601, that are zero-emission or have a low-ROG content (below 10 grams per liter). Where such ROG coatings are not available, the coating with the lowest ROG rating available shall be used.</p> <p><i>AQ-2: Diesel Engine Tier Requirements</i>  <b>Policy OS-G.13: Diesel Engine Tier Requirements</b>                      The County shall require development projects to implement diesel construction equipment meeting California Air Resources Board (CARB) Tier 4 or equivalent emission standards for off-road heavy-duty diesel engines. If use of Tier 4 equipment is not possible due to availability, diesel construction equipment meeting Tier 3 emission standards shall be used. Tier 3 equipment shall use a Level 3 Diesel Particulate Filter.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact AQ-3.</b> Individual development projects carried out under the GPR/ZOU would generate construction- and operational-related emissions that may expose sensitive receptors to substantial pollutant concentrations. Such emissions may result in adverse impacts to local air quality. Implementation of Plan policies and compliance with existing regulations would reduce emissions, but not below the level of significance. Impacts would be significant and unavoidable.</p>	<p><i>AQ-3: Sensitive Receptor Setbacks</i>  <b>Policy EJ-A.15: Sensitive Receptor Setbacks.</b>                      Consistent with the provisions contained in the California Air Resources Board (CARB) Air Quality and Land Use Handbook, project applicants shall identify appropriate measures for projects with sensitive uses located within 500 feet of freeways, heavily traveled arterials (daily vehicle trips of 10,000 or more), railways, and other sources of diesel particulate matter (DPM) and other known carcinogens. The County shall require development projects that are located within 500 feet of freeways, heavily traveled arterials (daily vehicle trips of 10,000 or more), railways, and other sources of DPM and other known carcinogens to retain a qualified air quality consultant to prepare a health risk assessment (HRA)in accordance with the CARB and the California Environmental Protection Agency’s Office of Environmental Health and Hazard Assessment requirements to determine the exposure of nearby sensitive receptors to emission sources resulting from the project. Measures</p>	<p>Significant and Unavoidable</p>

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
	<p>identified in the HRA shall be enforced by the County.</p> <p><i>AQ-4: Valley Fever</i></p> <p><b>Policy OS-G.13: Valley Fever Mitigation.</b></p> <p>The County shall continue to promote public awareness of Valley Fever risks relating to ground disturbing activities through the provision of educational materials, webpages and resource contact information. For projects involving ground disturbance on unpaved areas left undisturbed for 6 months or more, the County shall require developers to provide project-specific Valley Fever training and training materials.</p>	
<p><b>Impact AQ-4.</b> The GPR/ZOU would not create objectionable odors that would affect a substantial number of people. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Biological Resources</b></p>		
<p><b>Impact BIO-1.</b> The GPR/ZOU envisions development that could impact special-status species. The 2042 General Plan policies would reduce the potential for impacts and the severity of impacts. However, impacts would be potentially significant and thus mitigation is required.</p>	<p><i>BIO-1 Protection of Nesting Birds</i></p> <p><b>Policy OS-E.19: Nesting Birds.</b></p> <p>For development projects on sites where tree or vegetation/habitat removal is necessary and where the existence of sensitive species and/or bird species protected by California Fish and Game Code Sections 30503 and 305.3 and Migratory Bird Treaty Act has been determined by a qualified biologist, surveys for nesting birds shall be conducted by a qualified biologist for all construction sites where activities occurring during nesting bird season (February 1 through September 15). If active nests are located onsite, then a qualified biologist shall determine an appropriate avoidance buffer for construction activities.</p>	<p>Less than Significant (with Mitigation)</p>
<p><b>Impact BIO-2.</b> While the GPR/ZOU would not facilitate development that would directly impact riparian and wetland habitats, there would be potential for adverse indirect impacts from such development on wetlands and areas under the jurisdiction of CDFW and USACE. however, compliance with existing regulations, and implementation of 2042 General Plan policies would reduce potential impacts to a less than significant level.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact BIO-3.</b> The GPR/ZOU would largely avoid impacts on wildlife movement corridors by conserving natural areas through policies in the 2042 General Plan. 2042 General Plan policies would protect wildlife corridors and impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact BIO-4.</b> Implementation of the GPR/ZOU would conform with applicable local policies protecting biological resources, such as Fresno County Municipal Code and proposed 2042 General Plan policies. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact BIO-5.</b> There are three habitat conservation plans that conserve portions of the Planning Area. Impacts to areas identified in the habitat conservation plans would be protected by conservation strategies contained in goals and policies of the General Plan. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Cultural Resources</b></p>		
<p><b>Impact CR-1.</b> Implementation of the GPR/ZOU has the potential to impact built-environment historical resources. Impacts would be significant and unavoidable even with the incorporation of mitigation.</p>	<p><i>CR-1: Architectural History Evaluation.</i>  <b>Policy OS-J.2. Historic Resources Consideration.</b>                      The County shall consider historic resources during preparation or evaluation of plans and discretionary development projects that may impact buildings or structures For a project projected on a property that includes buildings, structures, objects, sites, landscapes, or other features that are 45 years of age or older at the time of permit application, the project applicants shall be responsible for preparing and implementation the recommendations of a historical resources evaluation completed by qualified cultural resources practitioners.</p>	<p>Significant and Unavoidable.</p>
<p><b>Impact CR-2.</b> Implementation of the GPR/ZOU has the potential to impact archaeological resources. Impacts would be Significant and unavoidable, even with the incorporation of mitigation.</p>	<p><i>CR-2: Archaeological Resources Study Program.</i>  <b>OS-J.4. Cultural Resources Protection and Mitigation</b>                      The County shall require that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, tribal, paleontological, and cultural sites and resources. For projects requiring ground disturbance and located within a high or moderate cultural sensitivity areas, a cultural resources technical report may be warranted, including accurate archival research and site surveys conducted by qualified cultural resources practitioners. The need to prepare such studies shall be determined based on the tribal consultation process and initial outreach to local or state information centers.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact CR-3.</b> Ground-disturbing activities associated with the implementation of the GPR/ZOU could result in damage to or destruction of human burials. However, with compliance with existing regulations, impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<b>Energy</b>		
<p><b>Impact E-1.</b> Development and population growth facilitated by the GPR/ZOU would result in an increase of overall consumption of energy compared to existing conditions. However, the GPR/ZOU is based on a land-use strategy that would promote greater overall energy efficiency in community and municipal operations. 2042 General Plan policies and implementation programs would ensure that development would comply with existing energy efficiency regulations and would encourage new development to take advantage of voluntary energy-efficiency programs. As such, the consumption of energy resources by development facilitated under the GPR/ZOU would not be wasteful, inefficient, or unnecessary consumption, and impacts would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact E-2.</b> Construction and operation of projects facilitated by the GPR/ZOU would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur.</p>	None required.	No Impact
<b>Geology and Soils</b>		
<p><b>Impact GEO-1.</b> New development envisioned in the General Plan Review and Zoning Ordinance Update (GPR/ZOU) could result in exposure of people or structures to a risk of loss, injury, or death from seismic events. Additionally, development under the general plan has the potential to be located on an unstable geologic unit or unstable soil, or soil that could become unstable as a result of the project. However, adherence to the requirements of the California Building Code and implementation of the policies in the 2042 General Plan would minimize the potential for loss, injury, or death following a seismic event, as well as the potential for on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse due to unstable soils or unstable geologic units. Impacts would be less than significant level.</p>	None required.	Less than Significant
<p><b>Impact GEO-2.</b> New development envisioned in the General Plan Review and Zoning Ordinance Update (GPR/ZOU) could result in exposure of people or structures to a risk of loss, injury, or death from seismic events. Additionally, development under the general plan has the potential to be located on an unstable geologic unit or unstable soil, or soil that could become</p>	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
<p>unstable as a result of the project. However, adherence to the requirements of the California Building Code and implementation of the policies in the 2042 General Plan would minimize the potential for loss, injury, or death following a seismic event, as well as the potential for on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse due to unstable soils or unstable geologic units. Impacts would be less than significant level.</p>		
<p><b>Impact GEO-3.</b> Development facilitated by the GPR/ZOU could result in the construction of structures on expansive soils, which could create a substantial risk to life or property. However, new development would be required to comply with the standards of the California Building Code pertaining to expansive soils. Compliance with the requirements of the California Building Code, the Fresno County Municipal Code, and polices in the 2042 General Plan would reduce impacts related to expansive soils to a less-than-significant level.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact GEO-4.</b> Development envisioned in the GPR/ZOU would be required to connect to public sewer systems where they are available. In areas where public sewer systems are not available, development would have to comply with 2042 General Plan Policies. Implementation of the Fresno County Mandatory Sewer Connection Ordinance and the 2042 General Plan Policies would reduce impacts to less-than-significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact GEO-5.</b> Individual development projects facilitated by the GPR/ZOU may result in ground disturbance that has the potential to directly or indirectly destroy a paleontological resource or unique geologic feature. 2042 General Plan Policies would ensure that individual discretionary development projects are reviewed, designed, and mitigated to reduce potential impacts to paleontological resources; however, this policy would not apply to all development facilitated by the GPR/ZOU. This would be a potentially significant impact, and there would be no feasible mitigation. Therefore, impacts would be significant and unavoidable.</p>	<p>None feasible.</p>	<p>Significant and Unavoidable</p>

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<b>Greenhouse Gas Emissions</b>		
<p><b>Impact GHG-1.</b> development envisioned under the GPR/ZOU would generate both short-term and long-term GHG emissions. Implementation of the GPR/ZOU would result in GHG emissions exceeding the locally applicable, project-specific efficiency thresholds. Impacts would be significant and unavoidable.</p>	<p><i>GHG-1: Funding for a Greenhouse Gas Inventory and Preparation of a Climate Action Plan</i></p> <p><b>Policy HS-H.10 Funding for a Greenhouse Gas Inventory and Preparation of a Climate Action Plan.</b>            The County shall seek a variety of sources including, but not limited to, grants, state funding, and or impact fees to fund the preparation and implementation of a Fresno County specific Climate Action Plan. Once funding is available, the County shall proceed to prepare a Climate Action Plan.</p> <p><i>GHG-2 Preparation and Implementation of a Climate Action Plan</i></p> <p><b>Policy HS-H.11 Preparation and Implementation of a Climate Action Plan.</b>            The County shall undertake a countywide Climate Action Plan (CAP) within two years of the adoption of General Plan Amendment No. 529 (General Plan Review) with the objective of meeting a GHG emissions reduction trajectory consistent with State law (currently codified in Health and Safety Code Section 38566 et seq. [Senate Bill 32] and Executive Order B-55-18).</p>	<p>Significant and Unavoidable</p>
<p><b>Impact GHG-2.</b> The GPR/ZOU would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Impacts would be Less than Significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<b>Hazards and Hazardous Material</b>		
<p><b>Impact HAZ-1.</b> Implementation of the GPR/ZOU could result in an incremental increase in the overall routine transport, use, storage, and disposal of hazardous materials within the County and increase the risk of release of hazardous materials. However, compliance with applicable regulations related to the handling and storage of hazardous materials and compliance with 2042 General Plan policies would minimize the risk of spills and the public’s potential exposure to these substances. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact HAZ-2.</b> Implementation of the GPR/ZOU could result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school, but compliance with existing regulatory requirements would minimize risks to schools and students, resulting in a less than significant impact.</p>	<p>None required.</p>	<p>Less than Significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact HAZ-3.</b> Implementation of the GPR/ZOU could result in development on sites contaminated with hazardous materials. However, compliance with applicable regulations relating to site cleanup and 2042 General Plan policies would minimize impacts from development on contaminated sites, resulting in a less than significant impact.</p>	None required.	Less than Significant
<p><b>Impact HAZ-4.</b> Several public and private airports are located within Fresno County. Increased population, forecasted over the span of the proposed General Plan's horizon year of 2042, would result in additional airport and airstrip activity. Impacts would be avoided through implementation of goals and policies in the 2042 General Plan and hazardous impacts on people working and residing within the airport area of influence would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact HAZ-5.</b> The 2042 General Plan policies address maintenance of a Local Hazard Mitigation Plan and emergency access implementation. Therefore, the GPR/ZOU would not result in interference with these types of adopted plans. Impacts would be less than significant.</p>	None required.	Less than Significant
<b>Hydrology and Water Quality</b>		
<p><b>Impact HWQ-1.</b> Development envisioned by the GPR/ZOU could result in a discharge of pollutants to surface waters or contamination of shallow groundwater through increased soil disturbance and erosion, discharge of contaminated wastewater or stormwater, or accidental spills or leaks of hazardous materials. Compliance with applicable laws and regulations and implementation of the goals and policies of the 2042 General Plan would minimize the potential for water quality degradation and would reduce this impact to a Less-Than-Significant level.</p>	None required.	Less than Significant
<p><b>Impact HWQ-2.</b> The GPR/ZOU would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge due to the county's policies to recharge the basin. The GPR/ZOU would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be less than significant.</p>	None required.	Less than Significant



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact HWQ-3.</b> Development facilitated by the GPR/ZOU could alter the existing drainage patterns on future development sites and potentially result in erosion and siltation. Compliance with applicable regulations, including the Clean Water Act, and implementation of the goals and policies of the 2042 General Plan would minimize the potential for erosion and siltation and would reduce this potential impact to a less than significant level.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact HWQ-4.</b> Development facilitated by the GPR/ZOU could alter the existing drainage patterns and increase the amount of runoff in spheres of influence of incorporated cities and in existing unincorporated communities, which could result in flooding on- or off-site, exceeding the capacity of existing or planned stormwater drainage systems, or create substantial additional sources of polluted runoff. Compliance with applicable regulations and implementation of the goals and policies of the 2042 General Plan would minimize the potential for increased runoff and flooding. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact HWQ-5.</b> Development facilitated by the GPR/ZOU could risk release of pollutants due to project inundation. Compliance with applicable regulations and implementation of the goals and policies of the 2042 General Plan would minimize the potential for adverse effects related to flood hazard and would reduce this potential impact to a less than significant level.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Land Use and Planning</b></p>		
<p><b>Impact LU-1.</b> Implementation of the GPR/ZOU would not physically divide an established community. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact LU-2.</b> Implementation of the GPR/ZOU would be generally consistent with applicable land use plans, policies, or regulations adopted to avoid or mitigate environmental effects, such as FCOG's <i>Regional Transportation Plan 2018-2042</i> and the SJVAPCD Air Quality Management Plans. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<b>Noise</b>		
<p><b>Impact N-1.</b> Construction of development envisioned in the GPR/ZOU would temporarily generate increased noise levels, potentially affecting nearby noise-sensitive land uses. However, provisions in the Fresno County Ordinance Code and 2042 General Plan policies would limit construction-related noise disturbance, and impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact N-2.</b> Development envisioned in the GPR/ZOU would introduce new stationary noise sources associated with residential, commercial and industrial land uses and would contribute to an increase in traffic and railway noise. The continued regulation of stationary noise sources, consistent with the County’s Noise Control Ordinance, and implementation of goals and policies in the 2042 General Plan would minimize disturbance to adjacent land uses. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact N-3.</b> Construction of individual projects facilitated by the GPR/ZOU could temporarily generate groundborne vibration, potentially affecting nearby land uses. high-vibration levels during working construction hours could potentially disturb people or damage fragile buildings. This impact would be less than significant with mitigation to apply standard vibration control measures.</p>	<p><i>N-1: Construction Vibration Control Measures.</i>  <b>Policy HS-H.12: Construction Vibration Control Measures.</b>                      The following measures to minimize exposure to construction vibration shall be included as standard conditions of approval for projects involving construction vibration within 50 feet of historic buildings or nearby sensitive receivers shall:</p> <ol style="list-style-type: none"> <li>1. Avoid the use of vibratory rollers within 50 feet of historic buildings or residential buildings with plastered walls that are susceptible to damage from vibration and;</li> <li>2. Schedule construction activities with the highest potential to produce vibration to hours with the least potential to affect nearby institutional, educational, and office uses that are identified as sensitive to daytime vibration by the Federal Transit Administration in <i>Noise and Vibration Impact Assessment</i> (FTA 2018).</li> </ol>	<p>Less than Significant</p>
<p><b>Impact N-4.</b> Development envisioned by the GPR/ZOU would result in increased airport and airstrip activity. The continued regulation of airport noise consistent with state and federal regulations as well as the implementation of policies in the 2042 General Plan would minimize disturbance to people residing or working within proximity to airports, airstrips, and air bases. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<b>Population and Housing</b>		
<p><b>Impact PH-1.</b> Implementation of the GPR/ZOU would facilitate new housing in Fresno County, which would increase the County's population over time. However, the growth accommodated by the GPR/ZOU would not exceed FCOG population forecasts and impacts would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact PH-2.</b> Implementation of the GPR/ZOU would not result in the displacement of substantial numbers of housing or people. The GPR/ZOU would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. Impacts would be less than significant.</p>	None required.	Less than Significant
<b>Public Services and Recreation</b>		
<p><b>Impact PS-1.</b> Implementation of the GPR/ZOU would add new population, generating additional need for fire protection services. The proposed 2042 General Plan policies would reduce impacts associated with the provision of fire protection services, and new facilities would be located in developed areas. Impacts would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact PS-2.</b> Implementation of the GPR/ZOU would add new population, generating additional demand for police services. The proposed 2042 General Plan policies would reduce impacts, and new facilities would be located in developed areas. Impacts would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact PS-3.</b> Development under the GPR/ZOU would facilitate development that would add school aged children to the county's population. However, facilities have adequate capacity and new development would be required to pay impact fees which would result in less than significant impacts with regard to the provision of school facilities. Impacts would be less than significant.</p>	None required.	Less than Significant
<p><b>Impact PS-4.</b> Development facilitated by the GPR/ZOU allow for an increase in the County's population and increased demand for library services, which would result in the provision of new or physically altered library facilities. Although compliance with the policies in the 2042 General Plan would</p>	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
<p>reduce impacts to library facilities, impacts would be significant and unavoidable.</p>		
<p><b>Impact PS-5.</b> Development facilitated by the GPR/ZOU would result in an increase in the County’s population. This would increase demand for parks and recreation facilities and potentially create the need for new park and recreation facilities. Although compliance with the policies in the 2042 General Plan would reduce impacts to parks and recreation, impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Transportation</b></p>		
<p><b>Impact T-1.</b> Implementation of the Fresno County GPR/ZOU would be consistent with the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact T-2.</b> The proposed Fresno County GPR/ZOU would result in an increase in VMT per capita and an increase in VMT per employee above 87 percent of the baseline 2019 countywide conditions. VMT per capita and VMT per employee impacts from implementation of the proposed GPR/ZOU would be significant and unavoidable.</p>	<p><i>T-1: VMT Policy</i>                      On a regional level, the following Policy shall be added to the Fresno County General Plan to solidify the County’s requirement for individual transportation and land use projects that would generate or attract more than 110 daily trips (pursuant to OPR’s SB 743 technical advisory) under their jurisdiction to reduce project related VMT:  <b>Policy TR-A.25 VMT Threshold.</b>                      Projects that would generate or attract more than 110 daily vehicle trips shall be evaluated for a transportation VMT impact on an individual basis. The threshold of significance shall be 87 percent below the countywide average rate of VMT. Any individual project resulting in VMT that exceeds 87 percent below the countywide average shall be required to implement project-specific mitigation measures aimed at reducing VMT generated by the project.                      The policy detailed above would be consistent with the recommended threshold identified for unincorporated Fresno County in the 2021 <i>Fresno County SB 743 Implementation Regional Guidelines</i>. Project specific mitigation may include, but is not limited to, the following regional- and project-level Transportation Demand Management (TDM) strategies that could further reduce project-level VMT resulting from future development under implementation of the proposed GPR/ZOU.  <ul style="list-style-type: none"> <li>▪ <b>Expand Transit Service:</b> Consider opportunities to expand FCRTA fixed-route and shuttle-based transit service to serve locations of future</li> </ul> </p>	<p>Significant and Unavoidable</p>

Impact	Mitigation Measure (s)	Residual Impact
	<p>growth, with consideration to anticipated increases in commute trips.</p> <ul style="list-style-type: none"> <li>▪ <b>Public-Facing TDM Programs:</b> Promote existing TDM programs led by FCOG and other public agencies including ridesharing programs, carpool and vanpool programs, and demand-response services, such as:               <ul style="list-style-type: none"> <li>▫ Fresno COG “Valley Rides” Ridesharing</li> <li>▫ Carpool Incentive Program</li> <li>▫ Commuter Vanpool Program</li> <li>▫ Agricultural Worker Vanpool Program</li> <li>▫ Senior Taxi Scrip Program</li> </ul> </li> <li>▪ <b>Employer-Based TDM Programs:</b> Per San Joaquin Valley Air Pollution Control District, the employer-based trip reduction Rule 9410 (December 17, 2009) requires employers with at least 100 eligible employees at a worksite to implement programs to reduce VMT from private vehicles used by employees to commute to and from their worksites. Employers should promote the education, information, and promotion of the above mentioned TDM programs.</li> <li>▪ <b>Mobility-As-A-Service:</b> Provide additional access and connectivity for underserved populations. Strategies to improve connectivity and access include on-demand shuttles to connect individuals to desired destinations.</li> <li>▪ <b>Connectivity Enhancement:</b> The bicycle and pedestrian facilities presented in the Fresno County Regional ATP should connect to transit route stops where applicable, to accommodate “first mile” and “last mile” travel (travel between modes to a destination). In addition, existing and future bus stops should be improved to comply with ADA design standards to ensure ADA-accessible bus stops and comfortable bus shelters.</li> <li>▪ <b>Land Use:</b> Modify land use plans for future proposed development projects to increase residential development in areas with low VMT/capita characteristics and/or decrease development in areas with high VMT/capita characteristics and modify land use plans to increase commercial development in areas with low VMT/employee characteristics and/or decrease development in areas with high VMT/employee characteristics.</li> </ul> <p><b>Education and Promotion/Encouragement:</b>            Voluntary travel behavior change program including promotions and marketing.</p> <p><b>Commute Trip Reductions (smaller employers):</b>            Implement or provide access to:</p>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>Voluntary commute trip reduction programs</p> <p>Alternative work schedules and Telework Program</p> <p>Employer-sponsored vanpools or shuttles</p> <p>Rideshare Program - Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services</p> <p>Provide car-sharing and bike-sharing programs</p> <p>Provide partially or fully subsidized transit passes</p> <p>Provide telework options</p> <p>Provide employee transportation coordinators at employment sites</p> <p>Provide a guaranteed ride home service to users of non-auto modes</p> <p><b>Bicycle Infrastructure:</b> Implement on-street bicycle facilities, provide bicycle parking, and provide secure bicycle parking and showers.</p> <p><b>Neighborhood Infrastructure:</b> Implement neighborhood improvements such as:</p> <p>Traffic calming improvements</p> <p>Pedestrian network improvements</p> <p>Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle</p> <p>Improve or increase access to transit</p> <p>Increase access to common goods and services, such as groceries, schools, and daycare</p> <p>Incorporate a neighborhood electric vehicle network</p> <p>Limit or eliminate parking supply</p> <p>It should be noted that the above list of measures is not all inclusive; rather, this list includes potential recommendations to be considered if feasible for individual projects implemented under the GPR/ZOU, and alternate measures can and should be evaluated based on a specific project in response to site specific conditions.</p>	
<p><b>Impact T-3.</b> Implementation of the Fresno County GPR/ZOU would not substantially increase hazards due to geometric design features or incompatible uses. Rather, the proposed goals and policies would make roadways safer. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact T-4:</b> The proposed Fresno County GPR/ZOU would not result in inadequate emergency access. Rather, the proposed goals and policies would improve emergency response and facilitate more effective emergency evacuation. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Impact	Mitigation Measure (s)	Residual Impact
<b>Tribal Cultural Resources</b>		
<p><b>Impact TCR-1.</b> Implementation of the proposed project has the potential to impact tribal cultural resources. Impacts would be significant and unavoidable.</p>	None feasible.	Significant and Unavoidable
<b>Utilities and Service Systems</b>		
<p><b>Impact UTL-1.</b> Development facilitated by the GPR/ZOU would require new connections to existing utilities, and may require new or expanded utility infrastructure to accommodate future growth, particularly for the provision of water supply and wastewater treatment. Improvements would also be required for stormwater drainage, electricity, natural gas, and telecommunications, which may require the construction of new facilities. Future development would be consistent with goals and policies in the 2042 General Plan which help to reduce impacts. However, it is not known where or how extensive new facilities would be required; therefore potential impacts would be significant and unavoidable.</p>	None feasible.	Significant and Unavoidable
<p><b>Impact UTL-2.</b> Development facilitated by the GPR/ZOU would result in incrementally increased water demands tied to population growth. Although future development would be consistent with goals and policies in the 2042 General Plan, including for water supply availability and reliability, it cannot be determined whether sufficient water supplies are available to accommodate this growth. Impacts would be significant and unavoidable.</p>	None feasible.	Significant and Unavoidable
<p><b>Impact UTL-3.</b> Development facilitated by the GPR/ZOU would increase wastewater production, and sufficient treatment capacity is available at the existing Fresno-Clovis RWRF to accommodate this increase. However, because the location of future growth is not known, it cannot be determined whether all new wastewater would be diverted to the Fresno-Clovis RWRF, or if new wastewater treatment facilities would be required. Therefore, although future development would be consistent with goals and policies in the 2042 General Plan to minimize impacts, if new wastewater treatment facilities would be necessary to accommodate growth locations, impacts would be significant and unavoidable.</p>	None feasible.	Significant and Unavoidable

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact UTL-4.</b> Development facilitated by the GPR/ZOU would increase solid waste generation in the county. Future development would be required to comply with State and local regulations related to solid waste, as well as applicable goals and policies in the 2042 General Plan. However, the existing landfill which accommodates most solid waste disposal in the county will reach capacity in 2031, and alternate disposal location(s) have not yet been identified or developed. Therefore, sufficient solid waste disposal capacity is not currently available to accommodate anticipated growth. Impacts would be significant and unavoidable.</p>	<p>None feasible.</p>	<p>Significant and Unavoidable</p>
<b>Wildfire</b>		
<p><b>Impact WFR-1.</b> The proposed 2042 General Plan policies ensure adequate emergency access, response, and preparation. Furthermore, Fresno County works closely with Local Fire Districts to ensure emergency access and fire protection services meet standards. Therefore, the GPR/ZOU would not impair an emergency response plan or emergency evacuation plan. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact WFR-2.</b> The GPR/ZOU would not facilitate urban development in areas most susceptible to wildfire. Prevailing wind and slopes would generally spread fire away from areas where urban development is envisioned. However, there remains a possibility that development under the GPR/ZOU would occur in areas in proximity to MFHSZ, HFHSZ, and VHFHSZ that could lead to a significant risk of loss, injury, or death involving wildland fires. Impacts would be significant and unavoidable.</p>	<p>No feasible mitigation exists.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact WFR-3.</b> The GPR/ZOU facilitates growth primarily as infill and redevelopment within urbanized areas of the County where infrastructure and roads currently exist. The proposed General Plan policies require new development to have adequate fire and emergency access, which would reduce the potential for fire risk. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than Significant</p>



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# 1 Introduction

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This document is a Program Environmental Impact Report (EIR) that examines the potential environmental effects associated with implementation of the proposed Fresno County General Plan Review and Zoning Ordinance Update (GPR/ZOU), defined as the proposed project for purposes of this environmental review. This section:

1. Provides an overview of the background behind the proposed project
2. Summarizes the process involved in developing the proposed project
3. Describes the purpose of and legal authority for the adoption of the EIR
4. Summarizes the scope and content of the EIR
5. Lists lead, responsible, and trustee agencies for the EIR
6. Describes the intended uses of the EIR
7. Provides a synopsis of the environmental review process required under CEQA

The contents of other EIR sections are as follows:

- Section 2, *Project Description*, provides a detailed discussion of the proposed project
- Section 3, *Environmental Setting*, describes the existing environmental and geographic conditions within Fresno County
- Section 4, *Environmental Impact Analysis*, describes the potential environmental effects associated with the proposed project, and provides mitigation measures when significant effects are identified
- Section 5, *Other CEQA Required Sections*, discusses issues such as growth inducement, significant irreversible environmental effects, and significant and unavoidable impacts.
- Section 6, *Alternatives*, discusses alternatives to the proposed project, including the CEQA-required “no project” alternative
- Section 7, *References and Report Preparers*, lists informational sources for the EIR and persons involved in the preparation of the document

## 1.1 Overview of the General Plan Review and Zoning Ordinance Update

The current Fresno County General Plan was adopted by the Fresno County Planning Commission on September 7, 2000, and by the Fresno County Board of Supervisors on October 3, 2000. The current 2000 County General Plan consists of multiple documents: the countywide General Plan Background Report, the countywide General Plan Policy Document, and over 40 regional, community, and specific plans. The General Plan Background Report inventories and analyzes existing conditions and trends in Fresno County and provides the formal supporting documentation for General Plan Policy Document. The countywide General Plan Policy Document contains explicit statements of goals, policies, and implementation programs that constitute the formal policy of Fresno County for land use, development, open space protection, and environmental quality. The current General Plan Policy Document is organized by and consists of the following seven countywide elements: 1)

Economic Development; 2) Agriculture and Land Use; 3) Transportation and Circulation; 4) Public Facilities and Services; 5) Open Space and Conservation; 6) Health and Safety; and 7) Housing.

The County's Zoning Ordinance is officially known as Division VI of the Ordinance Code of the County of Fresno. The stated purpose of the Zoning Ordinance is "to classify and regulate the highest and best use of buildings, structures, and land located in the unincorporated area of the County of Fresno in a manner consistent with the Fresno County General Plan." The Zoning Ordinance is effectively the principal tool for implementing the County's General Plan, and by State law, must be consistent with the General Plan.

In June 2006, the Fresno County Board of Supervisors directed County staff to initiate a review of the 2000 General Plan along with a comprehensive update of the County Zoning Ordinance. This effort was called for in Policy LU-H.16 of the current 2000 General Plan, which states that the County will review the 2000 General Plan goals, policies, and implementation programs every five years and revise them as deemed necessary. With input from the public and other agencies, as well as comments received at several public hearings, the County completed the review and developed a final draft of the revised countywide General Plan Policy Document in 2014. The final draft was presented to the Fresno County Board of Supervisors for adoption at a public hearing that was held on September 30, 2014. However, based on the public testimony, the Board of Supervisors directed County staff to continue the review of the General Plan and update the General Plan Background Report.

The proposed project consists of a comprehensive update of the General Plan Background Report, a review of the General Plan Policy Document, and a comprehensive update of the Zoning Ordinance. The revised General Plan is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2042 and address recently adopted State regulations. The revised General Plan would accommodate County population growth projected through 2042. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The revision includes only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document. The Zoning Ordinance update includes provisions, development standards, and guidelines for consistency with the revised General Plan, pursuant to State law.

## 1.2 Purpose and Legal Authority

The proposed project – adoption and implementation of the GPR/ZOU – requires discretionary approval by the Fresno County Board of Supervisors; therefore, the project is subject to the environmental review requirements of CEQA. This EIR has been prepared in accordance with CEQA and the *State CEQA Guidelines*. In accordance with Section 15121 (a) of the *State CEQA Guidelines* (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of an EIR is to:

...inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are necessarily more general and may contain a broader discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the *State CEQA Guidelines*, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the County, as Lead Agency, with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the County with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis. Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically, are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways. By its nature, a Program EIR considers the largescale effects associated with implementing a program, such as a General Plan or Specific Plan, and does not, and is not intended to, examine the specific environmental effects associated with individual actions that may be undertaken under the guise of the larger program.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine what, if any, additional CEQA documentation needs to be prepared. If the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope and additional environmental documents may not be required (*CEQA Guidelines* Section 15168(c)). When a Program EIR is relied on for a subsequent activity, the Lead Agency must incorporate feasible mitigation measures and alternatives developed in the Program EIR into the subsequent activities (*State CEQA Guidelines* Section 15168(c)(3)). If a subsequent activity would have effects not within the scope of the Program EIR, the Lead Agency must prepare a new Initial Study leading to a Negative Declaration (ND), Mitigated Negative Declaration (MND), or a project level EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The *State CEQA Guidelines* (Section 15168(h)) encourage the use of Program EIRs, citing five advantages:

1. Provision of a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
2. Focus on cumulative impacts that might be overlooked in a case-by-case analysis.
3. Avoidance of continual reconsideration of recurring policy issues.
4. Consideration of broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
5. Reduction of paperwork by encouraging the reuse of data (through tiering).

As a wide-ranging environmental document, the Program EIR uses macro level thresholds as compared to the project-level thresholds that might be used for an EIR on a specific development project. It should not be assumed that impacts determined not to be significant at a macro level would not be significant at a project level. In other words, determination that implementation of the proposed project as a broad program would not have a significant environmental effect does not necessarily mean that an individual project would not have significant effects based on project-level CEQA thresholds, even if the project is consistent with the General Plan.

This EIR has been prepared to analyze potentially significant environmental impacts associated with future development resulting from implementation of the proposed project and its associated action with direction to review the project description section for details, and also addresses

appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts.

This EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. This EIR identifies significant or potentially significant environmental effects, as well as ways in which those impacts can be reduced to less-than-significant levels, whether through the imposition of mitigation measures or through the implementation of specific alternatives to the proposed project. In a practical sense, this document functions as a tool for fact-finding, allowing citizens, decision-makers, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

### 1.3 Scope and Content

In accordance with the *State CEQA Guidelines*, a Notice of Preparation (NOP) of a Draft EIR was circulated to the State Clearinghouse, responsible, and trustee agencies and persons requesting notice on March 20, 2018. The 2018 NOP, included in Appendix NOP, indicated that the EIR would evaluate potential impacts in each of the following resources and issues areas:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

The County received written responses to the 2018 NOP regarding the scope and content of the EIR. The responses, included in Appendix D, are addressed in the analysis contained in the topical subsections of Section 4, *Environmental Impact Analysis*. Table 1-1 summarizes the content of the letters and verbal comments received during the 2018 NOP public review period and where the issues raised are addressed in the EIR.

The County held two EIR scoping meetings both on March 26, 2018, one at the Fresno County Board of Supervisors Chambers and the other at the Riverdale Memorial District, with a number of members of the public in attendance. A summary of the written comments received at this meeting is included at the end of Appendix NOP. Oral and written comments associated with the scoping meetings are addressed, as appropriate, in the analysis contained in the topical subsections of Section 4, *Environmental Impact Analysis*.

However, the County temporarily paused the project for additional changes after circulating the NOP in 2018. As a result, the County prepared an updated NOP on January 15, 2021, which was circulated to the State Clearinghouse, responsible, and trustee agencies and persons requesting

notice. The 2021 NOP, included in Appendix NOP, stated the EIR would evaluate all potential impacts to the resources and issues areas in the 2018 NOP in addition to Wildfire and Energy.

Wildfire and Energy were added as issue areas when the *CEQA Guidelines* were updated and adopted in January 2019. In addition to adding issue areas, significance thresholds in previously included existing issues areas were modified. Therefore, since the 2021 NOP was circulated after the updated *CEQA Guidelines* were released, all revisions to and additions of impact areas are reflected in the EIR.

The County received written responses during the comment period that took place from January 15, 2021 to March 1, 2021 for the 2021 NOP regarding the scope and content of the EIR. The responses, included in Appendix NOP, are addressed in the analysis contained in the topical subsections of Section 4, *Environmental Impact Analysis*. Table 1-1 summarizes the content of the letters and verbal comments received during the 2021 NOP public review period and where the issues raised are addressed in the EIR.

The County held one virtual EIR scoping meeting on January 27, 2021. A summary of the written comments received at this meeting is included at the end of Appendix NOP. Oral and written comments associated with the scoping meeting are addressed, as appropriate, in the analysis contained in the topical subsections of Section 4, *Environmental Impact Analysis*.

**Table 1-1 NOP Comments and EIR Response**

Commenter (year)	Comment/Request	How and Where It Was Addressed
American Civil Liberties Union (2018)	The General Plan should identify disadvantaged communities.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The Draft GP should identify the Census Tracts of disadvantaged communities it included in the General Plan and to explain methodology for identifying these communities.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The Draft GP must include objectives and policies that promote safe and sanitary homes.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	County should amend its EJ policies and objectives to address needs of disadvantaged communities and should adopt more concrete policies for promoting public facilities, safe and sanitary homes, and civic engagement in the public decision-making process.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Building Industry Association (2018)	Commenter provides a map showing an area they feel should be designated for residential development. Area is northeast of the City of Fresno, north of the Clovis Landfill.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
CDFW Central Region (2021)	Recommends the EIR analyze potential impacts to special-status species with mitigation measures.	Potential impacts of the GPR/ZOU on special-status species are evaluated in Section 4.4, <i>Biological Resources</i> .
	Recommends the County consult with US FWS about potential impacts to federally listed species.	Potential impacts of the GPR/ZOU on federally listed species are evaluated in Section 4.4, <i>Biological Resources</i> .

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Commenter (year)	Comment/Request	How and Where It Was Addressed
	If project causes any potential stream or lake disturbance, mitigation should be developed to reduce the need for LSAA in the future.	Potential impacts of the GPR/ZOU on streams and lakes are evaluated in Section 4.4, <i>Biological Resources</i> and Section 4.9, <i>Hydrology and Water Quality</i> .
	Commenter provided a Summary Table. Report attachment.	This comment is noted.
California Rural Legal Assistance, Inc. (2018)	Fresno County is not using proper baseline conditions for the analysis.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	County must address legal inadequacies in the GP before a proper env. impact analysis can be conducted.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	Draft Zoning Ordinance fails to fully implement the mandate density bonus law for affordable housing units.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	County's plan to consolidate small commercial parcels to provide adequate sites for affordable housing is unrealistic.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The County must conduct a thorough analysis of the infrastructure deficiencies in disadvantaged unincorporated communities within its jurisdiction.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Draft documents do not facilitate housing for the homeless or other persons with special needs.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Carpenters Local 701 (2021)	Commenter requests that mandatory local hire and apprenticeship language be added to the land use, economic development, and environmental justice elements.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Carpenters Local 702 (2021)	For every apprenticeable craft, contractors will participate in a Joint Apprenticeship Program.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Carpenters Local 703 (2021)	Contractors will hire a minimum of 25% of staff with home addresses within Fresno, Madera, Tulare, or Kings Counties within 180 days of NOP issuance.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Central Valley Flood Protection Board (2018)	The draft Safety Element of the GP must be submitted to the Board at least 90 days in advance of adoption.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Christine Flannigan (2021)	Update the Local Area Management Program to include alternative wastewater treatment systems without RWQCB approval.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
City of Fresno (2021)	Examine policies in relation to well-drilling and the Sustainable Groundwater Management Act with mitigation.	Potential impacts of the GPR/ZOU on the Sustainable Groundwater Management Act are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	Ensure the groundwater quality of septic tanks are thoroughly analyzed.	Potential impacts of the GPR/ZOU regarding septic tanks are evaluated in Section 4.6, <i>Geology and Soils</i> .

Commenter (year)	Comment/Request	How and Where It Was Addressed
	Avoid or mitigate impacts of AQ, transportation, VMT, GHG, and noise in rural residential parcels.	Potential impacts of the GPR/ZOU on air quality are evaluated in Section 4.3, <i>Air Quality</i> . Potential impacts of the GPR/ZOU on transportation and VMT are evaluated in Section 4.14, <i>Transportation and Traffic</i> . Potential impacts of the GPR/ZOU on greenhouse gas emissions are evaluated in Section 4.6, <i>Greenhouse Gas Emissions</i> . Potential impacts of the GPR/ZOU on noise are evaluated in Section 4.11, <i>Noise</i> .
	Impacts of good movements on city roads, AQ, GHG, and noise should be analyzed.	Potential impacts of the GPR/ZOU on air quality are evaluated in Section 4.3, <i>Air Quality</i> . Potential impacts of the GPR/ZOU on transportation are evaluated in Section 4.14, <i>Transportation and Traffic</i> . Potential impacts of the GPR/ZOU on greenhouse gas emissions are evaluated in Section 4.6, <i>Greenhouse Gas Emissions</i> . Potential impacts of the GPR/ZOU on noise are evaluated in Section 4.11, <i>Noise</i> .
City of Fresno- Development & Resources Mgmt. Department (2018)	City concurs an EIR is appropriate level of CEQA review.	This comment is noted.
	Commenter provides a comprehensive list of GP review comments; not related to the EIR.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
City of Reedley (2018)	Urge County to incorporate GP designation of "Greenbelt" around the City of Reedley's perimeter.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Approves of the County's efforts to engage in regional coordination activities, such as the multi-jurisdictional housing element, and RTP.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
David Cehrs (2021)	Claims that the County has not followed up/enforced their own water sustainability policies.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Asks the County to stop parcel splits.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Asks the County to stop second homes on a single parcel.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Asks the County to stop issuing new groundwater well permits.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Committer (year)	Comment/Request	How and Where It Was Addressed
Department of Toxic Substances (2021)	Acknowledge the potential for historic or future activities on/near Planning Area to result in the release of hazardous wastes/substances.	Potential impacts of the GPR/ZOU relating to hazardous waste/substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	Identify the mechanisms to initiate any required investigations and the responsible government agency to provide oversight.	Potential impacts of the GPR/ZOU relating to hazardous waste/substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	Recommends collecting soil samples to test for lead prior to any intrusive activities.	Potential impacts of the GPR/ZOU relating to lead in soil are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	Recommends any areas on/near mining activities should be evaluated for mine waste.	Potential impacts of the GPR/ZOU relating to hazardous substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	If buildings are demolished, surveys should be conducted for the presence of lead-based products, mercury, asbestos, and polychlorinated biphenyl caulk.	Potential impacts of the GPR/ZOU relating to hazardous substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	Recommends imported soils should be sampled for contaminants.	Potential impacts of the GPR/ZOU relating to hazardous substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
Feleena Sutton, Aera Energy (2021)	If a site has been used for agriculture or weed abatement, the area should be investigated for pesticides.	Potential impacts of the GPR/ZOU relating to hazardous substances are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	Committer requested to be placed on a distribution list for information regarding the Fresno County General Plan Review Zoning Ordinance Update public meetings as it relates to the work on the Climate Action Plan.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Fresno County Fire Protection District (2018)	Project shall comply with CCR Fire Code.	Compliance with the CCR Fire Code is evaluated in Section 4.17, <i>Wildfire</i> .
Fresno Metropolitan Flood Control District (2018)	Development in the GP Planning Area shall be designed to not overload stormwater management and drainage systems.	Potential impacts of the GPR/ZOU on stormwater management and drainage systems are evaluated in Section 4.16, <i>Utilities and Service Systems</i> .
	Development in the GP shall prevent adverse water quality impacts and discharges.	Potential impacts of the GPR/ZOU on water quality and discharges are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	Table LU-1 of the draft GP proposes changes to land use designations that may increase the amount of impervious surface in the region, and the current storm drain system may be undersized for runoff from this increased impervious surface.	Potential impacts of the GPR/ZOU on runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
Fresno Metropolitan Flood Control District (2021)	Committer provided attachment of Fresno Storm Drainage and Flood Control Master Plan.	This comment is noted and does not require revisions to the EIR.
	Maximum flood pool elevation should be studied for all development in the Planning Area.	Potential impacts of the GPR/ZOU flood hazards are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .

Commenter (year)	Comment/Request	How and Where It Was Addressed
	Grading within the Planning Area should be designed so there are no adverse impacts on the passage of a major storm through the area.	Potential impacts of the GPR/ZOU on runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	Development should provide any surface flowage easements or covenants for areas of the Plan that cannot convey storm water without crossing private property.	Potential impacts of the GPR/ZOU regarding runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	Storm water discharges from private facilities to FMFCD's storm drainage system should consist only of storm water runoff and shall be free of solids and debris.	Potential impacts of the GPR/ZOU on runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	FMFCD will need to review and approve the final improvement plans for all development within the boundaries of the Planning Area to insure consistency with the future Storm Drainage Master Plan.	This comment is noted.
	Storm drain easement will be required whenever storm drain facilities are located on private property.	This comment is noted.
	FMFCD may require developers to construct certain storm drain facilities.	This comment is noted.
	Outdoor storage areas should be constructed to improve storm runoff quality.	Potential impacts of the GPR/ZOU on runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
	The most current Flood Insurance Rate Maps should be reviewed for individual properties.	This comment is noted and does not require revisions to the Draft EIR.
	If the land use changes to a "higher intensity" at a later date, the public drainage system may be undersized to accommodate the higher storm water runoff rates.	Potential impacts of the GPR/ZOU on runoff are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
Leadership Counsel for Justice and Accountability (2021)	Ensure an accurate baseline for environmental conditions.	Baseline environmental conditions are analyzed in each respective section.
	In its analysis, the PEIR should utilize CalEnviroScreen 3.0, the San Joaquin Valley APCD, AB 617 and AB 686, the CA Housing Partnership reports, the CA Healthy Places Index, FCHIP, and the Fresno County Community Health Needs Assessment.	Potential impacts of the GPR/ZOU are analyzed using sources from the San Joaquin Valley APCD in Section 4.3, <i>Air Quality</i> . Otherwise, appropriate methodology and sources for analysis were used throughout the Draft EIR.
	Identify and map the location of existing sensitive uses and how they would be impacted by Plan implementation.	Potential impacts of the GPR/ZOU on sensitive land uses are analyzed throughout the Draft EIR.
	Consider modifications to ensure buffers between sensitive land uses and polluting land uses.	Impacts to sensitive receptors have been noted throughout the document and mitigation identified where required.
	Consider revisions to the circulation map to minimize impacts on sensitive uses and residential areas.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Commenter (year)	Comment/Request	How and Where It Was Addressed
	Expand opportunities for higher density housing in growth areas.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Support infrastructure improvements in zero emission technologies and vehicles, and grid improvements.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Identify existing water and wastewater needs to ensure all residents have access to safe water services.	Potential impacts of the GPR/ZOU on water and wastewater are evaluated in Section 4.16, <i>Utilities and Service Systems</i> .
	Identify sufficient land for park and green spaces with prioritization on communities with the least access.	Potential impacts of the GPR/ZOU on parks and green spaces are evaluated in Section 4.13, <i>Public Services and Recreation</i> .
	Require adequate landscaping and buffer zones to protect sensitive uses.	Impacts to sensitive receptors have been noted throughout the document and mitigation identified where required.
	Noticing requirements for zoning changes and Conditional Use Permits, including who is noticed and distributing notices in accessible languages.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Analyze and include mitigation for impacts to housing, water supply, traffic and road safety, public health, utilities, and construction impacts.	Potential impacts of the GPR/ZOU on housing are evaluated in Section 4.12, <i>Population and Housing</i> . Potential impacts of the GPR/ZOU on water supply and utilities are evaluated in Section 4.16, <i>Utilities and Service Systems</i> . Potential impacts of the GPR/ZOU on traffic and road safety are evaluated in Section 4.14, <i>Transpiration and Traffic</i> . Construction impacts of the GPR/ZOU are evaluated throughout the EIR within each respective section.
	Include any and all comments provided to staff in 2018, both oral and written.	Comments from 2018 have been included in this table of the EIR and in Appendix NOP.
	Plan development has not been conducive for informed public decision or encouraging public participation.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	County should partner with diverse stakeholders.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	County needs abide by the implementation of SB 1000, AB 170, and AB 379.	SB 1000 and AB 170 pertains to the General Plan and does not pertain to the scope and contents of the EIR. Potential impacts of the GPR/ZOU on wildlife conservation are evaluated in Section 4.4, <i>Biological Resources</i> .
	Incorporate a vulnerability assessment to identify the risks of climate change.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.

Commenter (year)	Comment/Request	How and Where It Was Addressed
	Incorporate relevant info from federal, state, regional, and local agencies on the assets, resources, and population at-risk of climate change exposure.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Include adaptation and resiliency goals.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Identify feasible implementation measures to minimize climate change impacts.	Potential impacts of the GPR/ZOU on climate change are analyzed in Section 4.7, <i>Greenhouse Gas Emissions</i> . Potential impacts of the GPR/ZOU on climate change related drought and associated water availability are analyzed in Section 4.9, <i>Hydrology and Water Quality</i> and Section 4.16, <i>Utilities and Service Systems</i> .
Leadership Counsel for Justice and Accountability (2018)	Implementation measures in Section 3 of the Policy Document are ambiguous and deficient.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	The County must conduct a thorough analysis of the infrastructure deficiencies in disadvantaged unincorporated communities within its jurisdiction, and include methodology used to identify these communities	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	County should expand analysis of infrastructure and service deficiencies in disadvantage unincorporated communities to identify present and future needs in light of existing and forecast conditions.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	County must identify financial funding alternatives for the extension of services in disadvantaged unincorporated communities.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	Introduction in the GP Land Use Element should also cover unincorporated areas.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	GP Land Use Element should include summaries of Community Plans.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR
	Draft Background Report does not satisfy legal requirements to include data and relevant AQ policies, programs, and regulations.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Draft Background Report does not include an adequate analysis of water supply and drinking water issues.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Background Report noise analysis should describe the disproportionate impact that noise has on disadvantaged communities.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Committer (year)	Comment/Request	How and Where It Was Addressed
	Background Report should discuss economic and demographic conditions in Fresno County, including disparities by race and income level.	This comment does not pertain to the scope and contents of the EIR.
	Draft Zoning Ordinance fails to comply with the employee housing act.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Draft Zoning Ordinance fails to fully implement the mandate density bonus law for affordable housing units.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Draft Zoning Ordinance must be revised to allow emergency shelters in accordance with Government Code Section 65583.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Draft Zoning Ordinance does not comply with state and federal laws requiring the county to ensure reasonable accommodations.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
League of Women Voters (2021)	For the "No Project" alternative, reevaluate the adverse effects identified in the 2000-2020 GP.	Alternatives for the GPR/ZOU are evaluated in Section 6, <i>Alternatives</i> .
	The Plan should contain a "No Harm" alternative	Section 6, <i>Alternatives</i> , includes a discussion of the Environmentally Superior Alternative.
	The County should evaluate how the revision of the goals and policies of the Plan could combat climate change.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The County should evaluate the relationship between human activity under the GP and the viability of native plants and animals.	Potential impacts of the GPR/ZOU on native plants and animals are evaluated in Section 4.4, <i>Biological Resources</i> .
	The EIR should assess how the GP support for agriculture with its heavy reliance on pesticides is contributing to the decline on insect numbers in the country.	Potential impacts of the GPR/ZOU on special-status animal species are analyzed in Section 4.4, <i>Biological Resources</i> . However, insects are not protected under CEQA or the California Endangered Species Act.
	The EIR should address the GP goals that promote development and how achieving them affects the environment.	This EIR analyzes impacts of development facilitated under the GPR/ZOU on the environment.
	The EIR should assess whether pursuing cost-effectiveness inhibits County support for energy sources that are more costly but environmentally superior.	Potential impacts of the GPR/ZOU on energy sources are analyzed in Section 4.6, <i>Energy</i> . However, CEQA does not require an analysis of cost effectiveness.
	The County may not have the means to achieve the environmental protection goals outlined in the draft GP.	This comment does not pertain to the scope and contents of the EIR.
	Committer mentioned that implementation of the GP programs had fallen to 40% in 2019.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
The EIR should evaluate the environmental consequences of the County not being able to successfully execute its existing implementation programs.	The EIR analyzes the GPR/ZOU , which is the proposed project. The GPR/ZOU contains implementation programs that would become the applicable County programs moving forward if the GPR/ZOU is adopted.	

Commenter (year)	Comment/Request	How and Where It Was Addressed
	The updated Plan should remove barriers to urban sprawl.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The EIR should evaluate the environmental effect of lack of funding to implement the GP.	The EIR analyzes the GPR/ZOU , which is the proposed project. CEQA requires analysis of a proposed project’s impacts, not the impacts of not implementing a project.
League of Women Voters of Fresno (2018)	The County should evaluate the cause for and the extent of the County's inability to implement mitigation measures in the 2000 GP, since many of these same measures will be carried over into the draft GP.	This comment does not pertain to the scope and contents of the EIR.
	Significant and unavoidable impacts should be described in measurable terms.	Significance thresholds are provided in the impact analysis of each section, and significant impacts are explained where identified.
	The County should determine the funding required to fully implement mitigation measures.	This comment does not pertain to the scope and contents of the EIR.
	The County should determine the conditions under which the GP can work as a self-mitigating document.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	A range of reasonable alternatives should be evaluated, including one that has no impacts harmful to the environment.	Alternatives for the GPR/ZOU are evaluated on Section 6, <i>Alternatives</i> .
	Commenter objects to the lack of community outreach for the GP review and Zoning Ordinance Update.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Lucy Hornbaker (2018)	The few people attending the public meeting might be special interests; be aware of this when structuring new plan review.	This comment does not pertain to the scope and contents of the EIR.
	Air Quality: would like to encourage continued effort; recognizes County for work already done on this issue.	This comment is noted.
Malaga County Water District (2018)	Outdated/inaccurate description of the District in the Background Report (Commenter points out specific examples).	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	County should prepare a specific plan for Malaga Community because Land Use Policies conflict w/ Fresno County GP En.Ju. Element.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Mary Savala (2021)	Commenter is interested in the criteria and data that will be used to review the GP.	This comment does not pertain to the scope and contents of the EIR.
	Commenter wants to know what the environmental impacts is if current or expanded programs/policies are not implemented.	Potential environmental impacts of the GPR/ZOU are analyzed in each respective section of this EIR. Alternatives to the GPR/ZOU are analyzed in Section 6, <i>Alternatives</i> .
	Commenter believes that a good number of policies and programs of the current GP have been ignored or neglected.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Committer (year)	Comment/Request	How and Where It Was Addressed
Jackie McCoy (2021)	No annual cleanup day for unincorporated area to drop off tires and large things electronics etc.	This comment does not pertain to the scope and contents of the EIR.
	PG&E cut trees everywhere but not into manageable pieces leaving a huge fire danger	This comment does not pertain to the scope and contents of the EIR.
	Due to drought, no buildings should be constructed unless a similar building is taken down.	This comment does not pertain to the scope and contents of the EIR.
	Need solar on both sides of the freeways and highways with charging stations	This comment does not pertain to the scope and contents of the EIR.
	Need restrooms or rest stop facilities for visitors to Pine Flat Lake. People pull over leaving trash and human excrement along Hughes Creek and the Road	This comment does not pertain to the scope and contents of the EIR.
	Garbage trucks lose trash along the road	This comment does not pertain to the scope and contents of the EIR.
	Committer lives in a dead zone for cell service	This comment does not pertain to the scope and contents of the EIR.
John Dirickson, Navy (2018)	NAS Lemoore Military Influence Area -- Navy would like to review & comment; consider environmental factors in relation to local communities.	Potential impacts of the GPR/ZOU on sensitive receptors are analyzed in Section 4.3, <i>Air Quality</i> and Section 4.11, <i>Noise</i> .
	NAS Lemoore Air Installation Compatible Use Zone -- consider environmental factors to this area.	Potential impacts of the GPR/ZOU on airports and aircrafts are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
Ken Wall (2021)	The GP should address GHG in the form of a separate Greenhouse Gas Reduction Plan or a Climate Action Plan.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The Plan should make mention of and consider the possibility of a massive atmospheric river event that may submerge the Central Valley in up to 30 feet of water and how Fresno may be affected.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The Plan should address evacuation scenarios, agricultural losses, and stormwater quality in the event of a massive flooding event.	Potential impacts of the GPR/ZOU on evacuation plans are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> . Potential impacts of the GPR/ZOU on agricultural land are evaluated in Section 4.2, <i>Agricultural Resources</i> . Potential impacts of the GPR/ZOU on stormwater quality in the event of a flood are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
Native American Heritage Commission (2018)	AB 52 & SB 18 have tribal consultation requirements; NAHC recommends consulting with tribes affiliated with the Planning Area ASAP.	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .
	Summarizes provisions of SB 18 & AB 32 as they related to the CEQA process.	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .

Committer (year)	Comment/Request	How and Where It Was Addressed
	Recommends local tribal involvement and consultation as early as possible.	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .
	Committer provided a breakdown of AB 52, SB 18, and additional CEQA requirements.	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .
	Recommends consulting with legal counsel about compliance with AB 52, SB 18, and any other applicable laws	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .
	Recommends contacting CHRIS for a records search.	Potential impacts of the GPR/ZOU on tribal cultural resources are evaluated in Section 4.15, <i>Tribal Cultural Resources</i> .
	Committer mentions that lack of surface evidence of archeological resources does not preclude their subsurface existence so mitigation and monitoring should be conscious of that.	Potential impacts of the GPR/ZOU on archeological resources are evaluated in Section 4.5, <i>Cultural Resources</i> .
Naval Facilities Engineering Systems Command (2021)	The County should consider the impact of new growth on military readiness activities on the Military Influence Area and NAS Lemoore Air Installation Compatible Land Use Zone (AICUZ).	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The County should consider incorporating key military-community components such as noise contours, accident potential zones, military training routes, and special use airspace.	Potential impacts of the GPR/ZOU on noise are evaluated in Section 4.11, <i>Noise</i> . Potential impacts of the GPR/ZOU on airports and aircrafts are evaluated in Section 4.8, <i>Hazards and Hazardous Materials</i> .
	The commenter included an attachment of their May 2018 comments on the NOP and a map of NAS Lemoore.	This comment is noted.
NAWSCL (2021)	The Plan may push urban growth and create conflict with military land and airspace, affecting military readiness	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Renewable energy technologies may result in adverse impacts on military testing and training so it should occur in a coordinated and compatible manner.	This comment does not pertain to the scope and contents of the EIR.
	Committer provides the opportunity to create a partnership between the County of Fresno and NAWSCL to ensure compatible development.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Radley Reep (2021)	Committer raises concerns regarding the County's ability to implement the GP, and specifically outlines the failures of self-mitigation.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The County needs to evaluate the cause for/extent of its inability to implement mitigation measures for the 2000-2020 GP.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Determine the amount of funding needed to guarantee full implementation.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Committer (year)	Comment/Request	How and Where It Was Addressed
	Determine the conditions under which GP self-mitigation can work.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Committer raises concerns surrounding the lack of public engagement and provides a detailed timeline of County's planning process.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Committer provided attachments of 2000-2020 GP policies and sig/unavoidable adverse impacts.	This comment is noted.
	Clearly define "valuable agricultural lands" (mentioned in LU-A.1 Agricultural Land Conservation).	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	EIR should address impacts to agriculture that may result from new urban development allowed by GP policy revisions.	Potential impacts of the GPR/ZOU on agriculture are evaluated in Section 4.2, <i>Agricultural Resources</i> .
San Joaquin Valley APCD (2021)	Committer offers an ongoing commitment to strengthen the relationship between APCD and the City	The Lead Agency for this document is Fresno County.
	There should be appropriate project siting to help ensure there is adequate distance between conflicting land uses and away from sensitive receptors.	Potential impacts of the GPR/ZOU on sensitive receptors are evaluated in Section 4.3, <i>Air Quality</i> .
	There should be an effort to reduce VMT.	Potential impacts of the GPR/ZOU on VMT are evaluated in Section 4.14, <i>Transpiration and Traffic</i> .
	The commenter recommends that the EIR include or incorporate by reference, policies that will reduce or mitigate VMT impacts to the extent feasible.	Potential impacts of the GPR/ZOU on VMT are evaluated in Section 4.14, <i>Transpiration and Traffic</i> .
	The commenter recommends that a more detailed preliminary review of the Plan be conducted for construction and operational emissions including potential impacts on: construction and operational emissions, recommended model, truck routing, cleanest available truck, idling, electric and on-road equipment, and under-fired char boilers.	Potential construction and operational emission impacts of the GPR/ZOU are evaluated in Section 4.3, <i>Air Quality</i> .
	The commenter recommends the EIR include a discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement for the Plan.	The Voluntary Emission Reduction Agreement is discussed in Section 4.3, <i>Air Quality</i> .
	The commenter recommends that future development projects should be evaluated for potential health impacts to surrounding receptors resulting from operational and multi-year construction TAC emissions.	Potential construction emission impacts of the GPR/ZOU are evaluated in Section 4.3, <i>Air Quality</i> .

Commenter (year)	Comment/Request	How and Where It Was Addressed
	The commenter recommends that an AAQA be performed for a project if emissions exceed 100 pounds per day of any emission.	Potential impacts of the GPR/ZOU on emissions are discussed in Section 4.3, <i>Air Quality</i> and Section 4.7, <i>Greenhouse Gas Emissions</i> . Emissions are analyzed using appropriate methodologies.
	The commenter recommends that the EIR include a discussion of whether future development would result in a cumulatively considerable net increase of any criteria pollutant or precursor.	Potential cumulative impacts of the GPR/ZOU on criteria pollutants are evaluated at the end of Section 4.3, <i>Air Quality</i> .
	Consider the feasibility of incorporating vegetative barriers and urban greening as a measure to reduce air pollution exposure on sensitive receptors.	Potential impacts of the GPR/ZOU on air pollution exposure are discussed in Section 4.3, <i>Air Quality</i> . Mitigation is suggested to address air pollution exposure on sensitive receptors.
	The commenter recommends that the EIR include a measure requiring the assessment and potential installation of particulate matter emission control systems for new large restaurants operating under-fired char broilers.	Potential impacts of the GPR/ZOU on emissions are evaluated in Section 4.3, <i>Air Quality</i> .
	The commenter provided a list of district rules and regulations that the County should apply to the Plan.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The commenter recommends that a copy of the district's comments be provided to the Project proponent.	The County if the project proponent and has received a copy of the comments.
Sequoia Riverland's Trust (2018)	The General Plan should distinguish between existing communities (incl. disadvantaged communities) where infrastructure needed and new towns.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Set a mitigation ratio of at least 1:1; integrate elements from LU-A1.6 into a more clearly defined farmland mitigation program.	Potential impacts of the GPR/ZOU on agriculture are evaluated in Section 4.2, <i>Agricultural Resources</i> . No mitigation is incorporated to the Draft EIR.
	The Plan should avoid unnecessary impacts to agricultural and biological resources.	Potential impacts of the GPR/ZOU on agriculture are evaluated in Section 4.2, <i>Agricultural Resources</i> . Potential impacts of the GPR/ZOU on biological resources are evaluated in Section 4.4, <i>Biological Resources</i> .
	New development should be directed into existing communities.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	Commenter suggest strengthening L.U. polices by setting a mitigation measure requiring that for each acre of ag land converted to development, another acre of equivalent quality land is permanently conserved.	Potential impacts of the GPR/ZOU on agriculture are evaluated in Section 4.2, <i>Agricultural Resources</i> .

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Committer (year)	Comment/Request	How and Where It Was Addressed
	Committer requests to be placed on a distribution list for information regarding the Fresno County General Plan Review Zoning Ordinance public meetings.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
Sierra Club Fresno County (2021)	The County may not legally approve any project relying on the GP while the GP is clearly noncompliant with state Planning and Zoning Law.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The GP is outdated; many elements are obsolete and currently applicable legal mandates are not met.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	AQ issues in Fresno County are inadequately addressed; not currently complying with AB 170 but commenter believes it is feasible and overdue.	Potential impacts of the GPR/ZOU on emissions are evaluated in Section 4.3, <i>Air Quality</i> .
	The Circulation Element fails to consider current state law requiring VMT reduction.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The County fails to comply with state mandates to prepare for climate change.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
January 2021 Scoping Meeting Verbal Comments	The commentor questions if the County has considered renewable-energy specific elements of the zoning ordinance or land use plans, including solar battery storage and hydrogen technology.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The commentors suggests alternatives that minimize impacts on disadvantaged communities and that the EIR looks at environmental impacts, such as housing, water, and wastewater services, on vulnerable communities.	Environmental justice analysis is not required under CEQA, but the General Plan contains a new Environmental Justice Element. However, potential impacts of the GPR/ZOU on housing, water, and wastewater services are discussed in Section 4.12, <i>Population and Housing</i> and Section 4.16, <i>Utilities and Service Systems</i> .
	All feasible mitigation measures on residences and the environment based on community feedback should be used. Feedback should be gathered with a community-based organization engagement plan.	Mitigation measures are implemented throughout the Draft EIR.
	The commentor suggests habitat and agricultural resources mitigation.	Potential impacts of the GPR/ZOU and associated mitigation on habitats and agricultural resources are analyzed in Section 4.2, <i>Agricultural Resources</i> and Section 4.4, <i>Biological Resources</i> .
	The commentor asks for a report on how well previous General Plan policies have worked.	This comment pertains to the General Plan. This comment does not pertain to the scope and contents of the EIR.
	The commentor questions how environmental justice will be analyzed in the EIR.	Environmental justice analysis is not required under CEQA.

Commenter (year)	Comment/Request	How and Where It Was Addressed
	The commenter asks how the Friant Ranch decision impacts air quality analysis.	Potential impacts of the GPR/ZOU on air quality are evaluated in Section 4.3, <i>Air Quality</i> .
	The commenter notes the new VMT requirement.	Potential impacts of the GPR/ZOU on VMT are evaluated in Section 4.14, <i>Transportation and Traffic</i> .

In preparing the EIR, use was made of pertinent County policies and guidelines, certified EIRs and other adopted CEQA documents, and other background documents. A full reference list is contained in Section 7, *References and Preparers*.

The alternatives section of the EIR, Section 6, was prepared in accordance with *CEQA Guidelines* Section 15126.6 and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the proposed project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the environmentally superior alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and XX alternative development scenarios.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. *CEQA Guidelines* Section 15151 provides the standard of adequacy on which this document is based. The *Guidelines* state:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

## 1.4 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible, and trustee agencies. Fresno County is the lead agency under CEQA for this EIR because it has primary discretionary authority to determine whether or how to approve the proposed project.

*CEQA Guidelines* Section 15381 defines responsible agencies as other public agencies that are responsible for carrying out/implementing a specific component of a proposed project or for approving a project, such as an annexation, that implements the goals and policies of a general plan.

There are no responsible agencies for the proposed project.

Although there are no responsible agencies under CEQA with respect to adoption of the proposed project, several other agencies may have review or approval authority over aspects of projects that could potentially be implemented in accordance with various goals and policies included in the General Plan. These agencies and their roles are listed below.

- The State Geologist is responsible for the review of the County's program for minimizing exposure to geologic hazards and for regulating surface mining activities.

**General Plan Review and Zoning Ordinance Update**

- The California Department of Transportation (Caltrans) has responsibility for approving future improvements to the State highway system, including Highway 99 and Interstate 5.
- The California Department of Fish and Wildlife (CDFW) has responsibility for issuing take permits and streambed alteration agreements for any projects with the potential to affect plant or animal species listed by the State of California as rare, threatened, or endangered or that would disturb waters of the State.
- Any other public agencies, such as: Fresno County Fire Protection District, Fresno Irrigation District, Fresno Unified School District, Fresno Local Agency Formation Commission, Airport Land Use Commission of Fresno County, Central Valley Regional Water Quality Control Board, San Joaquin Valley Air Quality Management District, Army Corps of Engineers, Department of Water Resources, and California Department of Housing and Community Development.

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. Potential trustee agencies for the General Plan may include CDFW, State Department of Parks and Recreation, and State Lands Commission.

## 1.5 Intended Uses of the EIR

This EIR is an informational document for use in the County's review and consideration of the proposed General Plan Review and Zoning Ordinance Update. It is to be used to facilitate creation of a General Plan that incorporates environmental considerations and planning principals into a cohesive policy document. The GPR/ZOU will guide subsequent actions taken by the County in its review of new development projects. This EIR discloses the possible environmental consequences associated with the proposed project. The information in this EIR will be used by the Fresno County Board of Supervisors, the Fresno County Planning Commission, the general public, and potentially the trustee and responsible agencies.

The focus of this EIR is to:

- Provide information about the GPR/ZOU for consideration by the Fresno County Board of Supervisors and Fresno County Planning Commission in their selection of the proposed project, an alternative to the proposed project, or a combination of various chapters from the proposed project and its alternatives, for approval
- Review and evaluate the potentially significant environmental impacts that could occur as a result of the implementation of the GPR/ZOU compared to existing conditions
- Identify feasible mitigation measures that may be incorporated into the proposed project in order to reduce or eliminate potentially significant effects
- Disclose any potential growth-inducing and/or cumulative impacts associated with the proposed project
- Examine a reasonable range of alternatives that could feasibly attain the basic objectives of the proposed project, while eliminating and/or reducing some or all of its potentially significant adverse environmental effects

## 1.6 Environmental Review Process

The environmental impact review process required under CEQA is summarized below. The steps appear in sequential order.

1. **Notice of Preparation (NOP) and Initial Study.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more State agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency. An Initial Study may be prepared but is not required.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability for a regional document such as a general plan must be given through publication in a newspaper of general circulation. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.
4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.
5. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
6. **Certification of Final EIR.** According to Section 15090 of the *State CEQA Guidelines* prior to approving a project the lead agency shall certify that: "(1) the final EIR has been completed in compliance with CEQA; (2) the final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and(3) the final EIR reflects the lead agency's independent judgment and analysis."
7. **Lead Agency Project Decision.** According to Section 15092 of the *State CEQA Guidelines*:
  - (a) After considering the final EIR and in conjunction with making findings under Section 15091, the Lead Agency may decide whether or how to approve or carry out the project.
  - (b) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless either:
    - (1) The project as approved will not have a significant effect on the environment, or
    - (2) The agency has:
      - (A) Eliminated or substantially lessened all significant effects on the environment where feasible as shown in findings under Section 15091, and

- (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.
- (c) With respect to a project which includes housing development, the public agency shall not reduce the proposed number of housing units as a mitigation measure if it determines that there is another feasible specific mitigation measure available that will provide a comparable level of mitigation.

**8. Findings/Statement of Overriding Considerations.** According to Section 15091 of the *State CEQA Guidelines*:

- (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
  - (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
  - (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.
- (b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.
- (c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subsection (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.
- (d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.
- (e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.
- (f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

In addition Section 15093 of the *State CEQA Guidelines* state:

- (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the

unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

- (b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
  - (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.
9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.



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## 2 Project Description

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The proposed project involves the adoption of the Fresno County General Plan Review and Zoning Ordinance Update (GPR/ZOU). This section of the EIR describes the key characteristics of the General Plan Review, including the project proponent/lead agency, the geographic extent of the Planning Area, project objectives, required approvals and types and extent of revisions and changes to both the General Plan Policy Document (and Background Report) included in the General Plan Review and the Zoning Ordinance. The project is referred to as the GPR/ZOU in this document.

### 2.1 Project Proponent

The County of Fresno is both the project proponent and the CEQA lead agency for the proposed project. The County's Department of Public Works and Planning, located at 2220 Tulare Street, Fresno, California, 93721, directed preparation of this EIR with the assistance of Rincon Consultants, Inc. (Rincon).

### 2.2 Project Location

Fresno County is one of the eight counties that collectively form the greater San Joaquin Valley. The County covers approximately 6,000 square miles stretching from the Coast Range mountains to the west to the Sierra Nevada Range to the east (see Figure 2-1). For the purposes of this EIR the Planning Area is defined as unincorporated Fresno County as shown in Figure 2-1, and is the land over which the County has land use authority and where the policies and goals proposed in the GPR/ZOU are applicable. The County has 15 incorporated cities, with the City of Fresno being the largest at 546,770 and the City of San Joaquin being the smallest with a population of 3,674 as of 2021 (DOF 2021). For the purpose of the GPR/ZOU, the County has been divided into five geographic subareas to provide greater context. This is because Fresno County is diverse not only in the size of its communities, but also the vast geographic area it covers. These five sub-regions do not have any policy status, but are useful for general orientation and for framing and describing geographically unique planning issues. Each of the five sub-regions are described below and shown in Figure 2-2.

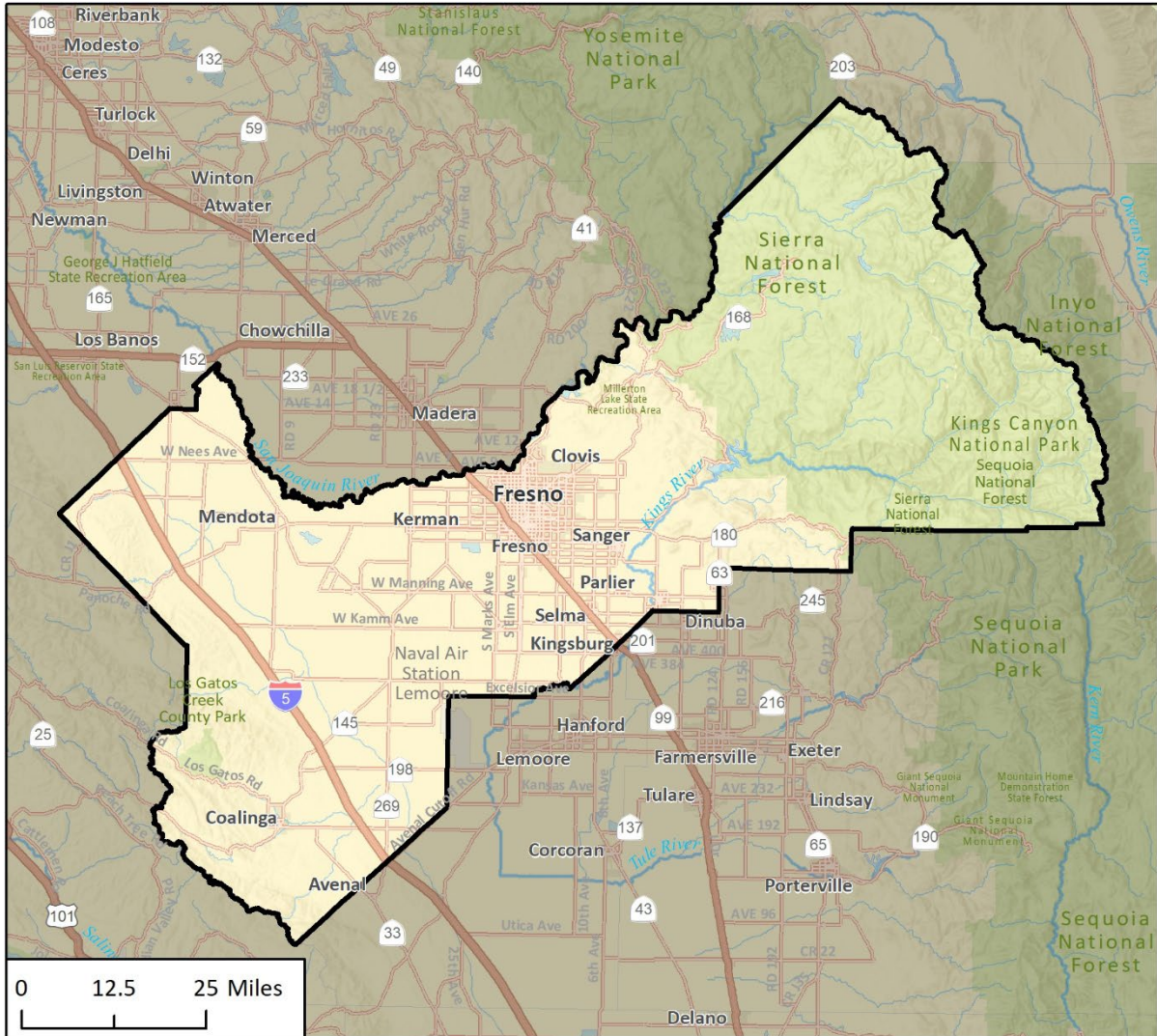
#### **Coast Range Foothills Area**

The Coast Range Foothills geographic area is located in the far west side of Fresno County, sharing its borders with Monterey and San Benito counties. This area primarily lies west of the Interstate 5 corridor and is mainly agriculture, grazing land, and open space. The Coast Range Foothills Area does not include any incorporated cities.

#### **Westside Valley Area**

The Westside Valley geographic area is located adjacent to Interstate 5 and stretches east to Fresno Slough. The land use in this area is primarily agriculture with open space. The Westside Valley encompasses four incorporated cities: Coalinga, Huron, Mendota, and Firebaugh.

**Figure 2-1 Regional Location**



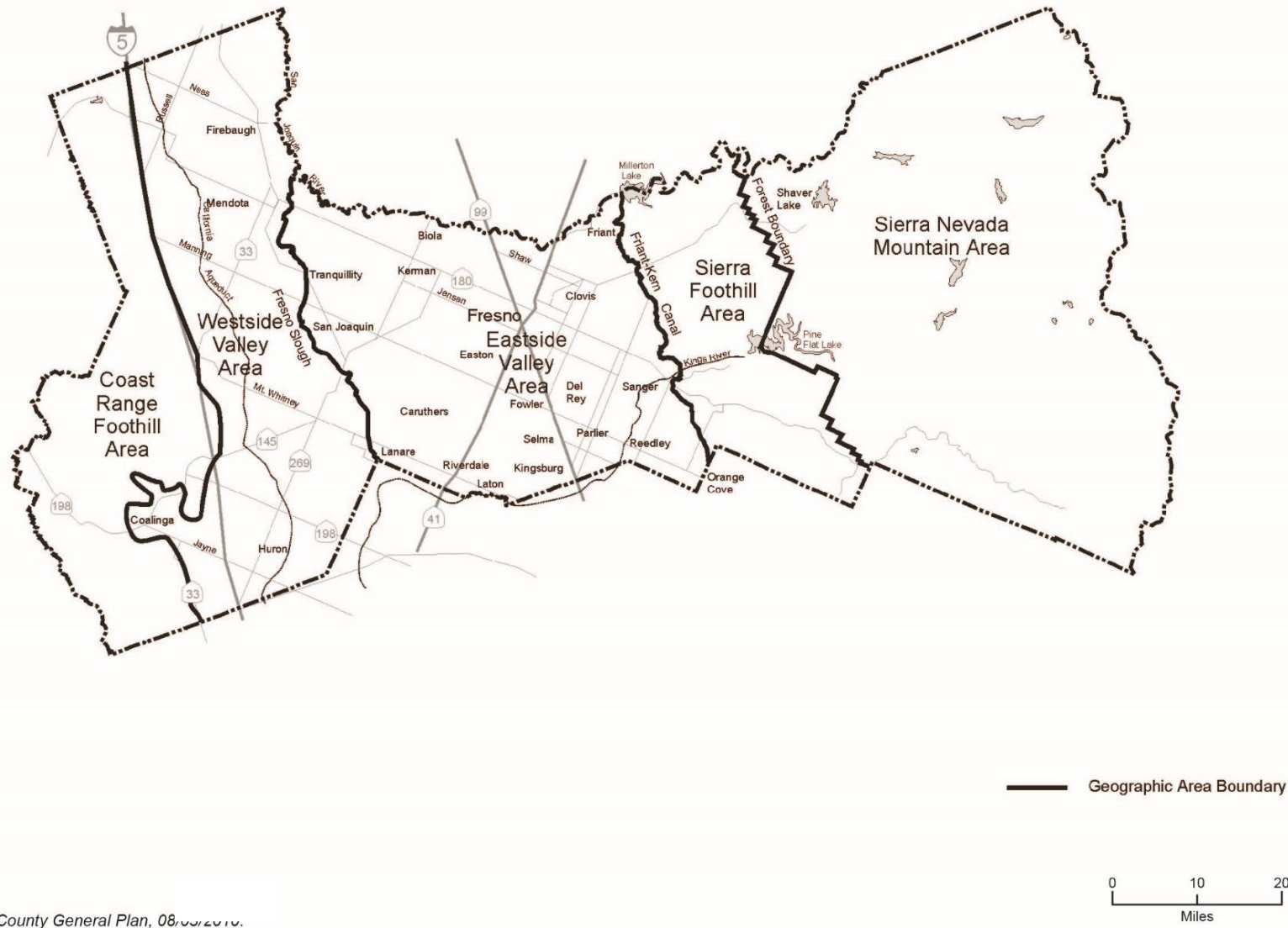
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★ Project Location



Fig 2-1 Regional Location

Figure 2-2 Fresno County Geographic Sub-regions



Source: Fresno County General Plan, 08/03/2010.

## **Eastside Valley Area**

The Eastside Valley geographic area is the most populated area within Fresno County. It is located in the center of county in between the Westside Valley and Sierra Foothills. The land uses in the Eastside Valley vary from agriculture, rural residential, residential, industrial, and some commercial. Many of the more intensive land uses are located on the fringe of the 11 incorporated cities: Fresno, Clovis, Sanger, San Joaquin, Fowler, Selma, Kerman, Parlier, Kingsburg, Orange Cove, and Reedley. In addition to the incorporated communities, there are a number of unincorporated communities, including Friant, Laton, Riverdale, Easton, Caruthers, Malaga, Lanare, Tranquillity, Del Rey, and Biola.

## **Sierra Foothill Area**

The Sierra Foothills geographic area is located east of the Fresno/Clovis metropolitan area adjacent to the Friant-Kern Canal. To the east of the Sierra Foothill area is primarily State and federal owned lands, which are part of multiple National Parks and National Forests. The dominant land use is agriculture and open space. There are numerous pockets of rural residential and a few unincorporated communities including Prather, Auberry, Dunlap and Pinehurst. The Sierra Foothills area does not include any incorporated cities.

## **Sierra Nevada Mountain Area**

The Sierra Nevada Mountain geographic area is located in the far eastern part of Fresno County, adjacent to Inyo and Mono counties. The mountainous terrain in this area limits development, although there are a few rural residential areas located in the far northwest portion and unincorporated communities including Tollhouse, Big Creek, and Shaver Lake. The predominant land use type in this area is open space, primarily State and federally owned lands. There are no incorporated cities in this area.

## **2.3 Fresno County General Plan**

The General Plan functions as a guide to the type of community that residents of Fresno County desire, and provides the means by which that desired future can be achieved. The General Plan addresses a range of immediate, mid-, and long-term issues with which the community is concerned. The General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and "quality of life" considerations in a manner that recognizes resource limitations and productive agricultural land, and the sensitive habitats of the community's natural environment. It outlines policies and programs and sets out plan proposals to guide day-to-day decisions concerning the County's future.

As described in Section 1, *Introduction*, the County's current 2000 General Plan consists of the countywide General Plan Background Report, the countywide General Plan Policy Document, Economic Development Strategy, and over 40 regional, community, and specific plans. The General Plan Review, herein referred to as the proposed project, consists of the General Plan Background Report and a review of the General Plan Policy Document, including revisions to the Policy Document. The proposed project also includes a comprehensive update of the Zoning Ordinance. In addition to "proposed project," the project is also referred to as "GPR/ZOU" in this EIR.

The revised General Plan Policy Document, and thus revised General Plan, is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the

challenges and community needs through planning horizon year 2042. The revised General Plan would accommodate County population growth projected through 2042. This population growth is projected to occur in the region with or without the GPR/ZOU, because the growth is forecast to occur by existing city general plan population projections, and the existing Fresno County 2000 General Plan. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The major themes of the current 2000 General Plan have been retained in the General Plan Review and include directing urban growth to existing communities, limiting the intrusion of development and incompatible land uses onto productive agricultural land, and limiting rural residential development. The revisions include only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan as discussed in more detail below in Section 2.3.1.2. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document.

The General Plan Policy Document is available online at: <https://fresnocountygeneralplan.com> and is incorporated into this document by reference. The revised General Plan Policy Document consists of the current 2000 General Plan Policy Document with proposed revisions shown as red-color text. Proposed additions to the text are indicated by underline, and proposed deletions to the text are shown as strikethrough. As shown in the revised General Plan Policy Document, many of the proposed revisions are grammatical or formatting, and do not affect the substance or meaning the text. These types of revisions would not result in physical changes in the environment, and therefore are not the focus of analysis in this EIR. The focus of this EIR is the revisions that would result in physical changes, which could therefore also result in environmental impacts.

### 2.3.1 Characteristics of the Proposed General Plan Review

The County's current 2000 General Plan Policy Document is made up of seven chapters, or elements, of which six are being updated as part of this project: Economic Development, Agriculture and Land Use, Transportation and Circulation, Public Facilities and Services, Open Space and Conservation, and Health and Safety. The proposed revisions to the General Plan Policy Document retain these same six elements, but also add an Environmental Justice Element. Each element is briefly summarized below. As described above, the majority of the proposed revisions to the General Plan Policy Document are to goals, policies, and implementation programs within the six existing elements of the current 2000 General Plan Policy Document, in addition to adding an Environmental Justice Element. The full text of the elements, including proposed revisions are provided as Appendix B.

Regarding the Housing Element (the seventh chapter of the 2000 General Plan Policy Document), Fresno County adopted its current Housing Element in March 2016, covering the period from 2015-2023. This Housing Element was submitted to the California Department of Housing and Community Development (HCD) for review and comment, and the County received certification of the Housing Element from HCD in April 2016. Fresno County adopted a Regional Housing Needs Allocation (RHNA) Plan for the 6<sup>th</sup> Cycle (2023-2031) on November 17, 2022 and the Housing Element is currently being updated. The update of the Housing Element is a separate process than the General Plan Review and Zoning Ordinance Update. That said, the potential growth that will be part of the RHNA Plan for the 6<sup>th</sup> Cycle - the County's RHNA allocation of 2,350 residential units is included in the overall growth assumed by the General Plan Review through the year 2042 (as defined in

section 2.4 below). The potential development and growth that would occur as a result of the allocation of 2,350 residential units is consistent with the projected growth and development assumed in this Program EIR since the 2,350 residential units would make up a small portion of the overall net 11,275 unit increase in development that would occur by the year 2042. Thus for the purposes of this Program EIR, the allocation of 2,350 units is considered part of the growth of the overall General Plan Review and Zoning Ordinance Update (as further described and estimated in Section 2.4).

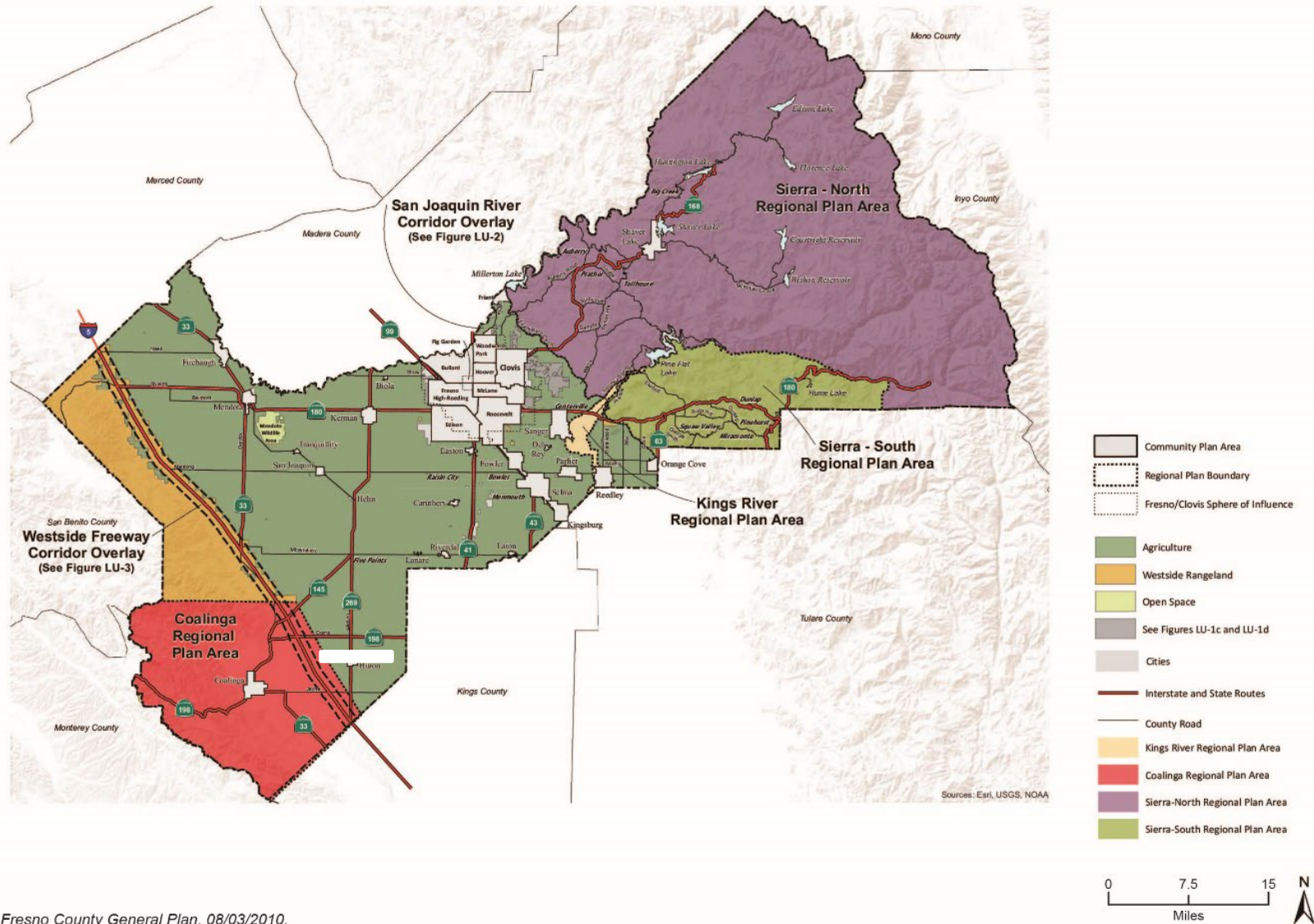
### *2.3.1.1 Economic Development Element*

The Economic Development Element addresses economic issues in Fresno County promoting the County's economic development. The long- and short-term objective of the County is to work with cities, the private sector, and other organizations to retain and expand existing businesses, encourage the development of value-added businesses, attract new industry, improve the skill of the workforce, and facilitate the creation of higher-paying jobs at a faster rate than population growth to elevate Fresno County's employment rates and wage levels. The Economic Development Element sets goals and establishes policies organized into three sections: Job Creation, Economic Base Diversification, and Labor Force Preparedness. Components of this element that could result in physical changes to the environment include the siting of new industrial locations, encouragement of expansion of visitor serving businesses, and future regional transportation initiatives to provide public transit to tourist destinations in the foothill and mountain areas.

### *2.3.1.2 Agriculture and Land Use Element*

The Agriculture and Land Use Element is divided into two major parts. The first major part describes the County's Land Use Diagram, the land use designations that appear on the diagram, and related development standards. The Land Use Diagram consists of multiple land use diagrams. The diagram that is broadest in scope is the Countywide Land Use Diagram, which depicts designations for resource lands primarily on the Valley floor and in the western foothills (see Figure 2-3). The rest of the County is covered by land use diagrams for regional plan areas, community plan areas, and specific plan areas. The various land use diagrams in the Agriculture and Land Use Element and in regional plans, community plans, and specific plans generally employ a common set of land use designations; although, not every land use diagram uses every land use designation. Figure 2-4, Figure 2-5, Figure 2-6, and Figure 2-7 show Open Space areas, Rural Residential areas, the Northeast Fresno-Clovis Metropolitan Area (FCMA), and Rural Settlement Areas, respectively.

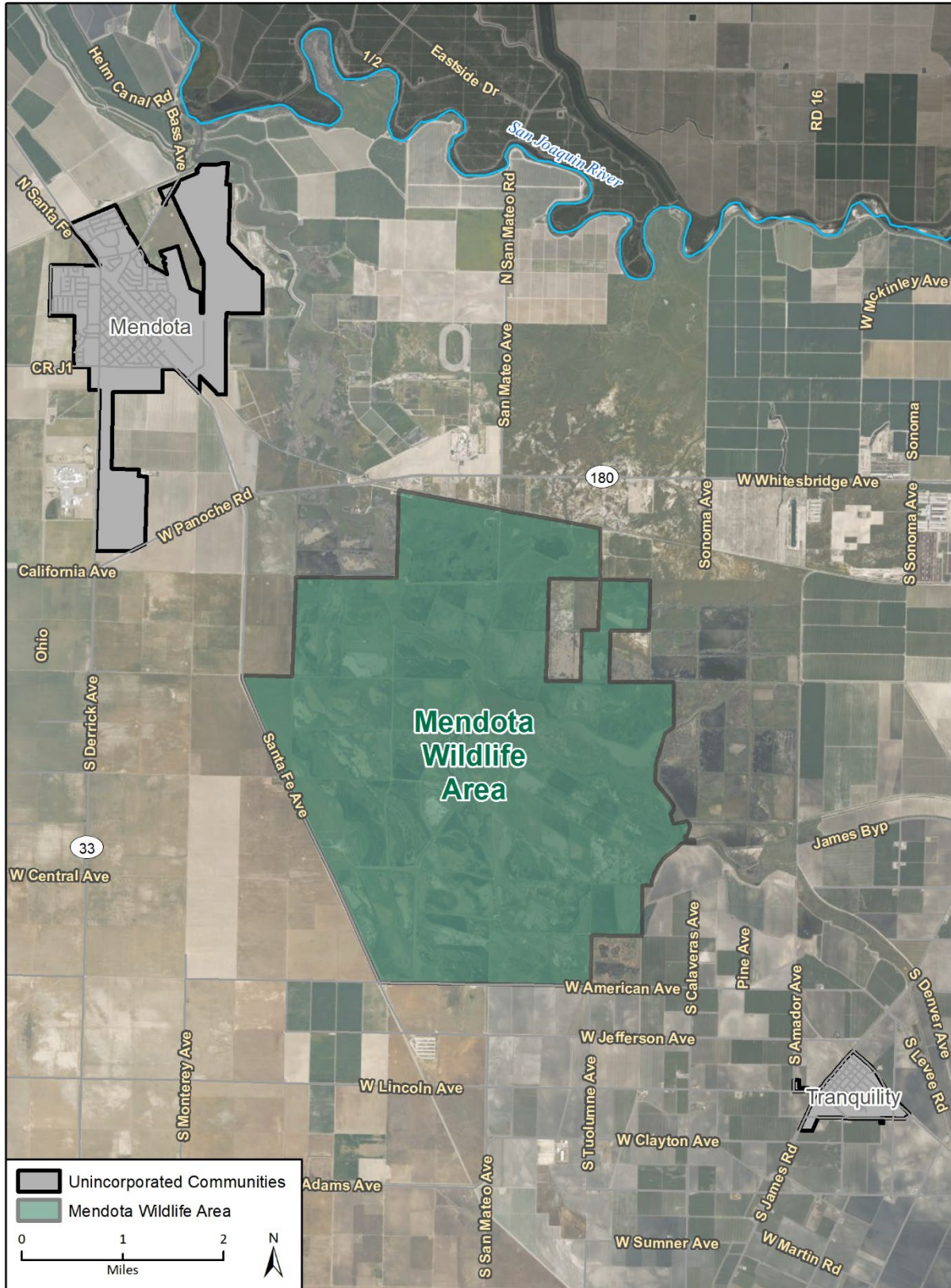
Figure 2-3 County Wide General Plan Land Use Map



Source: Fresno County General Plan, 08/03/2010.



Figure 2-4 Open Space Land Use Diagram



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Fig 2-4 Open Space Land Use Diagram

Figure 2-5 Rural Residential Land Use Diagram

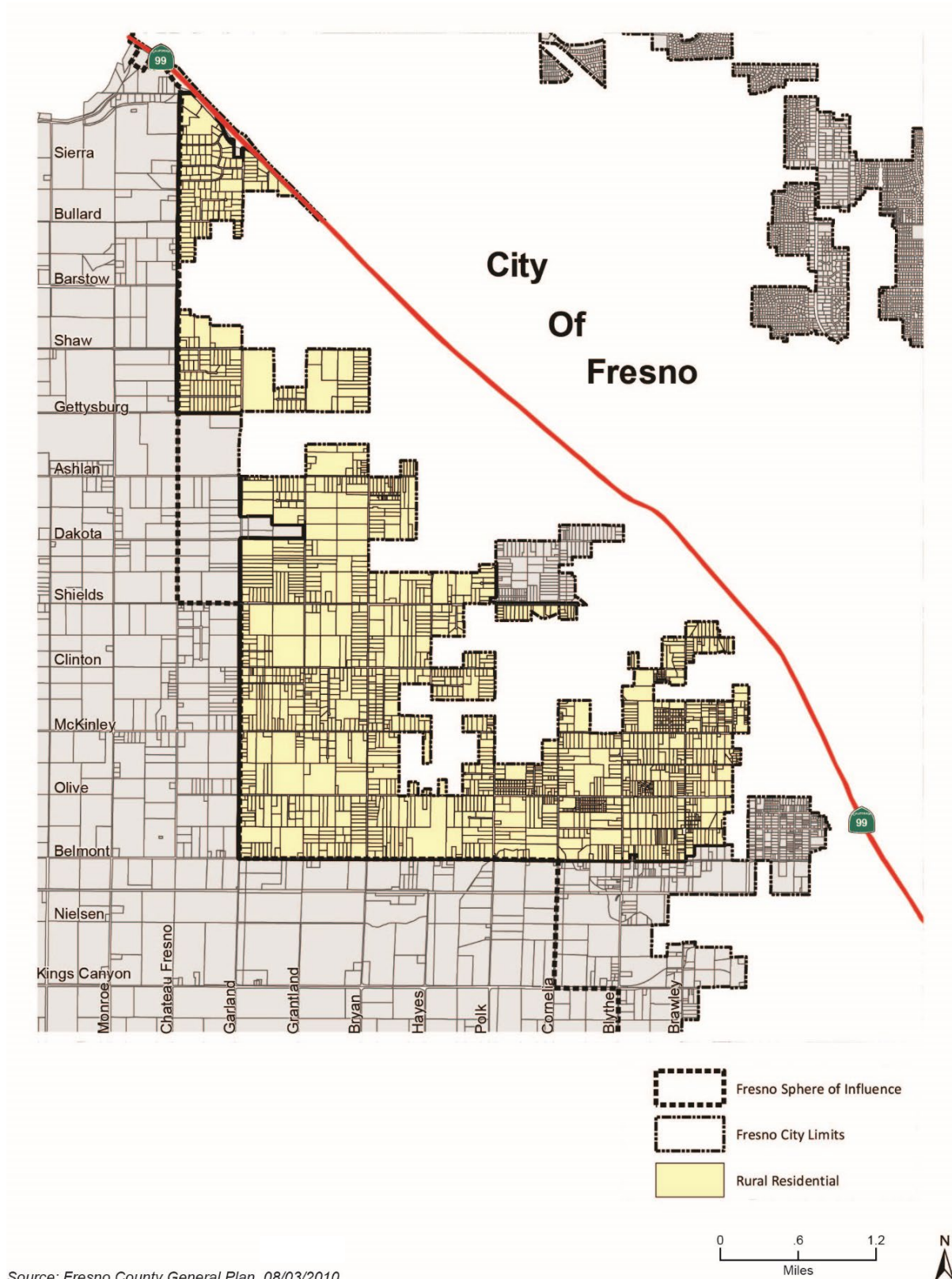
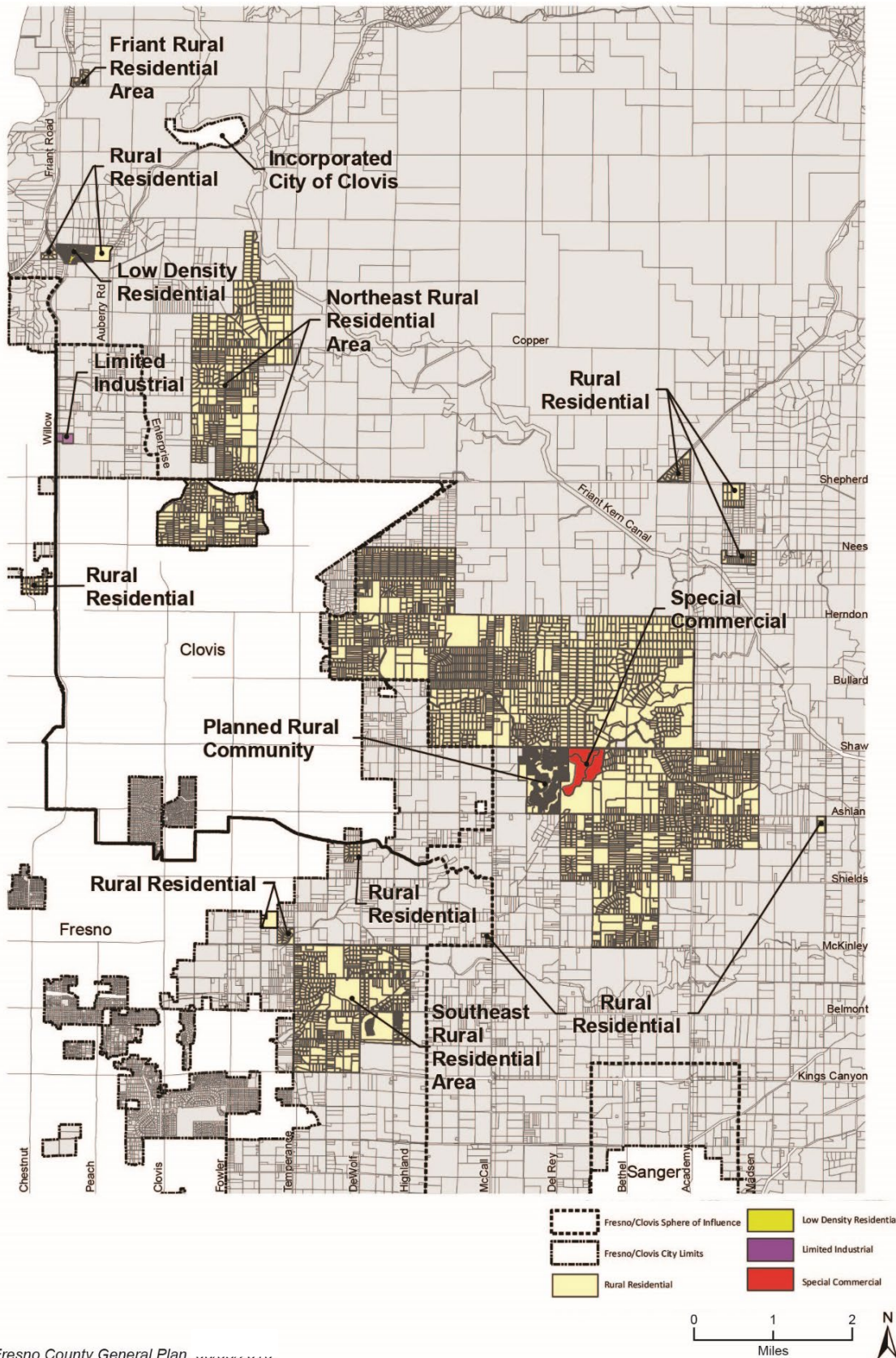
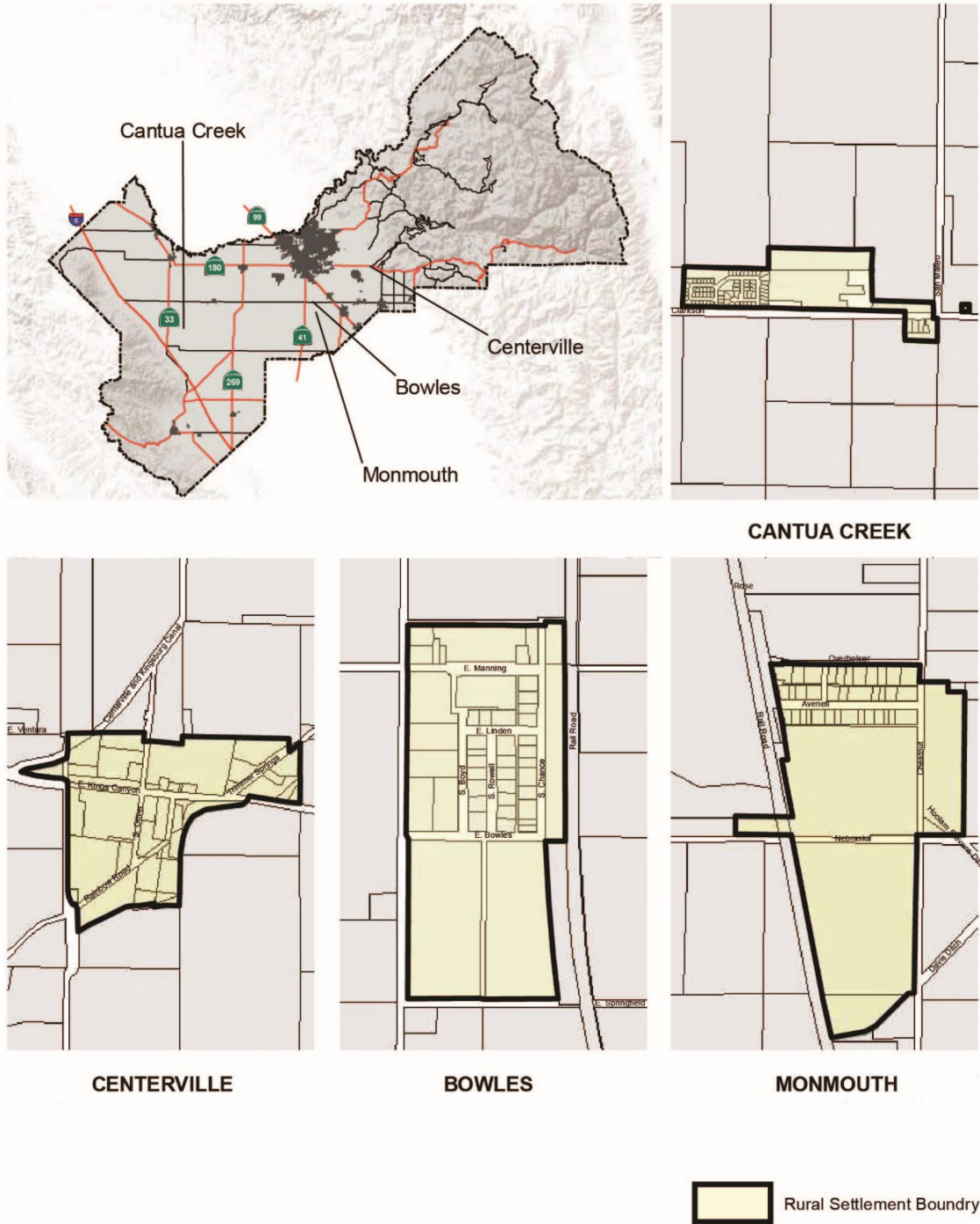


Figure 2-6 Northeast FCAM Land Use Diagram



Source: Fresno County General Plan, 2009-2019.

Figure 2-7 Rural Settlement Areas Land Use Diagram



Source: Fresno County General Plan, 08/03/2010.



The proposed General Plan includes 31 land use designations that depict the types of land uses that will be allowed throughout the unincorporated County. These designations are broken down into two categories: primary and overlay. The 27 primary land use designations consist of standard land use designations that appear on the land use diagram. There are also four overlay designations: Reserve, San Joaquin River Corridor, Westside Freeway Corridor, and Golden State Industrial Corridor. Each primary land use designation is defined in terms of allowable uses and intensity standards. Overlay land use designations modify the policies, standards, or procedures established for the underlying primary land use designation. Specific land use designations in the Agriculture and Land Use Element are show in Table 2-1.

**Table 2-1 Description of Land Use Designations**

Land Use Designation <sup>1</sup>	Allowed Uses	Residential Intensity (in gross acres) <sup>2</sup>	Non-residential Intensity (FAR) <sup>3</sup>
<b>Agriculture/Resource</b>			
Agriculture	This designation provides for the production of crops and livestock, and for location of necessary agriculture commercial centers, agricultural processing facilities, and certain nonagricultural activities.	Up to 1.0 DU/20 acres	0.10 <sup>4</sup>
Irrigated Agriculture	This designation provides for the production of crops, necessary agricultural processing facilities, and certain nonagricultural activities. Irrigated agriculture requires a system that delivers at least 1 acre-foot of water per acre per year.	Up to 1.0 DU/20 acres	0.10 <sup>4</sup>
Westside Rangeland	This designation provides for grazing and other agricultural operations, mining, oil and gas development, wildlife habitat, various recreational activities, and other appropriate open space uses.	Up to 1.0 DU/40 acres	0.10 <sup>4</sup>
Eastside Rangeland	This designation provides for grazing and other agricultural operations, wildlife habitat, various non-intensive recreational activities, and other appropriate open space uses.	Up to 1.0 DU/40 acres	0.10 <sup>4</sup>
Open Space	This designation, which is applied to land or water areas that are essentially unimproved and planned to remain open in character, provides for the preservation of natural resources, the managed production of resources, parks and recreation, <u>sacred Native American sites, lands adjacent to military installations</u> , and the protection of the community from natural and manmade hazards.	Up to 1.0 DU/40 acres	0.10 <sup>4</sup>
Public Lands and Open Space	This designation, which is applied to land or water areas that are essentially unimproved and planned to remain open in character, provides for the preservation of natural resources, the managed production of resources, parks and recreation, and the protection of the community from natural and manmade hazards.	Up to 1.0 DU/40 acres	0.10 <sup>4</sup>

Land Use Designation <sup>1</sup>	Allowed Uses	Residential Intensity (in gross acres) <sup>2</sup>	Non-residential Intensity (FAR) <sup>3</sup>
<b>Residential</b>			
Rural Residential	This designation provides for single-family dwellings, accessory buildings, and small agricultural operations (e.g., greenhouses, fruit trees, nut trees, vines) in rural settings. Expansion of this designation is restricted by General Plan policy.	1.0 DU/5 acres – 1.0 DU/2 acres	0.30
Mountain Residential	This designation provides for recreation-oriented residential development including single-family dwellings, multi-family dwellings, mobile homes, and accessory structures.	1.0 DU/5 acre – 14.5 DU/acre	0.50
Foothill Rural Residential	This designation provides for single-family dwellings, accessory buildings, and small agricultural operations (e.g., greenhouses, fruit trees, nut trees, vines) in rural settings in the Sierra Foothills. Expansion of this designation is restricted by General Plan policy.	1.0 DU/5 acres – 1.0 DU/2 acres	0.30
Low-Density Residential	This designation provides for residential development that combines the space and privacy of a suburban setting with the amenities and services of urban areas. The predominant residential type is the single-family dwelling unit.	0.9 DU/acre – 2.8 DU/acre	0.35
Medium-Density Residential	This designation provides for single-family dwellings, multi-family dwellings, and accessory structures.	2.8 DU/acre – 5.8 DU/acre	0.40
Medium High-Density Residential	This designation provides for single-family dwellings, multi-family dwellings, accessory structures, churches, schools, and libraries.	5.8 DU/acre – 20 DU/acre	0.50
<b>Multiple Categories</b>			
Mountain Urban	This designation provides for concentrations of residential development, various intensities of commercial activities, industrial uses where appropriate, and continued foothill rural residential uses.	1.0 DU/5 acres – 14.5 DU/acres	1.00
Mountain Commercial	This designation provides for mixed retail, service, heavy commercial, and residential uses in mountain or foothill communities where existing land use patterns preclude the clustering of similar types of uses into unified commercial centers. It is applied primarily to specific sections of major thoroughfares where the combination of uses function as a small central business district.	N/A	1.00

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Land Use Designation <sup>1</sup>	Allowed Uses	Residential Intensity (in gross acres) <sup>2</sup>	Non-residential Intensity (FAR) <sup>3</sup>
Rural Settlement Area	This designation provides for a non-urban community in the rural areas designated for residential and supportive commercial uses serving the rural settlement and surrounding farm population.	1.0 DU/2 acres – 1.0 DU/acre	0.50
Planned Rural Community	This designation provides for a variety of housing types in a semi-rural environment with public services and locally-oriented commercial uses such as grocery stores, restaurants, offices, and small retail shops. Expansion of this designation is prohibited by General Plan policy.	1.0 DU/acre – 2.0 DU/acre	0.50
<b>Commercial</b>			
Neighborhood Commercial	This designation provides for commercial activities ranging from a single commercial use, <u>mixed-use developments</u> , and neighborhood shopping center serving a local area. A neighborhood shopping center should provide convenience goods, personal services, and general merchandise for the daily needs of neighborhood residents and may offer specialty items.	5.8 DU/acre – 20/DU acre	0.50
Office Commercial	This designation provides for the concentration of administrative, business, medical, professional, general offices, and multi-family development in designated locations where development is compatible with surrounding land uses	5.8 DU/acre – 14.5 DU/acre	0.50
Community Commercial	This designation provides for development of unified retail centers that supplement Central Business Commercial. Typical uses include retail shops, services, restaurants, professional and administrative offices, department stores, furniture stores, supermarkets, mixed-use developments, and similar and compatible uses.	5.8 DU/acre – 20 DU/acre	0.50
Central Business Commercial	This designation provides for development of commercial centers where the full range of retail services and professional and governmental offices are concentrated in a location that is central to most community residents. Typical uses include specialty shops, retail, entertainment uses, apparel stores, restaurants, hotels/motels, and financial, medical, professional offices, and mixed-use developments.	5.85 DU/acre – 20 DU/acre	1.00
Regional Commercial	This designation provides for a large cluster of commercial establishments that serve a defined regional trade area of more than 50,000 people. Typical uses include large-scale shopping centers, wholesale stores, factory outlets, and other commercial uses including retail stores, food and drug stores,	N/A	1.00

Land Use Designation <sup>1</sup>	Allowed Uses	Residential Intensity (in gross acres) <sup>2</sup>	Non-residential Intensity (FAR) <sup>3</sup>
	apparel stores, specialty shops, motor vehicle sales and service, hotels/motels, theaters, entertainment uses, and other uses that serve a regional market		
Highway Commercial	This designation provides for one-stop concentrated commercial service nodes for the traveling public. Typical uses include hotels, motels, service stations, and restaurants.	N/A	1.00
Service Commercial	This designation provides for general commercial uses which, due to space requirements or the distinctive nature of the operation, are not usually located in commercial centers. Typical uses include repair, rental, sales, storage, and overnight lodging.	5.8 DU/acre – 14.5 DU/acre	1.00
Special Commercial	This designation provides for commercial activities which do not fall within any other commercial land designation and whose frequency of occurrence does not warrant the establishment of additional specific use designations. Typical uses include drive-in theaters, airport-related and recreation-related commercial uses, and other such uses.	N/A	1.00
<b>Industrial</b>			
Limited Industry	This designation provides for restricted non-intensive manufacturing and storage activities that do not have detrimental impacts on surrounding properties.	N/A	1.50
General Industry	This designation provides for the full range of manufacturing, processing, fabrication, and storage activities. Land designated General Industrial may be developed to a less intense industrial use when in a transitional area adjacent to land designated for nonindustrial urban uses.	N/A	1.50
<b>Public</b>			
Public Facilities	This designation provides for location of services and facilities that are necessary to the welfare of the community. Typical uses include liquid and solid waste disposal, ponding basins, parks, schools, civic centers, hospitals, libraries, penal institutions, and cemeteries.	N/A	0.50
<b>Overlay</b>			
Reserve Overlay	This overlay is intended to reserve certain lands for future more intensive development by permitting only limited agricultural uses on an interim basis. Typical uses include livestock raising; tree, vine, and field crops; single-family dwellings; and accessory buildings. Where such lands are located within a city	1.0 DU/20 acres	0.10 <sup>4</sup>



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Land Use Designation <sup>1</sup>	Allowed Uses	Residential Intensity (in gross acres) <sup>2</sup>	Non-residential Intensity (FAR) <sup>3</sup>
	sphere of influence, development will usually not occur until annexation to the city. Where such lands are peripheral to an unincorporated community, development shall be subject to the provision of public facilities and phasing.		
San Joaquin River Corridor Overlay	This overlay provides for agricultural activities with incidental homesites, sand and gravel extraction, various recreational activities, wildlife habitat areas, and uses which serve the San Joaquin River Parkway. This overlay designation does not restrict uses set forth in the Friant Community Plan.	1.0 DU/20 acres	0.104
Westside Freeway Corridor Overlay	This overlay provides for uses at designated interchanges that cater to needs of long distance freeway users and agriculture-related enterprises, and prohibits uses which normally cater to the service and convenience needs of urban and rural population centers. Typical permitted uses include hotels, motels, service stations, restaurants and cafes, truck service and repair facilities, rest areas, camper and trailer parks, emergency medical facilities, grocery stores, employee housing facilities, public use airports, agriculture-related uses, and value-added agricultural uses. Areas outside designated interchanges are limited to agricultural uses.	N/A	1.00
Golden State Industrial Corridor Overlay	This overlay is intended for industrial development near Highway 99, a major transportation route, and planned available utilities. Industrial developments within the sphere of influence of the cities will be directed to the appropriate city for possible annexation. To keep a positive image of Fresno County for the traveling public, industrial developments within this corridor are required to adhere to the Highway 99 Beautification Overlay District design guidelines.	N/A	1.00

Source: County of Fresno General Plan

DU=dwelling unit

FAR=floor area ratio

<sup>1</sup> These are the applicable standards of residential and non-residential building intensity unless otherwise specified in policy text.

<sup>2</sup> Maximum allowing residential intensity or allowable range of residential intensity. Gross acreage includes roadways and other right-of-ways. Net acreage is about 80 percent of gross acreage.

<sup>3</sup> Maximum allowable intensity for non-residential uses allowed as a matter of right in the compatible zone district where parcel size meets or exceeds minimum area requirements of applicable districts.

<sup>4</sup> Does not apply to facilities necessary for resource production.

Note: Planned Urban Village was removed entirely and is not shown in this table. Underlining indicates language added, and italics indicate the former densities.

This second major part of the Agriculture and Land Use Element sets out goals and policies under eight main headings:

- Agriculture
- Westside Rangelands
- River Influence Areas
- Westside Freeway Corridor
- Non-agricultural Rural Development
- Urban Development Patterns
- Incorporated City, City Fringe Area, and Unincorporated Community Development
- General and Administrative Provisions

The goals and policies for the first four headings listed above reflect a basic commitment to preserve the existing open rural character of the county and its natural and managed resources. The intent of the policies under these four headings is to discourage intensive development except in identified areas, to minimize loss of valuable agricultural land and open space. The goals and policies addressing the fifth heading, Non-Agricultural Rural Development, guide development in areas designated Rural Residential, Rural Settlement Area, and Planned Rural Community. The policies provide for the continued development of areas within these designations in a manner that minimizes environmental impacts and public infrastructure investments, but generally limits expansion of these designations. The goals and policies addressing the sixth and seventh headings, Urban Development Patterns and Incorporated City, City Fringe Area, and Unincorporated Community Development, direct intensive urban development to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available or can be provided consistent with the adopted General Plan or Community Plan. These policies reflect a basic commitment to conserving natural and managed resources while directing growth and enhancing economic development. Goals and policies addressing the eighth heading, General and Administrative Provisions, include special development and administrative provisions that are applicable to many land use types and various areas of Fresno County. Components of this element that could result in physical changes to the environment include implementation of a freeway interchange master plan, policies regarding second units, and increased allowable residential density.

### *2.3.1.3 Transportation and Circulation Element*

The Transportation and Circulation Element provides the framework for Fresno County decisions concerning the countywide transportation system, which includes various transportation modes and related facilities. It also provides for coordination with the cities and unincorporated communities within the County, with the Regional Transportation Plan adopted by the Fresno Council of Governments, Highway 99 beautification, and with State and federal agencies that fund and manage transportation facilities within the County. The Transportation and Circulation Element reflects the urban and rural nature of Fresno County. The element establishes standards that guide the development of the transportation system and management of access to the highway system by new development, throughout the unincorporated areas of Fresno County.

The element is divided into two major parts. The first major part describes the County's Circulation Diagram and functional roadway classification system. The second major part sets out goals, and policies organized into six sections: Streets and Highways; Transit; Transportation System

Management; Bicycle Facilities; Rail Transportation; and Air Transportation. Components of this element that could result in physical changes to the environment include the implementation of the urban and rural area complete streets and safe routes to school policies.

#### *2.3.1.4 Public Facilities and Services Element*

Development in Fresno County is dependent on a complex network of public facilities and services. Each type of service has a unique set of constraints and issues and must adapt to growth and change differently. The General Plan sets out policies and implementation programs to respond to this variety of issues and constraints. Since the major themes of the General Plan include directing urban growth to cities and existing unincorporated communities, limiting the intrusion of development onto productive agricultural land, and limiting the spread of rural residential development, demand for public facilities and services will be controlled.

The Public Facilities and Services Element sets out goals and policies organized into ten sections: General Public Facilities and Services; Funding; Water Supply and Delivery; Wastewater Collection, Treatment, and Disposal; Storm Drainage and Flood Control; Landfills, Transfer Stations, and Solid Waste Processing Facilities; Law Enforcement; Fire Protection and Emergency Medical Services; School and Library Facilities; and Utilities. Components to this element that could result in physical changes to the environment include installation of recycling and waste receptacles in in new developments. The Public Facilities element also includes revisions that would encourage further review of infrastructure master plans for wastewater collection in areas undergoing urban growth.

#### *2.3.1.5 Open Space and Conservation Element*

The Open Space and Conservation Element is concerned with protecting and preserving natural resources, preserving open space areas, managing the production of commodity resources, protecting and enhancing cultural resources, and providing recreational opportunities.

The Open Space and Conservation Element sets out goals and policies under three main headings: Productive Resources, Natural Resources, and Recreation and Cultural Resources. Productive Resources encompasses three sections: Water Resources; Forest Resources; and Mineral Resources. Natural Resources encompasses four sections: Wetland and Riparian Areas; Fish and Wildlife Habitat; Vegetation; and Air Quality. Finally, Recreation and Cultural Resources encompasses five sections: Parks and Recreation; Recreational Trails; Historic; Cultural; and Geologic Resources; Scenic Resources; and Scenic Roadways. The General Plan Revision includes the addition of Auberry Road, Morgan Canyon Road, Millerton Road, and Marina Drive to the County designated scenic drives. Other components of the revisions include the goals and policies to encourage preservation and minimize impacts to sites and buildings identified as having historical significance. Components of this element that could involve physical environmental effects include implementation of the Fresno County Active Transportation Plan.

#### *2.3.1.6 Health and Safety Element*

The Health and Safety Element addresses a wide range of public safety issues that have the potential to impact the County. Many of the health and safety risks associated with development can be avoided through locational decisions made at the planning stages of development, while others may be lessened through the use of mitigation measures in the planning and land use regulation process. Therefore, the Health and Safety Element, in conjunction with the Fresno County Multi-Jurisdictional Local Hazard Mitigation Plan, which is incorporated by reference into the

General Plan, sets out goals and policies for ensuring the maintenance of a healthy and safe physical environment. The Health and Safety Element include the addition of goals and policies aiming to improve sustainability and resiliency of the County through continued efforts to reduce the impacts of climate change. Other new goals include setting new standards for flood protection in the San Joaquin Valley and coordination with cities to adopt a flood emergency response plan. Additionally, the County has completed a Vulnerability Assessment as an appendix to the General Plan to meet the requirements of SB 379, which requires the element to include a set of goals, policies, and objectives based on a vulnerability assessment, identifying the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts, and specified information from federal, state, regional, and local agencies.

### 2.3.1.7 Environmental Justice Element

The County has elected to emphasize the importance of ensuring environmental equity for disadvantaged communities in Fresno County through adoption of a separate Environmental Justice Element. There are 62 total disadvantaged communities in Fresno County, as identified by the California Environmental Protection Agency (CalEPA) (Fresno County 2021), and 36 identified disadvantaged unincorporated communities (DUC) as defined by SB 244. The Environmental Justice Element is a component of the General Plan to address environmental justice through a set of policies and programs aimed at increasing the influence of target populations in the public decision-making process and reducing their exposure to environmental hazards. This element is a new addition to the General Plan.

## 2.4 General Plan Buildout

Generally, in California the development of real property is driven by market conditions, including supply and demand and other economic factors, such as the cost of raw materials and construction labor. Simply zoning or designating a parcel for a type of use or development does not automatically result in the development of that parcel with the intended use. For example, designating a parcel for industrial uses does not mean that the parcel will ever be developed with an industrial use or structures, such as a warehouse. Rather, demand for additional warehouse space must exist for there to be reason or incentive to construct a new warehouse. Additionally, economic conditions must also be favorable for construction of a new warehouse to ensure the project would be profitable to construct. If the cost of construction is so incredible that the expense will not be recovered in leasing or selling the structure, the property would be unlikely to be developed.

The Fresno Council of Governments (FCOG) generates population and growth projections for the County based on economic trends and demographic factors. The most recent and published FCOG projections are contained in *Fresno County 2050 Growth Projections* (FCOG 2021). Population, housing, and employment growth are projected through 2050, which covers the GPR/ZOU horizon year of 2042. The population, housing, and employment growth that FCOG projects for the County between 2021 and 2042 is shown in Table 2-2, below. The proposed GPR/ZOU is intended and designed to align with the growth projection that FCOG forecasts for the County through 2042.

**Table 2-2 Unincorporated County Growth Projections**

Parameter	2021	2042	Net Change from 2021 to 2042
Population	209,984	234,591	+24,607
Housing (units)	71,830	83,106	+11,276
Employment (jobs)	99,274	120,019	+20,745

Source: Fresno Council of Government. 2021.

The figures in Table 2-2 show the anticipated growth that would occur through 2042 and that would cause environmental impacts, forming the basis of this EIR. While the GPR/ZOU is not itself causing this growth, for the purposes of this EIR, the potential growth in Table 2-2 is compared to existing conditions in 2021, which form the baseline for anticipated physical impacts that may occur as a result of the implementation of the GPR/ZOU and the population growth through 2042. Generally, this growth would occur in areas located in the spheres of influence of incorporated cities, as well as in existing unincorporated communities.

The growth projections compiled by FCOG generally show growth focused for areas of the unincorporated County that are within the sphere of influence of incorporated cities as part of the individual cities, rather than assigning this growth to the County. FCOG uses this methodology because those areas, if developed, would be built in accordance with city land use policy and may become a part of the individual cities through annexation. From the County’s perspective, Goal LU-G of the Agriculture and Land Use Element directs urban development within city spheres of influence to existing incorporated cities to ensure that all development in city fringe areas is well planned and adequately served by necessary public facilities and infrastructure. Furthermore, Policy LU-G.1 which references city spheres of influence, states that the County acknowledges that the cities have primary responsibility for planning within their LAFCO-adopted spheres of influence and are responsible for urban development and the provision of urban services within their spheres.

Using 2019 data from FCOG and Applied Development Economics (ADE) in the Fresno County 2019-2050 Growth Projections (FCOG 2021), adjustments were made to disaggregate growth from the spheres of influences to assign this growth to the County by looking at individual traffic analysis zone (TAZ) data and aggregating them by jurisdiction rather than by sphere of influence. Annualized growth rates based on the five-year increments created for the Fresno County 2019-2050 Growth Projects were used to back-calculate from forecasted growth of population and employment, and the annual growth rates for the County as a whole were applied to these numbers and forecast out to the GPR/ZOU buildout year of 2042. ADE also projected the number of households based on household size trends for each community in Fresno (for more methodology information, please refer to the Fresno County 2019-2050 Growth Projections). These numbers are the most reasonably and readily available figures available for use in this EIR, and this growth is the basis used for impact analysis.

## 2.5 Fresno County Zoning Ordinance Update

The County’s Zoning Ordinance is officially known as Division VI of the Ordinance Code of the County of Fresno. The stated purpose of the Zoning Ordinance is “to classify and regulate the highest and best use of buildings, structures, and land located in the unincorporated area of the County of Fresno in a manner consistent with the Fresno County General Plan,” (Fresno County

2021). The Zoning Ordinance is effectively the principal tool for implementing the County's General Plan, and by State law, must be consistent with the General Plan (Government Code §65860).

Section 65860(c) of the Government Code requires that when a General Plan is amended in a way that makes the Zoning Ordinance inconsistent with the General Plan, "the Zoning Ordinance shall be amended within a reasonable time so that it is consistent with the general plan as amended."

However, the Government Code does not define a specific time period that would constitute a reasonable time. In this instance, the proposed project includes updating the Fresno County Zoning Ordinance to be consistent with the proposed revisions to General Plan Policy Document included in the General Plan Review. Components of the Zoning Ordinance update that could result in physical changes to the environment include the revisions to the regulations for accessory dwelling units, density bonus and other State-mandated changes to California Zoning law which became effective since the adoption of the 2000 General Plan.

## 2.6 Project Objectives

The primary objective of the GPR/ZOU are to ensure that the County's guiding land use documents are consistent with State legislation that has been enacted subsequent to the adoption of the County 2000 General Plan Update. This includes, but is not limited to, the inclusion of an Environmental Justice Element. Additionally, the current effort proposes to revise and streamline some existing General Plan Policies and programs as well as Zoning Ordinance provision.

The General Plan Vision Statement is as follows:

This General Plan sets out a vision reflected in goals, policies, programs, and diagrams for Fresno County through the plan horizon year of 2042 and beyond. This plan carries forward major policies that have been in place since the mid-1970s, but expands and strengthens them to meet the challenges of the 21<sup>st</sup> century.

The County sees its primary role to be the protector of productive agricultural lands, open space, recreational opportunities, and environmental quality, and the coordinator of countywide efforts to promote economic development.

In consideration of the County's General Plan Vision, this General Plan Review and Zoning Ordinance Update does not designate/expand new growth areas or new development, with the exception of those sites within urbanized areas to be identified for additional housing as required to meet the State mandated Regional Housing Needs Assessment (RHNA) for the sixth (6th) Cycle Housing Element.

The General Plan provides the following guiding themes:

### **Economic Development**

The plan seeks to promote job growth and reduce unemployment through the enhancement and expansion of its agricultural economic basis plus facilitate business parks that include manufacturing, processing, and distribution.

### **Agricultural Land Protection**

The plan seeks to protect its productive agricultural land as the County's most valuable natural resource and the historic basis of its economy through directing new urban growth to cities and existing unincorporated communities and by limiting the encroachment of incompatible development upon agricultural lands.

### **Growth Accommodation**

The plan is designed to accommodate population growth through the year 2042 consistent with the forecasted projection of 234,591 people in the unincorporated County by 2042. This represents an additional population of approximately 33,607.

### **Urban-Centered Growth**

The plan promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where public facilities and infrastructure are available or can be provided consistent with the adopted General Plan or Community Plan to accommodate such growth. Accordingly, this plan prohibits designation of new areas as Planned Rural Community and restricts the designation of new areas for rural residential development while allowing for the orderly development of existing rural residential areas.

### **Efficient and Functional Land Use Patterns**

The plan promotes compact, mixed-use, and pedestrian- and transit-oriented development within city spheres as well as in the County's unincorporated communities.

### **Service Efficiency**

The plan provides for the orderly and efficient extension of infrastructure such as roadways, water, wastewater, drainage, and expansion services to support the county's economic development goals and to facilitate compact growth patterns. The plan supports development of a multi-modal transportation system that meets community economic and freight mobility needs, improves air quality, and shifts travel away from single-occupant automobiles to less-polluting transportation modes.

### **Recreational Development**

The plan supports the expansion of existing recreational opportunities and the development of new opportunities, particularly along the San Joaquin and Kings Rivers, in the foothills, and in the Sierras, for the employment of County residents and to increase tourism as part of the County's diversified economic base.

### **Resource Protection**

The plan seeks to protect and promote careful management of the County's natural resources, such as its soils, water, air quality, minerals, and wildlife and its habitat, to support the County's economic goals and to maintain the County's environmental quality.

### **Health and Safety Protection**

The plan seeks to protect County residents and visitors through mitigation of hazards and nuisances such as geological and seismic hazards, flooding, wildland fires, transportation hazards, hazardous materials, noise, and air pollution.

### **Health and Well-Being**

The plan seeks to promote the health and well-being of its residents, recognizing that the built environment affects patterns of living that influence health. The plan seeks to ensure long-term conservation of agricultural lands and environmentally sensitive landscapes; encourage walking and biking and provide linked transit systems; promote greater access to healthy foods and produce, particularly fresh locally-grown produce; and create community centers that provide access to employment, education, business, and recreation.

**Enhanced Quality of Life**

The plan strives throughout all its elements to improve the attractiveness of the County to existing residents, new residents, and visitors through increased prosperity, attractive forms of new development, protection of open space and view corridors, promotion of cultural facilities and activities, efficient delivery of services, and expansion of recreational opportunities.

**Affordable Housing**

The plan seeks to assure the opportunity for adequate and affordable housing for all residents in Fresno County. While directing most new growth to cities, the plan also seeks to provide for the maintenance of existing housing and for new construction in designated areas within the unincorporated area of the County.

**Environmental Justice**

The plan is designed to create opportunities for every resident to live in healthy and safe communities regardless of race, color, national origin or income, and to create opportunities for meaningful community involvement in the development of laws and regulations that affect every community's natural surroundings, and the places people live, work, play and learn.

## 2.7 Required Discretionary Approvals

With recommendations from the County's Planning Commission, the Fresno County Board of Supervisors will need to take the following discretionary actions in conjunction with the proposed project:

- Certification of the Final EIR
- Adoption of the proposed General Plan Review
- Approval of the limited revisions to the Zoning Map and Zoning Ordinance amendments to implement select programs of the General Plan.
- Adoption of the Housing Element



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## 3 Environmental Setting

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According to Section 15125 of the *CEQA Guidelines*, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the baseline condition against which project-related impacts are compared. In order to fulfill this requirement and to inform the reader of the context in which the General Plan Review and Zoning Ordinance Update (GPR/ZOU) would be carried out, this section describes current environmental conditions in the Planning Area of Fresno County. More detailed setting information is included within the impact analysis for each issue area.

### 3.1 Regional Setting

Fresno County is one of the eight counties that collectively form the greater San Joaquin Valley. The County covers approximately 6,000 square miles stretching from the Coast Range Mountains in the west to the Sierra Nevada Range in the east. The San Joaquin Valley region extends from the Sacramento-San Joaquin River Delta in the north to the Tehachapi Mountains in the south. The valley's primary river is the San Joaquin, which drains north through about half of the valley into the Sacramento-San Joaquin River Delta. The County has 15 incorporated cities, with the City of Fresno being the largest and the City of Jan Joaquin being the smallest (Fresno County 2021).

### 3.2 Physical Setting

#### 3.2.1 General Geographic Setting

Fresno County is situated in the center of the San Joaquin Valley, with Madera and Merced Counties to the north and Kings and Tulare Counties to the south, and Monterey and San Benito Counties to the east. The County covers approximately 3,833,600 acres or 6,000 square miles. About 114,700 of the County's acreage is part of an incorporated city, while the remaining 3,718,900 acres are unincorporated.

Major land uses in Fresno County are agriculture, public lands, and open space. Agriculture and agricultural processing are the main economic drivers in the County, with approximately 50 percent of land used for agricultural purposes (Fresno County 2021). The Sierra Nevada Mountains take up much of the eastern half of the County. Eastern Fresno County consists mostly of public lands, including the Sierra and Sequoia National Forests and Kings Canyon National Park. The central and western portions of the County are dominated by agriculture and open space, with the largest city, Fresno, occurring near the County's east-west center and adjacent to the San Joaquin River which lies to the north.

For the purpose of the GPR/ZOU, the County has been divided into five geographic subareas to provide greater context. From west to east, roughly, these are: Coast Range Foothill Area, Westside Valley Area, Eastside Valley Area, Sierra Foothill Area, and Sierra Nevada Mountain Area. The subareas do not have policy status but are useful for orientation and framing of land use planning issues. The subareas are shown in Figure 2-2 in Section 2, *Project Description*. Most of the County's urbanized areas, including the cities of Fresno and Clovis, are within the Eastside Valley Area.

### 3.2.2 Topography and Waterways

Elevations vary widely throughout the County as it encompasses portions of the San Joaquin Valley (Valley) and the Sierra Nevada Mountain range (Sierra Nevadas). The County's minimum elevation is approximately 59 feet above mean sea level (amsl) within the Valley, and its maximum elevation is approximately 14,233 feet amsl near Kings Canyon National Park in the Sierra Nevadas.

The County contains many natural and manmade watercourses, most of which are utilized to support agriculture. The San Joaquin River, the longest river in Central California, marks the County's northern border as it travels from the Sierra Nevadas to the west into the Valley. The river bends north near the city of Mendota in the northwestern portion of the County. The Kings River, which flows from Kings Canyon, flows approximately 20 miles southeast of the city of Fresno, and is a major source of water for many canals in the northeastern portion of the County, and connects to several bypasses and sloughs.

### 3.2.3 Climate

Fresno County is located within the San Joaquin Valley Air Basin, which encompasses the entire San Joaquin Valley and the Counties of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, and portions of Kern County (California Air Resources Board [CARB] 2021). Because the County includes portions of the Valley and Sierra Nevadas, the climate varies widely. The Valley portion of the County experiences a Mediterranean climate, with mild winters and very long, hot summers. Average winter temperatures range from approximately 40° Fahrenheit (F) to 60°F, and average summer temperatures range from 80°F to 100°F, with several days each summer exceeding 100°F (National Oceanic and Atmospheric Administration [NOAA] 2021a).

The eastern portion of the County is dominated by the Sierra Nevada Mountain range, and the climate is much cooler and experiences more precipitation. Average summer temperatures are between 60°F and 80°F, and average winter temperatures are between 35°F and 50°F. The Sierra National Forest Area, which occupies the northeastern part of the County, experiences an average of 35 to 40 days of precipitation each year. At their highest elevations (9,000 to 14,000 feet amsl), Sierra Nevada peaks will accumulate snow and often maintain a year-round snowpack (NOAA 2021b).

### 3.2.4 Demographics

The County of Fresno has experienced rapid population growth over the last century due to its position as the agricultural center of California. The population of the County increased by approximately 50 percent in 1950, and increased by approximately 25 percent in the years 1980, 1990, and 2010. Between 2010 and 2021, the population has increased steadily by approximately 0.60 percent to 0.95 percent each year (US Census Bureau 1996; US Census Bureau 2010). The population of the entire County was 1,026,681 people, while the unincorporated County's population was 170,067 people as of January 2021 (DOF 2021).

The entire County had 339,380 dwelling units with 71,860 of those dwelling units in unincorporated Fresno County as of January 2021 (DOF 2021; FCOG 2017). The vacancy rate was 6.9 percent Countywide and 13.7 percent in unincorporated Fresno County. This includes 238,557 single-family units (70.2 percent), 85,895 multi-family units (25.3 percent), and 14,928 mobile homes (4.4 percent), as of January 2021 for the entire County. For unincorporated Fresno County, this includes single-family units (83 percent); multi-family units (5.4 percent), and mobile homes (11.7 percent).

The average number of persons per household in the County and unincorporated Fresno County is 3.2, as of January 2021 (DOF 2021).

Agriculture is the primary industry of the County, and the County ranks first in the nation in terms of its agricultural economy. The market value of agricultural products sold in 2017 was approximately \$5.7 billion, a 15 percent increase since 2012 (US Department of Agriculture 2017). Other major industries include trade, transportation, and utilities, with 72,200 jobs; education and health services, with 71,200 jobs; and government positions, with 66,600 jobs (US Bureau of Labor Statistics 2021). Employment forecasts for the County estimate there will be approximately 506,300 jobs in the entire County by 2050, an addition of 108,200 jobs since 2020 (Fresno County Council of Governments 2017).

### 3.3 EIR Baseline

CEQA Guidelines Section 15125 states that an EIR “must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [NOP] is published.” Section 15125 states that this approach “normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant.”

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (January 2021) but may vary in individual sections due to the availability of data. Comparing future conditions, as would be caused (or partially caused) by the GPR/ZOU, to current, existing baseline conditions provides relevant information for the public, responsible agencies, and the County decision-makers. For some issue areas, this EIR also includes consideration of impacts against a forecast future baseline condition (generally 2042) in addition to the current baseline conditions, controlling for impacts caused by population growth and other factors that would occur whether or not the proposed GPR/ZOU is approved.

For certain issue areas (including air quality, energy, greenhouse gas emissions/climate change, noise, and transportation/circulation), impacts would occur as a result of population growth, urbanization, and volume of average daily traffic increases in the Planning Area that would occur by 2042, with or without implementation of the GPR/ZOU. Thus, for these issue areas, a comparison to a future 2042 baseline is provided for informational purposes. However, all impact determinations are based on a comparison to existing 2021 baseline conditions, except in limited circumstances where data from slightly before 2021 may be the most reasonably available.

### 3.4 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

**General Plan Review and Zoning Ordinance Update**

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects, or a forecast of future development potential. Because the proposed project is a GPR/ZOU, cumulative impacts are treated somewhat differently than they would be for a specific development. For general plan amendments, Section 15130 of the state *CEQA Guidelines* provides the following direction relative to cumulative impact analysis:

Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

## 4 Environmental Impact Analysis

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This section discusses the possible environmental effects of the General Plan Review and Zoning Ordinance Update for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. “Significant effect” is defined by the *CEQA Guidelines* Section 15382 as:

...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the County and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *CEQA Guidelines*.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact.

The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the General Plan Review and Zoning Ordinance Update.

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## 4.1 Aesthetics

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This section evaluates the potential impacts on aesthetics of implementing the proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU), including scenic vistas, scenic resources, visual character and quality, and light and glare.

### 4.1.1 Environment Setting

#### **a. Definitions**

##### **Scenic Resources**

Most communities identify scenic resources as important assets that form community identity. Scenic resources typically include natural open spaces, unique topographic formations, natural landscapes, and aspects of the built environment such as parks, trails, cultural resources, and architecturally significant buildings.

##### **Viewsheds, View Corridors, and Scenic Vistas**

Viewsheds also contribute to aesthetic value, as they establish the context in which scenic resources may be observed. They are typically defined by physical features that frame one or more scenic resources. For example, an area's topography can contribute to aesthetic value through the creation of view corridors and/or scenic vistas consisting of ridgelines and mountains, which can form a community's visual backdrop. Viewsheds can also include a range of resources (including natural and/or man-made elements) and thus natural and man-made environments can be considered important scenic resources worthy of preservation.

#### **b. Existing Visual Conditions**

Fresno County has a rich and diverse landscape that makes an important contribution to the quality of life in the county. Ranging from the agricultural land of the central San Joaquin Valley, the oak woodlands of the Sierra Nevada foothills, and the coniferous forest of the rugged Sierra Nevada mountain range, the eastern mountains are important to the sense of place in the county. The Sierra Nevada traverses nearly half of eastern Fresno County, and includes the Sierra National Forest, Kings Canyon National Park, and Sequoia National Forest. Several large reservoirs throughout the mountain range also provide important scenic resources, including Millerton Lake, Huntington Lake, and Shaver Lake. The San Joaquin River and the Kings River originate in the Sierra Nevada and are Fresno County's two major rivers. Most scenic highways and roadways in Fresno County originate in the Sierra Nevada and extend west through the foothills and agricultural lands (Fresno County 2021). Agricultural lands and rangelands make up over half of the county's landscape west of the Friant-Kern Canal. The large farms and ranches signal the county's agricultural heritage and provide unrestricted, expansive views of the landscape. Extending west of Interstate 5 (I-5), a County-Designated Scenic Highway, the foothills of the Coastal Range feature gentle rolling topography dotted with oak trees and tan meadow grasses. Scenic resources also play an important role in the economic development of the region, including the expansion of tourism-based industries like the self-driving Blossom Trail tour, and the decisions about where to locate businesses, for example along Highway 99. Figure 4.1-1 through Figure 4.1-5 offer example images of aesthetic and visual resources throughout the county.



**Figure 4.1-1 Kings Canyon National Park**



Source: Wikimedia Commons 2011

**Figure 4.1-2 Huntington Reservoir Recreation Area**



Source: Don Ramey Logan 2013

**Figure 4.1-3 Millerton Lake**



Source: David Prasad 2011

**Figure 4.1-4 San Joaquin River Trail**



Source: David Prasad 2011

**Figure 4.1-5 Orchard on the Fresno County Blossom Trail**



Source: Creative Commons, Andy Blackledge 2015

**Figure 4.1-6 Expansive View of Grasslands on Either Side of SR 180 Looking East toward Mountains in the Distance**



Source: Google Earth 2021

**Figure 4.1-7 Expansive View of Valley Oak Woodland and Foothills from SR 198 West of Coalinga**



Source: Creative Commons, Alton Woods 2013

**Figure 4.1-8 Agricultural Industrial Development: Wineland along Highway 99 between Kingsburg and Selma Looking North**



Source: Google Earth 2021

### *Built and Natural Environments*

Unincorporated Fresno County is a mix of developed and undeveloped areas, dispersed throughout the valley, foothills, and mountains. Most development in the incorporated cities is clustered around Highway 99. Along its entire corridor within Fresno County, Highway 99 is an important transportation corridor used by vacationers, commuters, and transport drivers. It traverses several cities along with unincorporated Fresno County and currently has a low visual quality. Low visual quality is due to the lack of unity between the industrial and commercial development along the highway and the proliferation of what the Highway 99 Beautification Master Plan calls “sign pollution.” Example views are presented in Figure 4.1-8, where multiple billboards, above ground transmission lines and other infrastructure components and low- and high-rise agricultural industrial structures appear at random intervals. Intermittent mature trees appear unmaintained and stressed due to exposure to vehicular pollution. Shrubs and trees closer to development are visually secondary to ruderal vegetation and litter along the fence between the freeway shoulder and the adjacent open land. Industrial structures contrast sharply with the topography of the valley. The Highway 99 Beautification Plan seeks to rectify these conditions and provides guidelines for achieving the goal of improving the visual quality, but the constraints and costs are substantial.

The GPR/ZOU divides the county into five geographic subareas to help orient and frame geographically unique planning issues. Figure 3-1 in the General Plan Land Use Element depicts the five planning areas, described as follows:

#### **COAST RANGE FOOTHILLS AREA**

The Coast Range Foothills geographic area is on the far west side of Fresno County, sharing borders with Monterey and San Benito counties. This area lies west of the I-5 corridor and comprises mainly agriculture, grazing land, and open space. The Coast Range Foothills Area does not include incorporated cities.

#### **WESTSIDE VALLEY AREA**

The Westside Valley geographic area is adjacent to I-5 and stretches east to Fresno Slough. The land use in this area is primarily agriculture with open space. The Westside Valley area encompasses four incorporated cities: Coalinga, Huron, Mendota, and Firebaugh.

#### **EASTSIDE VALLEY AREA**

The Eastside Valley geographic area is the most populated in Fresno County. It is in the center of county, between the Westside Valley and Sierra Foothills geographic subareas. The land uses in the Eastside Valley vary from agriculture, rural residential, residential, and industrial, to some commercial. Many of the more intensive land uses are on the fringe of the 11 incorporated cities: Fresno, Clovis, Sanger, San Joaquin, Fowler, Selma, Kerman, Parlier, Kingsburg, Orange Cove, and Reedley. In addition to the incorporated communities, several unincorporated communities, occur in the Eastside Valley area, including Friant, Laton, Riverdale, Easton, Caruthers, Lanare, Tranquillity, Del Rey, and Biola.

#### **SIERRA FOOTHILL AREA**

The Sierra Foothills geographic subarea is east of the Fresno/Clovis metropolitan area, adjacent to the Friant-Kern Canal. East of this subarea primarily State and federally owned lands occur that are part of the state and national parks and forests systems. The dominant land use is agriculture and

open space, but pockets of rural residential development and a few unincorporated communities also occur. The Sierra Foothills area does not include incorporated cities.

### **SIERRA NEVADA MOUNTAIN AREA**

The Sierra Nevada Mountain geographic area is in the far eastern part of Fresno County, adjacent to Inyo and Mono counties. The mountainous terrain in this area limits development, although there are a few rural residential areas in the far northwest portion. The predominant land use type in this area is open space, primarily State and federally owned lands. There are no incorporated cities in this area.

Within these five subareas, the County Board of Supervisors adopted six specific plans in unincorporated areas of the county. These plans guide development and preservation of scenic resources and highways in those planning areas. The following provides policies that address visual resources in three of the specific plans.

- Bretz Mountain Village Specific Plan is south of Shaver Lake, just east of SR 168. The plan specifies lot sizes and limits development.
- Shaver Lake Forest Specific Plan area addresses a planned recreational-residential community in the Sierra Nevada foothills, about a mile south of Shaver Lake on SR 168, and 50 miles northeast of Fresno. The plan stipulates that new development be compatible in design with the surrounding environment, including maintaining a semi-natural state. This includes protecting natural resources such as rock outcroppings and unscreened ridge areas by requiring sufficient setbacks, careful placement of permanent structures to protect view corridors, appropriate landscaping and visual buffers to minimize visual impacts on scenic roadways, and incorporation of aesthetic buffers. The specific plan includes goals and policies that address planned open conservation of scenic highways.
- Wildflower Village Specific Plan area is about two miles southwest of Shaver Lake and abuts the Shaver Lake Forest Specific Plan area. Wildflower Village is intended to accommodate mostly seasonal residential and recreational land uses. The Plan designates over half of the plan area as protected open space.

### **c. Scenic Highways and Corridors**

Scenic highways and corridors offer views of the natural environment in areas with important aesthetic value from publicly accessible places, such as roadways, vista points, and recreation areas.

#### **State Scenic Highways**

The California Department of Transportation (Caltrans) designates and administers California's Scenic Highway program to protect important visual corridors from changes that would diminish their aesthetic value (Caltrans 2012). State Route (SR) 180 is the officially designated State Scenic Highway in Fresno County (Caltrans 2019). It is a gateway to Kings Canyon National Park; the scenic designation applies to the extent of SR 180 from Alta Main Canal near Minkler to the General Grant Grove near Cedar Grove. The views along SR 180 are primarily farmland and rangeland, until it enters the Sierra Nevada foothills, where views become more forested, with granite outcroppings and river crossings. The scenic highway then enters Kings Canyon National Park with access to one of the deepest canyons in the United States (Kings Canyon), the highest mountain peak in the contiguous United States (Mount Whitney), and one of the largest living trees on the earth (the giant sequoia) (Fresno County 2021).

In addition to SR 180, Caltrans has identified four more routes eligible for official designation (Caltrans 2019):

- SR 33 is **eligible** for designation from SR 198 north of Coalinga to I-5
- SR 198 is **eligible** for designation from SR 33 north of Coalinga to I-5
- SR 168 is **eligible** for designation from SR 65 near Clovis to Huntington Lake
- SR 180 is **eligible** for designation from an unconstructed segment of SR 65 at post mile 77.3 near Minkler and the Kings Canyon National Park and to the boundary near Cedar Grove (this would extend the official designation portion of SR 180 by 1.3 miles if it were to receive official designation)

Eligible highways can become officially designated when Fresno County applies to Caltrans for scenic highway approval, adopts a corridor protection program, and receives notification that the highway has been officially designated. Along Highway 99 and I-5, major north-south transportation corridors, views vary from vast horizons of cultivated agriculture to a mix of agricultural/industrial development such as packing and distribution warehouses, railroad components, and equipment storage yards, to local shopping centers, hotels, and restaurants (Figure 4.1-8).

### **County-Designated Scenic Roadways**

The County has designated a system of scenic roadways that includes landscaped drives, scenic drives, and scenic highways (Fresno County 2021). Landscaped drives are roads bordered by mature and consistent landscaping with an area-wide significance. In Fresno County, these include:

- Kearney Boulevard from Westlawn Avenue to the city of Fresno
- Van Ness Avenue from the city of Fresno to Palm Avenue at Shaw
- North Van Ness Boulevard from Shaw Avenue to the San Joaquin River
- Butler Avenue from Peach to Fowler
- Minnewawa Avenue from Kings Canyon to Central Canal

Scenic drives are rural roads with outstanding natural scenic qualities and connect with scenic highways. County-designated Scenic Drives include:

- Trimmer Springs Road from SR 180 to Trimmer, Maxson Road from Trimmer to Watts Valley Road, Watts Valley Road from Maxson Road to Pitman Hill Road, and Burrough Valley Road from Watts Valley Road to Tollhouse Road
- Piedra Road from SR 180 to Piedra
- Dinkey Creek Road/McKinley Grove Road from proposed SR 168 to Courtright Reservoir
- Edison-Florence Lake Road from Huntington Lake to Florence Lake
- Blossom Trail Route
- Wild Flower Route
- Auberry Road
- Morgan Canyon Road
- Millerton Road
- Marina Drive
- Friant Road Fresno to Millerton Road

Scenic highways traverse land with unique or outstanding scenic quality or provide access to regionally significant scenic areas. Fresno County-designated Scenic Highways are as follows:

- Proposed SR 168 from Friant-Kern Canal to Lodge Road
- SR 168 from Lodge Road to Pineridge
- Proposed SR 168 from Pineridge to Huntington Lake Road
- SR 168 from Huntington Lake Road to Huntington Lake
- SR 180 from Trimmer Springs road to the Tulare County Line
- SR 180 from Kings Canyon National Park boundary near General Grant Grove to Kings Canyon National Park boundary near Cedar Grove
- SR 198 from I-5 to Monterey County line, excluding city of Coalinga
- I-5 within Fresno County

Agricultural lands in Fresno County comprise more than half the county, with nearly half of that being open, undeveloped grazing land. These provide uninterrupted views of the valley floor framed by mountains in the distance, looking in every direction. Furthermore, agricultural lands offer views of orchards, vineyards, field crops, cattle grazing, and rustic farm components such as windmills and barns (Figure 4.1-5, Figure 4.1-6, and Figure 4.1-7). In some areas, particularly along transportation corridors, cultivated agricultural lands give way to industrial and other development (Figure 4.1-8).

#### **d. Light and Glare**

For purposes of this analysis, light refers to light emissions (brightness) generated by a source of light. Stationary sources of light include exterior parking lot and building security lighting; moving sources of light include the headlights of vehicles driving on roadways near the project site. Streetlights and other security lighting also serve as sources of light in the evening hours.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces are associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

Existing development and motor vehicles in Fresno County produce light and glare. Primary sources of light are streetlights, parking lot lighting, and automobile headlights at night. General sources of glare include reflected sunlight from the windows of buildings, from automobiles, and from glass building facades.

### 4.1.2 Regulatory Setting

#### **a. Federal**

##### **National Environmental Policy Act**

The National Environmental Policy Act was established in the 1970s, in part, to “assure for all Americans safe, healthful, productive, and aesthetically pleasing surroundings (42 United States Code Section 4331, Section 101). Under this law, visual impacts are included among environmental effects that must be considered when actions are proposed in or near national forests, parklands, or open space lands under federal jurisdiction. The Sierra National Forest is partly in Fresno County and



includes a range of scenic attractions with diverse landscapes that reflect shape changes in elevation (United States Department of Agriculture 2019).

## **Wild and Scenic Rivers Act**

In 1968, Congress created the National Wild and Scenic Rivers System (16 United States Code 1271 et seq.) to preserve rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.” Various forks of the San Joaquin River have their headwaters and segments within the Sierra National Forest. Some are classified as Wild and Scenic Rivers, protected under this law.

### **b. State**

#### **State Scenic Highway Program**

Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way, that traverses an area of exceptional scenic quality. Suitability for designation as a State scenic highway is based on vividness, intactness, and unity, as described in Caltrans Scenic Highway Guidelines (2012). A brief description of these terms follows:

- **Vividness** is the extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.
- **Intactness** is the integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions (e.g., buildings, structures, equipment, grading).
- **Unity** is the extent to which development is sensitive to and visually harmonious with the natural landscape.

In Fresno County, one route is officially designated and four routes are eligible for designation as described above in Section 4.1.1.c (Caltrans 2019).

### **c. Local**

#### **General Plan Review and Zoning Ordinance Update**

##### *General Plan Review*

The GPR includes a project objective that states “the plan strives throughout all its elements to improve the attractiveness of the County to existing residents, new residents, and visitors through increased prosperity, attractive forms of new development, protection of open space and view corridors, promotion of cultural facilities and activities, efficient delivery of services, and expansion of recreational opportunities.” This is supported by goals and policies aimed to conserve, protect, maintain the scenic resources in the county and ensure that development enhances those resources throughout the unincorporated County. This occurs through the process of identifying important scenic resources, requiring development review, and acquiring easements between developed areas and open space resources. Scenic resource policies focus on encouraging the preservation of scenic views, identifying, and mapping significant scenic resources, developing a program to manage these resources, and requiring development to incorporate natural features and to minimize impacts to the scenic qualities of the site. Scenic roadways policies include encouraging the designation of scenic roadways (i.e. landscaped drives, scenic drives, and scenic highways), managing scenic

roadways based on specific principles, requiring new development along designated scenic roadways to follow certain criteria, and pursuing scenic highway designation from the State of California. Specific goals and policies as they apply to this evaluation appear in Section 4.1.3, Impact Analysis and Mitigation Measures.

**Goal LU-F** To encourage mixed-use pedestrian and transit-oriented development and to establish development standards for residential, commercial, and industrial development in urban and urbanizing areas.

**Policy LU-F.14:** The County may permit land designated Low and Medium Density Residential to develop to the next higher density when such development will not have an adverse impact on the surrounding land uses... The development of multiple-family and planned residential developments should be guided by the following criteria:

1. The building height should not exceed the height surrounding structures.
2. The site development of residential units or a residential complex should be compatible with existing and planned uses on adjacent properties.

**Policy LU-F.20:** The County shall require residential project design to consider natural features, noise, exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these factors. As a result, the maximum density specified by the General Plan designation or zoning for a given piece of land may not be realized.

**Policy LU-F.25:** The County shall require new commercial development to be designed to minimize the visual impact of parking areas on public roadways and maintain compatibility with surrounding land uses.

**Policy LU-F.27:** The County may allow land designated Community Commercial to develop with urban residential, office commercial, or neighborhood commercial or a combination of these uses... Development should be guided by the following criteria:

- a. Visual compatibility with the existing and planned uses on adjacent property should be required.
- b. The building height should not exceed the height of surrounding structures.

**Policy LU-F.28:** The County may allow land designated Central Business Commercial to develop with office commercial and urban residential uses... Development should be guided by the following criteria:

- b. The site development of residential units or office complexes should be visually compatible with the existing and planned uses on adjacent property.
- c. The building height should not exceed the height of surrounding structures.

**Policy LU-F.32:** The County shall require that all industrial uses located adjacent to planned non-industrial areas or roads carrying significant non-industrial traffic be designed with landscaping and setbacks comparable to the non-industrial area.

**Policy LU-F.34:** The County shall require that permanent parking facilities permitted within designated industrial areas be designed to be compatible with the surrounding land use patterns.

**Policy LU-F.36:** The County may approve rezoning and discretionary permits within the Golden State Industrial Corridor subject to the following criteria and consideration of Implementation Program OS-L.A addressing beautification of Highway 99:

- g. Compliance with the provisions of Highway 99 Beautification Ordinance.

**Goal PF-J** To provide efficient and cost-effective utilities that serve the existing and future needs of people in unincorporated areas of the county.

**Policy PF-J-2:** The County shall work with local gas and utility companies to design and locate appropriate expansion of gas and

**Goal OS-K** To conserve, protect, and maintain the scenic quality of Fresno County and discourage development that degrades areas of scenic quality.

**Policy OS-K.1:** The County shall encourage the preservation of outstanding scenic views, panoramas, and vistas wherever possible. Methods to achieve this may include encouraging private property owners to enter into open space easements for designated scenic areas.

**Policy OS-K.2:** The County shall maintain an inventory and map of scenic resources within the county.

**Policy OS-K.3:** The County should preserve areas of natural scenic beauty and provide for public access to scenic vistas by purchasing sites for park use.

**Policy OS-K.4:** The County should require development adjacent to scenic areas, vistas, and roadways to incorporate natural features of the site and be developed to minimize impacts to the scenic qualities of the site.

**Goal OS-L** To conserve, protect, and maintain the scenic quality of land and landscape adjacent to scenic roads in Fresno County.

**Policy OS-L.2:** The County shall manage designated landscaped drives and adjacent land based on the following principles:

- a. Maintenance and improvement of landscaped drives should be directed toward preserving and enhancing the quality of the landscape within the right-of-way. Where deemed necessary or desirable, the Board of Supervisors should, by resolution, assume responsibility for maintenance and improvement of landscaped drives
- b. Development of land adjoining landscaped drives should be planned and designed to preserve the quality and integrity of the roadside landscape.

**Policy OS-L.3:** The County shall manage the use of land adjacent to scenic drives and scenic highways based on the following principles:

- a. Timber harvesting within or adjacent to the right -of -way shall be limited to that which is necessary to maintain and enhance the quality of the forest
- b. Proposed high voltage overhead transmission lines, transmission line towers, and cell towers shall be routed and placed to minimize detrimental effects on scenic amenities visible from the right -of -way

- c. Installation of signs visible from the right of way shall be limited to business identification signs, on site real estate signs, and traffic control signs necessary to maintain safe traffic conditions. All billboards and other advertising structures shall be prohibited from location within view of the right -of -way
- d. Intensive land development proposals including, but not limited to, subdivisions of more than four lots, commercial developments, and mobile home parks shall be designed to blend into the natural landscape and minimize visual scarring of vegetation and terrain. The design of said development proposals shall also provide for maintenance of a natural open space area two hundred (200) feet in depth parallel to the right of way. Modification of the setback requirement may be appropriate when any one of the following conditions exist:
  - 1. Topographic or vegetative characteristics preclude such a setback
  - 2. Topographic or vegetative characteristics provide screening of buildings and parking areas from the right -of-way
  - 3. Property dimensions preclude such a setback
  - 4. Development proposal involves expansion of an existing concentration of uses
- e. Subdivision proposals shall be designed to minimize the number of right -of way access drives
- f. Developments involving concentration of commercial uses shall be designed to function as an integral unit with common parking areas and right -of -way access drives
- g. Outside storage areas associated with commercial activities shall be completely screened from view of the right -of -way with landscape plantings or artificial screens which harmonize with the natural landscape

**Policy OS-L.4:** The County shall require proposed new development along designated scenic roadways within urban areas and unincorporated communities to underground utility lines on and adjacent to the site of proposed development or, when this is infeasible, to contribute their fair share of funding for future undergrounding.

**Policy OS-L.5:** The County road improvement projects involving designated scenic roadways shall be constructed to ensure that consideration is given to preservation of ornamental trees consistent with public safety standards and accepted road design.

**Policy OS-L.6:** The County shall request city, State, and federal agencies to maintain County-designated landscaped drives, scenic drives, and scenic highways under their jurisdictions in a manner consistent with the goals and policies in this section

**Policy OS-L.7:** The County shall encourage the State of California to landscape urban freeway and highway routes that pass through Fresno County

**Policy OS-L.8:** The County shall encourage cities within Fresno County to develop complementary policies and principles to enhance the visual qualities of streets and highways within their boundaries.

**Policy OS-L.9:** The County shall work with the Department of Transportation to pursue scenic highway designation from the State of California for the State highway segments eligible for such designation (including those discussed above and any other segments added).

### *Zoning Ordinance Update*

The primary purpose of the ZOU is to reformat and modernize the existing County Zoning Ordinance, which classifies and regulates the use of buildings, structures, and land located in the unincorporated area of the county in a manner consistent with the Fresno County General Plan. The zoning ordinance achieves these purposes through various standards and regulations, including the building permit process where the planning commission and the County Board of Supervisors reviews the proposal, although there are no current regulations that apply generally to architectural design or review, lighting, or landscaping. Some of the specific plans discussed above specify architectural design for their plan areas, but these do not apply to development beyond those areas. Other County Code of Ordinances that apply to specific types of development in certain areas of Fresno County.

Article 2, Zones, Allowable Land Uses, and Zone-Specific Standards contains development standards for various land uses. Development standards include specifications for features such as parcel size, setbacks, density, and height. Development standards, which apply to new land uses and structures and alterations to existing land uses and structures exist for the following land uses. Provisions in Article 3, Development and Operational Standards, also apply to these land uses.

**Agricultural Zone General Development Standards:** Section 808.2.040, Table 2-3

**Residential Zone General Development Standards:** Section 810.2.030, Table 2-5

**Commercial Zone General Development Standards:** Section 812.2.030, Table 2-7

**Industrial Zone General Development Standards:** Section 814.2.030, Table 2-9

**Special Purpose Zone General Development Standards:** Section 816.2.030, Table 2-10

Section 818.2 describes three adopted overlay zones, which are designed to modify specific provisions of the underlying zones. Those zones include:

**Mountain Overlay Zone.** The Mountain overlay zone is intended to provide for residential and mixed retail and service uses within mountain and foothill communities. Property development standards are found in Section 818.2.040 and other provisions in Article 3, Development and Operational Standards, and Article 4, Standards for Specific Land Uses, apply to the Mountain overlay zone.

**Neighborhood Beautification Overlay Zone.** The Neighborhood Beautification overlay zone is intended to protect and preserve the integrity of the County neighborhoods within designated unincorporated areas, which have a history of and reputation for well-kept properties. Property development standards are found in Section 818.2.060 and other provisions in Article 3, Development and Operational Standards, and Article 4, Standards for Specific Land Uses, apply to the Neighborhood Beautification overlay zone.

**Highway Beautification Overlay Zone.** The Highway Beautification overlay zone is intended to promote consistent aesthetic standards for future development within County jurisdictional lands along Highway 99. These regulations allow for growth in commerce while securing an aesthetically attractive character for future development along Highway 99. The development standards shall apply to all property within 1,000 feet of the outside boundaries of the Highway 99 ultimate right-of-way. Any new use or expansion of an existing use approved after the effective date of this ordinance and located within the overlay zone boundaries shall be subject to the provisions of this section. Property development standards are found in Section

818.2.080 and other provisions in Article 3, Development and Operational Standards, and Article 4, Standards for Specific Land Uses, apply to the Highway Beautification overlay zone. The overlay zone is the result of the Highway 99 Beautification Master Plan, discussed below.

## **Fresno County Corridor Protection Program and Visual Assessment**

This document was prepared collaboratively by the Fresno County Public Works and Planning Department, the Sierra Gateway Trust, and Caltrans District 6 Landscape Architecture Division and addresses the segment of SR 180 from Trimmer Springs Road to the Tulare County Boundary, and from the Kings Canyon National Park boundary near General Grant Grove to the Kings Canyon National Park boundary near Cedar Grove (i.e., the extent of SR 180 within Fresno County). This document serves as the guide for development through this corridor and comprises support for State designation of SR 180, which occurred in 2016 (Fresno County 2014). SR 180 was officially designated a State scenic highway in October 2015 (Caltrans 2019).

## **Highway 99 Beautification Master Plan**

This plan was developed between the Association for the Beautification of Highway 99 and the Council of Fresno County Governments to “turn Highway 99 through Fresno County into an Asset which leaves an outstanding, favorable, and lasting impression on the driving public...eventually capable of receiving State and national attention and commendation” (Association for the Beautification of Highway 99 and the Council of Fresno County Governments 2016). Goals and policies include communicating the scenic beauty by establishing gateways, improving visual appeal of the corridor, and eliminating “sign pollution” in the form of eliminating billboards along the corridor. Another policy calls for enhancing existing landscaping and adding drought-tolerant plants to the palette. Finally, the plan includes landscape and architectural guidelines that define themes appropriate to the area through which the highway passes (e.g., rural, transitional, cityscape), and that attends to horizontal elements in the landscape (architecture and signage), architectural form, landscaping, and building materials, colors, and themes. Finally, there is a suggestion that public art could be incorporated to enhance regional civic pride. Implementation is at the discretion of individual jurisdictions along the corridor.

### **4.1.3 Impact Analysis and Mitigation Measures**

#### **a. Methodology and Significance Thresholds**

As addressed in CEQA analysis, a visual resources analysis is a process to assess the visible change in the availability of scenic resources or the character and quality of a region, and anticipated viewer response to that change. The Federal Highway Administration (FHWA), Bureau of Land Management (BLM), and U.S. Forest Service (USFS) have developed methodologies for conducting visual analysis that are used across the industry (BLM 1984, BLM 1986, FHWA 2015, USFS 1996). These methods have been synthesized and adapted for use in this analysis. However, the specific or exact methodology of either the BLM or USFS has not been used, as both methodologies are generally associated with broad expanses of public land, such as vast valleys in the Great Basin region of the west or for roadways. The GPR/ZOU pertains more toward future growth and development, unlike vast expanses of public land or roadways.

While the conclusions of these assessments may seem subjective, value is assessed based on generally accepted measures of quality, viewer sensitivity, and viewer response, supported by consistent levels of agreement in research on visual quality evaluation (BLM 1984, FHWA 2015).

Modifications in a landscape that repeat basic elements found in that landscape are said to be in harmony with their surroundings; changes that do not harmonize often look out of place and can be found to form an unpleasant contrast when their effects are not evaluated adequately.

Scenic quality can be described best as the overall impression a viewer retains after driving through, walking through, or flying over an area (BLM 1984). Viewer response is a function of the number of viewers, number of views seen, distance of the viewers from the viewing point, and the viewing duration. Viewer sensitivity reflects the extent of public concern for a particular viewshed. A brief description of these terms and criteria follows.

### *Viewshed*

A viewshed is an area of the landscape visible from a particular location or series of points (e.g., an overlook or a trail, respectively) (FHWA 2015). A viewshed may be divided into viewing distances called foreground, middle ground, and background. Usually, the closer a resource is to the viewer, the more dominant it appears visually, and thus it has greater importance to the viewer than something farther away. A common set of criteria identifies the foreground as 0.25 to 0.5 mile from the viewer; the middle ground is three to five miles away; and the background extends away to the horizon.

### *Visual Character*

Natural and human-built landscape features contribute to the visual character of an area or view. Features include geology, water features, plants, wildlife, trails and parks, and architecture and transportation elements (e.g., bridges or city skylines). The way visual character is perceived can vary based on the season, the time of day, the light, and other elements that influence what is visible in a landscape. The basic components used to describe visual character are form, line, color, and texture of landscape features (FHWA 2015, USFS 1996).

### *Visual Quality*

Visual quality is a term that indicates the uniqueness or desirability of a visual resource, within a frame of reference that accounts for the uniqueness and “apparent concern for appearance” by concerned viewers (e.g., residents, visitors, jurisdictions) (USFS 1996). A well-established approach to visual analysis is used to evaluate visual quality, using the concepts of vividness, intactness, and unity (FHWA 2015).

- Vividness describes the memorability of landscape components as they combine in striking patterns.
- Intactness refers to the visual integrity of the natural and human-built.
- Unity indicates the visual coherence and compositional harmony of the landscape as a whole.

### *Visual Exposure and Sensitivity*

Viewer sensitivity is determined based on the visibility of resources in the landscape, the proximity of viewers to the visual resource, the height from which viewers see the resource, and the types of viewers with their associated expectations. Visual sensitivity also depends on the number and type of viewers, along with the frequency and duration of views experienced by these viewers.

Once an adequate description of the visual resource and its quality is developed, including the number and types of views for common uses (e.g., recreational, agriculture), an evaluation can be made as to the impact of the project upon the aesthetic and visual resources in the landscape.

This section evaluates the anticipated changes in the County's visual environment from existing conditions to buildout of the GPR/ZOU. It is important to underscore that the GPR/ZOU is a policy document and does not contain specific development proposals. This analysis therefore focuses on potential growth envisioned under the GPR/ZOU, and the potential aesthetic impacts increased density and intensity of development could have on the visual relationship between the built environment and open space. Impacts would occur if substantial, adverse changes or effects would occur, including blocking views from public viewing points, damaging scenic resources by removing or altering them through project implementation, degrading visual character or quality or conflicting with existing zoning codes and guidelines, according to the CEQA thresholds of significance listed below.

### *Impact Criteria*

The proposed GPR/ZOU would have a significant impact if it could facilitate physical changes that would:

- 1 Have a substantial adverse effect on a scenic vista
- 2 Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- 3 Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality
- 4 Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area

Once an adequate description of visual resources and their quality is developed, including the number and types of views for common uses, an evaluation can be made as to the impact of the project upon the aesthetic and visual resources in the landscape. For a programmatic analysis such as that which follows, specific visual resources are not discussed but general landscape types as described in Section 4.1.1, Environmental Setting, are discussed in terms of how development that may be proposed in their vicinity could affect visual resources.

<b>Threshold 1:</b> Would the GPR/ZOU have a substantial adverse effect on a scenic vista?
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**IMPACT AES-1 THE GPR/ZOU WOULD FACILITATE GROWTH THAT MAY LEAD TO INTENSIFIED DEVELOPMENT IN FRESNO COUNTY. GENERAL PLAN POLICIES AND DEVELOPMENT STANDARDS WOULD REGULATE DEVELOPMENT IN AREAS WITH SCENIC VISTAS OR VIEWS OF NATURAL SCENIC RESOURCES, REDUCING POTENTIAL IMPACTS. THE IMPACT ON SCENIC VISTAS WOULD BE LESS THAN SIGNIFICANT.**

A scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and considered important. It can be obtained from an elevated position (such as from the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape. An adverse effect would occur if a proposed project would block or otherwise damage the scenic vista upon implementation. In Fresno County, scenic vistas would include expansive views from east-to-west roadways like SR 180 or SR 198 (pictured in Figure 4.1-7 and Figure 4.1-6). Additionally, scenic vistas exist from peaks and ridges in the Sierra Nevada, in the eastern part of the County.

In agricultural areas, existing development is very limited, with an occasional single-family home with agricultural structures like barns and workshops appearing in between large expanses of



cultivated fields, orchards, or rangelands. Viewed from the scenic roadways described in Section 4.1.1, *Environmental Setting*, the views are intact and have a high visual quality. However, when situated near major transportation corridors, such as Highway 99, transmission lines and billboards may interrupt the long-range views by cluttering the foreground. In some areas, particularly along transportation corridors, cultivated agricultural lands abruptly give way to views of industrial and other development that interrupts the visual continuity and contrasts sharply with the natural and cultivated landscape (Figure 4.1-8). This style of development tends to reduce visual quality for people driving on those roadways because it rises up out of an otherwise flat landscape and is incongruous with that landscape. The transition from the uninterrupted rurality of the cultivated fields and orchard to the developed areas is often abrupt under existing conditions. Combined with the mix of landscaped shrubs, like oleanders, that appear in freeway medians and along the roadways, and dried or untended ruderal vegetation, the general visual quality is low. This may change as viewers transition from one area of the roadway to the next. Provisions in the ZOU, such as Agricultural Zone development standards and Highway Beautification overlay zone development standards regarding setbacks, height, and landscaping would allow for new development that protects scenic vistas. Existing conditions would remain, but new development would not further reduce visual quality along scenic vistas.

Other development that could occur under implementation of the GPR/ZOU includes retail stores and malls, outdoor sales (e.g., automobile lots), and golf courses. These would generally not occur in areas with scenic vistas, particularly along designated or eligible scenic highways and scenic corridors. Warehouses and other light industrial development, along with heavy industrial development to support agricultural operations are concentrated along Highway 99, south of the City of Fresno and throughout the larger agricultural lands between the Sierra Nevada foothills and Interstate 5. The GPR/ZOU would focus development within existing unincorporated communities and away from agricultural lands. This type of development would be similar to other like structures along those transportation corridors within and between spheres of influence of incorporated cities and existing unincorporated communities. Increased densities in these areas, new development, and renovation of aging facilities could occur during the GPR/ZOU planning horizon (through the year 2042) but would be in spheres of influence of incorporated cities and existing unincorporated communities that are already developed with similar uses, considering the lack of substantial land use changes and rezoning. Likewise, views of the agricultural valleys from the Sierra Nevada would not substantially change because of development facilitated by the proposed project. Further, development under the GPR/ZOU along scenic corridors would occur in compliance with the Highway Beautification overlay zone development standards, which would promote consistent aesthetic provisions for future development along Highway 99.

Finally, Goal OS-K and Policies OS-K.1 through OS-K.4 in the GPR, which call for conservation, protection, and maintenance of the scenic quality of the County, ensure continued maintenance and access to scenic vistas throughout Fresno County. In particular, Policy OS-K.2 requires the County to maintain a map of scenic resources and with implementation of this policy Countywide scenic resources would be preserved. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the GPR/ZOU substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historical buildings within a state scenic highway?

**IMPACT AES-2 THE GPR/ZOU PROPOSES NO DEVELOPMENT IN DESIGNATED OR ELIGIBLE SCENIC HIGHWAYS. FURTHER, DEVELOPMENT NEAR SCENIC HIGHWAYS AND SCENIC CORRIDORS IS REGULATED BY DESIGN STANDARDS THAT PROTECT VIEWS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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Development in Fresno County is focused in the areas around urbanized centers and cities, like Fresno, Clovis, and Sanger. The proposed project promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where utilities and public infrastructure are available or can be consistently provided, all the while protecting and conserving the County's natural resources such as soils, water, air quality, minerals, vegetation, and wildlife and habitats. This has the effect of limiting suburban sprawl into agricultural zoned areas and open spaces.

Fresno County has many areas that are considered scenic, particularly views of rural farmland, the foothills, and the Sierra Nevada Mountains. Many of these are protected by means of State and County designations that protect their features. As discussed above in Section 4.1.1, Environment Setting, SR 180 is an officially designated State Scenic Highway along over 60 miles of its eastern segment, from Minkler to General Grant Grove area. This area offers intact views of rangelands, like those pictured in Figure 4.1-6, to the pine woodlands and river areas where the roadway enters the Sequoia National Forest in the Sierra Nevada. Existing zoning and General Plan land use designations along most of SR 180 are Exclusive Agricultural, which protects agricultural lands from encroachment by non-related agricultural uses (i.e., residential, commercial, and industrial development). Some parcels are in the Kings River Regional Plan Area and are subject to limitations on parcel division (i.e., minimum lot sizes) and restricts the style, height, density and types of development that can occur on those parcels.

The GPR/ZOU would focus development within existing unincorporated communities and away from agricultural lands. County-designated view corridors are similarly protected in the GPR/ZOU land use designations that limit density, type, and design. These include overlay zones, such as Mountain, Neighborhood Beautification, and Highway Beautification, as discussed under section 4.1.2, *Regulatory Setting*, that specify minimum parcel sizes, maximum density, and heights (limited to 25 feet in most cases). Building permits are subject to review by the Planning Director. Limited heights and building permit review would ensure that increased density does not impact views of scenic resources. Goal OS-L in the General Plan specifically intends to conserve, protect, and maintain the scenic quality of Fresno County and discourage development that degrades areas of scenic quality. Additionally, the GPR/ZOU does not propose or envision development along designated scenic highways or highway eligible for state designation, as well as County-designated scenic corridors. This is evident considering Policy OS-L.3, Policy OS-L.6, and Policy OS-L.9, which encourage maintenance of existing scenic drives and highways and designation of new scenic highways. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 3:** Would the GPR/ZOU, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the GPR/ZOU is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

**IMPACT AES-3 THE PROPOSED GENERAL PLAN COULD CREATE LAND USE PATTERNS THAT WOULD SUBSTANTIALLY ALTER THE EXISTING VISUAL CHARACTER OF THE REGION, INCLUDING THE QUALITY OF PUBLIC VIEWS. IN DEVELOPED AREAS, CHANGES IN ZONING DESIGNATIONS COULD RESULT IN INCREASED DENSITY AND MORE MIXED-USE-STYLE DEVELOPMENT. GOALS AND POLICIES IN THE GENERAL PLAN PROTECT VISUAL RESOURCES AND GUIDE NEW DEVELOPMENT IN A WAY THAT IS VISUALLY COMPATIBLE WITH EXISTING USES, SUCH THAT IMPACTS WOULD BE REDUCED. FURTHERMORE, NEW DEVELOPMENT WOULD BE SUBJECT TO DESIGN REVIEW. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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Development in Fresno County is focused in the areas around urbanized centers and cities, like Fresno, Clovis, and Sanger. The GPR/ZOU promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where utilities and public infrastructure are available or can be consistently provided, all the while protecting and conserving the County's natural resources such as soils, water, air quality, minerals, vegetation, and wildlife and habitats. This has the effect of limiting suburban sprawl into agricultural zoned areas and open spaces. The GPR has the objective to improve the attractiveness of the County through attractive forms of new development and protection of open space and view corridors, which would guide development in unincorporated Fresno County.

Historically, residential land development in the County and other areas of California has prioritized detached, single-family homes, with some apartments, duplexes, and other multi-family units being built closer to population centers that serve local industries. Development in areas where scenic resources occur has been governed by specific plans that provide guidelines for development limiting height, orientation, and massing such that scenic vistas and views of nearby visual resources, such as rock outcroppings, rivers, lakes, and forested lands, are not interrupted. Specific plans in eastern Fresno County include the Wildflower Village, Bretz Mountain, and Shaver Lake Forest specific plans. Development design may be controlled through the guidelines in the specific plan. For example, in Wildflower Village, a specific plan area in the community of Shaver Lake, homes have a rustic design that is unified with the landscape in terms of color and massing, and lots retain the topography and existing trees to the extent feasible such that development has the effect of being "nestled" into the forest, leaving the visual character intact. Furthermore, lot size is limited and thus density is low. Visual quality in these areas is high.

The GPR/ZOU would facilitate development along the Golden State Industrial Corridor through Highway 99, which is an area that currently has a low visual quality due to the lack of unity between the industrial and commercial development along the highway, the poor condition of the landscaping, and the excessive litter and dead ruderal vegetation along the roadway (Figure 4.1-8). Any development that is implemented in unincorporated County areas along Highway 99 in compliance with the GPR/ZOU would have a beneficial impact since it would increase landscaping and provide a transition between open agricultural lands and the existing industrial or commercial development along the highway.

General Plan policy OS-L.4, included below, requires undergrounding of utility lines for proposed new developments along designated roadways on or adjacent to that proposed site. To further maintain the open space and minimally impact visual quality in the occurrence of new development,

policy LU-B.11, included below, requires new development to be planned and designed to maintain the scenic character of rangelands and view corridors of highways. Additionally, to minimize potentials impacts from new development, policies OS-K.1 through OS-K.4, included below, would maintain existing visual quality by encouraging the preservation of outstanding scenic views, panoramas and vistas; developing programs to manage these resources; ensuring public access to scenic vistas; and requiring development adjacent to scenic areas, vistas, and roadways to incorporate natural features of the site and be developed to minimize impacts to the scenic qualities of the site. It also requires that new development use natural landforms and vegetation in the least visually disruptive way possible, and use design, construction and maintenance techniques that minimize the visibility of structures on hillsides, ridgelines, steep slopes, and canyons.

#### OS-L.4

The County shall require proposed new development along designated scenic roadways within urban areas and unincorporated communities to underground utility lines on and adjacent to the site of proposed development or, when this is infeasible, to contribute their fair share of funding for future undergrounding.

#### LU-B.11

The County shall require that new development requiring a County discretionary permit be planned and designed to maintain the scenic open space character of rangelands including view corridors of highways. New development shall use natural landforms and vegetation in the least visually disruptive way possible, and use design, construction and maintenance techniques that minimize the visibility of structures on hillsides, ridgelines, steep slopes, and canyons.

#### OS-K.1

The County shall encourage the preservation of outstanding scenic views, panoramas, and vistas wherever possible. Methods to achieve this may include encouraging private property owners to enter into open space easements for designated scenic areas.

#### OS-K.2

The County shall maintain an inventory and map of scenic resources within the county.

#### OS-K.3

The County should preserve areas of natural scenic beauty and provide for public access to scenic vistas by purchasing sites for park use.

#### OS-K.4

The County should require development adjacent to scenic areas, vistas, and roadways to incorporate natural features of the site and be developed to minimize impacts to the scenic qualities of the site.

As much of the county's scenic resources such as scenic highways, scenic drives, mountains, and forests are located away from urban development areas and no new significant amount of development is planned for rural areas of the county, implementation of the proposed General Plan policies would ensure that the visual quality of unincorporated areas is not substantially altered by future development. Additionally, much of the land in the scenic Sierra Nevada in the eastern part

of the county is public land administered by federal agencies, such as the USFS, and the GPR/ZOU proposes no changes to these lands. In areas where development would be permitted within unincorporated Fresno County, adherence to the goals and policies in the General Plan would ensure growth would not have a potentially significant impact on visual character, due to the generally agricultural visual character of the County, which would not be substantially altered. With the implementation of the listed policies, impacts to scenic vistas and visual character throughout unincorporated Fresno County would be less than significant.

### **Mitigation Measures**

None required.

### **Significance After Mitigation**

Impacts would be less than significant.

**Threshold 4:** Would the GPR/ZOU create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

**IMPACT AES-4 NEW DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD INCREASE LIGHT AND GLARE EFFECTS ON SENSITIVE RECEPTORS, SUCH AS RESIDENTIAL USES. HOWEVER, NEW DEVELOPMENT WOULD BE SUBJECT TO EXISTING REGULATIONS IN THE COUNTY'S ZONING ORDINANCE AND 2042 GENERAL PLAN POLICIES TO PROTECT DARK SKIES AT NIGHT. THEREFORE, THE GPR/ZOU WOULD HAVE A LESS THAN SIGNIFICANT IMPACT ASSOCIATED WITH LIGHT AND GLARE.**

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Development in Fresno County is focused in the areas around urbanized centers and cities, like Fresno, Clovis, and Sanger. The proposed project promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where utilities and public infrastructure are available or can be consistently provided, all the while protecting and conserving the County's natural resources such as soils, water, air quality, minerals, vegetation, and wildlife and habitats. This has the effect of limiting suburban sprawl into agricultural zoned areas and open spaces.

The GPR/ZOU would facilitate new development that could introduce new sources of light and glare in Fresno County, resulting in increased ambient nighttime lighting. New sources of light and glare could be installed for infill development, new development in currently vacant or undeveloped lots, or modification of existing buildings. Specific sources would include streetlights, light fixtures in parking lots, signage on businesses, exterior building illumination, interior lighting passing through building fenestration, and outdoor lighting at recreational facilities. Reflective building and vehicles surfaces, and the headlights of motor vehicles, could generate additional light and glare.

Compliance with GPR/ZOU requirements would minimize adverse effects from light spillover to nearby properties and glare. Goal OS-K of the 2042 General Plan includes provisions to conserve, protect, and maintain the scenic quality of Fresno County and discourage development that degrades areas of scenic quality. This would include limiting urban light sources to areas, such as rural residential areas, that have been previously unaffected by these impacts. In addition, several lighting standards including those regarding residential and parking developments require limiting light and glare sources within the County. Section 826.3.060(F) of the ZOU requires that lighting to illuminate parking areas shall be hooded and arranged so as not to cause a nuisance to highway traffic or the living environment. Article 2, *Zones, Allowable Land Uses, and Zone-Specific Standards*, of the ZOU requires several land use provisions regarding lighting and glare restrictions including

how signs may be displayed and illuminated near traffic and/or residences. Under these County guidelines, the placement of exterior lights is required to eliminate spillover illumination or glare onto adjoining properties to the maximum extent feasible, and not interfere with the normal operation or enjoyment of adjoining properties.

New exterior lighting associated with future growth in would be regulated by the Fresno County Zoning Ordinance. Adherence to existing County lighting requirements and proposed General Plan policies and goals would reduce impacts to a less than significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### **b. Cumulative Impacts**

A large portion of the Central Valley is characterized by rural and agricultural lands. The foothills and Sierra Nevada are sparsely populated and retain much of their natural character. The development associated with the proposed project in combination with other development in the Central Valley would extend the urban edge by converting currently undeveloped land to urban and suburban uses. Views along rural or scenic highways would change with the introduction of residential and commercial development, streets, and night lighting. Rural communities may lose some of their small-town character as they grow. Because it would foster growth associated with economic development, the proposed project would contribute considerably to the cumulative alteration of the visual character and scenic resources of the Central Valley. But, implementation of the proposed General Plan policies listed above would reduce the proposed project's contribution to this significant cumulative impact to a less-than-significant level. Therefore, the cumulative impact would be less than significant.

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## 4.2 Agriculture and Forestry Resources

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This section evaluates impacts on agriculture and forestry resources from implementation of the General Plan Review and Zoning Ordinance Update (GPR/ZOU). Both direct impacts associated with the conversion of agricultural land to non-agricultural use in the Planning Area and potential indirect impacts to adjacent agricultural operations are discussed. The section also addresses potential project impacts to forestry resources, including the conversion of forestland to non-forest use.

### 4.2.1 Setting

#### **a. Overview of Agriculture**

##### **California Agriculture**

California agriculture ranks first in the nation in productivity, its 77,500 farms and ranches received \$49.1 billion for their products in 2020. California produces over 400 commodities. Over a third of the country's vegetables and two-thirds of the country's fruits and nuts are grown in California (California Department of Food and Agriculture [CDFA] 2021).

##### **Regional Agriculture**

Fresno County is the number one agricultural producer in California, with a total gross production value of over \$7.9 billion, agriculture is Fresno County's largest industry and agricultural jobs represent 20 percent of total employment. Fresno contains more than 1.8 million acres of farmland with agricultural production accounting for nearly half of the County's entire 3.84 million acres. Almonds are the leading agricultural commodity in Fresno County with a gross value of \$1,255,475,723 (County of Fresno 2020). Fresno County leads in production of almonds, with 18.1percent of the State's total production. The county ranks second for grape production with 18percent, and pistachios, with 26.8 percent (California Department of Food and Agriculture [CDFA] 2021).

Table 4.2-1 show the ten leading crops ranked by their dollar value in 2020. The Fresno County Agricultural Commissioner reports an annual summary of the acreage, production, and value of Fresno County's agricultural products (measuring gross return to the producer and not a reflection of actual net profit). The report provides a summary of crops broken into the following categories: field crops, seed crops, vegetable crops, fruit and nut crops, nursery products, livestock and poultry, livestock and poultry products, apiary products and pollination services, and industrial crops.



**Table 4.2-1 Ten Leading Crops in Fresno County**

Crop	2020 Rank	2020 Dollar Value	2019 Rank	2018 Rank
Almonds	1	1,255,475,723	1	1
Grapes	2	1,046,356,645	2	2
Pistachios	3	761,967,964	3	3
Poultry	4	573,959,000	4	4
Milk	5	464,561,000	5	6
Cattle	6	417,551,000	7	5
Garlic	7	398,566,000	6	7
Tomatoes	8	381,349,013	8	9
Oranges	9	305,204,000	+	10
Peaches	10	264,139,238	+	12

\*Includes turkeys, chickens, ducks, geese, gamebirds, and eggs

+Not previously separated for ranking purposes

Source: County of Fresno 2020. [https://www2.co.fresno.ca.us/VisionLive/Agricultural%20Commissioner/Fresno%20County%20AG%20Crop%20Report\\_2020\\_FOR%20POSTING%20ONLINE.pdf](https://www2.co.fresno.ca.us/VisionLive/Agricultural%20Commissioner/Fresno%20County%20AG%20Crop%20Report_2020_FOR%20POSTING%20ONLINE.pdf)

[https://www2.co.fresno.ca.us/VisionLive/Agricultural%20Commissioner/Fresno%20County%20AG%20Crop%20Report\\_2020\\_FOR%20POSTING%20ONLINE.pdf](https://www2.co.fresno.ca.us/VisionLive/Agricultural%20Commissioner/Fresno%20County%20AG%20Crop%20Report_2020_FOR%20POSTING%20ONLINE.pdf)

## b. Important Farmland

The State mapping of significant farmlands as part of a national Important Farmland Inventory System (additional detail provided in the Regulatory Setting section below) identifies those agricultural lands that are of Prime Importance, Statewide Importance, and Unique Farmland. These designations indicate which lands are used for cultivation compared to the Soil Conservation Service’s Land Capability Classification system which rates soils for their potential to support cultivation. A description of each of the three categories of Important Farmland is provided below.

- **Prime Farmland.** Prime Farmland is land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the most recent mapping date (the most recent map update for the region is 2008).
- **Farmland of Statewide Importance.** Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.
- **Unique Farmland.** Unique Farmland is land of lesser quality soils used for the production of the State’s leading agricultural crops (i.e., crops of high economic value, such as oranges, olives, avocados, rice, grapes, and cut flowers). This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones of California. The land must have been cultivated at some time during the two update cycles prior to the mapping of 2008.

As shown in Figure 4.2-1 and Table 4.2-2, based on the most recent data the majority of land within the Planning Area (2,182,237 acres) in 2018 was comprised of agricultural lands. About 31 percent (672,208 acres) is designated as Prime Farmland; 18 percent (395,148 acres) as Farmland of Statewide Importance; and five percent (95,352 acres) as Unique Farmland. In addition, there are 822,455 acres (38 percent) of Grazing Land and 192,434 acres (9 percent) of Farmland of Local

Importance (DOC 2018). Compared to 2016 Farmland of Statewide Importance, Prime Farmland and Grazing Land has decreased, while the acreage of Farmland of Local Importance and Unique Farmland has increased. However, the total acreage of agricultural and farmland in the Planning Area has decreased since 2016 (Table 4.2-2). Figure 4.2-2 shows lands in the vicinity of the Planning Area that are under Williamson Act contracts.

**Table 4.2-2 Important Farmland in the Planning Area**

Farmland Designation	2018 Acres	Percent of 2018 Total Land	2016 Acres	Percent of 2016 Total Land
Prime Farmland	672,208	31%	675,720	31%
Farmland of Statewide Importance	395,148	18%	397,133	18%
Farmland of Local Importance	192,434	9%	191,783	9%
Unique Farmland	95,352	5%	94,902	5%
Grazing Land	822,455	38%	822,696	38%
Urban and Built-Up Land	132,868	6%	128,910	6%

Source: California Department of Conservation 2018

Note: 2018 is the most recent published data at the time of preparation of this EIR.

## Conversion of Farmlands in the Region

Conversion of farmlands is the loss of farmlands due to development or land use changes that do not support agricultural production. The California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP), which updates its maps biennially, provides land use conversion information for decision makers to use in their planning for the present and future of California’s agricultural land resources. Between 2016 and 2018, Fresno County lost a net total of 21,937 acres of Important Farmland, including 7,237 acres of Prime Farmland and 3,945 acres of Farmland of Statewide Importance. However, there was a net gain of 1,259 acres of Unique Farmland. Additionally, approximately 513 acres in Fresno County were converted from irrigated farmland to urban land. The California Farmland Conversion Report 2016 is the most recent comprehensive report on farmland conversion and documents farmland conversion from 2014 to 2016. From 2014 to 2016 Important Farmland in California decreased by 26,557 acres (DOC 2015). The highest-quality agricultural soils, known as Prime Farmland, decreased by 18,312 acres. Although farmland conversion was partially caused by increased urbanization, long-term land idling was the largest factor contributing to irrigated land decreases over this time period.

## Agricultural/Urban Interface Issues

Development in and adjacent to agricultural areas in the Planning Area can create a variety of potential conflicts for both growers and urban uses. Existing areas of potential conflict are located throughout the Planning Area, particularly the unincorporated County areas surrounding the City of Fresno and other metropolitan areas, where there is active agricultural production on the fringes of cities that are adjacent to sensitive land uses such as residences. Potential agricultural/urban land use conflicts can arise from the following activities, among others:

### Potential Concerns for Urban Neighbors

- Use of pesticides/dust problems in vicinity of residential neighborhoods, particularly near schools
- Odors and health concerns associated with fertilizer/pesticide application and livestock

- Noise related to farming equipment or farm worker activities
- Farm worker parking

#### **Potential Concerns for Agricultural Interests**

- Restrictions on activity arising from neighbor concerns/complaints
- Loss of revenue and competitiveness
- Competition for water and land

### **c. Overview of Forests**

Approximately 84 percent of the land in the Planning Area is owned by the federal government in the form of national parks and forests. Fresno County contains portions of two national forests: Sierra National Forest, which makes up much of the eastern portion of the County north of the Kings River, and Sequoia National Forest, which makes up a small portion of the County south of the Kings River. National forests are managed by the National Park Service, which is part of the USDA. These include the Sierra and Sequoia National Forests and Kings Canyon National Park. The Sequoia National Forest covers approximately 1,173,200 acres, with 12 percent, or 140,784 acres of the forest located in the southeastern portion of the County (USFS 2019).

#### **Sierra National Forest**

Sierra National Forest is located on the west side of the central Sierra Nevada Range in Fresno, Madera, and Mariposa Counties. The forest's administrative boundary encompasses approximately 1,395,553 acres, of which 102,000 acres are non-federal. The private holdings were patented under various laws such as the Timber and Stone Act, Homestead Act, or 1872 Mining Act. The pattern of private holding is generally irregular and scattered along the forest's western boundary at the lower and mid-elevations. USFS completed the Draft Revised Land Management Plan for the Sequoia National Forest in June 2019 (USFS 2019). As of the publication of this EIR, that plan had not been adopted.

Several small communities are located within the Forest boundary. These include:

- |                     |                   |
|---------------------|-------------------|
| ▪ Pine Ridge        | ▪ Sierra Cedars   |
| ▪ Mono Hot Springs  | ▪ Cedar Crest     |
| ▪ Vermillion Valley | ▪ Lakeshore       |
| ▪ Florence Lake     | ▪ Big Creek       |
| ▪ Balch Camp        | ▪ Huntington Lake |
| ▪ Wishon Village    | ▪ Camp Chawanakee |
| ▪ Trimmer           | ▪ Shaver Lake     |
| ▪ Camp Sierra       | ▪ Alder springs   |
| ▪ Mountain Rest     | ▪ Meadowlakes     |

Management of the Sierra National Forest is guided by the 2001 Forest Land and Resource Management Plan and the most recent (2004) Forest Land and Resource Management Plan Record of Decision. The goal of the Forest Plan is to provide a management program reflecting a mix of activities, allow use and protection of Forest resources, and fulfill legislative requirements while addressing local, regional and National issues. The planning horizon is 50 years, however the

National Forest Management Act (NFMA) regulations require land and Resource Management Plans to be applicable for 10-15 years with projections for the following 40 years (Fresno County 2021).

## **Sequoia National Forest**

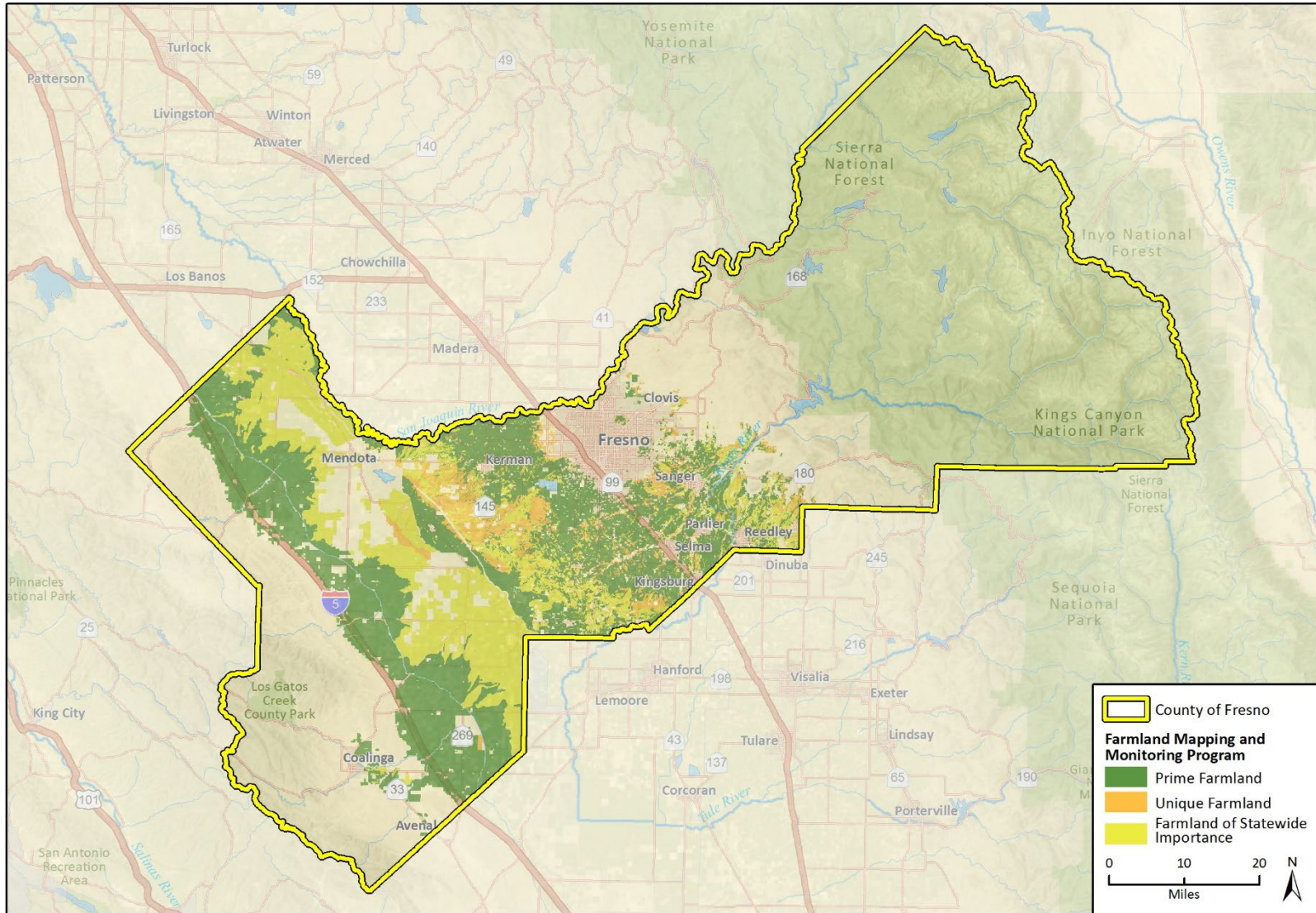
Sequoia National Forest is located at the southernmost end of the Sierra Nevada range within Tulare (62 percent), Kern (26 percent) and Fresno (12 percent) counties. Within the Forest boundary, there are approximately 1,119,045 acres of National Forest land and approximately 46,000 acres of other ownerships (private, County, State, etc.). The forest is divided into three ranger districts including Hume Lake Ranger District on the north end, the Western Divide Ranger District just east of Springville, and the Kern River Ranger District at the southern end near Lake Isabella. Management of the Sequoia National Forest is directed by the 1988 Sequoia National Forest Land and Resource Management Plan (Forest Plan). The Forest Plan provides a management program reflecting a mix of activities which allows use and protection of Forest resources. It also fulfills the legislative requirement for the Sequoia National Forest while addressing local, regional, and national issues. To accomplish this, the Forest Plan: allocates land uses, establishes the management direction and associated goals and objectives for the Forest specifying the standards, approximate timing and intensity of practices necessary to achieve that direction, and establishes the monitoring and evaluation requirements needed to ensure that the direction is being carried out and to determine how well outputs and effects were predicted. USFS completed the Draft Revised Land Management Plan for the Sequoia National Forest in June 2019 (USFS 2019). As of the publication of this EIR, that plan had not been adopted.

### **d. Forestry Resources**

Forestry resources include forestland, timberland, and timberland production zones. Definitions used for forest land and timberland are those found in the California Public Resources Code (PRC) §§12220(g) and 4789.2(g) and California Government Code (CGC) §51104(g). These codes define forestland, timberland, and timberland production zones as follows:

- **Forest Land.** Forest land is land that can support, under natural conditions, 10 percent native tree cover of any species, including hardwoods, and that allows for the preservation or management of forest-related resources such as timber, aesthetic value, fish and wildlife, biodiversity, water quality, recreational facilities, and other public benefits (PRC §12220(g)).
- **Timberland.** Timberland means land on which is growing a significant stand of trees of commercial species, or potential commercial species, either in public or private ownership or that is generally capable of maintaining a stand of trees in perpetuity and not withdrawn or otherwise devoted to uses other than timber production (PRC §4789.2(g)).
- **Timberland Production Zones.** Timberland production zones or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h) (CGC §51104).

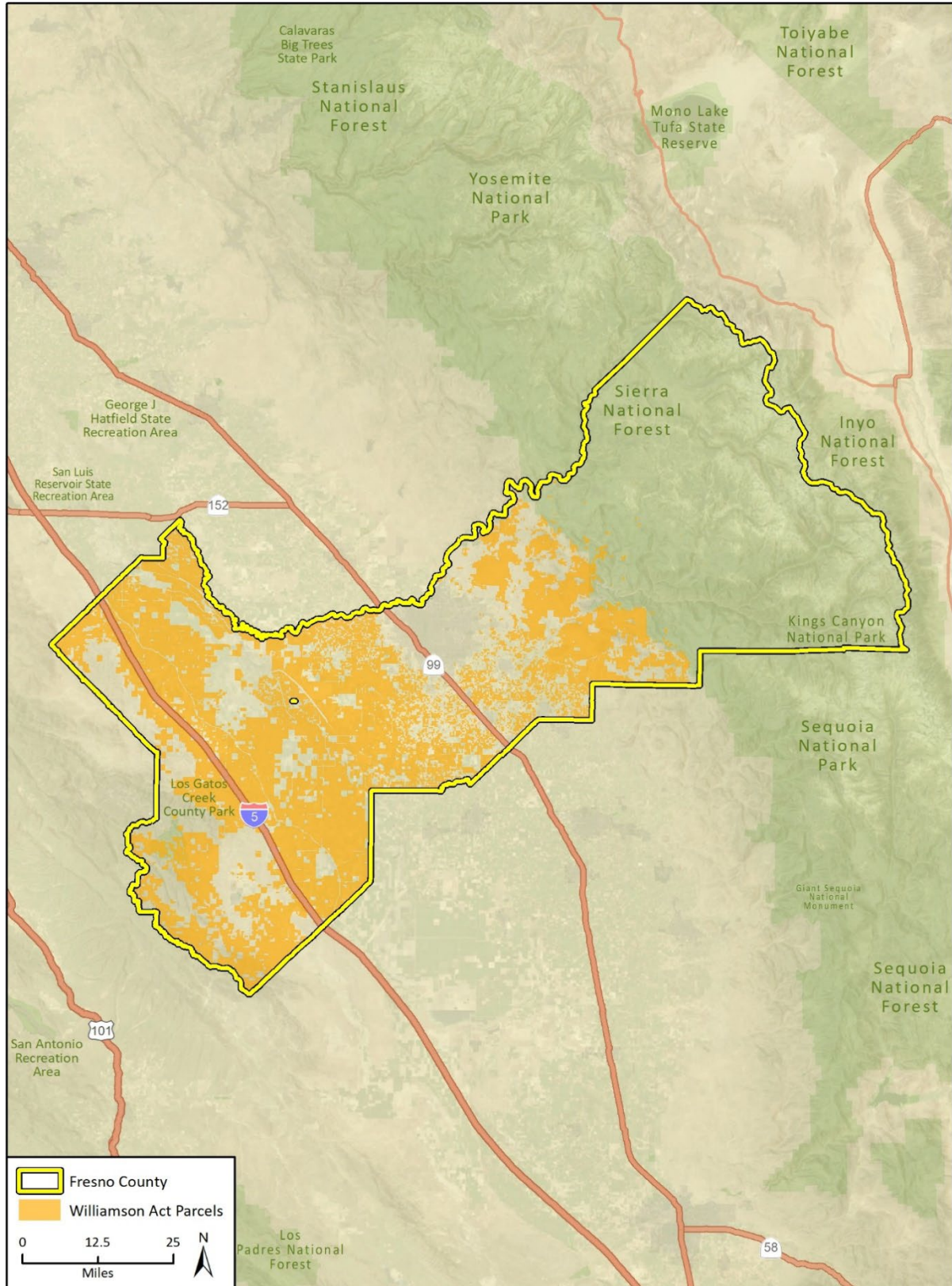
Figure 4.2-1 Farmland in Fresno County



Imagery provided by Esri and its licensors © 2018.  
Additional data provided by California Department of Conservation, 2014.

Fig X FMMMP

Figure 4.2-2 Williamson Act Contract Lands in Fresno County



Imagery provided by Microsoft Bing and its licensors © 2021.  
Williamson Act data provided by the County of Fresno, 2021.

Fig. 4.2-2. Williamson Act Contract Lands, Fresno County

## **e. Regulatory Setting**

### **Federal**

#### *Farmland Protection Policy Act*

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect Farmland. Projects are subject to FPPA requirements if they may irreversibly convert Farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a federal agency (USDA n.d.).

#### *US Forest Service*

The USFS is a Federal agency that manages public lands in national forests and grasslands. The USFS is also the largest forestry research organization in the world, and provides technical and financial assistance to state and private forestry agencies. The purpose of USFS is to provide the greatest amount of good for the greatest amount of people in the long run (USFS 2017).

### **National Forest Management Act**

In an effort to establish long-range planning and management of the national forests, Congress passed the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), and the National Forest Management Act of 1976 (NFMA), that amended the RPA. These laws require comprehensive, long range forest plans to be prepared for each national forest that details, among other things, how the resources within the forest will be managed and used. The management plans stress “multiple use” strategies that encourage the economic use of resources within the forest. Such resources include timber, water, and mineral resources, as well as recreation.

### **State**

#### *Farmland Mapping and Monitoring Program*

The DOC’s FMMP monitors the conversion of the State’s Farmland to and from agricultural use. County-level data is collected, and a series of maps are prepared that identify eight classifications and uses based on a minimum mapping unit size of 10 acres. The program also produces a biennial report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of State agricultural land and updates the Important Farmland Series Maps every two years. The FMMP is an informational service only and does not constitute State regulation of local land use decisions. Agricultural land is rated according to several variables, including soil quality and irrigation status with Prime Farmland being considered the most optimal for farming practices. Other FMMP designations include Farmland of Local Importance, Grazing Land, and Water.

#### *Land Conservation Act*

Better known as the Williamson Act (California Administrative Code Section 51200 et seq.), the California Land Conservation Act of 1965 creates a legal arrangement whereby private landowners contract with local governments to voluntarily restrict land to agricultural and open space uses,

protecting it from unnecessary or premature conversion to urban uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use rather than potential market value, which saves landowners from 20 percent to 75 percent in property tax liability each year.

Generally, Williamson Act contracts have an initial term of ten years, with renewal occurring automatically each year thereafter. The contracts run with the land and are binding on all succeeding landowners. Land must be in an agricultural preserve in order to enter into a Williamson Act contract. Agricultural preserves under Williamson Act contract contain at least 100 contiguous acres of agricultural land unless specific findings are made.

Non-renewal initiations are requested either by the landowner or the local government and are often filed in anticipation of converting farmland to other uses. Most contracted land is terminated through non-renewal. Upon the expiration of the contract, the restrictions are removed and the property tax assessment, which had been gradually increasing over the previous nine year non-renewal period, returns to full market value.

## **Local**

### *Local Agency Formation Commission (LAFCO) Boundary Controls*

Under California's much amended Cortese-Knox-Hertzberg Act, each County has a Local Agency Formation Commission (LAFCO) with the power to review and decide on proposals for the expansion of city or special district boundaries. LAFCOs lack official authority over land use, but their boundary decisions, especially those dealing with city expansions, can influence the local pattern of urbanization and its impact on agricultural land.

The Fresno County LAFCO is a five-member body with two County representatives, two city representatives, and one public member. There are also three alternate members: one County representative, one city representative, and one public member. There are three members of the LAFCO Counsel supported by LAFCO staff. State law requires LAFCOs to consider agricultural land and open space preservation in all decisions related to expansion of urban development.

### *Fresno County General Plan Review and Zoning Ordinance Update (GPR/ZOU)*

The Fresno County GPR/ZOU contains goals aimed to promote the long-term conservation of productive and potentially-productive agricultural lands, to accommodate agricultural-support services and agriculturally-related activities that support the viability of agriculture and that further the County's economic development goals, and to accommodate agriculture in specific land use designations in the County. The policies focus on the implementation of the County's Right-to-Farm Ordinance, directing urban growth towards cities and away from valuable agricultural lands, maintenance of a minimum parcel size in areas designated agriculture, and agricultural land preservation programs (e.g., agricultural conservation easements, new Williamson Act and Farmland Security Zone contracts, agricultural education programs). Implementation Programs for agriculture include such programs as evaluating minimum parcels sizes for sustained agricultural productivity, programs that would reduce conflicts between agricultural and non-agricultural lands (e.g., requiring buffers for new developments), reviewing agricultural land preservation programs, and pursuing grant funding for agricultural conservation easements.



*Fresno County Right-to-Farm Ordinance (1987)*

Section 17.04.100, Right-to-Farm Notice, requires the approval of a tentative and final subdivision in 300 feet of an AE (Exclusive Agriculture), AL (Limited Agriculture), TPZ (Timberland Preserve) or RC (Resource Conservation) Zone District to be conditioned at the time of recording with the Fresno County recorder, a Fresno County Right-to-Farm Notice.

## 4.2.2 Impact Analysis

### a. Methodology and Significance Thresholds

Appendix G of the State CEQA Guideline identifies the following criteria for determining whether a project’s impacts would have a significant impact on agriculture or forestry resources:

1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract;
3. Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timber Production;
4. Result in the loss of forest land or conversion of forest land to non-forest use; and/or
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

### b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the proposed project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**Threshold 5:** Would the proposed project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**IMPACT AG-1 THE GPR/ZOU IS DESIGNED TO ENCOURAGE THE CONTINUED OPERATION OF EXISTING AGRICULTURE LANDS AND FOREST LANDS IN THE PLANNING AREA. HOWEVER, BUILDOUT OF THE GPR/ZOU COULD RESULT IN THE CONVERSION OF FARMLAND OR FORESTLAND TO NON-AGRICULTURAL USE. THEREFORE, IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

The GPR/ZOU seeks to ensure that growth and development in the Planning Area is done in a way that protects open space and agricultural land. The proposed project promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where utilities and public infrastructure are available or can be consistently provided, all the while protecting and conserving the County’s natural resources such as soils, water, air quality, minerals, vegetation, and wildlife and habitats. There is no proposed redesignation of agricultural lands for housing development. However, due to regional housing needs, the County may be required to approve urban development in areas that are currently not planned for urban

development, including agricultural lands and thus growth envisioned by the GPR/ZOU could result in conversion of agricultural land and forest land into more urban uses.

Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are concentrated within the western portion of the County, east of I-5 and west of SR-99. The GPR/ZOU prioritizes reducing the conversion of agricultural lands. Policies in the GPR/ZOU aim to sustain agriculture by protecting agricultural activities from incompatible land uses, promoting agricultural land preservation programs, developing programs to preserve or maintain soil conditions or improve soil productivity, facilitating agricultural production by supplying adequate land for support services, and controlling expansion of non-agricultural development onto productive agricultural lands.

The GPR/ZOU would preserve agricultural land within the County through Policy LU-A.1, agricultural land conservation, to maintain agriculturally designated areas for agricultural use and direct urban growth away from agricultural lands. With Policy LU-A.2, agriculture-related uses would be allowed by right in areas designated for agricultural activities related to the production of food and fiber and support uses incidental and secondary to the on-site agricultural operation. Through policy LU-A.12, agricultural protection, the County would aim to protect agricultural activities from encroachment of incompatible land uses through the adoption of land use policies, regulations, and programs. Policy LU-A.13, agricultural buffers, protects agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural lands. However, implementation of the goals and policies of the GPR/ZOU mentioned would not ensure the preservation of all agricultural land in the Planning Area. Full buildout of the GPR/ZOU could result in a loss of agricultural lands including those mapped as Farmland. Due to the potential for growth to result in land uses changes that convert existing agricultural production in the Planning Area, agricultural impacts would be significant and unavoidable.

As mentioned above in Section 4.2.1, Setting, approximately 84 percent of the Planning Area is National Parks and Forest land. While the majority of forest land in the Planning Area is concentrated in the eastern portion of the County, where no development is planned, smaller tracts of forest land exist throughout the rest of the County, which could be subject to conversion. The GPR/ZOU seeks to protect forestry resources by encouraging productive use of forest land, carefully managing the forest ecosystem, protecting forest resources, discouraging the development of land uses that conflict with timberland management, and encouraging participation in the Timberland Production Zone program.

The GPR/ZOU includes policies intended to preserve and restore forest lands. This includes policy OS-B.1, forest production, which encourages the sustained productive use of forest land as a means of providing open space and conserving natural resources. Policy OS-B.6, Reforestation Programs, is intended to encourage and support conservation programs to reforestation in private timberlands. Additionally, Policy OS-B.7, Forest Resource Protection, states that the County shall protect forest resources for the production of timber resources and related activities. Additionally, land use strategies contained within the General Plan would help to encourage growth in developed areas rather than a more dispersed land use pattern that could result in conversion of forest land, and General Plan policies would protect and encourage productive use of forest land, the impacts on the conversion of forest land, would be less than significant

## **Mitigation Measures**

The County shall incorporate the following policies into the 2042 General Plan:

*AG-1 Agriculture Conservation*

- **Policy LU-A.23.** The County shall require discretionary land use projects which propose the permanent conversion of forty acres or more of Prime Farmland (as designated by the Farmland Mapping and Monitoring Program) to non-agricultural uses to undertake an evaluation of soil type, existing crop history and access to surface irrigation water to support the non-viability of the land for agricultural use. Should documentation indicate a loss of productive agricultural land would occur due to project development, consideration shall be given to offsetting land conversion through grants of perpetual conservation easements, deed restrictions, establishment of land trusts, in-lieu fee payment program or other County-approved farmland conservation mechanisms for the purpose of preserving agricultural land. This policy does not apply to land zoned or designated in the General Plan for non-agricultural land uses.
- **Policy LU-A.24.** The County shall encourage the State of California Department of Conservation to update its Important Farmland Map in consideration of recent restrictions to groundwater pumping, reduced access to surface water and the potential loss of irrigable land.

**Significance After Mitigation**

The policies listed above would serve to preserve existing agricultural land but would not create new agricultural lands to mitigate for agricultural land lost as a result of development under the GPR/ZOU. Existing Farmland in the Planning Area could still be converted to non-agricultural use, and the recommended policies cannot prevent all Farmland from being converted to non-agricultural use. In addition, off-site agricultural conservation easements cannot replace converted Farmland. Therefore, these measures cannot ensure impacts associated with conversion of Farmland to non-agricultural use would be avoided or reduced to a less than significant level. Impacts would be significant and unavoidable.

<p><b>Threshold 2:</b> Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>
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**IMPACT AG-2 BUILDOUT OF THE GPR/ZOU COULD RESULT IN CONFLICTS TO EXISTING ZONING FOR AGRICULTURAL USES AND WILLIAMSON ACT CONTRACTS. THEREFORE, IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

The Williamson Act allows County and City governments to define compatible land uses for contract lands within their jurisdictions, as long as those uses are consistent with the compatibility principles set forth in Government Code, Section 51238.1. Public agencies acquiring contracted lands for a public use (such as transportation facilities) must comply with Government Code Section 51293. Two criteria must be met when acquiring contracted lands:

1. The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.
2. If the land for any public improvement is agricultural land covered under a Williamson Act contract and there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

The GPR/ZOU does not envision specific development projects on land subject to a Williamson Act contract. However, as growth envisioned in the GPR/ZOU occurs near lands that are subject to Williamson Act contract and lands zoned for agricultural uses, the development of those lands with

urban uses could be more likely in the future. Therefore, buildout under the GPR/ZOU could conflict with existing zoning for agricultural uses and Williamson Act contracts.

The GPR/ZOU policies aim to conserve agricultural lands and open space including those under the Williamson Act Contract. Policy LU-A.17 Williamson Act Contracts, states that the County should accept Williamson Act contracts on all designated agricultural land subject to location, acreage, and use limitations established by the County provided that the County receives full subvention payment as partial replacement of local property tax revenue foregone as a result of participating in the Williamson Act program. Additionally, in compliance with policy LU-A.1 urban buildout under the general plan would be directed away from agricultural lands, thereby reducing the potential for conversion of agricultural lands to urban uses, as well as avoiding lands currently designated for agriculture and/or under Williamson Act contract. Furthermore, in accordance with policy LU-A.16, the County would implement agricultural land preservation programs for long-term conservation of viable agricultural operations. These programs include new and continued Williamson Act contracts and Zoning regulations. While the General Plan goals and policies are intended to reduce impacts to existing zoning for agricultural uses and Williamson Act contracts, they cannot ensure the preservation of all agricultural uses and Williamson Act contracts. Therefore, impacts to existing zoning for agricultural uses and Williamson Act contracts would be significant and unavoidable.

### **Mitigation Measures**

There are no mitigation measures available to prevent impacts to existing zoning for agricultural uses and Williamson Act contracts within the Planning Area. Impacts would be significant and unavoidable.

**Threshold 3:** Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timber Production?

**Threshold 4:** Would the project result in loss of forest land or conversion of forest land to non-forest use?

### **IMPACT AG-3 THE PROPOSED PROJECT IS DESIGNED TO ENCOURAGE THE CONTINUED OPERATION OF EXISTING TIMBER PRODUCTION WITHIN THE PLANNING AREA. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

The majority of timber resources in the Planning Area are located in southern part of the Sierra national forest and the northern portion of the Sequoia National Forest. A total of 0.1 percent of land in unincorporated Fresno County is designated as timberland. According to the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program's (FRAP) 2010 Assessment, Fresno County contains land with a Timber Production Zone designation (FRAP 2010). Additionally, the County has a Timberland Preserve Zone District intended to be an exclusive district for the growing and harvesting of timber for areas which are an integral part of a timber management operation.

A minor portion of development under the GPR/ZOU may occur near forested regions; however, no development would occur within the Sierra or Sequoia National Forests. Land use decisions and resource management within National Forests are outside the jurisdiction of Fresno County, although the USFS seeks County input on major land use and policy decisions. Therefore, development would not overlap in lands zoned for timberland projection. In addition, the proposed project would not rezone or change the land use designations of any existing land in the National

Forests. Therefore, future development in areas zoned as forest land would be required to comply with applicable development standards and zoning regulations, and thus would by design comply with zoning for forest land and timberland.

Policies in the General Plan would protect forestry resources by encouraging productive use of forest land, carefully managing the forest ecosystem, protecting forest resources, discouraging development of land uses that conflict with timberland management, and encouraging participation in the Timberland Production Zone (TPZ) program. Policy OS-B.7 would protect forest resources for the production of timber resources and related activities, Policy OS-B.9 would encourage qualified landowners to enroll in the TPZ program, and Policy OS-B.12 would maintain TPZ designations in the County.

Because land use strategies contained within the General Plan would help to encourage growth in developed areas rather than a more dispersed land use pattern that could result in conversion of forest land, and General Plan policies would protect and encourage productive use of forest land, the impacts on existing zoning and land use designations for forest land and timberland and conversion of forest land, would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### **c. Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future project" (CEQA Guidelines Section 15065[a][3]). The geographic scope for cumulative agricultural impacts is generally the County, neighboring counties, and unincorporated cities. The cumulative impacts of projects facilitated by the GPR/ZOU could result in the conversion of agricultural land. Full buildout of the GPR/ZOU could cause the conversion of agricultural lands in the Planning Area. Agriculture is a large contributor the economy in Fresno County thus loss of agricultural land as a result of the GPR/ZOU could impact Fresno County's economy. While General Plan policies attempt to reduce impacts to agricultural resources, they would not ensure the preservation of all agricultural land in the Planning Area, therefore impacts cumulative impacts to agricultural lands would be significant and unavoidable. Meanwhile, because the impacts as a result of growth envisioned by the GPR/ZOU to forest land, timberland, or timberland zoned would be less than significant as discussed above in impact AG-3, cumulative impacts to forest land, timberland, or timberland zoned Timber Production would likewise be less than significant and would not be cumulatively considerable.

## 4.3 Air Quality

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This section analyzes the impacts of the Fresno County GPR/ZOU upon local and regional air quality. Both temporary construction and long-term emissions associated with development facilitated by the GPR/ZOU are discussed. The analysis herein is based partially on the VMT Analysis Technical Memorandum dated May 24, 2022, prepared by GHD and included as Appendix TIS to this EIR.

### 4.3.1 Environmental Setting

#### a. Climate and Meteorology

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, provide the links between air pollutant emissions and air quality.

Fresno County is part of the San Joaquin Valley Air Basin (SJVAB), which occupies the southern half of the Central Valley and comprises eight counties: San Joaquin, Stanislaus, Fresno, Merced, Madera, Kings, Tulare, and portions of Kern. The SJVAB is approximately 250 miles long and 35 miles wide (on average) and is bordered by the Coast Ranges on the west, the Sierra Nevada on the east, and the Tehachapi Mountains to the south. On the valley floor, the SJVAB is open only to the north, which heavily influences prevailing winds (San Joaquin Valley Air Pollution Control District [SJVAPCD] 2015a).

Although marine air generally flows into the SJVAB from the San Francisco Bay Area through the Carquinez Strait (a gap in the Coast Ranges) and low mountain passes such as Altamont Pass and Pacheco Pass, the mountain ranges restrict air movement through the SJVAB. Additionally, most of the surrounding mountains are above the normal height of summer inversion layers (1,500 to 3,000 feet). These topographic features result in weak airflow and poor dispersion of pollutants, and as a result, the SJVAB is highly susceptible to pollutant accumulation.

The SJVAB is in a Mediterranean climate zone, characterized by sparse rainfall and hot, dry summers. With an average of over 260 sunny days per year, the SJVAB provides favorable conditions for ozone formation. While precipitation and fog during the winter block sunlight and reduce ozone concentrations, wintertime fog provides favorable conditions for the formation of particulate matter (County of Fresno 2021).

#### b. Air Pollutants of Primary Concern

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG), nitrogen oxides (NO<sub>x</sub>), particulate matter with diameters of up to 10 microns (PM<sub>10</sub>) and up to 2.5 microns (PM<sub>2.5</sub>), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO<sub>x</sub>. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates, otherwise

known as smog. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants of primary concern.

### **Ozone**

Ozone is produced by a photochemical reaction between  $\text{NO}_x$  and ROG triggered by sunlight.  $\text{NO}_x$  form during the combustion of fuels, while ROG form during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

### **Carbon Monoxide**

Carbon monoxide is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high-traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities (USEPA 2021).

### **Nitrogen Dioxide**

Nitrogen dioxide is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide, but nitric oxide reacts rapidly to form nitrogen dioxide, creating the mixture of nitric oxide and nitrogen dioxide commonly called  $\text{NO}_x$ . Nitrogen dioxide is an acute irritant. A relationship between nitrogen dioxide and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur (USEPA 2021). Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of  $\text{PM}_{10}$  and acid rain.

### **Particulate Matter**

$\text{PM}_{10}$  is particulate matter measuring no more than 10 microns in diameter, while  $\text{PM}_{2.5}$  is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. Both  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  are by-products of fuel combustion and wind erosion of soil and unpaved roads and are emitted directly into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates between 2.5 and 10 microns in diameter and fine particulates ( $\text{PM}_{2.5}$ ) can be very different. Small particulates generally come from windblown dust and dust kicked up from mobile sources. Fine particulates are associated generally with combustion processes, as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can

damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

## **Sulfur Dioxide**

Sulfur dioxide is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of sulfur dioxide emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of sulfur dioxide emissions include industrial processes such as extracting metal from ore and the burning of fuels with a high-sulfur content by locomotives, large ships, and off-road equipment. Sulfur dioxide is linked to adverse effects on the respiratory system, including aggravation of respiratory diseases, such as asthma and emphysema, and reduced lung function (USEPA 2021).

## **Lead**

Lead is a metal found naturally in the environment and in manufacturing products. The major sources of lead emissions historically have been mobile and industrial sources. However, as a result of the USEPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries as a result of national emissions standards for hazardous air pollutants (USEPA 2021). As a result of phasing out leaded gasoline, metal processing currently is the primary source of lead emissions. The highest level of lead in the air is found generally near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. The health impacts of lead include behavioral and hearing disabilities in children and nervous system impairment (USEPA 2021).

## **Toxic Air Contaminants**

In addition to the criteria pollutants discussed above, toxic air contaminants (TAC) are airborne substances that form a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than 1 micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM<sub>2.5</sub>. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (USEPA 2021). TACs are different than criteria pollutants, because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2021).



### *Diesel Particulate Matter*

Diesel engine fuel combustion forms an important fraction of the particulate matter emission inventory, as particulates in diesel emissions are very small and readily respirable. The particles have hundreds of chemicals adsorbed onto their surfaces, including many known or suspected mutagens and carcinogens. The Office of Environmental Health Hazard Assessment (OEHHA) reviewed and evaluated the potential for diesel exhaust to affect human health and the associated scientific uncertainties. Based on the available scientific evidence, it was determined that a level of DPM exposure has not been identified below which no carcinogenic effects are anticipated.

The Scientific Review Panel that approved the OEHHA report determined that, based on studies to date,  $3 \times 10^{-4}$  micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) is a reasonable estimate of the unit risk for DPM. This means that a person exposed to a DPM concentration of  $1 \mu\text{g}/\text{m}^3$  continuously over the course of a lifetime has a 3 per 10,000 chance (or 300 in one million chance) of contracting cancer due to this exposure. In 2000, the statewide estimated average concentration of DPM was  $1.26 \mu\text{g}/\text{m}^3$  for indoor and outdoor ambient air. If DPM concentrations remained the same, about 380 excess cancers per one million population could be expected (CARB 2000). Therefore, CARB has determined that these particulate emissions are a TAC.

DPM emissions are estimated to be responsible for about 70 percent of the total ambient statewide air toxics risk. DPM can also be responsible for elevated localized or near-source exposures (“hot-spots”). Depending on the activity and nearness to receptors, these potential risks are as high as 1,500 per million or more (CARB 2000). CARB staff have conducted risk characterization scenarios to determine the potential excess cancer risks involved when individuals are near various sources of diesel engine emissions, ranging from school buses to high-volume freeways. The purpose of the risk characterization was to estimate, through air dispersion modeling, the cancer risk associated with typical diesel-fueled engine or vehicle activities based on modeled particulate matter concentration at the point of maximum impact. The study included various sources of DPM emissions, including idling school buses, truck stops, low- and high-volume freeways, and other sources. High-volume freeways (20,000 or more trucks per day) were estimated to cause 800-1,700 per million potential excess cases of cancers, while low-volume freeways (2,000 or fewer trucks per day) were estimated to cause about 100-200 per million potential excess cases of cancers statewide (CARB 2000).

### *Asbestos*

Asbestos is another TAC regulated by SJVAPCD. Asbestos is a mineral fiber found naturally in the environment and is used in a variety of building construction materials for insulation and fire retardant. The major sources of asbestos in construction materials include roofing shingles, ceiling and floor tiles, paper products, asbestos cement products, textured paint and patching compounds, and walls and ceilings around wood-burning stoves (USEPA 2022). Asbestos fibers can be released into the air during demolition, building, or maintenance/repair when asbestos-containing materials (ACM) are disturbed. Asbestos exposure has a long-term impact of developing lung diseases including lung cancer, mesothelioma, and asbestosis. (USEPA 2022).

## **Dust-Related Concerns**

### *Valley Fever*

Valley Fever or coccidioidomycosis is caused locally by the microscopic fungus *Coccidioides immitis* (*C. immitis*). The *Coccidioides* fungus resides in the soil in southwestern United States, northern Mexico, and parts of Central and South America. Fresno County lies in the endemic area for Valley

Fever with approximately 403 cases reported in the County in 2021 (California Department of Public Health 2022). Infection occurs when the spores of the fungus become airborne and are inhaled. The fungal spores become airborne when contaminated soil is disturbed by human activities, such as construction and agricultural activities, and natural phenomena, such as windstorms, dust storms, and earthquakes. About 60 percent of infected persons have no symptoms. The remainder develop flu-like symptoms that can last for a month and tiredness that can sometimes last for longer than a few weeks. A small percentage of infected persons (less than 1 percent) can develop disseminated disease that spreads outside the lungs to the brain, bone, and skin. Without proper treatment, Valley Fever can lead to severe pneumonia, meningitis, and even death. Symptoms may appear between 1 to 4 weeks after exposure (Los Angeles County Health Department 2013).

Diagnosis of Valley Fever is conducted through a sample of blood, other body fluid, or biopsy of affected tissue. Valley Fever is treatable with antifungal medicines and is not contagious. Once recovered from the disease, the individual is protected against further infection. Persons at highest risk from exposure are those with compromised immune systems, such as those with human immunodeficiency virus and those with chronic pulmonary disease. Farmers, construction workers, and others who engage in activities that disturb the soil are at highest risk for Valley Fever. Infants, pregnant women, diabetics, the elderly, and people of African, Asian, Latino, or Filipino descent may be at increased risk for disseminated disease. Historically, people at risk for infection are individuals not already immune to the disease and whose jobs involve extensive contact with soil dust, such as construction or agricultural workers and archeologists (Los Angeles County Health Department 2013).

#### *Naturally Occurring Asbestos*

Naturally occurring asbestos is the name for several types of naturally occurring fibrous minerals found in serpentine rock, and its parent material, ultramafic rock. Exposure to asbestos fibers can result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Klamath Mountains, the Sierra Nevada foothills, and Coast Ranges. Based on information provided by the Department of Conservation Division of Mines and Geology, naturally occurring asbestos is likely to be present within Fresno County. (DOC 2000).

### **c. Existing Ambient Air Quality**

The SJVAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. Existing and probable future general levels of air quality in the SJVAB can normally be inferred from ambient air quality measurements conducted by SJVAPCD at its monitoring stations. The major criteria pollutants of concern in the Central Valley (i.e., ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>) are monitored at several locations.

Background ambient concentrations of pollutants are determined by pollutant emissions in a given area, as well as wind patterns and meteorological conditions for that area. As a result, background concentrations can vary among different locations in Fresno County. However, areas located close together and exposed to similar wind conditions can be expected to have similar background pollutant concentrations.

Six SJVAPCD monitoring stations are located in Fresno County: Clovis-North Villa Avenue; Fresno-Drummond Street; Fresno-Garland Avenue; Fresno-Sierra Skypark #2; Fresno-Parlier; and Fresno-Tranquility at 32650 West Adams Avenue. Air quality from the centrally located Fresno-Garland Air Monitoring Station at 3727 North 1st Street in Fresno is shown in Table 4.3-1. This station monitors ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, and nitrogen dioxide. Sulfur dioxide, lead, and carbon monoxide are pollutants for which the SJVAB does not conduct monitoring in Fresno County. Therefore, data is not available for these pollutants. Table 4.3-1 shows a 3-year summary of data compared to the NAAQS and CAAQ). As shown therein, at the Fresno-Garland station, the state 1-hour ozone standard was exceeded in 2018, 2019, and 2020. The state and national 8-hour ozone standards were exceeded for multiple days from 2018 to 2020. The national PM<sub>2.5</sub> 24-hour standard was exceeded every year from 2018 to 2020. The state PM<sub>10</sub> 24-hour standard was also exceeded every year from 2018 to 2020 and the federal standard was exceeded in 2019 and 2020. No additional exceedances of any applicable state or national standard were observed.

**Table 4.3-1 Annual Air Quality Data at the Fresno-Garland Air Monitoring Station**

Pollutant	2018	2019	2020
Ozone (ppm), Worst 1-Hour <sup>1</sup>	0.121	0.105	0.119
Number of days above CAAQS (>0.09 ppm)	8	2	10
Number of days above NAAQS (>0.12 ppm)	0	0	0
Ozone (ppm), Worst 8-Hour Average	0.099	0.084	0.099
Number of days above CAAQS (>0.070 ppm)	36	17	24
Number of days above NAAQS (>0.070 ppm)	36	17	24
Nitrogen Dioxide (ppm), Worst 1-Hour	0.068	0.055	0.048
Number of days above CAAQS (>0.180 ppm)	0	0	0
Number of days above NAAQS (>0.100 ppm)	0	0	0
Sulfur Dioxide (ppm), Worst Hour <sup>1</sup>	N/A	N/A	N/A
Number of days above CAAQS (>0.25 ppm)	0	0	0
Number of days above NAAQS (>0.075 ppm)	0	0	0
Carbon Monoxide (ppm), Worst Hour <sup>1</sup>	N/A	N/A	N/A
Number of days above CAAQS (>20 ppm)	0	0	0
Number of days above NAAQS (>35 ppm)	0	0	0
Carbon Monoxide (ppm), 8-Hour Average <sup>1</sup>	N/A	N/A	N/A
Number of days above CAAQS (>9 ppm)	0	0	0
Number of days above NAAQS (>9 ppm)	0	0	0
Particulate Matter <10 microns (µg/m <sup>3</sup> ), Worst 24 Hours	130.4	328.2	296.4
Number of days above CAAQS (>50 µg/m <sup>3</sup> )	101	72	99
Number of days above NAAQS (>150 µg/m <sup>3</sup> )	0	3	14
Particulate Matter <2.5 microns (µg/m <sup>3</sup> ), Worst 24 Hours	95.7	51.3	163.2
Number of days above NAAQS (>35 µg/m <sup>3</sup> )	36	10	45

Pollutant	2018	2019	2020
Lead ( $\mu\text{g}/\text{m}^3$ ), 3-Month Average <sup>2</sup>	N/A	N/A	N/A
Number of days above NAAQS ( $>0.15 \mu\text{g}/\text{m}^3$ )	0	0	0

ppm = parts per million;  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard

<sup>1</sup> San Joaquin Valley Air Pollution Control District does not have sulfur dioxide or carbon monoxide monitoring requirements.

<sup>2</sup> Lead monitoring data not available.

Source: CARB 2021a and USEPA 2021

## Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater-than-average sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality, because children, elderly people, and the infirmed are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are also considered sensitive to poor air quality, because people usually stay home for extended periods of time, which results in greater associated exposure to ambient air quality and potential pollutants. In addition, recreational uses are considered sensitive due to the greater exposure to ambient air pollutants because vigorous exercise associated with recreation places a high demand on the human respiratory system. The SJVAPCD considers hospitals, schools, parks, playgrounds, daycare centers, nursing homes, convalescent facilities, and residential areas as sensitive receptors (SJVAPCD 2015a). The GPR/ZOU Planning Area includes the entire jurisdiction of Fresno County. Therefore, sensitive receptor locations are considered to be any hospitals, schools, parks, and other recognized sensitive receptor groups that are located in unincorporated Fresno County. Sensitive receptors are therefore located throughout the Planning Area.

### 4.3.2 Regulatory Setting

The following section discusses the federal, state, and local agencies and regulations pertinent to air quality in the Fresno County area.

#### a. Federal and State Criteria Air Pollutants

Regulation of air pollution is achieved through both national and state ambient air quality standards and emission limits for individual sources of air pollutants. The CAA was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation’s air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the USEPA developed primary and secondary National Ambient Air Quality Standards. NAAQS have been designated for the following criteria pollutants of primary concern: ozone, carbon monoxide, carbon monoxide, sulfur dioxide,  $\text{PM}_{10}$ ,  $\text{PM}_{2.5}$ , and lead. The primary NAAQS “in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health” and the secondary standards are to “protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air” [42 USC 7409(b)(2)]. The USEPA classifies specific geographic areas as either “attainment” or “non-attainment” areas for each pollutant based on the comparison of measured

data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. The SIP is a collection of documents that set forth the State’s strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. CARB is the lead agency for all purposes related to the SIP under state law.

The California Clean Air Act (CCAA) was enacted in 1988 (California Health and Safety Code Section 39000 et seq.). Under the CCAA the state has developed the CAAQS, which are generally more stringent than the NAAQS. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the CCAA classifies specific geographic areas as either “attainment” or “non-attainment” areas for each pollutant, based on the comparison of measured data in the CAAQS.

Table 4.3-2 lists the current federal and state standards for regulated pollutants and the SJVAB’s attainment status for each standard. As shown therein, the SJVAB is currently classified as nonattainment for the federal and state ozone standards, the state and federal PM<sub>2.5</sub> standards, and the state 24-hour PM<sub>10</sub> standards. The SJVAB is unclassified or classified as attainment for all other NAAQS and CAAQS (SJVAPCD 2018a).

**Table 4.3-2 Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	State Standard		National Standard	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8-Hour	0.070 ppm	Nonattainment/ Severe Nonattainment	0.070 ppm	Nonattainment/ Extreme
	1-Hour	0.090 ppm		–	
Carbon Monoxide	1-Hour	9.0 ppm	Attainment/ Unclassified	9.0 ppm	Attainment/ Unclassified
	8-Hour	20 ppm		35 ppm	
Nitrogen Dioxide	1-Hour	0.180 ppm	Attainment	0.100 ppm	Attainment/ Unclassified
	Annual	0.030 ppm		0.053 ppm	
Sulfur Dioxide	1-Hour	0.25 ppm	Attainment	0.075 ppm	Attainment/ Unclassified
	3-Hour	–		0.5 ppm*	
	24-Hour	0.04 ppm		0.14 ppm	
	Annual	–		0.03 ppm	
Respirable Particulate Matter (PM <sub>10</sub> )	24-Hour	50 µg/m <sup>3</sup>	Nonattainment	150 µg/m <sup>3</sup>	Attainment
	Annual	20 µg/m <sup>3</sup>		–	
Fine Particulate Matter (PM <sub>2.5</sub> )	24-Hour	–	Nonattainment	35 µg/m <sup>3</sup>	Nonattainment
	Annual	12 µg/m <sup>3</sup>		12 µg/m <sup>3</sup>	
Hydrogen Sulfide	1-Hour	0.03 ppm	Unclassified	No Federal Standard	No Federal Standard
Sulfates	24-Hour	25 µg/m <sup>3</sup>	Attainment	No Federal Standard	No Federal Standard
Vinyl Chloride	24-Hour	0.010 ppm	Attainment	No Federal Standard	No Federal Standard
Visibility Reducing Particles	8-Hour	<sup>1</sup>	<sup>1</sup>	No Federal Standard	No Federal Standard

Pollutant	Averaging Time	State Standard		National Standard	
		Concentration	Attainment Status	Concentration	Attainment Status
Lead	30-Day Quarterly	1.5 µg/m <sup>3</sup> –	Attainment	– 1.5 µg/m <sup>3</sup>	No Designation/ Classification

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less

<sup>1</sup>In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: San Joaquin Valley Air Pollution Control District 2018a

The NAAQS are defined as the maximum acceptable concentration that may be reached but not exceeded more than once per year. If ambient air quality concentrations of the pollutants of concern are below the NAAQS and CAAQS standards, then health impacts are not anticipated. However, when concentrations of the air pollutants exceed the NAAQS and CAAQS standards, the health impacts are considered to vary based on the level of exceedance. The USEPA has established the Air Quality Index to characterize health impacts based on the ambient air concentrations of a given pollutant (USEPA 2021).

## b. Regional

### San Joaquin Valley Air Pollution Control District

The project would be located in the jurisdiction of the SJVAPCD, which regulates air pollutant emissions for all sources throughout the SJVAB other than motor vehicles. The SJVAPCD enforces regulations and administers permits governing stationary sources. The following regional rules and regulations would apply to development under the GPR/ZOU.

- **Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions)** contains rules developed pursuant to USEPA guidance for "serious" PM<sub>10</sub> nonattainment areas. Rules included under this regulation limit fugitive PM<sub>10</sub> emissions from the following sources: construction, demolition, excavation, extraction and other earth moving activities, bulk materials handling, carryout and track-out, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. The rule contains control measures that future project applications would be required to implement during project construction activities pursuant to *Rule 8021 Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.
- **Rule 4002 (Asbestos Requirements)** requires any renovation or demolition of a regulated facility to conduct a thorough inspection of the facility and proper abatement of asbestos as necessary. The rule also requires a noticing period and a general prohibition on demolition until asbestos containing material has been abated and removed from the location and requires that abatement be conducted by persons with specific asbestos certifications (primarily Asbestos Hazard Emergency Response Act [AHERA] certification).
- **Rule 4101 (Visibility)** limits the visible plume from any source to 20 percent opacity.
- **Rule 4102 (Nuisance)** prohibits the discharge of air contaminants or other materials in quantities that may cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public.

- **Rule 4601 (Architectural Coatings)** limits VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.
- **Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations)** limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations and applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.
- **Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities)** limits fugitive dust emissions from earthmoving activities and travel on access roads to and from the site. Measures required by Rule 8021 are listed in Table 4.3-3.
- **Rule 9510 (Indirect Source Review)** requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NO<sub>x</sub> emissions and 45 percent below statewide average PM<sub>10</sub> exhaust emissions. This rule also requires applicants to reduce baseline emissions of NO<sub>x</sub> and PM<sub>10</sub> emissions associated from operations by 33.3 percent and 50 percent respectively over a period of 10 years.

A developer can also reduce the project’s impact on air quality by entering into a “Voluntary Emission Reduction Agreement” (VERA) with SJVAPCD to address mitigation requirements under CEQA. Under a VERA, the developer may fully mitigate project emission impacts by providing funds to SJVAPCD, which then are used by SJVAPCD to administer emission reduction projects on behalf of the project developer (SJVAPCD 2015a).

*Air Quality Management Plans*

As required by the federal and California CAAs, the SJVAB or portions thereof have been classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the standards have been achieved. Jurisdictions of nonattainment areas also are required to prepare an air quality management plan (AQMP) that includes strategies for achieving attainment. The SJVAPCD has approved AQMPs demonstrating how the SJVAB will reach attainment with the federal and state ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> standards.

**Table 4.3-3 SJVAPCD Rule 8021 Measures**

No.	Measure
A.1	Pre-water site sufficient to limit VDE to 20 percent opacity.
A.2	Phase work to reduce the amount of disturbed surface area at any one time.
B.1	Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20 percent opacity; or
B.2	Construct and maintain wind barriers sufficient to limit VDE to 20 percent opacity. If using wind barriers, control measure B1 above shall also be implemented.
B.3	Apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20 percent opacity and meet the conditions of a stabilized unpaved road surface.
C.1	Restrict vehicular access to the area.
C.2	Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acre or more of disturbed surface area remains unused for 7 or more days, the area must comply with the conditions for a stabilized surface area as defined in section 3.58 of Rule 8011.

No.	Measure
5.3.1	An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
5.3.2	An owner/operator shall post speed limit signs that meet state and federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.
5.4.1	Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20 percent opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.
5.4.2	Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.
6.3.1	An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least 3 days. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for residential and non-residential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity.
6.3.3	The Dust Control Plan shall describe all fugitive dust control measures to be implemented before, during, and after any dust generating activity.
6.3.4	A Dust Control Plan shall contain all the [administrative] information described in Section 6.3.6 of this rule. The APCO shall approve, disapprove, or conditionally approve the Dust Control Plan within 30 days of plan submittal. A Dust Control Plan is deemed automatically approved if, after 30 days following receipt by the District, the District does not provide any comments to the owner/operator regarding the Dust Control Plan.
<p>VDE = visible dust emissions; APCO = Air Pollution Control Officer; SJVAPCD = San Joaquin Valley Air Pollution Control District  Source: San Joaquin Valley Air Pollution Control District 2004</p>	

### *Air Quality Attainment Plans*

Because the SJVAB is currently designated nonattainment for both federal and state ozone and PM<sub>2.5</sub> standards, the SJVAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. The SJVAPCD 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan include emissions inventories that identify sources of air pollutants, evaluations for feasibility of implementing potential opportunities to reduce emissions, sophisticated computer modeling to estimate future levels of pollution, and a strategy for how air pollution will be further reduced. The plans also include innovative alternative strategies for accelerating attainment through non-regulatory measures. The 2016 Ozone Plan determines that, with implementation of the proposed control strategy, the SJVAB can expect to reach attainment of the 2008 8-hour ozone NAAQS by December 31, 2031 (SJVAPCD 2016). The 2018 PM<sub>2.5</sub> Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> NAAQS includes a strategy for bringing SJVAB into attainment by the respective deadlines of 2023, 2024, and 2025 (SJVAPCD 2018b).



### c. Local

#### County of Fresno General Plan

The County of Fresno has established a series of goals, policies, and implementation measures in the County of Fresno 2042 General Plan to improve air quality. Applicable goals and policies related to air quality are as follows:

**Goal TR-A** To plan and provide a unified, multi-modal, coordinated, and cost-efficient countywide street and highway system that ensures the safe, orderly, and efficient movement of people and goods, including travel by walking, bicycle, or transit.

**Policy TR-A.7. Regional Transportation Plan Planning Coordination.** The County shall coordinate its transportation planning with the Fresno Council of Governments, Caltrans, cities within the county, and adjacent jurisdictions.

**Policy TR-A.8. Regional Transportation Plan Coordination.** The County shall continue to participate with the Fresno Council of Governments, Caltrans, and other agencies, to maintain a current Regional Transportation Plan, and to identify funding priorities and development expenditure plans for available regional transportation funds, in accordance with regional, state, and federal transportation planning and programming procedures. Such regional programming may include improvements to state routes, city streets, and county roadways

**Policy TR-A.14. Multi-modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right of way Plan and Precise Plans of streets and highways.

**Policy TR-A.15. Bikeways and Trails.** The County shall develop and maintain a program to construct bikeways and recreation trails in accordance with the adopted Regional Bicycle and Recreational Trail Master Plan. The County shall seek funding for construction and maintenance of bicycle and trails.

**Goal TR-C** To reduce travel demand on the County’s roadway system and maximize the operating efficiency of transportation facilities so as to reduce the quantity of motor vehicle emissions and reduce the amount of investment required in new or expanded facilities.

**Goal TR-D** To plan and provide a safe, continuous, and easily accessible bikeway system that facilitates the use of the bicycle as a viable alternative transportation mode and as a form of recreation and exercise.

**Policy TR-D.1. Bicycle Routes.** The County shall implement a system of recreational, commuter, and inter-community bicycle routes in accordance with the Regional Bikeway Plan described in the Circulation Diagram and Standards section and depicted in Figure TR-2. The plan designates bikeways between cities and unincorporated communities, to and near major traffic generators such as recreational areas, parks of regional significance, and other major public facilities, and along recreational routes.

**Policy TR-D.4. Bikeway Improvements.** The County shall develop bikeways in conjunction with street improvement projects occurring along streets and roads designated on the Regional Bikeways Plan map.

**Policy TR-D.8. Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation.

- Goal OS-G.1** The County shall develop standard methods for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents. The County will do this in conjunction with the SJVAPCD and the cities in Fresno County.
- Goal OS-G.3** The County shall participate with cities, surrounding counties, and regional agencies to address cross-jurisdictional and regional transportation and air quality issues.
- Goal OS-G.4** The County shall consult with the SJVAPCD during CEQA review for projects that require air quality impact analysis and ensure that the SJVAPCD is on the distribution list for all CEQA documents.
- Goal OS-G.5** The County shall participate with cities, surrounding counties, and regional agencies in the San Joaquin Valley in efforts to promote consistent air quality programs and implementation programs to the extent possible (e.g., transportation control measures, trip reduction ordinances, indirect source programs, etc.).
- Goal OS-G.11** The County shall continue, through its land use planning processes, to avoid inappropriate location of residential uses and sensitive receptors in relation to uses that include, but are not limited to, industrial and manufacturing uses and any other uses which have the potential for creating a hazardous or nuisance effect.
- Goal OS-G.12** The County shall include fugitive dust control measures as a requirement for subdivision maps, site plans, and grading permits. This will assist in implementing the SJVAPCD's Regulation VIII. Enforcement actions can be coordinated with the Air District's Compliance Division.
- Goal EJ-A.1** The County, during the discretionary land use permitting/development process, shall require new sensitive land uses (such as residential uses and care facilities) to be located an appropriate distance from freeways, major roadways, and railroad tracks based on analysis of physical circumstances of the project location to minimize the noise impacts, and mitigations applied as needed to reduce significant impacts.
- Goal EJ-A.2** The County shall consider and require mitigation of potential adverse health and safety impacts associated with the establishment of new residential and other sensitive land uses near existing industrial land uses, agricultural operations using pesticides applied by spray techniques, wastewater treatment plants, landfills and waste treatment facilities, and other existing land uses that could be incompatible with new adjacent residential uses.
- Goal EJ-A.3** The County shall promote commercial and industrial developments to incorporate the latest technologies to reduce diesel emissions.

### 4.3.3 Impact Analysis

#### a. Methodology and Significance Thresholds

##### Significance Thresholds

Based on Appendix G of the *CEQA Guidelines*, the GPR/ZOU would have a significant impact on air quality if it would:

1. Conflict with or obstruct the implementation of the applicable air quality plan
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard
3. Expose sensitive receptors to substantial pollutant concentrations
4. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)

SJVAPCD’s 2015 *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) does not provide guidance applicable to plans. However, the SJVAPCD’s GAMAQI includes significance criteria for evaluating construction and operational emissions associated with individual projects. SJVAPCD recommends the use of quantitative thresholds to determine if a project would significantly contribute to a nonattainment designation for criteria pollutants based on project emissions. Therefore, this analysis conservatively applies the thresholds shown in Table 4.3-4 to land use developments facilitated by the GPR/ZOU for operational emissions.

**Table 4.3-4 SJVAPCD Air Quality Significance Thresholds**

Pollutant	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>	CO
Thresholds (Tons Per Year)	10	10	15	15	27	100

NO<sub>x</sub>= nitrogen oxides; ROG = reactive organic gases; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less; SO<sub>x</sub> = sulfur oxides; CO = carbon monoxide; SJVAPCD = San Joaquin Valley Air Pollution Control District

Source: San Joaquin Valley Air Pollution Control District 2015b

In addition to the annual thresholds outlined above for regional compliance, SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the SJVAPCD’s GAMAQI, adopted in March 2015. The Ambient Air Quality Analysis (AAQA) prepared by SJVAPCD determined if localized emissions of criteria pollutants will exceed the NAAQS or CAAQS and therefore result in significant localized impacts. The *Ambient Air Quality Screening Tools* guidance provides a screening threshold of 100 pounds (lbs) per day for NO<sub>x</sub>, ROG, PM<sub>10</sub>, PM<sub>2.5</sub>, sulfur oxides, and carbon monoxide to inform localized significance impacts. SJVAPCD recommends an ambient air quality analysis be performed for all criteria pollutants when emissions of any criteria pollutant resulting from project activities exceed the 100 lbs per day screening level, after compliance with Rule 9510 requirements and implementation of all enforceable mitigation measures. For any analysis that results in a pollutant that exceeds this screening threshold, an AAQA should be conducted following District Rule 2201 *AAQA Modeling*. An AAQA uses air dispersion modeling to determine if emission increases from a project’s construction or operational activities would, in combination with background concentrations, cause or contribute to a violation of the ambient air quality. If modeled

concentrations combined with background concentrations would result in an exceedance of a NAAQS or CAAQS, then District Rule 2201 requires that the maximum modeled concentration of each pollutant be compared to its corresponding Significant Impact Level (SIL). A SIL is a concentration threshold used to determine whether a proposed source's emissions will have a significant impact on air quality in an area regardless of NAAQS or CAAQS exceedances. If modeled concentrations do not exceed the SIL, then the project would not result in a violation of ambient air quality standards.<sup>1</sup> Because this EIR is a programmatic document, an accurate AAQA analysis beyond the screening level analysis is not feasible. Therefore, for the purposes of the analysis, the 100 lbs per day screening level is used to determine if there would be an air quality impact for operational emissions.

At this time, reasonably foreseeable development facilitated by the 2042 General Plan do not have sufficient detail (e.g., construction schedule, amount of soil export, specific buildout parameters) to allow for project-level construction analysis given the programmatic nature of the plan and thus it would be speculative to analyze project-level impacts for comparison with SJVAPCD's project-level significance thresholds outlined under *Significance Thresholds*. Therefore, a more qualitative approach to characterizing construction air quality impacts has been employed for this analysis.

### *Sierra Club v. County of Fresno (2018) 6 Cal 5th 502*

A 2018 Supreme Court of California decision, *Sierra Club v. County of Fresno*, held that an EIR must reflect "a reasonable effort to discuss relevant specifics regarding the connection between" and the estimated amount of a given pollutant the project will produce and the health impacts associated with that pollutant. Further, the EIR must show a "reasonable effort to put into a meaningful context" the conclusion that the project will cause a significant air quality impact. Although CEQA does not mandate an in-depth health risk assessment, CEQA does require an EIR to adequately explain either (a) how "bare [emissions] numbers" translate to or create potential adverse health impacts; or (b) what the agency does know, and why, given existing scientific constraints, it cannot translate potential health impacts further.

As noted in the Brief of Amicus Curiae by the SCAQMD in the *Sierra Club v. County of Fresno* case, the SCAQMD – which has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State – indicated that quantifying specific health risks that may result from ozone precursors and other air pollutants from individual development projects (like those that would result from the GPR/ZOU) would be unreliable and misleading due to the relatively small-scale of these individual projects (from a regional perspective), unknown variables related to pollutant generation/release and receptor exposure, and regional model limitations. Accordingly, current scientific, technological, and modeling limitations prevent accurate and quantifiable relation of the GPR/ZOU's VOC emissions (and other air pollutant emissions) to likely health consequences for local and regional receptors.

## **Methodology**

This analysis uses the guidance and methodologies recommended in the SJVAPCD's GAMAQI to determine whether air quality impacts resulting from the GPR/ZOU would have a significant impact.

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<sup>1</sup> SIL's are available in SJVAPCD's APR 1235 Policy for District Rule 2201 AAQA Modeling guidance document.

### *Construction*

Construction-related emissions are temporary but may still cause adverse air quality impacts. Construction of development associated with the project would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, dump trucks, etc.); ground disturbance during site preparation and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances. At this time, there is not sufficient detail to allow project-level analysis and thus it would be speculative to analyze project-level impacts. Rather, construction impacts for the project are discussed qualitatively and emissions are not compared to project-level thresholds.

### *Operational*

The methodology for determining the significance of air quality impacts consists of quantifying operational emissions from development facilitated by the GPR/ZOU, then comparing emissions estimates to applicable thresholds, as described above. Criteria pollutant emissions for project operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. Specifically, CalEEMod incorporates SJVAPCD Rule 4601, which establishes restrictions on ROG content in architectural coatings, and the latest approved EMFAC model (EMFAC 2017). The input data and subsequent operation emission estimates for the GPR/ZOU are discussed below. CalEEMod output files are included in Appendix AQ. SJVAPCD's Regulation VIII, *Fugitive PM<sub>10</sub> Prohibition* was also incorporated into the modeling.

Operational emissions associated with buildout of the GPR/ZOU were modeled in CalEEMod. Project emissions represent only the expected growth in development by 2042 as described in Table 2-1 in Section 2, *Project Description*.

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources. Area emissions were based on CalEEMod defaults for each land use type. Electricity use assumed CalEEMod default values and 2019 Title 24 compliance based on the construction/operational year. Modeling for water and wastewater were based on CalEEMod defaults. Mobile source emissions consist of emissions generated by vehicles to and from the development sites proposed under the GPR/ZOU. Average daily VMT was derived from the 2042 General Plan specific Transportation Impact Assessment (TIA) prepared by GHD (Appendix TIS) and used to estimate mobile source emissions.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the GPR/ZOU conflict with or obstruct the implementation of the regional air quality management plan?

**IMPACT AQ-1 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD GENERATE CONSTRUCTION AND OPERATIONAL-RELATED EMISSIONS. EMISSIONS GENERATED BY THE GPR/ZOU WOULD CONFLICT WITH IMPLEMENTATION OF THE 2016 OZONE PLAN AND 2018 PM<sub>2.5</sub> PLAN. IMPLEMENTATION OF POLICIES IN THE GPR/ZOU, COMPLIANCE WITH EXISTING REGULATIONS, AND MITIGATION MEASURES WOULD NOT BE SUFFICIENT TO DEMONSTRATE CONSISTENCY WITH THE 2016 OZONE PLAN AND 2018 PM<sub>2.5</sub> PLAN. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

Development facilitated by the GPR/ZOU would result in emissions of criteria pollutants including ozone precursors, such as ROG and NO<sub>x</sub>, as well as particulate matter. The SJVAPCD has prepared several air quality attainment plans to achieve ozone and particulate matter standards, the most recent of which include the *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard*, *2013 Plan for the Revoked 1-Hour Ozone Standard*, and *2015 Plan for the 1997 PM<sub>2.5</sub> Standard*. The SJVAB is in attainment for carbon monoxide, sulfur dioxide, and lead, and there are no attainment plans for those pollutants.

Per the *GAMAQI*, the SJVAPCD has determined that projects with emissions above the thresholds of significance for criteria pollutants would conflict with/obstruct implementation of the SJVAPCD's air quality plan (SJVAPCD 2015a). As discussed under Impact AQ-2, both project construction and operation would exceed the thresholds of significance for criteria pollutants.

Policies TR-A.14, OS-G.1, and OS-G.2 included in the GPR/ZOU are examples of initiatives designed to incentivize infill development, improve the efficiency of transportation systems, and minimize emissions from stationary and mobile sources. These policies would reduce emissions of ozone precursors in the Planning Area. The GPR/ZOU also contains policies aimed at selectively increasing residential and commercial land use capacity within existing transit corridors and shifting a greater share of future growth to these corridors, ultimately increasing density, improving circulation and multimodal connections, and leading to lower per capita VMT (refer to Section 4.14, *Transportation and Traffic*). This land use pattern would contribute to a reduction in emissions of ozone precursors and particulate matter.

SJVAPCD Rule 9510, *Indirect Source Review, and Regulation VIII, Fugitive PM<sub>10</sub> Prohibitions*, would apply to individual projects under the GPR/ZOU as appropriate. Compliance with these rules would reduce air quality impacts from development facilitated by the GPR/ZOU, but they would not ensure that individual projects would be below SJVAPCD thresholds and consistent with the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan.

The 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan identify transportation control measures (TCM) (Table 4.3-5) to attain the air quality goals specified in the CCAA. TCMs are designed to reduce emissions from on-road motor vehicles and trucks by improving the existing transportation system to allow motor vehicles to operate more efficiently, inducing people to change their travel behavior to less polluting modes, or, ensuring emission control technology improvements in the motor vehicle fleet are fully and expeditiously realized (SJVAPCD 2016).

Consistent with the TCMs in the SJVAPCD's air quality plans, the GPR/ZOU identifies measures to reduce potential vehicle emissions beyond what is reflected in the emissions estimates for the project (e.g., increasing bus routes, pedestrian/bicycle improvements, etc.). Several goals and

policies included in the GPR/ZOU (see Section 4.3.2, *Regulatory Setting*) are designed to improve transportation congestion and reduce VMT. These policies promote the implementation of the TCMs identified in the SJVAPCD’s air quality plans.

As shown under Impact AQ-2, development facilitated by the GPR/ZOU is anticipated to exceed the project-level significance thresholds established by the SJVAPCD. Implementation of TCMs and compliance with SJVAPCD rules would not be sufficient to demonstrate consistency with the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan because an exceedance of project-level significance thresholds reflects inconsistency with the plans because the thresholds were designed to reach attainment in the SJVAB. Therefore, because emissions from development facilitated by the GPR/ZOU would potentially exceed SJVAPCD project-level thresholds, the GPR/ZOU would not be consistent SJVAPCD’s air quality plans. Impacts would be significant and unavoidable.

**Table 4.3-5 SJVAPCD TCMs Contributing to PM<sub>2.5</sub> and PM<sub>10</sub> Improvement**

TCM	Title
(i)	Improved Public Transit
(ii)	HOV Lanes
(iii)	Employer-Based Plans and Incentives
(iv)	Trip-Reduction Ordinances
(v)	Traffic Flow Improvements
(vi)	Fringe and Transportation Corridor Parking Facilities for Carpool/Vanpool and Transit
(vii)	Limit or Restrict Vehicle Use in Downtown Areas
(viii)	HOV and Ride-Share Programs
(ix)	Limit Access to Roads/Sections of Metro Area to Non-Vehicular or Pedestrian Use
(x)	Bicycle Facilities
(xi)	Control Extended Idling of Vehicles
(xii)	Reduce Extreme Cold Start Emissions
(xiii)	Employer-Sponsored Flexible Work Schedules

TCM = Transportation Control Measure; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; HOV = High-Occupancy Vehicle; SJVAPCD = San Joaquin Valley Air Pollution Control District  
 Source: San Joaquin Valley Air Pollution Control District 2016

### Mitigation Measures

The County shall require future discretionary development projects under the GPR/ZOU to implement the mitigation measures found under Impact AQ-2, which includes Mitigation Measures AQ-1 through AQ-2. Implementation of these measures would be required in order to reduce ozone precursor and particulate matter emissions and demonstrate consistency with the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan.

### Significance after Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce emissions of ROG in addition to NO<sub>x</sub> and particulate matter from development facilitated by the GPR/ZOU. However, it is

unknown at this time if such mitigation would be sufficient to reduce ozone precursor and particulate matter emissions to below applicable SJVAPCD thresholds.

As stated above, an exceedance of SJVAPCD project-level significance thresholds would conservatively reflect inconsistency with the 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan. The GPR/ZOU would therefore be inconsistent with applicable air quality plans, and impacts would be significant and unavoidable.

**Threshold 2:** Would the GPR/ZOU result in a cumulatively considerable net increase of any criteria pollutant for which the Plan region is nonattainment under an applicable federal or state ambient air quality standard?

**IMPACT AQ-2 INDIVIDUAL DEVELOPMENT PROJECTS CARRIED OUT UNDER THE GPR/ZOU WOULD GENERATE CONSTRUCTION AND OPERATIONAL-RELATED EMISSIONS. IMPLEMENTATION OF PLAN POLICIES, COMPLIANCE WITH EXISTING REGULATIONS, AND IMPLEMENTATION OF PROPOSED MITIGATION WOULD REDUCE CONSTRUCTION AND OPERATIONAL EMISSIONS, BUT EMISSIONS WOULD REMAIN ABOVE APPLICABLE THRESHOLDS. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

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## Construction

Construction facilitated by the GPR/ZOU would result in temporary emissions of various air pollutants. Ozone precursors NO<sub>x</sub> and carbon monoxide would be emitted by the operation of construction equipment, while fugitive dust (PM<sub>10</sub>, and PM<sub>2.5</sub>) would be emitted by activities that disturb the soil, such as grading and excavation, road construction, and building construction. The extent of emissions, particularly ROG and NO<sub>x</sub> emissions, generated by construction equipment would depend on the quantity of equipment used and the hours of operation for each individual project associated with buildout of the GPR/ZOU. PM<sub>2.5</sub> and PM<sub>10</sub> emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. Dust emissions can lead to both nuisance and health impacts. The extent of VOC emissions would primarily depend on the square footage of buildings being painted and asphalt surfaces being paved each day. SJVAPCD's Regulation VIII, *Fugitive PM<sub>10</sub> Prohibition*, further stipulates that property owners, contractors, developers, equipment operators, farmers, and public agencies employ fugitive dust control measures to minimize emissions from outdoor fugitive dust sources. These fugitive dust control measures are recommended for all projects (SJVAPCD 2015).

As discussed in *Methodology*, the SJVAPCD has not established plan-level significance thresholds for construction air pollutant emissions. At this time, reasonably foreseeable development facilitated by the proposed GPU/ZOU do not have sufficient detail (e.g., construction schedule, amount of soil export, specific buildout parameters) to allow for project-level analysis given the programmatic nature of the plan and thus it would be speculative to analyze project-level impacts. Therefore, a more qualitative approach to characterizing construction-related air emissions has been employed for this analysis.

Construction activities would occur in areas identified in Section 2, *Project Description*. Reasonably foreseeable development would be subject to compliance with applicable SJVAPCD rules described under Section 4.3.2, *Regulatory Setting*, including Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions), Rule 4002 (Asbestos Requirements), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations, Rule 8021



(Construction, Demolition, Excavation, and Other Earthmoving Activities), and Rule 9510 (Indirect Source Review). Compliance with these rules would reduce construction emissions of air quality criteria pollutants such as PM<sub>10</sub>, VOC, fugitive dust, and NO<sub>x</sub>.

In addition to the General Plan policies discussed under Impact AQ-1, the GPR/ZOU contains more goals and policies that would reduce air pollutant emissions. Specifically, Goal OS-G included in the GPR/ZOU aims to improve air quality and minimize the adverse effects of air pollution in Fresno County. Furthermore, the GPR/ZOU includes policies that would require proposals for new sensitive land uses to incorporate adequate setbacks, barriers, landscaping, and other measures as necessary to minimize air quality impacts, such as Policy EJ-A.2 and Policy EJ-A.3. These policies would further reduce construction emissions along with compliance with SJVACPD rules, but impacts would remain potentially significant without mitigation. Implementation of Mitigation Measures AQ-1 and AQ-2 would be required to restrict ROG content in architectural coatings and reduce emissions from diesel engines.

## Operation

Depending upon the type, size, and timeframe of development, annual emissions associated with individual projects facilitated by the GPR/ZOU could potentially exceed SJVAPCD significance thresholds. Emissions associated with development facilitated by the GPR/ZOU would result in operational emissions from buildout of individual sites. In addition, the SJVAPCD has established Rule 4601, which reduces ROG emissions from architectural coating activities. Table 4.3-6 shows the growth in operational emissions associated with the GPR/ZOU. As shown, development facilitated by the GPR/ZOU would result in emissions exceeding all SJVAPCD significance thresholds for criteria pollutants except SO<sub>x</sub>.

GPR/ZOU policies, including Policy LU-H.7, *Principles for Planned Development*, Policy HS-A.7, *Building Design*, and Policies OS-G.1 through OS-G.15, which encourage enhancements to building energy efficiencies and reduction in VMT. Implementation of such policies further reduce operational emissions. Adherence to the applicable GPR/ZOU policies and SJVAPCD rules would reduce operational-related emissions. However, there is the potential that even with these measures, operational impacts would exceed applicable thresholds. Impacts would be potentially significant.

**Table 4.3-6 Total Unmitigated Operational Emissions**

Emissions Source	Estimated Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	274	15	685	2	99	99
Energy	4	34	24	<1	3	3
Mobile	49	55	308	<1	46	12
<b>Total</b>	<b>327</b>	<b>104</b>	<b>1,017</b>	<b>2</b>	<b>148</b>	<b>114</b>
<i>SJVAPCD Thresholds</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Exceeds Threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub>= nitrogen oxides; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less; SJVAPCD = San Joaquin Valley Air Pollution Control District

See Appendix AQ for summaries and CalEEMod results.

Note: Totals may not add up due to rounding.

## Mitigation Measures

The County shall incorporate the following policies into the 2042 General Plan.

### AQ-1 *Architectural Coating ROG Content Limits*

#### **Policy OS-G.12: Architectural Coating Reactive Organic Gases Content Limits**

The County shall review development projects, and encourage the use of architectural coating materials, as defined in the San Joaquin Valley Air Pollution Control District's Rule 4601, that are zero-emission or have a low-ROG content (below 10 grams per liter). Where such ROG coatings are not available, the coating with the lowest ROG rating available shall be used.

### AQ-2 *Diesel Engine Tier Requirements*

**Policy OS-G.13: Diesel Engine Tier Requirements.** The County shall require development projects to implement diesel construction equipment meeting California Air Resources Board (CARB) Tier 4 or equivalent emission standards for off-road heavy-duty diesel engines. If use of Tier 4 equipment is not possible due to availability, diesel construction equipment meeting Tier 3 emission standards shall be used. Tier 3 equipment shall use a Level 3 Diesel Particulate Filter.

## Significance after Mitigation

Implementation of Policies OS-x.x and OS-x.x would reduce construction emissions, but the extent to which reductions would occur is unknown. It is speculative to determine whether project-level emissions associated with reasonably foreseeable development under the GPU/ZOU would be reduced below the SJVAPCD project-level significance thresholds because the nature and intensity of future projects is not known at this time. Therefore, impacts would remain significant and unavoidable. Individual development projects would be reviewed for project-specific impacts during any required environmental review. If project-specific significant impacts are identified, applicable mitigation measures will be placed on the project as conditions of approval.

shows mitigated operational emissions. Incorporation of GPR/ZOU policies, Mitigation Measure AQ-1 (which would have a minor VOC-reducing effect on operational emissions), and regulatory requirements, would reduce criteria air pollutant emissions associated with the developed facilitated by the GPR/ZOU to the extent feasible. However, it is speculative to determine whether project-level emissions associated with reasonably foreseeable development under the Housing Element Update would be reduced below the project-level significance thresholds because the nature and intensity of future housing projects is not known at this time. Operational impacts would remain significant and unavoidable.

**Threshold 3:** Would the GPR/ZOU expose sensitive receptors to substantial pollutant concentrations?

**IMPACT AQ-3 INDIVIDUAL DEVELOPMENT PROJECTS CARRIED OUT UNDER THE GPR/ZOU WOULD GENERATE CONSTRUCTION- AND OPERATIONAL-RELATED EMISSIONS THAT MAY EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. SUCH EMISSIONS MAY RESULT IN ADVERSE IMPACTS TO LOCAL AIR QUALITY. IMPLEMENTATION OF PLAN POLICIES AND COMPLIANCE WITH EXISTING REGULATIONS WOULD REDUCE EMISSIONS, BUT NOT BELOW THE LEVEL OF SIGNIFICANCE. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

## Ambient Air Quality Analysis

### Construction

The SJVAB is a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> under the NAAQS and/or CAAQS. The current air quality in the Air Basin is the result of cumulative criteria pollutant emissions from motor vehicles, off-road equipment, commercial and industrial facilities, residential developments, and other emission sources. Projects that emit these pollutants or their precursors (i.e., ROG and NO<sub>x</sub> for ozone) potentially contribute to poor air quality. Table 4.3-7 shows the annual emissions for construction associated with buildout of the GPR/ZOU. As shown, ROG would exceed the 100 lbs per day screening threshold. Therefore, localized construction impacts would be potentially significant.

**Table 4.3-7 Localized Construction Impacts**

Emissions Source	Estimated Emissions (pounds/day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Single Family	257	39	28	0	22	12
Low Rise Multi	88	17	15	0	8	4
Mobile Home	153	39	30	0	22	12
Education	257	33	21	0	22	12
Government	120	33	21	0	22	12
Health Services	119	33	21	0	22	12
Hospitality	308	33	21	0	22	12
Industrial	299	33	21	0	22	12
Manufacturing	160	33	21	0	22	12
Office	96	17	14	0	8	4
Retail	87	31	23	0	8	4
<b>Total</b>	<b>308</b>	<b>39</b>	<b>30</b>	<b>0</b>	<b>20</b>	<b>2</b>
<i>SJVAPCD Thresholds</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub>= nitrogen oxides; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less; SJVAPCD = San Joaquin Valley Air Pollution Control District

*Operation*

Table 4.3-8 summarizes estimated emissions associated with buildout of the GPR/ZOU. As shown, operational emissions would exceed SJVAPCD recommended daily 100 lbs per day screening threshold for all pollutants except SO<sub>x</sub>. Therefore, localized operational emissions would be potentially significant.

**Table 4.3-8 Localized Operational Emissions**

Emissions Source	Estimated Emissions					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Growth</b>						
tons/year	327	104	1,017	2	148	114
pounds/day	1,792	570	5,573	11	811	625
<b>Total</b>						
<i>SJVAPCD Thresholds</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
<b>Exceeds Threshold</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub>= nitrogen oxides; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; PM<sub>2.5</sub> = particulate matter with a diameter of 2.5 microns or less; SJVAPCD = San Joaquin Valley Air Pollution Control District

**Carbon Monoxide Hotspots**

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal 1-hour standard of 35 ppm or the federal and state 8-hour standard of 9 ppm (CARB 2016).

The entire SJVAB is in conformance with state and federal carbon monoxide standards and no air quality monitoring stations report carbon monoxide levels in the SJVAPCD jurisdiction. Additionally, CARB no longer reports carbon monoxide concentrations anywhere in California. Based on the low background level of carbon monoxide in the Planning Area (indicated by the lack of monitoring at state or local levels) and the ever-improving vehicle emissions standards for new sources in accordance with state and federal regulations, development facilitated by the GPR/ZOU would not create new carbon monoxide hotspots. Therefore, the GPR/ZOU would not expose sensitive receptors to substantial carbon monoxide concentrations, and localized air quality impacts related to carbon monoxide hot spots would be less than significant.

**Toxic Air Contaminants**

DPM is classified as the primary airborne carcinogen in the State. CARB reports that DPM represents about 70 percent of the potential cancer risk from vehicle travel on a typical urban freeway. More than 90 percent of DPM is less than 1 micron in size and thus is a subset of PM<sub>2.5</sub> (CARB 2021b); thus, diesel PM<sub>2.5</sub> emission levels can serve as a proxy of DPM emission levels. The SJVAPCD GAMAQI set the significance threshold for long-term public health risk is at 10 excess cancer cases in a million for cancer risk. For non-cancer risk, the significance level is set at a Hazard Index of more than one (1.0). The Hazard Index of more than one means that predicted levels of a toxic pollutant are greater than the exposure level, which is generally considered acceptable. If a formal health risk

assessment shows that a significant impact results, mitigation measures to reduce the predicted levels of toxic air pollutants from the facility to a level of insignificance may be required.

The population residing close to freeways or busy roadways may experience adverse health effects beyond those typically found in urban areas. CARB, in the *Air Quality and Land Use Handbook: A Community Health Perspective* (June 2005), recommends avoiding siting new sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. Additional non-cancer health risk attributable to proximity to freeways was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70 percent drop-off in particulate pollution levels at 500 feet (CARB 2005). As discussed above, proximity to freeways increases cancer risk and exposure to particulate matter. Similarly, proximity to heavily travelled transit corridors and intersections would expose residents to higher levels of DPM and carbon monoxide. The 2042 General Plan includes Policy EJ-A.5, requires the County to seek funding to develop projects to mitigate roadway pollution.

Although the precise location of projects and sensitive receptors is not known at this time, the GPR/ZOU does not include any significant changes to the land-use types envisioned by the existing General Plan. Nonetheless, while conditions would be similar to those of the existing General Plan, impacts would be potentially significant. Additionally, 2042 implementation of Mitigation Measures AQ-1 and AQ-2 above would reduce localized emissions of criteria pollutants from construction and operation of individual projects, but not to a level below the SJVAPCD screening threshold of 100 lbs per day. These policies would also reduce TAC emissions because they would reduce emissions from diesel equipment but would not ensure that sensitive receptors are not affected by air pollutant exposure. Implementation of Mitigation Measure AQ-4 would be required to ensure that sensitive receptors would not be exposed to substantial levels of toxic air contaminants. Asbestos

Asbestos may be contained in existing buildings that may be demolished as part of the land-use scenario envisioned by the GPR/ZOU. Individual project applicants would have to demonstrate compliance with SJVAPCD Rule 4002, which requires abatement of ACM by a licensed contractor prior to the issuance of a demolition permit. The requirements to obtain a demolition permit for the structures on the project location would ensure that ACM is handled appropriately and that hazardous materials are disposed of according to federal and state regulations. Therefore, impacts to workers and off-site receptors from asbestos exposure would be less than significant.

### **San Joaquin Valley Fever**

Construction activities, including site preparation and grading, would have the potential to release *Coccidioides immitis* spores. However, the population of Fresno County has been and will continue to be exposed to Valley Fever from agricultural and construction activities occurring throughout the region. Compliance with SJVAPCD Rule 8021 would limit spore release during grading of individual projects implemented under the GPR/ZOU. As discussed under *Air Pollutant Emission Thresholds*, the SJVAPCD does not have a recommended threshold for Valley Fever Impacts but instead recommends consideration of the following factors that may indicate a project's potential to result in significant impacts related to Valley Fever:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas

- Archaeological resources probable or known to exist in the area (Native American midden sites)
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass)
- Non-native population (i.e., out-of-area construction workers)

Development facilitated by the GPR/ZOU would involve construction activity in areas known to contain *Coccidioides immitis*. There is potential for construction workers to be from out of the area; therefore, construction activity under the GPR/ZOU has the potential to release spores that could impact workers. This is a potentially significant impact. Mitigation Measure AQ-5 would reduce the intensity of ground disturbance, and therefore reduce impacts related to Valley Fever.

Implementation of typical dust control measures would reduce the amount of airborne spores and would reduce exposure of construction workers to *Coccidioides immitis* spores to a less-than-significant level.

## Mitigation Measures

The County shall incorporate the following policies into the 2042 General Plan.

*Mitigation Measure AQ-3 Sensitive Receptor Setbacks.*

**Policy EJ-A.15: Sensitive Receptor Setbacks.** Consistent with the provisions contained in the California Air Resources Board (CARB) Air Quality and Land Use Handbook, project applicants shall identify appropriate measures for projects with sensitive uses located within 500 feet of freeways, heavily traveled arterials (daily vehicle trips of 10,000 or more), railways, and other sources of diesel particulate matter (DPM) and other known carcinogens. The County shall require development projects that are located within 500 feet of freeways, heavily traveled arterials (daily vehicle trips of 10,000 or more), railways, and other sources of DPM and other known carcinogens to retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the CARB and the California Environmental Protection Agency's Office of Environmental Health and Hazard Assessment requirements to determine the exposure of nearby sensitive receptors to emission sources resulting from the project. Measures identified in the HRA shall be enforced by the County.

*Mitigation Measure AQ-4 Valley Fever*

**Policy OS-G.13: Valley Fever Mitigation.** The County shall continue to promote public awareness of Valley Fever risks relating to ground disturbing activities through the provision of educational materials, webpages and resource contact information. For projects involving ground disturbance on unpaved areas left undisturbed for 6 months or more, the County shall require developers to provide project-specific Valley Fever training and training materials.

## Significance after Mitigation

Implementation of Mitigation Measure AQ-1 would also apply to this impact because localized ROG emissions from individual projects could potentially be reduced to below significance thresholds. However, without knowing the feasible extent of implementation of 2042 General Plan policies since there are no specific projects known at this time, it is unknown the extent to which localized ROG emissions can be reduced. Typically, when emissions exceed the 100 lbs per day screening threshold, an AAQA would be performed to determine if the impact would be significant. An AAQA was not performed for construction emissions due to the programmatic nature of the GPR/ZOU.

Furthermore, the location of the individual projects with respect to each other or nearby sensitive receptors is unknown. As the extent of reduction from Mitigation Measure AQ-1 is unknown and an AAQA cannot be performed, the impacts with respect to localized construction emissions would remain significant and unavoidable.

For operational localized emissions, as the emissions exceed the screening threshold (as shown in Table 4.3-8) and it is unknown the extent to which these emissions will impact local receptors, impacts with respect to localized operational emissions would remain significant and unavoidable.

Implementation of Mitigation Measure AQ-3, in conjunction with Mitigation Measures AQ-1 and AQ-2, would reduce impacts related to potential health risks associated with exposure of sensitive receptors to substantial pollutant concentrations of DPM and TACs. Mitigation measure AQ-3 would ensure that new development facilitated by the GPR/ZOU would not expose sensitive receivers to substantial air pollutant concentrations. Implementation of these mitigation measures would reduce impacts from DPM and TACs to a less-than-significant level.

With the implementation of Mitigation Measures AQ-4, Valley Fever impacts would be reduced to a less-than-significant level.

<b>Threshold 4:</b> Would the GPR/ZOU create objectionable odors affecting a substantial number of people?
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**IMPACT AQ-4 THE GPR/ZOU WOULD NOT CREATE OBJECTIONABLE ODORS THAT WOULD AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Full buildout in 2042 under the GPR/ZOU would increase light and heavy industrial land uses in the county. However, the GPR/ZOU would not implement any of the land-use types identified as odor producing sources and would therefore not contribute to the siting of sensitive receptors near odor sources or siting new odor sources near existing sensitive receptors. As discussed in Section 4.2, *Agriculture and Forestry Resources*, agricultural land uses permitted in the Planning Area would not result in conflicts with adjacent land uses. The existing General Plan land-use scenario (Section 2, *Project Description*) would ensure consistency of surrounding land uses with odor-producing land uses. Other odors resulting from buildout under the GPR/ZOU include odor emissions that would be limited to odors associated with vehicle and engine exhaust and idling. During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. Therefore, impacts would be less than significant.

**Mitigation Measures**

No mitigation required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation.

#### 4.3.4 Cumulative Impact Analysis

GPR/ZOU related air pollution may combine with other cumulative projects (past, present, and reasonably foreseeable future) to violate criteria pollutant standards if the existing background sources cause nonattainment conditions. Air districts manage attainment of the criteria pollutant standards by adopting rules, regulations, and attainment plans, which comprise a multifaceted programmatic approach to such attainment.

Because the GPR/ZOU is composed of a General Plan update, cumulative impacts are treated somewhat differently than would be the case for a project-specific development. Section 15130 of the *CEQA Guidelines* provides the following direction relative to cumulative impact analysis:

Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact...

By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur in a county's plan area. Therefore, the analysis of the GPR/ZOU impacts also constitutes the cumulative analysis. The GPR/ZOU may cumulatively increase the potential for impacts resulting from increased air pollutant emissions. Implementation of the GPR/ZOU policies and compliance with existing laws and regulations as well as mitigation measures described above would reduce cumulative impacts but not to a less-than-significant level. Cumulative impacts would be significant and unavoidable.



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## 4.4 Biological Resources

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This section addresses direct and indirect impacts on the following biological resources: regulated waterways and wetlands, sensitive habitats and mature native trees, special-status plants and animals (defined later in Section 4.4.1), and wildlife movement corridors from implementation of proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU).

### 4.4.1 Setting

#### **a. Planning Area Habitat Types**

Unincorporated Fresno County, which comprises the Planning Area, has a wide diversity of tree (hardwood and coniferous forests, oak woodlands), shrub (chaparrals, alkali desert scrub), and herbaceous (grasslands) habitat types. The descriptions of vegetation communities and wildlife habitats within Fresno County are presented below based on information from the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationship (CWHR) classification system.

The Jepson Manual (Baldwin et al. 2012) divides California geographically into units that are based on natural landscape features and biota. The four-tiered units in this system are provinces, regions, subregions, and districts. This system reflects broad patterns of vegetation, geology, topography, and climate. Fresno County has four regions or subregions from west to east: Central Western California Region, Great Central Valley, the Sierra Nevada including the Sierra Nevada Foothills, and the High Sierra Nevada Subregions.

The western edge of Fresno County is located in the Central Western California Region and supports grasslands, oak woodlands, blue oak-foothill pine woodland, riparian woodlands, and chaparral. The central portion of Fresno County is in the Great Central Valley Region, which is primarily agricultural, but it also supports a variety of vegetation communities (generally in isolated patches and along the margins of the Valley) including grasslands, marshes, vernal pools, alkali scrub, and riparian woodlands. The eastern portion of Fresno County is in the Sierra Nevada Region, subdivided into the Sierra Nevada Foothills Subregion and the High Sierra Nevada Subregion. The Sierra Nevada Region supports grasslands, chaparral, serpentine chaparral, blue oak woodlands, blue oakfoothill pine woodlands, and riparian woodlands. The High Sierra Nevada Subregion supports a variety of montane conifer and hardwood forest types, montane riparian woodlands, montane chaparral, and alpine scrub. Most of eastern Fresno County, situated in the High Sierra Nevada Subregion, is in the Sequoia National Forest, Sierra National Forest, and Kings Canyon National Park.

#### **Forests and Woodlands**

Fresno County is home to a variety of conifer and hardwood forests and woodlands that occur in all four Regions. These tree-dominated habitats can support diverse wildlife populations. Riparian woodlands are generally the terrestrial areas adjacent to freshwater bodies forming a vegetated corridor from stream edge to floodplain edge or along shorelines of lakes, ponds, and other open water. Riparian woodlands occur in and along the San Joaquin River and Kings River and its tributaries, as well as along the many creeks, streams, and ravines in the county. The following are descriptions of types of tree-dominated habitats that occur in Fresno County.

### Oak Woodlands

Fresno County supports several types of oak (*Quercus* spp.) woodlands in three of the county's four regions. Valley oak (*Quercus lobata*) woodlands occur in patchy distribution throughout most major lowland valleys including the Sacramento-San Joaquin Valley and in the Central Western California Region. Blue oak-foothill pine (*Pinus sabiniana*) woodland is located along the western edge of the county and in the Sierra Nevada Foothills Subregion. Oak woodland habitats provide foraging, nesting, and shelter habitat for a wide variety of birds amphibians, reptiles, and mammals. Large trees provide suitable nesting and roosting habitat for birds and bats, including special-status species such as white-tailed kite (*Elanus leucurus*) and western mastiff bat (*Eumops perotis californicus*).

### Riparian Woodlands

Riparian woodlands in Fresno County occur in all four Regions. Valley foothill riparian woodland is associated with drainages, particularly those with low velocity flows, flood plains, and gentle topography. This habitat is generally dominated by cottonwoods (*Populus* sp.), sycamore (*Platanus racemosa*) and/or valley oak, and willows (*Salix* spp.) and/or mulefat (*Baccharis salicifolia*). Valley foothill riparian woodland is distributed across most of Fresno County, except for in the High Sierra Nevada Subregion, where the montane riparian woodlands replace valley foothill riparian woodlands at increasing elevations. Black cottonwood (*Populus trichocarpa*) is often a dominant tree species in this habitat, and, in the High Sierra Nevada Subregion, it is associated with aspen (*Populus tremuloides*), willows (*Salix* spp.), and other riparian trees. Riparian woodlands are rich in wildlife species, providing foraging, migration, roosting, and nesting/breeding habitat. Many migratory birds and raptors nest in riparian woodlands, including special-status Swainson's hawks (*Buteo swainsoni*), least Bell's vireos (*Vireo bellii pusillus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow warblers (*Setophaga petechia*).

### Eucalyptus Forest

Eucalyptus forests are often planted in the South Coast Ranges (e.g., western margins of Fresno County) and the Central Valley Region as wind rows. This habitat ranges from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Blue gum (*Eucalyptus globulus*) and red gum eucalyptus (*E. camaldulensis*) are the most common species in these stands.

### Hardwood Stands

Hardwood stands in Fresno County include montane hardwood and hardwood-conifer. Montane hardwood stands occur in the Sierra Nevada Foothill Subregion and High Sierra Nevada Subregion. These stands have dense canopies of canyon live oak (*Quercus chrysolepis*) and are associated with California black oak (*Quercus kelloggii*) and other hardwood trees. Tree species include ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), and white fir (*Abies concolor*).

### Aspen Stands

Aspen (*Populus tremuloides*) stands are generally located in the High Sierra Nevada Range at an elevation range of 6,500 to 9,850 feet. They usually occur along seeps, streams, and meadows. These stands have relatively open canopies and are associated with other deciduous and conifer species, except in climax communities where aspen is the dominant tree species in the canopy.

### *Juniper Woodland*

Juniper habitats are characterized as woodlands of open to dense aggregations of junipers (*Juniperus* sp.) in the form of arborescent shrubs or small trees. Juniper woodlands generally occur in Fresno County in the South Coast Range and the High Sierra Nevada Range Subregion at middle elevations, forming a transition between habitats at higher elevations. Juniper woodlands occur on virtually all exposures and slopes, but are common on level to gently rolling topography.

### *Conifer Forests*

Conifer dominated forests in Fresno County are located in the High Sierra Nevada Range Subregion. Forest habitats at lower montane areas include ponderosa pine and white fir. At the upper montane elevations, forest habitats include Jeffrey pine (*Pinus jeffreyi*), lodgepole pine (*Pinus contorta*) red fir (*Abies magnifica*). Subalpine conifer forests are open stands that support Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), mountain hemlock (*Tsuga mertensiana*), and various pine species (*Pinus* spp.). The shrub layer in subalpine forests is often sparse, resulting in low wildlife diversity. Conifer forests provide habitat for nesting birds and roosting bats, including special-status species such as western mastiff bat, great gray owl (*Strix nebulosa*), and northern goshawk (*Accipiter gentilis*).

## **Shrub Dominated Habitats**

Fresno County includes shrub dominated habitats in all four Regions. Desert and alkali scrub and chaparral occur predominantly in the Coast range, San Joaquin Valley, and Sierra foothills regions, but alpine dwarf scrub is present in the Sierra Mountain region.

### *Desert and Alkali Scrub*

The South Coast Range (Central Western California Region) in Fresno County supports two types of scrub habitats: coastal and desert scrub. Coastal scrub is present along the far western margins of the County. California sagebrush (*Artemisia californica*) tends to be common in all coastal scrub habitats. Black sage (*Salvia mellifera*) and California buckwheat (*Eriogonum fasciculatum*) become more abundant in mesic areas. Desert scrub and Alkali desert scrub occur along the western edge of the San Joaquin Valley in western Fresno County. Desert scrub is characterized by open stands of broad-leaved evergreen or deciduous microphyll shrubs with a hardpan subsurface of high salt concentrations. Creosotebush (*Larrea tridentata*) is a dominant component of this habitat. Alkali desert scrub typically consists of open stands of very low to moderately high subshrubs and shrubs, which are physiognomically uniform. Shrub composition in this habitat type is typically dominated by chenopods, most notably saltbush species (*Atriplex* spp.), such as four-winged (*Atriplex canescens*) saltbush and allscale (*Atriplex polycarpa*).

### *Chaparral*

Chaparral communities are restricted to the Coast Range and Sierra foothill regions of Fresno County where they occur in three general categories: montane chaparral, mixed chaparral, and chamiseredshank chaparral. Mixed chaparral and chamise-redshank chaparral (*Adenostoma fasciculatum* A. *sparsifolium*) occur in the Sierra foothills and Coast Range. Mixed chaparral is structurally homogeneous, dominated by shrubs with evergreen leaves. At maturity, cismontane mixed chaparral typically is a dense, nearly impenetrable thicket. Mature chamise-redshank chaparral is single layered, and shrub canopies often overlap. In the High Sierra Nevada Foothill Subregion (SNH), montane chaparral is associated with evergreen shrubs such as ceanothus

(*Ceanothus* spp.), manzanita (*Arctostaphylos* spp.), and bitter cherry (*Prunus emarginata*), and can include deciduous or semi-deciduous shrubs

#### *Alpine dwarf-shrub*

Alpine dwarf-shrub occurs in the High Sierra Nevada Foothill Subregion, where it is present above timberline, typically above 8,500 feet. Common shrub species are ocean spray (*Holodiscus discolor*), Greene goldenweed (*Ericameria greenei*), and mountain white heather (*Cassiope mertensiana*).

### **Herbaceous Dominated Habitats**

Herbaceous dominated habitats generally consist of communities primarily comprising grasses and other non-woody species. The most common of these communities is non-native grassland, which is widespread throughout Fresno County. Native perennial grasslands dominated by perennial bunch grasses such as purple needlegrass (*Stipa pulchra*) were historically abundant in much of Fresno County (and throughout California), but are now patchy in distribution.

#### *Annual Grassland*

Annual grassland habitat is composed primarily of non-native annual herbs and forbs and typically lacks shrub or tree cover. Common grass species include wild oat (*Avena* spp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and red brome (*Bromus madritensis*). Common forb species include non-native species such as filaree (*Erodium* spp.) and bur clover (*Medicago polymorpha*). California poppy (*Eschscholzia californica*) can also be quite common in this habitat type.

#### *Perennial Grassland*

Perennial grassland habitats are dominated by perennial grass species such as California oatgrass (*Danthonia californica*), Pacific hairgrass (*Deschampsia holciformis*), and sweet vernal grass (*Anthoxanthum odoratum*). Perennial grassland habitat typically occurs on ridges and southfacing slopes, alternating with forest and scrub in the valleys and on north-facing slopes. Relic perennial grasses in annual grassland habitat occur in patches throughout California, and likely are present in Fresno County.

Annual and perennial grasslands provide foraging and nesting habitat for a wide variety of wildlife species including raptors, seed eating birds, small mammals, amphibians, and reptiles. Wildlife species typically associated with grasslands include black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), American badger (*Taxidea taxus*), coyote, common garter snake (*Thamnophis sirtalis*), deer mouse, western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), mule deer (*Odocoileus hemionus*), western meadowlark (*Sturnella neglecta*), and savannah sparrow (*Passerculus sandwichensis*). Grasslands also provide important foraging habitat for raptors such as the American kestrel (*Falco sparverius*) and red-tailed hawk, and special-status white-tailed kite and northern harrier (*Circus cyaneus*). The endangered San Joaquin kit fox (*Vulpes macrotismutica*) and threatened California tiger salamander (*Ambystoma californiense*) are also found in and adjacent to this habitat. Grasslands can also provide important foraging habitat for golden eagles (*Aquila chrysaetos*) and Swainson's hawks.

## Developed and Non-Vegetated Habitats

Developed and sparsely/non-vegetated habitats are abundant in Fresno County. Developed habitats are usually sparsely vegetated or non-vegetated, are associated with urban and agricultural areas, and are highly disturbed. Species that occur in these areas are typically adapted to anthropogenic disturbance and/or are ornamental species. Sparsely vegetated habitats also tend to be associated with rock outcrops and cliffs. Developed habitats in Fresno County include rice fields, dryland grain crop, irrigated hayfield, irrigated row and field crop, deciduous orchard, evergreen orchard, vineyard, residential development, commercial development, and industrial development. Plant species in urban habitats typically consist of ornamental and other non-native invasive plant species, with large, developed areas lacking vegetation. The barren habitat type is defined by the absence of vegetation. Any habitat with less than two percent total vegetation cover and less than 10 percent cover by tree or shrub species is defined as barren.

## Wetlands and Water Features

Wetlands and water features include freshwater sloughs, marshes, vernal pools, wet meadows, springs and seeps, portions of lakes, ponds, rivers and streams, and all other areas that are periodically or permanently covered by shallow water, are dominated by hydrophilic vegetation, or have soils that are predominantly hydric in nature. Ditches and channels that flow into traditional navigable waters may qualify as water features pending a significant nexus evaluation to determine U.S. Army Corps of Engineers jurisdiction for any non-navigable tributaries that are non-relatively permanent waters. CHWR system maps two aquatic habitats in Fresno County, lacustrine and riverine, and two wetland habitats, fresh emergent wetland and wet meadow. Figure 4.4-1 shows the wetlands and waters mapped by the National Wetland Inventory (NWI) in Fresno County (USFWS 2021a). NWI features include freshwater emergent wetland, freshwater/forested shrub wetland, freshwater pond, lake, other, and riverine.

### *Freshwater Emergent Wetlands*

Freshwater emergent wetlands include all non-tidal waters dominated by emergent herbaceous plant species, mosses, and/or lichens.

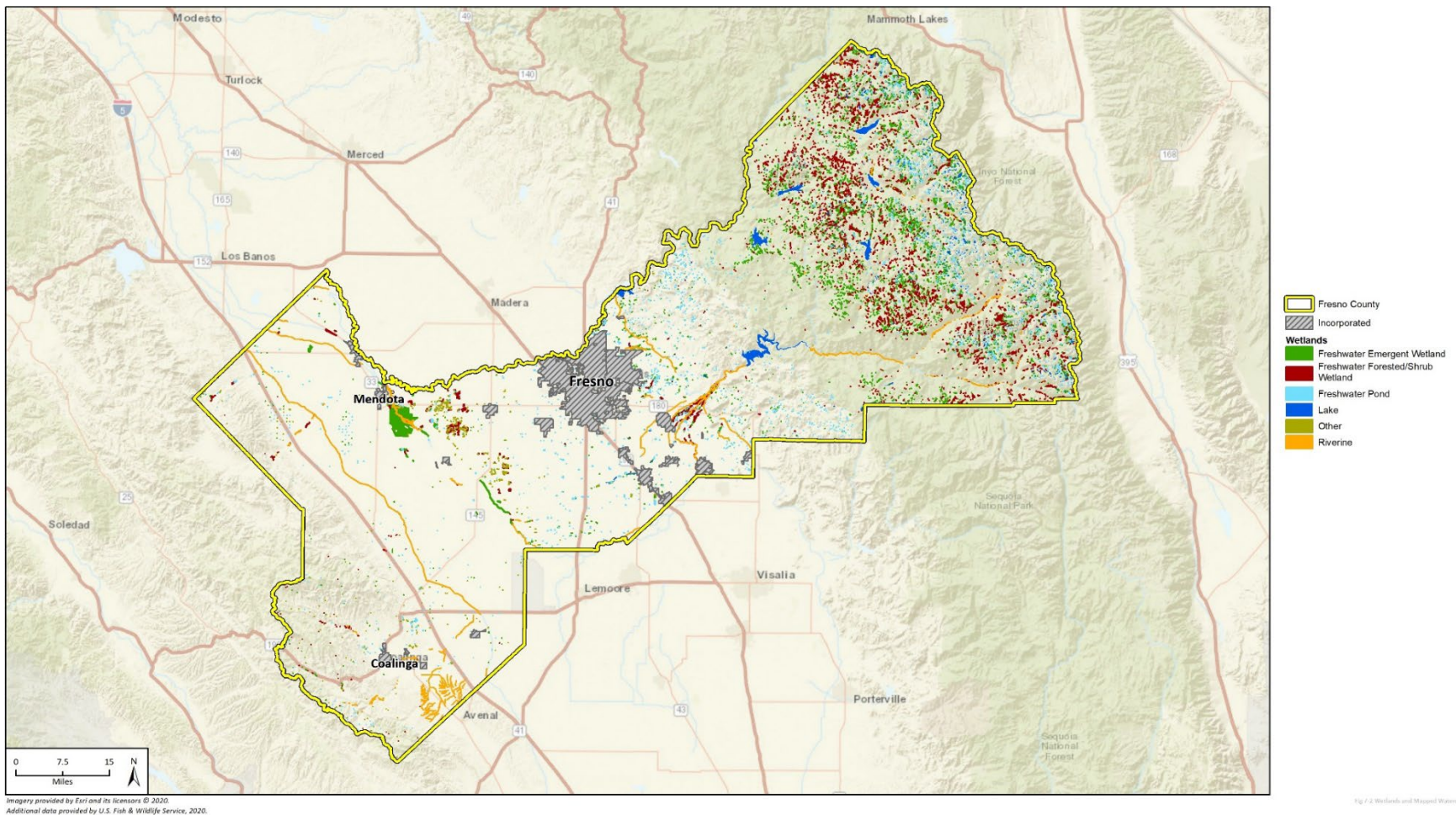
### *Wet Meadows*

Wet meadows are primarily associated with the High Sierra Nevada Subregion. A dense layer of herbaceous hydrophytic species that occur in wetlands characterize the species in the area. These include sedge (*Carex* spp.), rush (*Juncus* spp.), tufted hairgrass (*Deschampsia caespitosa*), and bentgrass (*Agrostis* spp.), but species composition can vary significantly. Shrubs and trees are absent or very sparse but can occur at the meadow edge.

### *Vernal Pools*

Vernal Pools are seasonal wetlands that arise when small depressions fill with water during winter, gradually drying during spring, and becoming completely dry in summer. Vernal pool vegetation is characterized by herbaceous plants that begin their growth as aquatic or semi-aquatic plants and transition to a dry land environment as the pool dries. Most vernal pool plants are annual herbs. Wildlife species supported by vernal pools include special-status species such as the California tiger salamander (*Ambystoma californiense*), vernal pool tadpole shrimp (*Lepidurus packardi*), and vernal pool fairy shrimp (*Branchinecta lynchi*). Vernal pools in Fresno County occur in the Great Central

Figure 4.4-1 Wetlands and Mapped Waters in Fresno County



Valley Region and Sierra Nevada Foothills Subregion at Table Mountain and near the Madera and Friant Kern Canals.

#### *Freshwater Forested/Shrub Wetlands*

Freshwater Forested/Shrub Wetlands include non-tidal waters that are dominated by trees and shrubs, with emergent herbaceous plants, mosses, and/or lichens. Wetlands that lack vegetation can be included in this class if they also exhibit the same criteria as described for freshwater emergent wetlands. The vegetation found in freshwater forested/shrub wetlands are generally dominated by woody vegetation such as shrubs and trees.

#### *Lakes*

Lakes include wetlands and deep water habitats that are located in a topographic depression or dammed river channel. These areas tend to be greater than 20 acres. Vegetation cover in this habitat is generally less than 30 percent and often occurs in the form of emergent or surface vegetation. Substrates are composed of at least 25 percent cover of particles smaller than stones.

#### *Freshwater Ponds*

Freshwater ponds include non-tidal waters with vegetative cover along their edges, such as trees, shrubs, emergent herbaceous plants, mosses, and/or lichens. Freshwater ponds can be manmade or natural and typically consist of an area of standing water with variable amounts of shoreline. These wetlands and deep water habitats are dominated by plants that grow on or below the surface of the water. Freshwater ponds provide important breeding habitat for special-status species such as California red-legged frog (*Rana draytonii*) and western pond turtle (*Actinemys marmorata*).

#### *Rivers*

Riverine habitats include all wetlands and deep water habitats in natural or artificial channels that contain periodically or continuously flowing water. This system may also form a connecting link between two bodies of standing water. Substrates generally consist of rock, cobble, gravel, or sand. Main rivers in Fresno County include the San Joaquin River and the Kings River. Millerton Lake and Pine Flat Reservoir are major reservoirs associated with these two rivers. This category also includes ephemeral and intermittent streams and dry washes, which are common in the coast range and San Joaquin Valley regions. Fresno County supports numerous creeks, drainages, and canals. Drainages that contain water year-round or experience periodic filling and draining are of biological importance as they provide valuable foraging habitat, breeding habitat, and movement habitat for a wide variety of aquatic animals and a number of special-status species, including California red-legged frog, Sierra Nevada yellow-legged frog (*Rana sierrae*), and western pond turtle.

### **b. Special-Status Resources**

Special-status species include those species that are listed as rare, threatened, or endangered by the CDFW or the US Fish and Wildlife Service (USFWS), or are candidates for either State or federal listing, or have been designated as "fully protected" or "species of special concern" by USFWS and CDFW, or are other species that are tracked by the California Natural Diversity Database (CNDDDB) or California Native Plant Society (CNPS), but do not fall into any of the categories cited above.

Oak woodlands, grasslands, riparian woodlands, vernal pools, and aquatic habitats are home to most of the county's special-status plant and animal species. These habitat types have the highest



conservation value for preservation of rare species. Most listed and special-status species have specific habitat and micro habitat conditions, and would not generally be expected to occur outside of areas that meet those specific habitat criteria; however, a number of listed and otherwise protected species have the potential to occur in a wide range of habitats, including disturbed and developed areas. The State and federally listed San Joaquin kit fox may occur in natural lands, fallow agricultural lands, margins of active agricultural lands, and even in urban areas. A number of bird species protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FGC) can nest in highly disturbed areas and in ornamental trees adjacent to developed areas. Sensitive species that may nest in non-natural areas includes burrowing owls and Swainson’s hawk.

Appendix BIO shows the special-status species known to occur, or with potential to occur, in Fresno County. The information is based on queries of several relevant scientific databases that provide information about occurrences of sensitive biological resources for California, including Fresno County. These include the CDFW California National Diversity Database (CNDDDB) (CDFW 2021a); the Biogeographic Information and Observation System (BIOS) (CDFW 2021b); the USFWS Critical Habitat Portal (USFWS 2021b); the Information, Planning, and Conservation System Query (IPaC) (USFWS 2021c); and the CNPS Online Inventory of Rare and Endangered Plants of California (CNPS 2021). The following section provides lists of special-status species with potential to occur in Fresno County based on these sources. This list is comprehensive and includes species that are documented in the county as well as species that could potentially occur in the county based on habitat availability, known species ranges, and other related and similar factors.

### Special-Status Wildlife

Several reptile, bird, amphibian, fish, invertebrate, and mammal species of concern are known or possibly found in the Planning Area, based on a search of the CNDDDB. Table 4.4-1 identifies these animal species that are known to occur or have the potential to occur within the Planning Area, 33 of which have federal and State listing status (CDFW 2021a). State or federally listed species are given the highest protection status.

**Table 4.4-1 Federal and/or State Listed Special-Status Wildlife Species Documented in or with the Potential to Occur in Fresno County**

Common Name	Scientific Name	Agency Status (Federal/State/Other)
<b>Invertebrates</b>		
Crotch bumble bee	<i>Bombus crotchii</i>	--/SCE/--
western bumble bee	<i>Bombus occidentalis</i>	--/SCE/--
longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	FT/--/--
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT/--/--
valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT/--/--
vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE/--/--
<b>Fish</b>		
Lahontan cutthroat trout Paiute cutthroat trout	<i>Oncorhynchus clarkii henshawi</i>	FT/--/--
Paiute cutthroat trout	<i>Oncorhynchus clarkii seleniris</i>	FT/--/--
steelhead - Central Valley DPS	<i>Oncorhynchus mykiss irideus</i>	FT/--/--

Common Name	Scientific Name	Agency Status (Federal/State/Other)
<b>Amphibians</b>		
California tiger salamander	<i>Ambystoma californiense</i>	FT/ST/WL
Yosemite toad	<i>Anaxyrus canorus</i>	FT/--/SSC
foothill yellow-legged frog	<i>Rana boylei</i>	--/SE/SSC
California red-legged frog	<i>Rana draytonii</i>	FT/--/SSC
southern mountain yellow-legged frog	<i>Rana muscosa</i>	FE/SE/WL
Sierra Nevada yellow-legged frog	<i>Rana sierrae</i>	FE/ST/WL
<b>Reptiles</b>		
blunt-nosed leopard lizard	<i>Gambelia sila</i>	FE/SE/FP
giant garter snake	<i>Thamnophis gigas</i>	FT/ST/--
<b>Birds</b>		
tricolored blackbird	<i>Agelaius tricolor</i>	--/ST/SSC
Swainson's hawk	<i>Buteo swainsoni</i>	--/ST/--
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT/SE/--
willow flycatcher	<i>Empidonax traillii</i>	--/SE/--
bald eagle	<i>Haliaeetus leucocephalus</i>	FD/SE/FP
bank swallow	<i>Riparia</i>	--/ST/--
great gray owl	<i>Strix nebulosa</i>	--/SE/--
least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE/--
<b>Mammals</b>		
Nelson's antelope squirrel	<i>Ammospermophilus nelsoni</i>	--/ST/--
giant kangaroo rat	<i>Dipodomys ingens</i>	FE/SE/--
Fresno kangaroo rat	<i>Dipodomys nitratooides exilis</i>	FE/SE/--
California wolverine	<i>Gulo</i>	--/ST/FP
Sierra Nevada bighorn sheep	<i>Ovis canadensis sierra</i>	FE/SE/FP
fisher – Southern Sierra Nevada ESU	<i>Pekania pennanti pop. 2</i>	FC/ST/SSC
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE/ST/--
Sierra Nevada red fox	<i>Vulpes necator</i>	FPE/ST/--

FE=Federally Endangered      SE=State Endangered      FP = CDFW Fully Protected  
 FT=Federally Threatened      ST=State Threatened      SSC = CDFW Species of Special Concern  
 FC=Federal Candidate      SCE=State Candidate Endangered      WL = CDFW Watch List  
 FD=Federal Delisted  
 FPE=Federally Proposed for Listing as Endangered

Source: California Natural Diversity Database (CNDDDB) (Fresno County), May 2021

## Special-Status Plant Species

Special-status plant species are either listed as endangered or threatened under FESA or CESA, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies and the scientific community. CDFW and local governmental agencies may also recognize special listings developed by focal groups (i.e. Audubon Society Blue List; CNPS

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Rare and Endangered Plants; U.S. Forest Service regional lists). Table 4.4-2 shows 17 special-status plant species that have the potential to occur within the Planning Area with federal or State listing status.

**Table 4.4-2 Federal and/or State Listed Special-Status Plants Documented in or with the Potential to Occur in Fresno County**

Common Name	Scientific Name	Agency Status (Federal/State/CRPR/Other)
Mariposa pussypaws	<i>Calyptridium pulchellum</i>	FT/--/1B.1
San Benito evening-primrose	<i>Camissonia benitensis</i>	FT/--1B.1
Tompkins' sedge	<i>Carex tompkinsii</i>	--/SR/4.3
tree-anemone	<i>Carpenteria californica</i>	--/ST/1B.2
succulent owl's-clover	<i>Castilleja campestris</i> var. <i>succulenta</i>	FT/SE/1B.2
California jewelflower	<i>Caulanthus californicus</i>	FE/SE/1B.1
palmate-bracted salty bird's-beak	<i>Chloropyron palmatum</i>	FE/SE/1B.1
Hoover's eriastrum	<i>Eriastrum hooveri</i>	FD/--/4.2
Tracy's eriastrum	<i>Eriastrum tracyi</i>	--/SR/3.2
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	--/SE/1B.2
Congdon's lewisia	<i>Lewisia congdonii</i>	--/SR/1B.3
San Joaquin woollythread	<i>Monolopia congdonii</i>	FE/--/1B.2
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	FT/SE/1B.1
Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	FT/SE/1B.1
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	FE/--/1B.2
Keck's checkerbloom	<i>Sidalcea keckii</i>	FE/--/1B.1
Greene's tuctoria	<i>Tuctoria greenei</i>	FE/SR/1B.1

FE=Federally Endangered                      SE=State Endangered  
 FT=Federally Threatened                      ST=State Threatened  
 FC=Federal Candidate                         SR= State Rare  
 FD=Federal Delisted

**California Native Plant Society (CNPS)**

- 1A: Plants presumed extinct in California
- 1B: Plants rare, threatened, or endangered in California and elsewhere
- 2: Plants rare, threatened, or endangered in California, but more common elsewhere.
- 3: Plants about which we need more information.
- 4: Plants of limited distribution, a watch list.

**California Rare Plant rank (CRPR)**

- 0.1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2 – Fairly endangered in California (20-80% occurrences threatened)
- 0.3 – Not very endangered in California (<20% of occurrences threatened, or no current threats known)

Sources: California Native Plant Society (CNPS) (Fresno County), 2018 California Natural Diversity Database (CNDDB) (Fresno County), May 2021

## Critical Habitat

Critical habitat is a term used in the Endangered Species Act (ESA) defined as specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. An area is designated as “critical habitat” after USFWS publishes a proposed federal regulation in the Federal Register and then receives and considers public comments on the proposal. The final boundaries of the critical habitat area, once identified, are published in the Federal Register.

As shown in Figure 4.4-2, the Planning Area contains critical habitat for the Fresno kangaroo rat (*Dipodomys nitratooides exilis*), Sierra Nevada bighorn sheep (*Ovis canadensis sierra*), California tiger salamander (*Ambystoma californiense*), Sierra Nevada yellow-legged frog (*Rana sierrae*), Yosemite toad (*Anaxyrus canorus*) and mountain yellow-legged frog (*Rana muscosa*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), Fleshy owl's-clover (*Castilleja campestris* ssp. succulent), Keck's Checker-mallow (*Sidalcea keckii*), and San Joaquin Orcutt grass (*Orcuttia inaequalis*).

## Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return.

Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Habitats in a linkage are not necessarily the same as those being linked. Rather, the linkage needs only contain sufficient cover and forage to allow temporary use by species during periods of movement between or among larger areas of suitable habitat. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending on the species, a linkage may require specific minimum physical characteristics (e.g., rock outcroppings, vernal pools, specific vegetation cover) to function as an effective wildlife corridor, and allow those species to traverse the linkage. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a relatively short period of time.

The CDFW BIOS website (CDFW 2021b), California Essential Habitat Connectivity Project: A Strategy for Conserving Connected California (Spencer et al. 2010) have all evaluated critical wildlife movement corridors throughout California. Fresno County has wildlife corridors and connectivity among three regions: the Central Coast, Great Central Valley, and Sierra Nevada regions (these regions are roughly consistent with the regions defined in The Jepson Manual [Baldwin et al. 2012] as discussed above). These regions are further subdivided into ecological connectivity areas (ECAs) that represent the most critical wildlife movement areas for long-term conservation of California's sensitive wildlife species. ECAs are large, continuous areas, and individual ECAs may overlap one another without clearly defined boundaries. The following five ECAs in three movement areas overlap the boundaries of Fresno County:

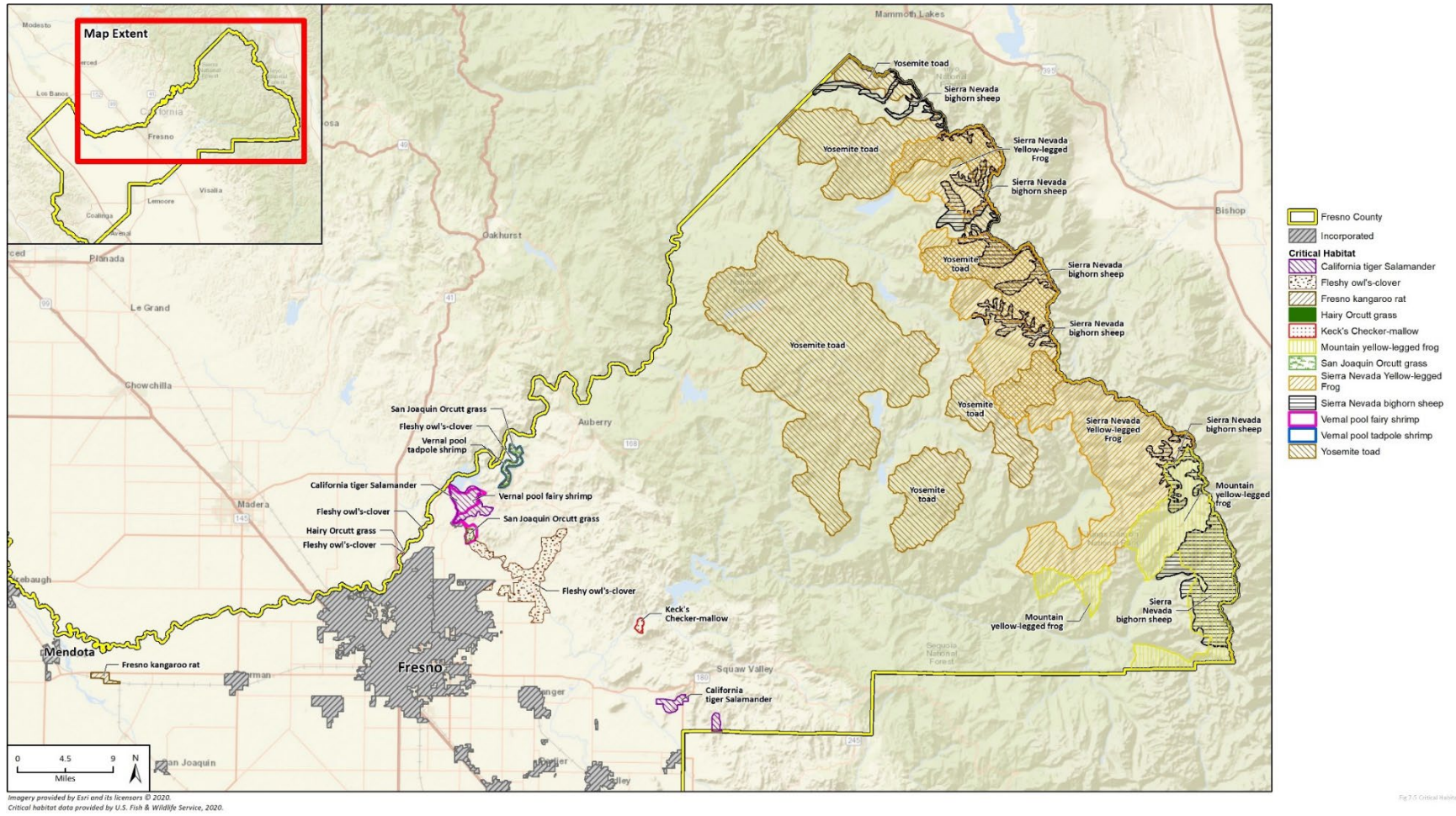
- Antic Ridge – Joaquin Ridge

**General Plan Review and Zoning Ordinance Update**

- Kettleman Hills/Las Alturas – Table Mountain/Chino Canyon
- Coyote Ridge – Owens Mountain
- Yokohl Valley/Oat Canyon – Sierra Nevada
- Coyote Ridge – Sierra Nevada
- The Great Central Valley region is composed of the valleys of Central California, bordered by the Pacific Coast Ranges on the west, the Sierra Nevada and Cascade Ranges on the east, and the Tehachapi Range on the south. Most of Fresno County lies in this region. Most of this land does not support wildlife movement due to high fragmentation and conversion of natural habitats to agricultural and urban uses. Figure 4.4-3 shows identified ECAs exist primarily in the western and eastern portions of the county adjacent to the Coast Range and Sierra Nevada mountain ranges.
- The Central Coast region consists of the coastal mountains, valleys, and plains along the Pacific Ocean from about the Russian River and Sonoma Valley on the north to Point Conception on the south. The Anticline Ridge – Joaquin Ridge and Kettleman Hills/Las Alturas - Table Mountain/Chino Canyon ECAs provide important habitat connectivity between the Great Central Valley and Central Coast Range regions on the western border of Fresno County, ranging roughly from the town of Coalinga up in elevation into the Coast Ranges. These ECAs occur in the far western portion of Fresno County to the north and south of Coalinga.
- The Sierra Nevada region borders the Great Central Valley region to the west and includes the mountain ranges of the Sierra Nevada. The eastern portion of Fresno County overlaps this region and provides important wildlife movement corridors. Much of this area remains as natural habitat and is protected by National Forests and National Parks. The Coyote Ridge – Owens Mountain, Yokohl Valley/Oat Canyon - Sierra Nevada, and Coyote Ridge - Sierra Nevada ECAs overlap the eastern portion of Fresno County. ECAs in this area provide critical movement corridors among habitat in the Sierra foothills and the Sierra Mountains.
- Local wildlife movement corridors may be used by a range of wildlife, and can be formed by drainages, uninterrupted riparian corridors, more extensive areas of fallow agriculture lands, and other natural areas. These smaller local movement corridors may provide for access to foraging areas, localized movement associated with breeding, annual dispersal among isolated populations, and local migrations.
- The Great Central Valley region is composed of the valleys of Central California, bordered by the Pacific Coast Ranges on the west, the Sierra Nevada and Cascade Ranges on the east, and the Tehachapi Range on the south. Most of Fresno County lies in this region. Most of this land does not support wildlife movement due to high fragmentation and conversion of natural habitats to agricultural and urban uses. Figure 4.4-3 shows identified ECAs exist primarily in the western and eastern portions of the county adjacent to the Coast Range and Sierra Nevada mountain ranges.

The Central Coast region consists of the coastal mountains, valleys, and plains along the Pacific Ocean from about the Russian River and Sonoma Valley on the north to Point Conception on the south. The Anticline Ridge – Joaquin Ridge and Kettleman Hills/Las Alturas - Table Mountain/Chino Canyon ECAs provide important habitat connectivity between the Great Central Valley and Central Coast Range regions on the western border of Fresno County, ranging roughly from the town of Coalinga up in elevation into the Coast Ranges. These ECAs occur in the far western portion of Fresno County to the north and south of Coalinga.

**Figure 4.4-2 Critical Habitat in Fresno County**



The Sierra Nevada region borders the Great Central Valley region to the west and includes the mountain ranges of the Sierra Nevada. The eastern portion of Fresno County overlaps this region and provides important wildlife movement corridors. Much of this area remains as natural habitat and is protected by National Forests and National Parks. The Coyote Ridge – Owens

Mountain, Yokohl Valley/Oat Canyon - Sierra Nevada, and Coyote Ridge - Sierra Nevada ECAs overlap the eastern portion of Fresno County. ECAs in this area provide critical movement corridors among habitat in the Sierra foothills and the Sierra Mountains.

Local wildlife movement corridors may be used by a range of wildlife, and can be formed by drainages, uninterrupted riparian corridors, more extensive areas of fallow agriculture lands, and other natural areas. These smaller local movement corridors may provide for access to foraging areas, localized movement associated with breeding, annual dispersal among isolated populations, and local migrations.

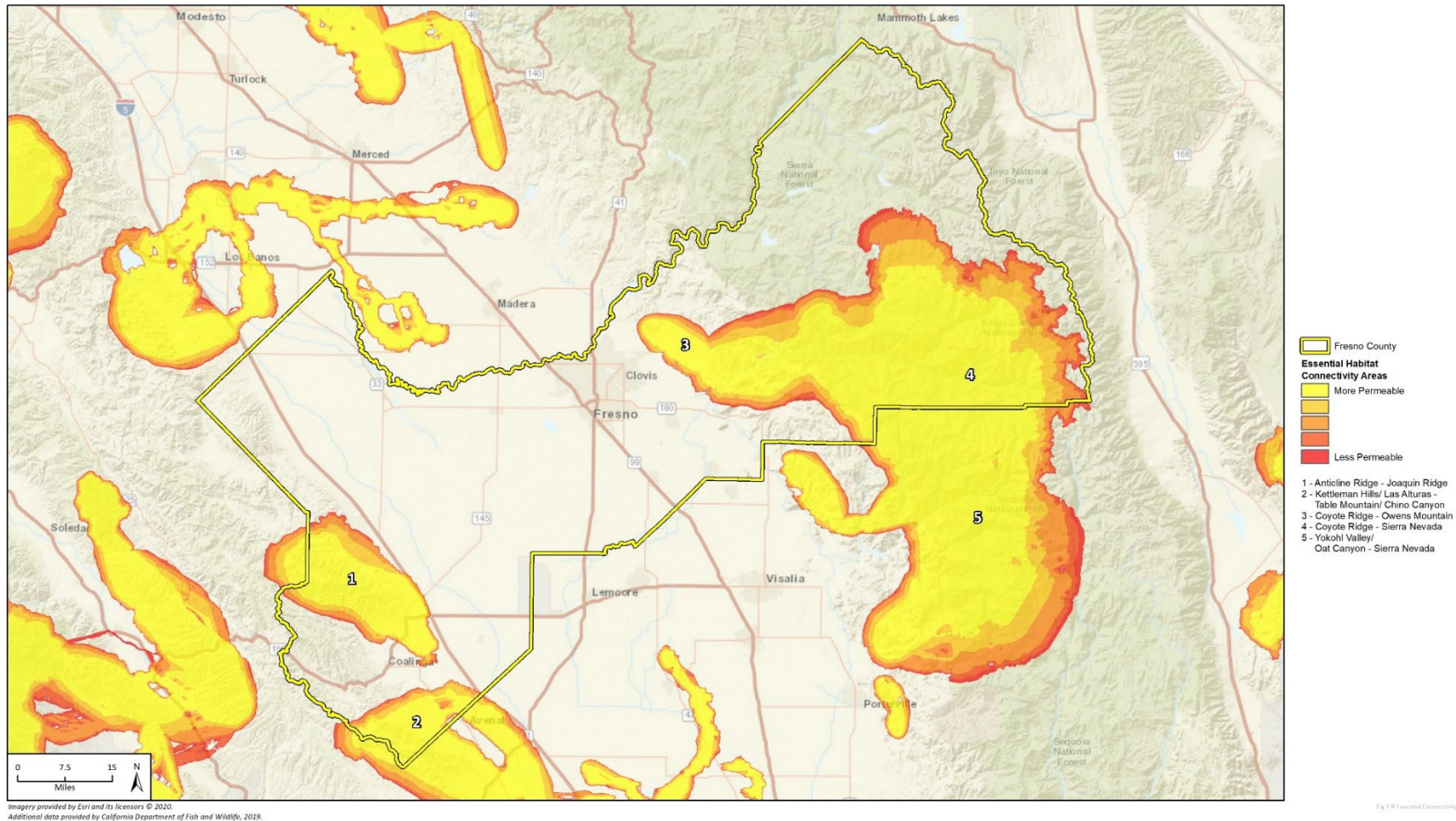
### **c. Regulatory Setting**

The following is a summary of the regulatory context under which biological resources are managed at the federal, State, and local level. Agencies with responsibility for protection of biological resources within the Planning Area include:

- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- U.S. Army Corps of Engineers (USACE; wetlands and other waters of the United States)
- California Department Fish and Wildlife (waters of the State, state listed and fully protected species, and other sensitive plants and wildlife)
- Central Valley Regional Water Quality Control Board (RWQCB; waters of the State)

The following discussion provides a summary of those laws that are most relevant to biological resources in the Planning Area vicinity.

**Figure 4.4-3 Identified Essential Connectivity Areas in Western Fresno County**





## Federal Regulations

### *Federal Endangered Species Act*

The USFWS and the National Marine Fisheries Service (NMFS) administer the Federal Endangered Species Act (FESA). The FESA requires each agency to maintain lists of imperiled native species and affords substantial protections to these “listed” species. The jurisdiction of the NMFS under the FESA is limited to the protection of marine mammals, marine fishes, and anadromous fish. All other species are subject to USFWS jurisdiction.

The USFWS and NMFS may “list” a species if it is endangered (at risk of extinction in all or a significant portion of its range) or threatened (likely to become endangered in the foreseeable future). Section 9 of the FESA prohibits the “take” of any wildlife species listed as endangered and most species listed as threatened. Take, as defined by the FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering” (50 CFR 17.3).

The FESA includes exceptions that allow an action to be carried out, despite the fact that the action may result in the “take” of listed species, where conservation measures are included for the species. Section 7 of the FESA provides an exception for actions authorized (e.g., under a Section 404 permit), funded, or carried out by a Federal agency and Section 10 provides an exception for actions that do not involve a Federal agency.

### *Federal Clean Water Act, Section 404 – Programmatic General Permit for Wetland Fill*

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation’s waters, including wetlands, lakes, rivers, and coastal areas. Section 404 of the CWA regulates the discharge of dredged or fill material into the waters of the United States, including wetlands. The CWA holds that all discharges into the nation’s waters are unlawful unless specifically authorized by a permit; issuance of such permits constitutes its principal regulatory tool.

The USACE is authorized to issue Section 404 permits, which allow the placement of dredged or fill materials into jurisdictional waters of the United States under certain circumstances. The USACE issues two types of permits under Section 404, general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the USACE to streamline the Section 404 permitting process for statewide or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact).

### *Federal Clean Water Act, Section 401 – Programmatic Water Quality Certification*

Under the CWA Section 401, applicants for a Federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the State in which the discharge would originate. Therefore, all projects that have a Federal component and may affect state water quality (including projects that require Federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401 and the

State's Porter-Cologne Water Quality Control Act. In California, Section 401 certification is handled by the RWQCBs. Fresno County is under the jurisdiction of the Central Valley RWQCB, which is responsible for implementation of State and Federal water quality protection guidelines. The RWQCB implements the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan), a master policy document for managing water quality issues in the region.

#### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act of 1918, as amended (MBTA), implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful, as is taking of any parts, nests, or eggs of such birds (16 U.S. Government Code [USC]703). Take is defined more narrowly under the MBTA than under FESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, take under the MBTA does not include the concepts of harm and harassment as defined under FESA.

### **State Regulations**

#### *California Endangered Species Act*

Administered by the CDFW, California ESA (CESA) prohibits the take of listed species and species formally under consideration for listing ("candidate" species) in California. CESA defines take as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish and Game Code § 86.) Under this definition, and in contrast to the FESA, CESA does not prohibit "harm" to a listed species. Furthermore, take under the CESA does not include "the taking of habitat alone or the impacts of the taking." However, the killing of a listed species that is incidental to an otherwise lawful activity and not the primary purpose of the activity constitutes a take under CESA. CESA does not protect insects, but with certain exceptions prohibits the take of plants on private land.

#### *State Fish and Game Code Section 1600-1616 – Master Streambed Alteration Agreement for Streambed Modifications*

The CDFW has jurisdictional authority over streams, lakes, and wetland resources associated with these aquatic systems under California Fish and Game Code Section 1600 et seq. CDFW has the authority to regulate work that will "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" (Fish and Game Code § 1602.). An entity that proposes to carry out such an activity must first inform CDFW, and where CDFW concludes that the activity will "substantially adversely affect an existing fish or wildlife resource," the entity proposing the activity must negotiate an agreement with CDFW that specifies terms under which the activity may be carried out in a way that protects the affected wildlife resource.

#### *California Fish and Game Code 3503 (Bird Nests)*

Section 3503 of the California Fish and Game Code makes it "unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." CDFW may issue permits authorizing take.

*California Fish and Game Code 3503.5 (Birds of Prey)*

Section 3503.5 of the California Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs “except as otherwise provided by this code or any regulation adopted pursuant thereto.” CDFW may issue permits authorizing take of birds of prey or their nests or eggs pursuant to CESA or the Natural Community Conservation Planning (NCCP) Act.

**Local Regulations**

*Fresno County Municipal Code*

Chapter 13.12, Trees and Shrubs, of the Fresno County Municipal Code contains ordinances regarding the planting and maintenance of trees. Chapter 13.12.020 establishes a master tree list, which includes the variety of trees deemed suitable by the director of public works and planning for planting along the county highways and roads. Chapter 13.12.040 requires permits for trees planting, trimming, or removal and encourages the planting of trees along county highways. Chapter 13.12.050 requires planting in new subdivisions in accordance with the county improvement standards to include trees that provide for energy conservation requirements. Additionally, Chapter 13.12.060 includes requirements for water-efficient landscaping, which encourages the planting of trees.

*General Plan Review (GPR)*

The GPR contains goals and policies in the Open Space and Conservation Element concerned with protecting and preserving natural resources and open space areas. These natural resources and open space areas include wetland and riparian areas, fish and wildlife habitat, and vegetation. Specific goals and policies as they apply to this evaluation appear in Section 4.4.2, Impact Analysis and are included below.

**Goal OS-A** To protect and enhance the water quality and quantity in Fresno County’s streams, creeks, and groundwater basins.

**Policy OS-A.1:** Water Resources Management Leadership. The County shall provide active leadership in the regional coordination of water resource management efforts affecting Fresno County and shall continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater, and water quality.

**Policy OS-A.13:** Watercourse Access and Benefit. The County shall require that natural watercourses are integrated into new development in such a way that they are accessible to the public and provide a positive visual element and a buffer area between waterways and urban development in an effort to protect water quality and riparian areas.

**Policy OS-A.14:** Floodplain Protection. The County shall require the protection of floodplain lands and, where appropriate, acquire public easements for purposes of flood protection, public safety, wildlife preservation, groundwater recharge, access, and recreation.

**Policy OS-A.15:** San Joaquin River Protection. The County shall support the policies of the San Joaquin River Parkway Master Plan to protect the San Joaquin River as an aquatic habitat, recreational amenity, aesthetic resource, and water source.

**Policy OS-A.19: Water Discharge Pollution Mitigation.** The County shall require new development near rivers, creeks, reservoirs, or substantial aquifer recharge areas to mitigate any potential impacts of release of pollutants in storm waters, flowing river, stream, creek, or reservoir waters.

**Policy OS-A.20: Minimization of Sedimentation and Erosion.** The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season unless adequately mitigated to avoid sedimentation of creeks and damage to riparian habitat.

**Policy OS-A.21: Best Management Practices.** The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff.

**Goal OS-D** To conserve the function and values of wetland communities and related riparian areas throughout Fresno County while allowing compatible uses where appropriate. Protection of these resource functions will positively affect aesthetics, water quality, floodplain management, ecological function, and recreation/tourism.

**Policy OS-D.1: No-Net-Loss Wetlands Policy.** The County shall support the “no-net-loss” wetlands policies of the US Army Corps of Engineers, the US Fish and Wildlife Service, and the California Department of Fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

**Policy OS-D.2: Wetland Loss Mitigation.** The County shall require new development to fully mitigate wetland loss for function and value in regulated wetlands to achieve "no-net-loss" through any combination of avoidance, minimization, or compensation. The County shall support mitigation banking programs that provide the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.

**Policy OS-D.3: Adjacent Wetland Protection.** The County shall require development to be designed in such a manner that pollutants and siltation do not significantly degrade the area, value, or function of wetlands. The County shall require new developments to implement the use of Best Management Practices (BMPs) to aid in this effort.

**Policy OS-D.4: Riparian Protection Zones.** The County shall require riparian protection zones around natural watercourses and shall recognize that these areas provide highly valuable wildlife habitat. Riparian protection zones shall include the bed and bank of both low- and high-flow channels and associated riparian vegetation, the band of riparian vegetation outside the high-flow channel, and buffers of 100 feet in width as measured from the top of the bank of unvegetated channels and 50 feet in width as measured from the outer edge of the dripline of riparian vegetation.

**Policy OS-D.5: Upland Habitat Protection.** The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

**Policy OS-D.6:** Native Riparian Habitat Protection. The County shall require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for creating new riparian habitats within or near the project area. Adjacency to the project area shall be defined as being within the same watershed sub-basin as the project site. Compensation shall be at a ratio of three (3) acres of new habitat for everyone (1) acre destroyed.

**Policy OS-D.7:** Wetland and Riparian Plant Management. The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient storage, and wildlife habitats.

**Policy OS-D.8:** Passive Recreation Areas. The County should consider the acquisition of wetland, meadows, and riparian habitat areas for parks limited to passive recreational activities as a method of wildlife conservation.

**Goal OS-E** To help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species so that populations are maintained at viable levels.

**Policy OS-E.1:** Avoid Habitat Loss. The County shall support efforts to avoid the “net” loss of important wildlife habitat where practicable. In cases where habitat loss cannot be avoided, the County shall impose adequate mitigation for the loss of wildlife habitat that is critical to supporting special-status species and/or other valuable or unique wildlife resources. Mitigation shall be at sufficient ratios to replace the function and value of the habitat that was removed or degraded. Mitigation may be achieved through any combination of creation, restoration, conservation easements, and/or mitigation banking. Conservation easements should include provisions for maintenance and management in perpetuity. The County shall recommend coordination with the US Fish and Wildlife Service and the California Department of Fish and Game to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed. Important habitat and habitat components include nesting, breeding, and foraging areas, important spawning grounds, migratory routes, migratory stopover areas, oak woodlands, vernal pools, wildlife movement corridors, and other unique wildlife habitats (e.g., alkali scrub) critical to protecting and sustaining wildlife populations.

**Policy OS-E.2:** Construction Buffers. The County shall require adequate buffer zones between construction activities and significant wildlife resources, including both onsite habitats that are purposely avoided and significant habitats that are adjacent to the project site, in order to avoid the degradation and disruption of critical life cycle activities such as breeding and feeding. The width of the buffer zone should vary depending on the location, species, etc. A final determination shall be made based on informal consultation with the US Fish and Wildlife Service and/or the California Department of Fish and Wildlife.

**Policy OS-E.3:** Wildlife Habitat Protection. The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the value of the habitat for wildlife is maintained.

**Policy OS-E.4:** Wildlife Habitat Management Practices. The County shall encourage private landowners to adopt sound wildlife habitat management practices, as recommended by the California Department of Fish and Wildlife officials and the US Fish and Wildlife Service.

**Policy OS-E.5:** Habitat Conservation Plans. The County shall support preservation of habitats of rare, threatened, endangered, and/or other special-status species including fisheries. The County shall consider developing a formal Habitat Conservation Plan in consultation with Federal and State agencies, as well as other resource conservation organizations. Such a plan should provide a mechanism for the acquisition and management of lands that support special-status species.

**Policy OS-E.6:** Habitat Corridors. The County shall ensure the conservation of large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife populations, as long as this preservation does not threaten the economic well-being of the county.

**Policy OS-E.7:** Pesticide Use Monitoring. The County shall continue to closely monitor pesticide use in areas adjacent to habitats of special-status plants and animals.

**Policy OS-E.8:** Pest Control. The County shall promote effective methods of pest (e.g., ground squirrel) control on croplands bordering sensitive habitat that do not place special-status species at risk, such as the San Joaquin kit fox.

**Policy OS-E.9:** Biological Resource Evaluation. Prior to approval of discretionary development permits, the County shall require, as part of any required environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based on field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant resources and/or special-status plants or animals. Such evaluation will consider the potential for significant impact on these resources and will either identify feasible mitigation measures or indicate why mitigation is not feasible.

**Policy OS-E.10:** Permanent Protection. The County shall support State and Federal programs to acquire significant fish and wildlife habitat areas for permanent protection and/or passive recreation use.

**Policy OS-E.11:** Water Withdrawal Protection. The County shall protect significant aquatic habitats against excessive water withdrawals that could endanger special-status fish and wildlife or would interrupt normal migratory patterns.

**Policy OS-E.12:** Water Habitat Protection. The County shall ensure the protection of fish and wildlife habitats from environmentally degrading effluents originating from mining and construction activities that are adjacent to aquatic habitats.

**Policy OS-E.13:** Habitat Protection. The County should protect to the maximum extent practicable wetlands, riparian habitat, and meadows since they are recognized as essential habitats for birds and wildlife.

**Policy OS-E.14:** Wildlife Corridors. The County shall require a minimum 200-foot-wide wildlife corridor along particular stretches of the San Joaquin River and Kings River, whenever possible. The exact locations for the corridors should be determined based on the results of biological evaluations of these watercourses. Exceptions may be

necessary where the minimum width is infeasible due to topography or other physical constraints. In these instances, an offsetting expansion on the

**Policy OS-E.15: Wildlife Migration Routes Protection.** The County should preserve, to the maximum extent practicable, significant wildlife migration routes such as the North Kings Deer Herd migration corridors and fawn production areas.

**Policy OS-E.16: High Value Fish and Wildlife Areas.** The County should preserve in a natural state to the maximum possible extent areas that have unusually high value for fish and wildlife propagation

**Policy OS-E.17: Endangered Species Habitat.** The County should preserve, to the maximum possible extent, areas defined as habitats for rare or endangered animal and plant species in a natural state consistent with State and Federal endangered species laws.

**Policy OS-E.18: Habitat Easements and Regulation.** The County should preserve areas identified as habitats for rare or endangered plant and animal species primarily through the use of open space easements and appropriate zoning that restrict development in these sensitive areas.

**Goal OS-F** To preserve and protect the valuable vegetation resources of Fresno County.

**Policy OS-F.1: Terrain and Vegetation Preservation.** The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides and ridges, and along important transportation corridors, consistent with fire hazard and property line clearing requirements.

**Policy OS-F.3: Significant Natural Vegetation Areas.** The County shall support the preservation of significant areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.

**Policy OS-F.4: Landmark Trees.** The County shall ensure that landmark trees are preserved and protected whenever possible.

**Policy OS-F.5: Rare, Threatened, and Endangered Species.** The County shall establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects. As part of this process, the County shall require, as part of the environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based on field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant plant resources and/or special-status plant species. Such evaluation shall consider the potential for significant impact on these resources and shall either identify feasible mitigation measures or indicate why mitigation is not feasible.

**Policy OS-F.6: Hillside Development.** The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.

**Policy OS-F.8:** Vegetation for Wildlife. The County should encourage landowners to maintain natural vegetation or plant suitable vegetation along fence lines, drainage and irrigation ditches, and on unused or marginal land for the benefit of wildlife.

**Policy OS-F.10:** Woodland Preservation. The County shall require that new developments preserve natural woodlands to the maximum extent possible.

**Policy OS-F.11:** Oak Woodland Preservation. The County shall promote the preservation and management of oak woodlands by encouraging landowners to follow the Fresno County Oak Management Guidelines, shown on the following page, to prepare an Oak Management Plan for their property.

## 4.4.2 Impact Analysis

### a. Methodology and Significance Thresholds

#### Methodology

The impact analysis is based on available literature regarding the existing biological resources within the Planning Area. Impacts on biological resources were assessed using significance criteria from federal, State, and local regulations. Impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened, or endangered species because growth and development projected to occur under the proposed GPR/ZOU may result in indirect impacts to species.

CEQA Statute Section 21001 (c) states that it is the policy of the State of California to “prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.” Impacts on biological resources may be assessed using impact significance criteria encompassing CEQA guidelines and federal, State and local plans, regulations, and ordinances.

#### Significance Thresholds

Appendix G of the CEQA Guidelines provides the following general statements to determine that significant impacts to biological resources could occur if a project action would:

1. Have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFW or USFWS;
2. Have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFW or USFWS;
3. Have a substantial adverse effect (i.e. direct/indirect reduction) on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, or hydrological interruption, or other means;
4. Interfere substantially (i.e. direct/indirect reduction) with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;



5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
6. Conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## **b. Project Impacts and Mitigation Measures**

**Threshold 1:** Would the GPR/ZOU have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFW or USFWS?

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**IMPACT BIO-1 THE GPR/ZOU ENVISIONS DEVELOPMENT THAT COULD IMPACT SPECIAL-STATUS SPECIES. THE 2042 GENERAL PLAN POLICIES WOULD REDUCE THE POTENTIAL FOR IMPACTS AND THE SEVERITY OF IMPACTS. HOWEVER, IMPACTS WOULD BE POTENTIALLY SIGNIFICANT AND THUS MITIGATION IS REQUIRED.**

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Natural habitat within the County could serve as habitats and foraging ground for wildlife. In urbanized environments, landscape features, such as trees, shrubs, herbaceous plants, and parklands, could also provide temporary habitats for wildlife. As indicated in Subsection 4.4.1, *Setting*, a variety of special-status wildlife species are present throughout the County, including various bird and mammal species, although areas that may provide habitat for special-status species in the Planning Area are primarily located in the County’s open space and undeveloped areas. Furthermore, migratory avian species that use portions of the County for nesting during the breeding season are present and are protected under the MBTA. Construction-related activities such as building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction could disturb vegetation or wildlife, such as nesting migratory species covered under the MBTA. The most likely impact would involve the removal of vegetation that serves as wildlife habitat or activities that could directly crush or injure special-status wildlife and plant species. This could occur in the landscape vegetation and natural areas throughout the County.

Development facilitated by the GPR/ZOU would be designed to promote compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where public facilities and infrastructure are available to accommodate such growth. The GPR/ZOU assumes most development would occur in the spheres of influence of incorporated cities and existing unincorporated communities. Therefore, the GPR/ZOU prohibits designation of new areas as Planned Rural Community and restricts the designation of new areas for rural residential development while allowing for development of existing rural residential areas. Therefore, implementation of the proposed project would not develop existing open space in Fresno that supports special-status species or sensitive habitats. One of the themes of the 2042 General Plan is to protect and promote the management of the County’s natural resources, including water, wildlife, and wildlife habitat. In addition, development projected by the proposed project would be subject to the provisions of the various federal and State natural resources regulations (discussed in Subsection 4.4.1, *Setting*) and their respective permitting processes.

The 2042 General Plan Open Space and Conservation Element contains goals and policies related to reducing impacts on special-status species. In particular, Goals OS-D, OS-E, and OS-F would minimize impacts from potential direct effects to special-status species because these goals would protect,

preserve, and enhance natural areas, including forests and wetlands, which serve as habitat for special-status species. Policies under these goals, such as OS-E.6, would result in less development in environmentally sensitive areas, thus protecting sensitive species. Other policies in the Environmental Legacy Chapter would minimize direct impacts on sensitive species, specifically Policy OS-E.1 would avoid habitat loss for species and require mitigation of habitat where it cannot be avoided, and Policy OS-E.3 would require planned development to be designed so that wildlife habitat is maintained. Additionally, Policy OS-E.9 would require preparation of a biological resources evaluation for individual projects by a qualified biologist as part of any environmental review process. Furthermore, Policies OS-F.4 Landmark Trees, OS-F.10 Woodland Preservation, and OS-F.11 Oak Woodland Preservation would preserve native trees, forests, and woodlands that may be used as habitat. Therefore, goals and policies in the 2042 General Plan require both protection and enhancement of habitat and assessment of special-status species resources for development.

The GPR/ZOU plans for an increasing population in the County through 2042. The additional residents, as well as additional employment facilitated by the GPR/ZOU, would result in more vehicle trips on roadways in the County. These trips could increase the potential for collisions between special-status wildlife species and vehicles, which could injure or kill the wildlife. Additionally, new buildings constructed as part of the development envisioned in the GPR/ZOU would include exterior lights that could spill over into adjacent areas providing wildlife habitat. The light intrusion could adversely impact the behavior of special-status wildlife. Regardless, the GPR/ZOU does not envision development in natural areas of the County, such as the public lands in the Sierra Nevada. The Sierra Nevada contains many trees, rock outcrops, and other potential nesting sites.

The 2042 General Plan policies would help to reduce or avoid these potential impacts. For example, Policy OS-E.3 would require maintaining wildlife habitat at project sites. However, there are no existing policies to protect nesting birds.

Therefore, the GPR/ZOU would have a potentially significant impact on special-status species (specifically related to nesting birds) and Mitigation Measure BIO-1 would be required.

## **Mitigation Measures**

The County shall add the following policy to the 2042 General Plan:

### *BIO-1 Protection of Nesting Birds*

**Policy OS-E.19: Nesting Birds.** For development projects on sites where tree or vegetation/habitat removal is necessary and where the existence of sensitive species and/or bird species protected by California Fish and Game Code Sections 30503 and 305.3 and Migratory Bird Treaty Act has been determined by a qualified biologist, surveys for nesting birds shall be conducted by a qualified biologist for all construction sites where activities occurring during nesting bird season (February 1 through September 15). If active nests are located onsite, then a qualified biologist shall determine appropriate measures necessary to mitigate impacts associated with proposed construction activities.

## **Significance After Mitigation**

Compliance with the above mitigation measure and existing General Plan policies (such as Policy OS-F.5, Policy OS-E.9, OS-E.13, and OS-E.16 through E.18) would require pre-project surveys and biological monitoring, focused biological surveys, avoidance or minimization of project related

disturbance or loss of special-status species, and coordination with permitting agencies, as required prior to project implementation. Impacts would be less than significant with mitigation incorporated.

- Threshold 2:** Would the GRP/ZOU have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFW or USFWS?
- Threshold 3:** Would the GPR/ZOU have a substantial adverse effect (i.e. direct/indirect reduction) on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, or hydrological interruption, or other means?

**IMPACT BIO-2 WHILE THE GPR/ZOU WOULD NOT FACILITATE DEVELOPMENT THAT WOULD DIRECTLY IMPACT RIPARIAN AND WETLAND HABITATS, THERE WOULD BE POTENTIAL FOR ADVERSE INDIRECT IMPACTS FROM SUCH DEVELOPMENT ON WETLANDS AND AREAS UNDER THE JURISDICTION OF CDFW AND USACE. HOWEVER, COMPLIANCE WITH EXISTING REGULATIONS, AND IMPLEMENTATION OF 2042 GENERAL PLAN POLICIES WOULD REDUCE POTENTIAL IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.**

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Fresno County contains several lakes, streams, and creeks, many of which are tributaries to the San Joaquin and Kings Rivers, which flow into the Central Valley. The San Joaquin Valley area of Fresno County contains wetlands, while the foothills east of the city of Fresno contain vernal pools. Development facilitated by the GPR/ZOU would require the expansion of infrastructure to accommodate the potential increase in population and jobs. Infrastructure would include utilities, such as stormwater outfalls, which are typically within streams or wetland areas. Additionally, development could require the direct removal, fill, or hydrological interruption of federally protected wetlands. Wetland and waterway areas may be subject to USACE jurisdiction under Section 404 of the Clean Water Act (CWA). Compliance with the requirements of the CWA would be required for any development project that would occur as a result of implementation under the GPR/ZOU. In addition, goals and policies from the Open Space and Conservation Element of the General Plan would reduce impacts on federally protected wetlands and riparian habitat. Specifically, Goal OS-D and associated policies would conserve the function and values of wetland communities and related riparian areas throughout Fresno County. Policies contained within Goal OS-D would preserve wetland and riparian habitat during development and require wetland management and mitigation. Policy OS-D.1 would prevent the loss of wetlands in the County by supporting the “no-net-loss” wetlands policies of the USACE, USFWS, and CDFW and Policy OS-D.2 would require new development in the County to fully mitigate wetland loss for function and value. Finally, Policy OS-D.4 and OS-D.6 would require riparian protection zones around natural watercourses and protection of native riparian habitat. Therefore, impacts on riparian and wetland habitats would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 4:** Would the GPR/ZOU interfere substantially (i.e. direct/indirect reduction) with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**IMPACT BIO-3 THE GPR/ZOU WOULD LARGELY AVOID IMPACTS ON WILDLIFE MOVEMENT CORRIDORS BY CONSERVING NATURAL AREAS THROUGH POLICIES IN THE 2042 GENERAL PLAN. 2042 GENERAL PLAN POLICIES WOULD PROTECT WILDLIFE CORRIDORS AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Wildlife corridors, such as strips or bands of forest between larger contiguous forest areas exist in the County. The development envisioned in the General Plan would require removal of trees, which could interfere with wildlife corridors. Likewise, development would require installation of linear infrastructure, such as new utilities and roadways, which could cross corridors. Most of the growth related to the GPR/ZOU would occur in the spheres of influence of incorporated cities, or in existing unincorporated communities. One of the themes of the 2042 General Plan is to promote compact growth by directing new growth to incorporated cities and existing unincorporated communities. In urbanized areas, the GPR/ZOU encourages infill development of vacant or underutilized urban land. Therefore, the proposed project would not encourage development of open spaces within the County, thus preserving wildlife corridors.

In addition, 2042 General Plan policies would preserve riparian corridors utilized by wildlife through Policy OS-D.4 to protect riparian zones and Policy OS-D.6 to protect riparian habitat. Other General Plan policies, including Policy OS-D.5 Upland Habitat Protect, Policy OS-E.3 Wildlife Habitat Protection, and Policy OS-E.13 Habitat Protection, would preserve wildlife habitat, including creeks and streams, that are used as wildlife corridors. Additionally, the 2042 General Plan contains policies specifically designed to protect wildlife corridors. Policy OS-E.6 would ensure the conservation of large, continuous expanses of native vegetation to provide suitable habitat corridors and Policy OS-E.14 would require a minimum 200-foot wide wildlife corridor along particular stretches of the San Joaquin River and Kings River for wildlife movement. Finally, Policy OS-E.15 would preserve significant wildlife migration routes, such as the North Kings Deer Herd migration corridors. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation

**Threshold 5:** Would the GPR/ZOU conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**IMPACT BIO-4 IMPLEMENTATION OF THE GPR/ZOU WOULD CONFORM WITH APPLICABLE LOCAL POLICIES PROTECTING BIOLOGICAL RESOURCES, SUCH AS FRESNO COUNTY MUNICIPAL CODE AND PROPOSED 2042 GENERAL PLAN POLICIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Implementation of the GPR/ZOU would be subject to all applicable local policies and regulations related to the protection of important biological resources. Specifically, development under the GPR/ZOU would be required to comply with Fresno County Municipal Code Chapter 13.12 – Trees and Shrubs. That chapter, as described under *Regulatory Setting*, includes a master tree list, outlines permitting requirements for tree planting, pruning, and removal, and requirements for water efficient landscaping.

Further, the following proposed 2042 General Plan policies would help to protect the City’s trees.

**Policy OS-A.20:** Minimization of Sedimentation and Erosion. The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season unless adequately mitigated to avoid sedimentation of creeks and damage to riparian habitat.

**Policy OS-F.4:** Landmark Trees. The County shall ensure that landmark trees are preserved and protected whenever possible.

Adherence to Fresno County Municipal Code Chapter 13.12 and applicable 2042 General Plan policies would ensure that development facilitated by the GPR/ZOU would not conflict with local policies or ordinances protecting biological resources. Impacts would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation

**Threshold 6:** Would the GPR/ZOU conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**IMPACT BIO-5 THERE ARE THREE HABITAT CONSERVATION PLANS THAT CONSERVE PORTIONS OF THE PLANNING AREA. IMPACTS TO AREAS IDENTIFIED IN THE HABITAT CONSERVATION PLANS WOULD BE PROTECTED BY CONSERVATION STRATEGIES CONTAINED IN GOALS AND POLICIES OF THE GENERAL PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

The Planning Area is located within the planning area for the Granite Construction Phase 1 , PG&E San Joaquin Valley Operations and Maintenance, and Area Energy Southwest San Joaquin Valley Habitat Conservation Plans (HCPs), which are overseen by the USFWS (USFWS n.d.). The Area Energy Southwest San Joaquin Valley HCP is yet to be approved and adopted as of February 2022, but a draft was released in February 2020. The HCPs create a long-term conservation program sufficient to mitigate potential adverse effects on listed species due to future development in

Fresno County. The following listed species in Fresno County are identified in the HCP's: San Joaquin kit fox, blunt-nosed leopard lizard, valley elderberry longhorn beetle, vernal pool fairy shrimp, California red-legged frog, California jewelflower, giant kangaroo rat, San Joaquin Valley Orcutt grass, California tiger salamander, giant garter snake, San Joaquin adobe sunburst, vernal pool tadpole shrimp, burrowing owl, Swainson's hawk, San Joaquin woolly-threads, and Greene's tuctoria. One of the themes of the General Plan is to prioritize infill development in already urbanized areas. Therefore, areas of potential preservation as outlined in in the HCP's are unlikely be developed. In addition, Goal OS-E to help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species and related policies (OS-E.1 Avoid Habitat Loss, OS-E.3 Wildlife Habitat Protection, OS-E.5 Habitat Conservation Plans, OS-E.12 Water Habitat Protection, and OS-E.13 Habitat Projection) would promote conservation and projection of valuable habitat and sensitive resources. Therefore, conflicts with a HCP would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation

### **Cumulative Impacts**

Cumulative development in Fresno County in combination with potential growth envisioned under GPR/ZOU may contribute to the loss of foraging and breeding habitat for special-status species; contribute to the decline of special-status species, fragmentation of habitat and isolation of populations, and decrease movement opportunities. Implementation of the GPR/ZOU would increase density and intensity of existing land uses. However, goals and policies contained within GPR/ZOU would conserve existing natural resource and limit impacts on special-status species. Furthermore, adherence to existing regulations and implementation of General Plan polices, as well as Mitigation Measure BIO-1, which would provide a new policy reducing impacts to nesting birds, would reduce potential impacts to biological resources to a less than significant level. Therefore, the GPR/ZOU would not have an incremental contribution to cumulative impacts associated with biological resources and impacts to biological resources would not be cumulatively considerable. Cumulative impacts would be less than significant.

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## 4.5 Cultural Resources

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This section addresses potential impacts on cultural resources from implementation of the General Plan Review and Zoning Ordinance Update (GPR/ZOU). Cultural resources comprise districts, structures, buildings, sites, areas of traditional use, or objects with historical, architectural, cultural, archaeological, or scientific importance. These resources include archaeological resources (historic and prehistoric), architectural resources (built structures), and traditional cultural properties (properties important to Native American groups for ancestral, religious, spiritual, or traditional reasons).

### 4.5.1 Setting

#### **a. Cultural Setting**

##### **Regional Prehistory**

The Central Valley prehistoric record is divided into three periods: Paleo-Indian (11,550 to 8550 BCE), Archaic (8550 BCE to CE 1100), and Emergent (CE 1100 to Historic). The Archaic period is further divided into three sub-periods: Lower Archaic (8550 to 5550 BCE), Middle Archaic (5550 to 550 BCE), and Upper Archaic (550 BCE to CE 1100) (Rosenthal et al. 2007).

##### **Paleoindian Period (11,550-8550 BCE)**

Little is known about the Paleoindian period in the Central Valley. Geoarchaeological studies have demonstrated that erosion and deposition have buried or destroyed early archaeological deposits. Most claims of ancient human occupation have been dismissed by Moratto (1984) based on radiocarbon dating. Currently, the earliest accepted date of human occupation in the Central Valley ranges from 11,550 to 9,550 BCE and comes from fluted projectile points similar to Clovis points found at sites near Tracy Lake and the Tulare Lake Basin (Rosenthal et al. 2007).

##### **Lower Archaic (8550-5550 BCE)**

Climate change at the end of the Pleistocene caused significant periods of alluvial deposition beginning around 9,050 BCE. The Lower Archaic, like the Paleoindian Period, is represented only by limited isolated finds. Only one Lower Archaic site (CA-KER-116) has been identified in the Central Valley proper, and only a few others are in the foothills surrounding the valley (Rosenthal et al. 2007). Typical Lower Archaic artifacts include flaked stone crescents and stemmed points. The identification of projectile points and a diverse faunal assemblage at CA-KER-116 point to hunting being an important subsistence activity. Milling tools and plant remains are largely absent in the valley, thus plant use during the Lower Archaic remains unclear. Several foothill sites contain milling implements and evidence of the use of nut crops such as acorn and pine (Lajeunesse and Pryor 1996). The relationship between foothill and valley floor adaptations is largely unknown during the Lower Archaic. However, distinct adaptations are apparent in the Middle Archaic, and it is possible that these divergent traditions first emerged in the Lower Archaic (Rosenthal et al. 2007).

##### **Middle Archaic (5550-550 BCE)**

The Middle Archaic began with substantial climate change to much warmer, drier conditions. Tulare Lake shrank and eventually disappeared. Alluvial fans and floodplains stabilized after an initial



period of deposition in 5,550 BCE Archaeological deposits dating to the Middle Archaic are rare in the Central Valley proper due to these geomorphic changes. Where evident, the Middle Archaic record has revealed a pattern of organized subsistence strategies and increased residential stability. The archetypal pattern of the Middle Archaic has been identified as the Windmiller Pattern. This pattern is represented by extended burials oriented to the west and a sophisticated material culture (Rosenthal et al. 2007). Middle Archaic sites are relatively common in the foothills surrounding the Central Valley and show relatively little change from the Lower Archaic (McGuire 1995).

During this time, the mortar and pestle become more widespread, suggesting a shift toward more intensive subsistence practices. Fishing technologies, such as bone gorges, hooks, and spears, also appear during the Middle Archaic, suggesting a new focus on fishing. Several other technologies become apparent during this time. Baked-clay impressions of twined basketry, simple pottery, and other baked clay objects have been found at several sites. Personal adornment items also become more frequent. Exchange with outside groups is evidenced by the presence of obsidian, shell beads and ornaments (Rosenthal et al. 2007; Moratto 1984). Trade also seemed to be focused on utilitarian items such as obsidian or finished obsidian tools from at least five separate sources (Moratto 1984).

### **Upper Archaic Period (cal. 600 BCE-cal. CE 1100)**

The Upper Archaic began with the onset of a markedly cooler, wetter climate. The environmental conditions of the Upper Archaic were characterized by the return of lakes that had disappeared during the Middle Archaic and renewed alluvial fan and floodplain deposition. The Upper Archaic is better represented in the archaeological record than earlier periods. Cultural diversity was more pronounced and is marked by contrasting material cultures throughout the valley (Rosenthal et al. 2007). Numerous specialized technologies were developed during this period, such as bone tools and implements, manufactured goods such as *Olivella* and *Haliotis* beads and ornaments, well-made ceremonial blades, and ground-stone plummet (a stone object used as a fishing sinker or ceremonially). People living in the San Joaquin Valley region traded with neighboring groups for obsidian. Upper Archaic period economies varied by region throughout the Central Valley. Economies were primarily focused on seasonal resources such as acorns, salmon, shellfish, rabbits, and deer (Rosenthal et al. 2007).

### **Emergent Period (CE 1100-Historic)**

The stable climatic conditions of the Upper Archaic continued into the Emergent Period. Sporadic research has been conducted in the San Joaquin Valley on this time period, and only the Panoche Complex on the western edge of the valley has been formally defined for this time period (Moratto 1984). After CE 1000, many of the technologies witnessed during the Archaic disappeared to be replaced by cultural traditions witnessed at European contact. The most important technological change during the Emergent Period was the replacement of the atlatl by the bow and arrow as the preferred hunting method sometime between CE 1000 and 1300.

Increased social complexity is evidenced by increased variation in burial types and offerings and larger residential communities. Grave offerings such as shell beads, ornaments, and ritually “killed” mortars and pestles are often found in burials. Pottery was frequently obtained through trade with groups living in the foothills to the east. The Panoche side-notched point became important in the western side of the San Joaquin Valley (Rosenthal et al. 2007). In addition to the side-notched point, the Panoche Complex featured large circular structures, flexed burials, marine shell beads, bone awls, millstones, and mortars and pestles (Moratto 1984).

As with the Archaic Period, Emergent Period economies varied geographically, though throughout the Central Valley, fishing and plant harvesting increased in importance. Most Emergent residential sites contain diverse assemblages of mammal and bird remains and large amounts of fish bone. After 1,000 years ago, the mortar and pestle become the dominant tool type and small seeds increase in archaeological deposits over time (Rosenthal et al. 2007).

## **Ethnographic Setting**

Fresno County overlaps with six (6) traditional ethnographic territories (comprising multiple tribes and moieties)(Smithsonian Institution and Heizer 1978). The ethnographic territories are: Northern Valley Yokuts (Central Valley, Wallace 1978b), Southern Valley Yokuts (Central Valley, Wallace 1978a), Foothill Yokuts (Central Valley, Spier 1978b), Mono (Sierra Nevada, Spier 1978a), Owens Valley Paiute (Sierra Nevada, Spier 1978a), and Salinan (Central Coast, Smithsonian Institution and Heizer 1978).

### *Yokuts*

Three Yokut tribes traditionally occupied Fresno County: the Northern Valley, Southern Valley, and Foothill Yokuts (Wallace 1978a). The distinction between the three Yokut tribes is based primarily on language dialect, but also ecological factors related to subsistence and local innovations (Mithun 2001; Silverstein 1978; Wallace 1978a, 1978b).

The Yokuts established permanent villages. Residential structures were most often of two types: single family dwellings and larger communal residences that housed ten families or more. Villages frequently included mat-covered granaries and a sweathouse (Mithun 2001).

Yokuts subsistence was based on a mixed economy focused on fishing, collecting, and hunting small game. Fishermen employed tule rafts and caught fish with nets, spears, basket traps, and bow and arrow. Yokuts often gathered mussels and hunted turtles in lakes, rivers, and streams. Wild seeds and roots contributed a large portion of the Yokuts diet. Tule roots were gathered, dried, and pounded into a flour to be prepared as a mush. Tule seeds and grass and flowering herb seeds were prepared in the same way. Leaves and stems of certain plants, such as clover and fiddle-neck, were also collected. Acorns, a staple of most California Native Americans, were not readily available in the Yokuts ethnographic territory. Some Yokuts tribes journeyed to neighboring groups to trade for acorns. Waterfowl was frequently hunted with snares, nets, and bow and arrow. Land mammals and birds contributed a smaller part of the Yokuts diet. Small game was occasionally taken in snares or traps, or shot with bows and arrows (Spier 1978b; Wallace 1978a, 1978b).

The basic economic unit among the Yokuts was the nuclear family. Totemic lineages were based on patrilineal descent. Totem symbols were passed from father to offspring and families sharing the same totem formed an exogamous lineage. Totems were associated with one of two moieties (social or ritual groups), a division which played a role during ceremonies and other social events (Wallace 1978a).

Yokuts were split into self-governing local groups, most often including several villages. Each group had a chief who directed ceremonies, mediated disputes, handled punishment of those doing wrong, hosted visitors, and provided aid to the impoverished. In certain cases, settlements had two chiefs, one for each moiety. Other political positions included the chief's messenger and the spokesman (Wallace 1978b). Shamans were also an important part of Yokuts village life. Shamans were able to gain their power through a dream or vision. If after this vision the man accepted the

role as shaman, he would pray, fast, and acquire talismans to aid him in his future work. Shamans had the ability to heal the sick and served the primary role in religious life (Wallace 1978b).

Yokuts technology depended primarily on tule. Stems of the plant served as the raw material for baskets, cradles, boats, housing, and many other items. Tools such as knives, projectile points, and scraping tools were made from imported lithic materials as stone was not readily available in the Central Valley. Marine shells secured through trade with coastal peoples were used in the manufacture of shell money and personal adornment items (Wallace 1978a).

### *Monache Or Mono*

The Monache or Mono were not a single group but comprised at least six (6) tribal groups united by language (Spier 1978a). They shared a distinct Numic language with the Owens Valley Paiute (discussed below). The social and cultural identity of the Mono tribes was based primarily on language and location, though they all inhabited a relatively small, mountainous region to the east of the Yokuts (Hester 1978).

Mono settlements were typically small and loosely organized, with huts or hamlets arranged in proximity instead of a central village area (Spier 1978a). Lineages were the main kinship unit among the Mono, though at least one tribe, the Northfork, possessed moieties (Spier 1978a). Each lineage had a totemic creature (e.g., eagle or roadrunner) that partially signified tribal duties (Gayton 1948). For example, the Eagle lineage provided chiefs while the Roadrunner or the Dove lineage provided the chief's messengers. It was not uncommon for more than one chief to be in office simultaneously, and settlements that were too small might not even have one (Spier 1978a).

The Mono subsisted primarily on hunting, fishing, and gathering wild plants. This system required the Mono to move about seasonally, shifting to higher or lower elevations as temperatures varied (Spier 1978a). Deer was a main staple, but pine nuts were also prized and were either gathered directly or traded for. Other food items included bear, ground squirrels, rabbits, pigeons, fish, acorns, manzanita berries, insects and grubs, and yucca.

Obsidian was most often used for knives, scrapers, and arrow points (Spier 1978a). One major source area was near the present Devil's Postpile National Monument (just north of Fresno County), within the northern Mono area. Laurel and juniper wood bows were usually sinew-backed and different arrow types were used depending on the size of intended game (e.g., birds or deer). The Mono were also skilled basket-makers, making cooking baskets and baby cradles among other forms (Spier 1978a).

### *Owens Valley Paiute*

The Owens Valley Paiute territory was located on the eastern side of the high Sierra and into the eastern portion of Fresno County and were Numic speakers belonging to the Uto-Aztecan language family (Moratto 1984).

Unlike other Great Basin tribes who were not sedentary, the Owens Valley Paiute were subdivided into sedentary land-owning groups who occupied the territory year-round in permanent villages (Bettinger and Baumhoff 1982). Short-term temporary camps were also established by the Owens Valley Paiute for resource procurement. Leadership among the Owens Valley Paiute was hereditary, with headmen being responsible for organizing communal work and festivals during which goods were redistributed amongst the tribe (Basgall 1983; Bettinger and King 1971; Hall 1983).

The Owens Valley Paiute are considered to have had a relatively complex socio-political culture, largely because of their elaborate redistribution system for goods and exchange network (Bettinger and King 1971). Ethnographic evidence suggest that the Owens Valley Paiute engaged in the trade of salt, pinyon pine nuts, obsidian, sinew-backed bows, rabbit blankets, moccasins, mountain sheepskins, baskets, sealed water bottles in exchange for shell money beads, acorns and acorn meal, cane for arrows, manzanita berries, and well-made Yokuts baskets (Hall 1983).

### *Salinan*

The primary Salinan territory was the middle and upper Salinas Valley and the Coast Ranges almost as far south as San Luis Obispo (Hester 1978; Shipley 1978). Salinan territory extended inland as far east as the western edge of Fresno County where it bordered the territory of the Yokuts (Hester 1978). The Salinan language was of Hokan stock and included at least two mutually intelligible dialects, with possibly a third observed along the coast that went extinct before it could be recorded (Hester 1978; Kroeber 1925).

Twenty-one possible villages have been associated with Salinan tradition including the major Migueleños village, *tšolám* or *Cholami*. Although no permanent sites have been identified in the coastal ranges, logistical foraging and hunting camps in these areas are likely. Houses were dome-shaped and use of communal structures and subterranean sweathouses has been recorded (Hester 1978).

Very little has survived of Salinan material culture. However, some baskets of varying shapes and sizes have been collected and represent Salinan basketry. Bone and stone tools were manufactured and have been recovered in limited amounts. The Salinan tool kit is similar to many groups in this region and includes projectile points, scrapers, stone bowl mortars, arrowshaft straighteners, and bone awls.

## **b. Regional History**

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present).

### *Spanish Period (1769-1822)*

Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what is now called southern California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769, the first of 21 missions erected by the Spanish. In 1772, Pedro Fages led the first Europeans into the southernmost part of the San Joaquin Valley (Johnson et al. 1993; Wallace 1978), stopping at a village on the shores of Buena Vista Lake before heading towards San Luis Obispo (Wallace 1978). The next prominent European to enter the valley was Francisco Garcés in 1776 (Wallace 1978). In the early 1800s numerous expeditions were made into the Central Valley to search for land for new missions or to recapture runaway neophytes (Hoover et al. 2002). However, the Spanish never succeeded controlling the region and no missions were established in the Central Valley because the area was considered to be uninhabitable and of limited resources.

During this period, Spain deeded ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a, 1927 b). Very few of the Central Valley tribes came under the control of the Spanish missions or ranchos. However, numerous runaway neophytes fled to the Central Valley, influencing local populations (Wallace 1978). The increased local population and contact with diseases brought by Europeans greatly reduced the Native American population (McCawley 1996) along the coast and in the Central Valley.

#### *Mexican Period (1822-1848)*

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period was an era of extensive interior land grant development by the Mexican government, and exploration by American fur trappers west of the Sierra Nevada Mountains. Beginning in 1833, mission lands were conferred as rancho grants. Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999). However, no ranchos were established in the Central Valley proper (Wallace 1978).

#### *American Period (1848-Present)*

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of California continued dramatically in the early American Period.

The discovery of gold near Sacramento in 1848 led to the California Gold Rush, though the first California gold was discovered in Los Angeles County in Placerita Canyon near the San Fernando Mission in 1842 (Guinn 1977; Workman 1935:26). In 1850, California was admitted into the United States and by 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to move into the state, particularly after the completion of the transcontinental railroad in 1869. Today, the Central Valley is the nation's leading agricultural producer with numerous farms and crops grown throughout the county.

#### *County of Fresno*

The Fresno County was first reached by the Spanish during the early 18th century during an exploration to find suitable locations for an inland chain of missions. However, the Spanish explorers and those who followed failed to settle the region. Other explorers and traders visited the region during the 1840s including fur traders and gold prospectors. Following the Gold Rush, a sudden increase in population led to the establishment of several permanent counties in California.

When Fresno County was first established on April 19, 1856, it included parts of Mariposa, Merced, and Tulare counties. The present boundaries of Fresno County were established in 1909. Fresno County underwent four major stages of development including the initial mining period, which continued into the 1860s. However, substantial gold mining during the Gold Rush period occurred to the north of modern Fresno County along the Mother Lode area of the middle Sierra Nevada foothills. Sheep and cattle raising were the primary industry from the 1860s to 1874, then general farming from the 1870s, with a later transition to irrigated row crops. Moses J. Church developed some of the County's first canals known as "Church Ditches," fostering an era of prosperous irrigated row crop farming (Winchell 1933). This irrigation led to extensive cultivation of wheat in

the county. Shortly after the first canals were established, Francis Eisen, an established vintner and leader of the wine industry in Fresno County, began the raisin industry in 1875 after he accidentally let his grapes dry on the vine. To this day, Fresno County produces more than 350 commercial crops and is home to 1.88 million acres of the world's most productive farmland (Fresno County Farm Bureau 2007).

The discovery of oil in western Fresno County, near the town of Coalinga, brought an economic boom during the early part of the 20th century. By 1910 the Coalinga Oil Field was the most productive oil field in California and continues to be a productive field today.

## **Regulatory Setting**

### *California Environmental Quality Act*

California Public Resources Code (PRC) Section 21804.1 requires lead agencies to determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or cultural significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: 1) it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; 2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that

convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines §15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC §21083.2[a], [b]).

Section 15126.4 of the CEQA Guidelines stipulates an EIR shall describe feasible measures to minimize significant adverse impacts. In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4[b][3]).

#### **NATIONAL REGISTER OF HISTORIC PLACES**

Although the project does not have a federal nexus, properties which are listed in or have been formally determined eligible for listing in the NRHP are automatically listed in the CRHR. The following is therefore presented to provide applicable regulatory context. The NRHP was authorized by Section 101 of the National Historic Preservation Act and is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Per 36 CFR Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

- Criterion A:** Are associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B:** Are associated with the lives of persons significant in our past
- Criterion C:** Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

- Location:** The place where the historic property was constructed or the place where the historic event occurred
- Design:** The combination of elements that create the form, plan, space, structure, and style of a property

<b>Setting:</b>	The physical environment of a historic property
<b>Materials:</b>	Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property
<b>Workmanship:</b>	The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
<b>Feeling:</b>	A property's expression of the aesthetic or historic sense of a particular period of time
<b>Association:</b>	The direct link between an important historic event or person and a historic property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluate significance (National Park Service 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

### **CALIFORNIA REGISTER OF HISTORICAL RESOURCES**

The CRHR was established in 1992 and codified by PRC §§5024.1 and 4852. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2006). Further, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

Properties are eligible for listing in the CRHR if they meet one or more of the following criteria:

- Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Criterion 2:** Is associated with the lives of persons important to our past
- Criterion 3:** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history



*California Health and Safety Code §7050.5*

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

*California Public Resources Code §5097.98*

Section 5097.98 of the California Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code §7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant or "MLD") it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

## **Local**

*County of Fresno Historical Landmarks and Records Commission*

The County Board of Supervisors (BOS) adopted legislation establishing the County of Fresno Historical Landmarks and Records Commission in 1966, with five amendments occurring between 1970 and 1983. The Commission's duties are to advise the BOS on landmark preservation and designation; maintain list of County Landmarks; advise the BOS on properties that might be added to the NRHP, CRHR, and the Fresno County Landmarks list; coordinate with other community agencies and organizations to carry out the goal of historic preservation; advise the BOS on the preservation of governmental records, including the retention and storage of these records; advise the County Library in their work for the preservation of all local historic records in the County; and coordinate with other agencies/organizations to foster and promote the preservation of all appropriate historic records.

*Fresno County General Plan (2000)*

The Fresno County General Plan Open Space and Conservation Element contains several objectives and policies relevant to the protection of cultural resources on the Project site and in the surrounding area. The Historical, Cultural, and Geological Resources section of the Open Space and Conservation Element provides policies directing the protection of historical and archaeological resources in the County.

**Goal OS-J** To identify, protect, and enhance Fresno County's important historical, archeological, paleontological, geological, and cultural sites and their contributing environment.

**Policy OS-J.1:** The County shall require that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Project-level mitigation shall

include accurate site surveys, consideration of project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.

**Policy OS-J.2:** The County shall, within the limits of its authority and responsibility, maintain confidentiality regarding the locations of archeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**Policy OS-J.3:** The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or sites of cultural importance.

**Policy OS-J.4:** The County shall maintain an inventory of all sites and structures in the County determined to be of historical significance (Index of Historic Properties in Fresno County).

**Policy OS-J.5:** The County shall support the registration by property owners and others of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark).

**Policy OS-J.6:** The County shall provide for the placement of historical markers or signs on

adjacent County roadways and major thoroughfares to attract and inform visitors of important historic resource sites. If such sites are open to the public, the County shall ensure that access is controlled to prevent damage or vandalism.

**Policy OS-J.7:** The County shall use the State Historic Building Code and existing legislation

and ordinances to encourage preservation of cultural resources and their contributing environment.

**Policy OS-J.8:** The County shall support efforts of other organizations and agencies to preserve and enhance historic resources for educational and cultural purposes through maintenance and development of interpretive services and facilities at County recreational areas and other sites.

**Policy OS-J.9:** In approving new development, the County shall ensure, to the maximum

extent practicable, that the location, siting, and design of any project be subordinate to significant geologic resources.

**Policy OS-J.10:** The County shall encourage property owners to enter into open space easements for the protection of unique geologic resources.

**Policy OS-J.11:** The County shall consider purchasing park sites for the purpose of preserving unique geologic resources for public enjoyment.

**Policy OS-J.12:** The County should encourage the inclusion of unique geologic resources on the National Registry of Natural Landmarks.

**Policy OS-J.13:** The County shall encourage State and Federal agencies to purchase significant geologic resources for permanent protection.

- **Program OS-J.A:** The County shall adopt and implement an ordinance to protect and preserve significant archaeological, historical, and geological resources. The

ordinance shall provide for implementation of applicable development conditions, open space easements, tax incentives, related code revisions and other measures as needed.

### *Known and Potential Historical Resources*

Under CEQA, a historical resource is a building, site, structure, object, or district that is eligible for listing or is listed in the NRHP), CRHR, or a local register due to its historical or archaeological significance.

A review of the NRHP and the Office of Historic Preservation databases revealed that 44 properties are currently listed on the NRHP and CRHR (including both archaeological and built-environment historical resources). There are an additional four California State Historical Landmarks located in Fresno County that qualify as historical resources. In addition, 13 California Points of Interest are located within Fresno County; however, none currently qualify as historical resources under CEQA.<sup>1</sup> The web site for the Fresno County Historical Landmarks & Records Advisory Commission (Commission) also identifies more than 200 historical resources designated locally as Landmarks. In addition, the State Office of Historic Preservation Built Environment Resource Directory identifies approximately 650 known and potential individual and district-contributor historical resources that have been designated, determined, or recommended as eligible for listing in the NRHP, CRHR, or a local register. Other designated and eligible historical resources, as well as potential historical resources that have yet to be identified, may be located in the County.

## 4.5.2 Impact Analysis

### **a. Methodology and Significance Thresholds**

Under CEQA, any project that may cause a substantial adverse change in the significance of a historical resource would also have a significant effect on the environment. According to Appendix G of the *CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

1. Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature of paleontological or cultural value; or
4. Disturb any human remains, including those interred outside of dedicated cemeteries.

The significance of a cultural resource and subsequently the significance of any impact is determined by among other things, consideration of whether that resource can increase our knowledge of the past. The determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

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<sup>1</sup> There are 7 California State Historical Landmarks and 13 Points of Interest in Fresno County. However, California Historical Landmarks 1-769 and Points of Historical Interest designated prior to January 1998 need to be reevaluated using current standards and therefore do not currently qualify as historical resources. Four California State Historical Landmarks and no Points of Interest meet the standards to qualify as historical resources.

CEQA Guidelines Section 15064.5 (Determining the Significance of Impacts to Archaeological Resources) states:

(3) [...] Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852).

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Historical resources are “significantly” affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior’s Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings [Guidelines § 15064.6(b)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [Guidelines § 15126.4(b)(2)]. Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site [Guidelines § 15126.4 (b)(3)(A)]. If an archaeological resource does not meet either the historic resource or the more specific “unique archaeological resource” definition, impacts do not need to be mitigated [Guidelines § 15064.5(e)]. Where the significance of a site is unknown, it is presumed to be significant for the purpose of CEQA.

## **b. Project Impacts and Mitigation Measures**

<b>Threshold 1:</b> Would the GPR/ZOU cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?
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**IMPACT CR-1      IMPLEMENTATION OF THE GPR/ZOU HAS THE POTENTIAL TO IMPACT BUILT-ENVIRONMENT HISTORICAL RESOURCES. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE EVEN WITH THE INCORPORATION OF MITIGATION.**

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For purposes of the analysis of impacts to historical resources, historical resources include all resources designated or identified as eligible for listing in the NRHP, CRHR, or County of Fresno Landmarks list. The GPR/ZOU does not in itself propose any construction that would impact historical resources; however, future development activities anticipated under the GPR/ZOU would include residential, commercial, industrial, and infrastructure development to accommodate a projected increase of the countywide population of approximately 249,370 people by 2042. Such development could potentially impact historical resources through adjacent development, demolition, and redevelopment.

Based on CEQA Guidelines §15064.5, the future development activities facilitated by the GPR/ZOU would have a significant impact on historical resources if they would cause a substantial adverse change in the significance of a historical resource. Historical resources include properties eligible for listing on the NRHP, the CRHR, and local designation. As explained in Section 15064.5, “[s]ubstantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

As discussed in above in Setting, historical resources listed in and eligible for the NRHP, CRHR, and the register of County of Fresno Landmarks are located throughout the County. In addition, potential historical resources that have not yet been identified may exist. CEQA and local regulations do not specify an age threshold for historical resources. However, guidance from the State Historic Preservation Officer (SHPO) recommends that “sufficient time”—typically 50 years—“must have passed to obtain a scholarly perspective” necessary to evaluate the significance of the historical events with which a property is associated (CA DPR OHP 2021). A threshold of 45 years is recommended because there is often “a five-year lag between resource identification and the date that planning decisions are made.” (CA DPR OHP 1995). Because Fresno County has been under intensive development since the nineteenth century, sites subject to development as a result of the GPR/ZOU may contain historical resources that have not yet been identified. Development under the GPR/ZOU could affect known and potential historical resources over the course of implementation.

Development facilitated by the project could impact built-environment historical resources through demolition, construction, and reconstruction activities facilitated by the project. Generally, new construction industrial, commercial, and residential development facilitated by the plan would be directed to established communities. Under Policy ED-A.7, industrial development and redevelopment would initially focus on potential new or redeveloped industrial areas, including Malaga, Calwa, and the Golden State Industrial Corridor. Commercial development promoted under this policy would be aimed at serving existing communities with neighborhood, community, and central commercial development. Policy LU-D.2 designates as new major commercial centers the areas surrounding the Panoche Road, Dorris Avenue, and Jayne Avenue interchanges at the Westside Freeway. Because development facilitated by the GPR/ZOU would generally be directed to developed areas, there is potential to impact historical resources.

The County has adopted policies and regulations to identify, designate, and minimize impacts to built-environment historical resources. As discussed in Setting, to promote the preservation of the County’s historical resources, the BOS authorized the Commission to designate County Landmarks. In addition, as detailed below, proposed Plan policies OS-J.1, OS-J.2, OS-J.3, OS-J.4, OS-J.7, and OS-J.10, and Mitigation Measure CR-1 would encourage the identification and designation of, and reduction of impacts to, historical resources.

## **Mitigation Measures**

The following edits shall be incorporated into the policies of the 2042 General Plan.

*CR-1 Architectural History Evaluation*

### **OS-J.2. Historic Resources Consideration**

The County shall consider historic resources during preparation of County capital facility plans or evaluation of discretionary development projects that may impact historic buildings or structures.

For a project proposed on a property that includes buildings, structures, objects, sites, landscapes, or other features that are 45 years of age or older at the time of permit application, the project applicants shall be responsible for preparing and implementation of feasible recommendations of a historical resources evaluation completed by qualified cultural resources practitioners.

### **Significance After Mitigation**

The implementation of Mitigation Measures CR-1 would reduce impacts on historical resources to the extent feasible. However, because the measures would not preclude the demolition or substantial alteration of a historical resource, impacts would be significant and unavoidable.

**Threshold 2:** Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

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**IMPACT CR-2 IMPLEMENTATION OF THE GPR/ZOU HAS THE POTENTIAL TO IMPACT ARCHAEOLOGICAL RESOURCES. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE, EVEN WITH THE INCORPORATION OF MITIGATION.**

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Effects on archaeological resources can only be determined once a specific project has been proposed because the effects are highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. Ground-disturbing activities, particularly in areas that have not previously been developed with urban uses, typically have not been studied through a cultural resources investigation, or when excavation depths exceed those previously attained, have the potential to damage or destroy previously-unknown historic or prehistoric archaeological resources that may be present on or below the ground surface. Consequently, damage to or destruction of previously unknown sub-surface cultural resources could occur as a result of development projects implemented under the GPR/ZOU.

The proposed 2042 Fresno County General Plan Open Space and Conservation Element contains goals, policies and programs related to reducing impacts on cultural resources. Specifically, Goal OS-J and Policies OS-J.1 through OS-J.7 describe measures to preserve cultural resources, consider cultural resources during development, minimize impact to resources, protect and mitigate impacts to resources, keep sensitive resources confidential, consult Native American groups, and maintain an inventory of historic resources. Specific mandatory polices are listed below that reduce impacts to archaeological resources. Impacts on archaeological resources can only be determined once a specific project has been proposed because the effects are highly dependent on both the individual resource and the characteristics of the proposed activity. Therefore, impacts to archaeological resources, including those that may be considered historical or unique archaeological resources, associated with the construction or operation of individual projects to be implemented under the GPR/ZOU may be significant, but the impacts to archaeological resources or the location of the impacts cannot be determined at this time. Mitigation Measure CR-2 may reduce these impacts; however, whether this measure would reduce all impacts to archaeological resources to less-than-significant levels is not known. Therefore, at this stage of planning, impacts to archaeological resources associated with the implementation of the GPR/ZOU are assumed to be significant and unavoidable. Further environmental analysis and documentation is necessary prior to construction to determine if a significant impact would occur at the project level and if mitigation would reduce the impact to a less-than-significant level.

## Mitigation Measures

The following edits shall be incorporated into the policies of the 2042 General Plan.

CR-2 *Archaeological Resources Study Program*

### OS-J.4. Cultural Resources Protection and Mitigation

The County shall require that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, tribal, paleontological, and cultural sites and resources. For projects requiring ground disturbance and located within a high or moderate cultural sensitivity areas, a cultural resources technical report may be warranted, including accurate archival research and site surveys conducted by qualified cultural resources practitioners. The need to prepare such studies shall be determined based on the tribal consultation process and initial outreach to local or state information centers.

## Significance After Mitigation

The implementation of Mitigation Measure CR-2 may reduce impacts on archaeological resources, however, whether this measure would reduce all impacts to a less than significant level is not known. Impacts associated with GPR/ZOU are assumed to be significant and unavoidable.

**Threshold 3:** Would the GPR/ZOU disturb any human remains, including those interred outside of dedicated cemeteries?

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### **IMPACT CR-3 GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF GPR/ZOU COULD RESULT IN DAMAGE TO OR DESTRUCTION OF HUMAN BURIALS. HOWEVER, WITH COMPLIANCE WITH EXISTING REGULATIONS, IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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Human burials outside of formal cemeteries often occur in prehistoric archeological contexts. These resources could be present in areas where development has not yet occurred. Excavation during construction activities in the County could disturb these resources, including Native American burials.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in PRC Section 5097. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, or destruction, and established procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes.

Development projected by the GPR/ZOU would be required to adhere to existing regulations regarding the treatment of human remains. Thus, impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

### 4.5.3 Cumulative Impacts

Cumulative development in County of Fresno, in combination with development proposed under the GPR/ZOU, may contribute to impacts on cultural resources as growth occurs in the region. The

increase in growth from cumulative development may impact existing and previously undisturbed and undiscovered historical or archaeological resources. Implementation of Mitigation CR-1 would reduce impacts to built-environment historical resources but would not in all cases prevent material impairment of the characteristics that convey their historical significance. Given the scope of development anticipated and allowed under the GPR/ZOU, cumulative impacts to built-environment historical resources would be significant and unavoidable. Proposed policies to reduce and avoid archaeological impacts, existing regulations, and implementation of Mitigation Measure CR-2 may reduce cumulative impacts to archaeological historical resources but may not reduce all impacts to archaeological resources and are assumed significant and unavoidable.



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## 4.6 Energy

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This section assesses potential impacts on energy from the GPR/ZOU. The physical environmental impacts associated with the generation of electricity and burning of fuels have also been accounted for in Section 4.3, *Air Quality*, and Section 4.8, *Greenhouse Gas Emissions*.

### 4.6.1 Setting

Energy relates directly to environmental quality. Energy use, when sourced from fossil fuels, can adversely affect air quality, and generate greenhouse gas (GHG) emissions that contribute to climate change. Fossil fuels are burned to create electricity to power residences and commercial/industrial buildings, heat and cool buildings, and power vehicles. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy.

#### **a. Energy Fundamentals**

Energy is generally consumed either in the form of electricity, measured in kilowatts (kW) or megawatts (MW); natural gas, measured in British thermal units (Btu) or cubic feet; and petroleum fuels, such as gasoline or diesel, measured in gallons or liters. Electricity is used primarily for lighting, appliances, and other uses associated with building and vehicle operations. Electricity sources range from renewable (hydroelectric, solar, wind, geothermal, biomass) to nonrenewable (natural gas, oil, nuclear, coal). Natural gas is used primarily for heating, water heating, and cooking purposes and is typically associated with building operations. Petroleum fuels are used primarily for powering off-road equipment and vehicles (commercial trucks and other vehicles).

#### **b. Energy Supply**

##### **Electricity**

Electricity is distributed through the various electric load-serving entities (LSE) in California. These entities include investor-owned utilities, publicly owned LSEs, rural electric cooperatives, community choice aggregators, and electric service providers (California Energy Commission [CEC] 2022a).

According to the CEC, California generated approximately 190,913 gigawatt-hours (GWh) of electricity in-state in 2020. Approximately 48 percent of this electricity was sourced from natural gas, 33 percent from renewable sources (i.e., solar, wind, geothermal, biomass, small hydroelectric), 9 percent from large hydroelectric sources, and the remaining 10 percent from coal, nuclear, oil, other and unspecified sources (CEC 2022b).

Pacific Gas and Electric (PG&E) is responsible for providing power supply to Fresno County while complying with county, state, and federal regulations. PG&E's power system is one of the nation's largest electric and gas utilities and maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2022a). In 2021, PG&E's power mix, including all PG&E-owned generation, plus PG&E's power purchases, consisted of 50 percent renewable resources, including wind, geothermal, biomass, solar, and small hydro, 39 percent nuclear generation, 7 percent natural gas, and 4 percent large hydroelectric facilities (PG&E 2022b).

## **Natural Gas**

Natural gas plays an important and varied role in California. According to the California Department of Conservation Geologic Energy Management Division (CALGEM), net natural gas production in California for 2019 was 148.2 billion cubic feet, or approximately 155,222 billion Btu. These figures indicate a decrease of 8.1 percent from 2018 production (CALGEM 2020).

The 2020 California Gas Report presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. California's existing natural gas supply portfolio is regionally diverse. It includes supplies from California onshore and offshore sources, Southwestern United States supply sources, the Rocky Mountains, and Canada (California Gas and Electric Utilities [CGEU] 2020). Nearly 90 percent of California's natural gas supply is from out-of-state imports (CEC 2022c).

Fresno County has transmission pipelines for both natural gas and hazardous liquid, such as petroleum fuels, discussed further below (National Pipeline Mapping System 2022).

## **Petroleum Fuels**

California is one of the top producers of petroleum in the nation, with drilling operations occurring throughout the state, but primarily concentrated in Kern and Los Angeles counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in ports in Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on imports. In 2021, 56 percent of the crude oil refined in California was imported (CEC 2022d). In 2020, foreign sources of crude oil imports to California were led by Ecuador (24.1 percent), Saudi Arabia (22.9 percent), and Iraq (20.4 percent) (CEC 2022e). According to the United States Energy Information Administration (EIA), California's field production of crude oil totaled 130.6 million barrels in 2021 (EIA 2022).

In Fresno County, petroleum fuels are generally purchased by individual users such as residents and employees. As of 2017, Fresno County had a total of 3,697 oil wells, 1,984 of which were active and 1,713 of which were idle (Los Angeles Economic Development Corporation 2019).

## **Alternative Fuels**

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various statewide regulations and plans, such as the Low Carbon Fuel Standard and Senate Bill (SB) 32. Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle with alternative energy sources such as hydrogen, biodiesel, and electricity, which are discussed in the following subsections.

### *Hydrogen*

Hydrogen is being explored for use in combustion engines and fuel cell electric vehicles. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency, which is two to three times more efficient than gasoline vehicles. There are currently no hydrogen fueling stations in Fresno County (United States Department of Energy [DOE] 2022).

### *Biodiesel*

Biodiesel is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant greases. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Biodiesel can run in any diesel engine generally without alterations, but fueling stations have been slow to make it available. There are currently no biodiesel refueling stations in Fresno County (DOE 2022).

### *Electric Vehicles*

Electricity can be used to power electric and plug-in hybrid electric vehicles directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicle's batteries. Fuel cells are being explored to use electricity generated onboard the vehicle to power electric motors. There are numerous publicly available electrical charging stations throughout Fresno County (DOE 2022).

The 2021 Federal Infrastructure Bill allocates approximately \$384 million dollars to California over the next 5 years to support the expansion of an electric vehicle charging network and includes a provision that allows the State to apply for the \$2.5 billion in grant funding dedicated to electric vehicle charging infrastructure. It is unclear at this time when and how the funds will be utilized.

### *Biogas*

There is growing interest regarding biogas<sup>1</sup> production potential in California from non-hazardous-waste landfills, landfill diversion of organic waste material, wastewater treatment, concentrated animal feeding operations, and food and green waste processing. When biogas is conditioned and upgraded to pipeline quality specifications, it can be interconnected to a gas utility's pipeline and distributed to a specific customer. Biomethane may also be consumed onsite for a variety of uses, including electrical power generation from internal combustion engines, fuel cells, and turbines, or as a fuel source for natural gas vehicles. Currently, there are instances where biogas is being vented naturally or flared to the atmosphere, rather than being utilized as a valuable renewable resource (CGEU 2020).

## **a. Energy Demand**

### **Electricity**

The EIA estimates that California electricity consumption in 2020 represents approximately 6.7 percent of total United States electricity consumption in 2020 (EIA 2021a). As shown in Table 4.6-1, total electricity consumption within California in 2020 was approximately 279,510 GWh. In Fresno County, total electricity consumption in 2020 was approximately 8,018 GWh, representing approximately 2.9 percent of electricity usage in California (CEC 2022f). According to the California Department of Finance (DOF), Fresno County's estimated 2020 population totaled 1,008,860 people (DOF 2021). As such, annual per capita electricity consumption is estimated at approximately 7,940 kWh.

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<sup>1</sup> Biogas is a mixture of methane and carbon dioxide produced by the bacterial degradation of organic matter.

**Table 4.6-1 2020 Annual Electricity Consumption**

Energy Type	California Consumption	Fresno County Consumption	Percentage of Statewide Consumption	County per Capita Consumption <sup>1</sup>
Electricity	279,510 GWh	8,018 GWh	2.9 percent	7,940 kWh

GWh = gigawatt hours; kWh = kilowatt hours

<sup>1</sup> Per capita consumption based on Fresno County’s estimated 2020 population of 1,008,860 people (DOF 2021)

Source: CEC 2022f

## Natural Gas

In 2020, California consumed a total of approximately 12,332 million U.S. therms of natural gas, or 1,233 million Btu (MMBtu). Residential natural gas demand accounted for approximately 39 percent of California’s total natural gas demand while non-residential natural gas demand accounted for approximately 61 percent (CEC 2022g).

Statewide natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of one percent per year from 2020 to 2035. The forecasted decline is due to a combination of moderate growth in the natural gas vehicle market and across-the-board declines in all other market segments including residential, commercial, electric generation, and industrial markets (CGEU 2020).

As shown in Table 4.6-2, development in Fresno County consumed approximately 326 million U.S. therms of natural gas in 2020, or approximately 32.6 MMBtu (CEC 2022g), representing approximately 2.6 percent of statewide consumption. Fresno County’s estimated 2020 population totaled 1,008,860 people (DOF 2021). As such, annual per capita natural gas consumption is estimated at approximately 33 Btu.

**Table 4.6-2 2020 Annual Natural Gas Consumption**

Energy Type	California Consumption	Fresno County Consumption	Percentage of Statewide Consumption	County per Capita Consumption <sup>1</sup>
Natural Gas	1,233 MMBtu	33 MMBtu	2.6 percent	33 Btu

Btu = British Thermal Units; MMBtu = million British Thermal Units

<sup>1</sup> Per capita consumption based on Fresno County’s estimated 2020 population of 1,008,860 people (DOF 2021).

Source: CEC 2022g

## Petroleum Fuels

According to the EIA, transportation accounted for nearly 40 percent of California’s total energy demand, amounting to approximately 3,073 trillion Btu in 2019 (EIA 2021b). According to the CEC, 2020 fuel sales in California totaled approximately 11.2 trillion gallons of gasoline and 1.6 trillion gallons of diesel. In 2020, there were an estimated 365 gas stations throughout Fresno County (CEC 2022h).

State and county fuel consumption is further illustrated in Table 4.6-3. In 2020, California consumed approximately 12.6 billion gallons of gasoline and 3.1 billion gallons of diesel fuel, and Fresno County consumed an estimated 347 million gallons of gasoline and 66 million gallons of diesel fuel (CEC 2022h). Fresno County’s estimated 2020 population totaled 1,008,860 people (DOF 2021). As such, annual per capita gasoline consumption is estimated at approximately 344 gallons of gasoline and 66 gallons of diesel per person.

**Table 4.6-3 2020 Annual Gasoline and Diesel Consumption**

Fuel Type	California Consumption	Fresno County Consumption	Percentage of Statewide Consumption	County per Capita Consumption <sup>1</sup>
Gasoline	12,572,000,000 gallons	347,000,000 gallons	2.8 percent	344 gallons
Diesel	3,086,000,000 gallons	66,000,000 gallons	2.1 percent	66 gallons

<sup>1</sup> Per capita consumption based on Fresno County’s estimated 2020 population of 1,008,860 people (DOF 2021)

Source: CEC 2022h

## **b. Regulatory Setting**

### **Federal**

#### *Energy Independence and Security Act of 2007*

The Energy Independence and Security Act, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce United States dependence on foreign oil. It expands the production of renewable fuels, thereby reducing dependence on oil and confronting global climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels
- Reduces United States demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent

#### *Corporate Average Fuel Economy Standards*

The Energy Policy and Conservation Act of 1975 established the Corporate Average Fuel Economy Standards (CAFE standards). The CAFE standards are federal rules established by the National Highway Traffic Safety Administration (NHTSA) that set fuel economy standards for all new passenger cars and light trucks sold in the United States. The CAFE standards become more stringent each year, reaching an estimated 38.3 miles per gallon for the combined industry-wide fleet for model year 2020 (77 Federal Register [FR] 62624 et seq. [October 15, 2012, Table I-1).

In September 2019, the United States Environmental Protection Agency (USEPA) and the NHTSA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, Part One “One National Program” (84 FR 51310), revokes a waiver granted by USEPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by USEPA for the explicit purpose of GHG reduction, and indirectly, criteria air pollutants and ozone precursor emission reduction. This revocation became effective on November 26, 2019, and could have restricted the ability of the California Air Resources Board (CARB) to enforce more stringent GHG emission standards for new vehicles and set zero-emission vehicle mandates in California. However, on December 21, 2021, the NHTSA published its CAFE Preemption rule, which finalizes its repeal of 2019’s SAFE Rule, Part One.

Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through

model year 2026. The proposal addressing CAFE standards was jointly developed by NHTSA and USEPA, with USEPA simultaneously proposing tailpipe carbon dioxide emission standards for the same vehicles covered by the same model years. However, at the time of Draft EIR publication, the USEPA was currently in the process of developing new CAFE standards that would significantly increase federal CAFE standards compared to the SAFE Rule Part Two.

### *Energy Star Program*

In 1992, USEPA introduced Energy Star as a voluntary-labeling program designed to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star label. In 1996, USEPA joined with the Energy Department to expand the program, which now also includes qualifying commercial and industrial buildings, and homes.

## **State**

### *California Energy Plan*

The CEC is responsible for preparing the California Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The California Energy Plan calls for the State of California to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

### *Assembly Bill 2076: Reducing Dependence on Petroleum*

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint agency report, *Reducing California's Petroleum Dependence*, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road-transportation-fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 *Integrated Energy Policy Reports*, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

### *Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015*

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

### *Senate Bill 100: California Renewable Energy Portfolio Standard Program: Emissions of Greenhouse Gases*

Approved by the Governor on September 10, 2018, SB 100 amends the State's Renewables Portfolio Standard (RPS) program, which originally called for electricity retailers to ensure 33 percent of electricity generation was sourced from renewable sources by 2020, 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. With implementation of SB 100, electricity retailers must ensure 33 percent of electricity generation is sourced from renewable sources by 2020, 44 percent by 2024, 50 percent by 2026, 52 percent by 2027, and 60 percent by 2030. SB 100 further requires electricity retailers to provide 100 percent zero-carbon electricity generation by 2045.

### *Assembly Bill 1493: Reduction of Greenhouse Gas Emissions*

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code Sections 42823 and 43018.5, requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Implementation of new regulations prescribed by AB 1493 required that the State of California apply for a waiver under the federal Clean Air Act. Although the USEPA initially denied the waiver in 2008, the USEPA approved a waiver in June 2009, and in September 2009, CARB approved amendments to its initially adopted regulations to apply the Pavley standards that reduce GHG emissions to new passenger vehicles in model years 2009 through 2016. According to CARB, implementation of the Pavley regulations is expected to reduce fuel consumption, while also reducing GHG emissions.

### *Assembly Bill 1007: State Alternative Fuels Plan*

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other federal, state, and local agencies. The State Alternative Fuels Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

### *Executive Order S-06-06*

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California, while providing environmental protection and mitigation. The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources, and to produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for California to meet a target for use of biomass electricity.

### *Bioenergy Action Plan*

The 2011 Bioenergy Action Plan identifies barriers to meeting goals and recommends actions to address them so that California can meet its clean energy, waste reduction, and climate protection



goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the state
- Reduce fire danger, improve air and water quality, and reduce waste

#### *California Code of Regulations Title 24, Part 6*

California Code of Regulations, Title 24, Part 6, is California's energy efficiency standards for residential and nonresidential buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. The standards are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new efficient technologies and methods. In 2019, the CEC updated Title 24 standards with more stringent requirements effective January 1, 2020. All buildings for which an application for a building permit is submitted on or after January 1, 2020, must follow the 2019 standards. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The CEC Impact Analysis estimates that nonresidential buildings will be 30 percent more energy efficient compared to buildings built consistent with 2016 Building Energy Efficiency Standards, and single-family homes will be 7 percent more energy efficient (CEC 2018). Due to the solar requirement for all new homes, the CEC also estimates that the 2019 standards will cut energy demand from grid electricity in new homes by more than 50 percent (CEC 2018). The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided these standards exceed those provided in Title 24.

#### *California Code of Regulations Title 24, Part 11*

California's Green Building Code (CalGreen) is updated every 2 years and was developed to provide a consistent approach to green building in the state. The 2019 CalGreen regulations were revised in a supplement in July 2021. CalGreen establishes the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved energy efficiency and process improvements. It also includes voluntary tiers to further encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design.

#### *California's 2020 Integrated Energy Policy Report*

Every 2 years, the CEC prepares the Integrated Energy Policy Report (IEPR). The IEPR identifies actions the state and others can take to ensure a clean, affordable, and reliable energy system. California's innovative energy policies strengthen energy resiliency, reduce GHG emissions, improve air quality, and contribute to an equitable future (CEC 2020). Volume II of the 2020 IEPR examines microgrids, lessons learned from a decade of state-supported research, and stakeholder feedback on the potential of microgrids to contribute to a clean and resilient energy system. Volume III

reports California’s energy-demand outlook, updated to reflect the global pandemic and plan for a growth in zero-emission plug in electric vehicles.

## **Local**

### *Integrated Strategies for a Vibrant and Sustainable Fresno County*

The Integrated Strategies for a Vibrant and Sustainable Fresno County report, prepared in 2011, provides a suite of strategies that were developed to reduce climate impacts in the county. Strategies include providing energy and conservation financing to promote clean energy throughout Fresno County (ClimateWise 2011).

### *San Joaquin Valley Blueprint*

Eight Regional Transportation Planning Agencies representing eight counties in the San Joaquin Valley, including Fresno County, initiated a collaborative planning process in 2005 to develop a regional vision of land use and transportation to guide growth over the next 50 years. The San Joaquin Valley Blueprint was adopted on April 1, 2009, and serves as an implementation guide in each of the eight counties. The Blueprint includes Smart Growth Principles and Scenarios such as the creation of walkable and bikeable neighborhoods, mixed-land uses, preservation of open spaces and environmental areas, and provision of a variety of transportation choices.

## 4.6.2 Impact Analysis

### **a. Methodology and Thresholds of Significance**

#### **Significance Thresholds**

The following thresholds of significance were developed in accordance with Appendix G of the *CEQA Guidelines*. Energy-related impacts would be significant if the GPR/ZOU would:

1. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

#### **Methodology**

Public Resources Code Section 21100(b)(3) states that an EIR shall include “mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” The physical environmental impacts associated with the use of energy, including the generation of electricity and burning of fuels, have been accounted for in Section 4.3, *Air Quality*, and Section 4.6, *Greenhouse Gas Emissions*.

Energy consumption is analyzed here in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during construction of development under the GPR/ZOU, such as fuel consumed by construction equipment and construction workers’ vehicles traveling to and from construction sites in the county. Project construction activities would also use building materials that would require energy use during the manufacturing and/or procurement of that material. Section 15126.2(b) of the *CEQA Guidelines* states, “This [energy] analysis is subject to the rule of reason and shall focus on energy use that is caused by the project.”

This analysis reasonably assumes that manufacturers of building materials such as concrete, steel, lumber, or other building materials would employ energy conservation practices in the interest of minimizing the cost of doing business. Therefore, the consumption of energy required for the manufacturing and/or procurement of building and construction material is not in the scope of this analysis.

Operational energy demand accounts for the anticipated energy consumption during operation of development facilitated by, including but not limited to, electricity and natural gas for lighting, space and water heating, appliances, and vehicle fuel consumption.

Because project-specific details are not yet known for development facilitated by the GPR/ZOU, this analysis evaluates energy impacts qualitatively in light of the proposed goals, policies, and objectives of the 2042 General Plan that would guide future development.

## **b. Project Impacts and Mitigation Measures**

**Threshold 1:** Would the GPR/ZOU result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**IMPACT E-1 DEVELOPMENT AND POPULATION GROWTH FACILITATED BY THE GPR/ZOU WOULD RESULT IN AN INCREASE OF OVERALL CONSUMPTION OF ENERGY COMPARED TO EXISTING CONDITIONS. HOWEVER, THE GPR/ZOU IS BASED ON A LAND-USE STRATEGY THAT WOULD PROMOTE GREATER OVERALL ENERGY EFFICIENCY IN COMMUNITY AND MUNICIPAL OPERATIONS. 2042 GENERAL PLAN POLICIES AND IMPLEMENTATION PROGRAMS WOULD ENSURE THAT DEVELOPMENT WOULD COMPLY WITH EXISTING ENERGY EFFICIENCY REGULATIONS AND WOULD ENCOURAGE NEW DEVELOPMENT TO TAKE ADVANTAGE OF VOLUNTARY ENERGY-EFFICIENCY PROGRAMS. AS SUCH, THE CONSUMPTION OF ENERGY RESOURCES BY DEVELOPMENT FACILITATED UNDER THE GPR/ZOU WOULD NOT BE WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION, AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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### **Construction Energy Demand**

Future development facilitated by the GPR/ZOU would involve the use of energy during construction and operation. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Energy use during construction would be temporary in nature, and construction equipment would be typical of similarly sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as CALGreen, future development projects facilitated by the GPR/ZOU would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct these future projects. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the GPR/ZOU would not involve the inefficient, wasteful, and

unnecessary use of energy during construction, and construction impacts related to energy consumption would be less than significant.

## **Operational Energy Demand**

Operation of future development facilitated by the GPR/ZOU would contribute to regional energy demand by consuming electricity, natural gas, and gasoline and diesel fuels. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water and wastewater conveyance, and powering alternative fuel vehicles, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by residents and employees of future development facilitated by the GPR/ZOU.

Operation of development facilitated by the GPR/ZOU would consume natural gas and electricity for building heating and power, lighting, water conveyance, and alternative fuel vehicles, among other operational requirements. Increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in the 2042 General Plan, would offset some of the overall energy demand facilitated by buildout under GPR/ZOU. Moreover, future development projects facilitated by GPR/ZOU would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations) and CALGreen (Title 24, Part 11 of the California Code of Regulations). Furthermore, the California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California.

The Energy Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Energy Code also provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances, water and space heating and cooling equipment, and insulation for doors, pipes, walls and ceilings. The Energy Code emphasizes saving energy at peak periods and seasons and improving the quality of installation of energy efficiency measures. In addition, CALGreen sets targets for energy efficiency and water consumption to minimize energy consumption. Compliance with regulations, such as the California Energy Code and CALGreen, would ensure that future projects facilitated by the GPR/ZOU would not result in the wasteful, inefficient, or unnecessary consumption of energy. Moreover, as time goes on, a greater proportion of electricity supplied for operational power needs in Fresno County through 2042 would be sourced from renewables due to the increasingly stringent requirements of California's RPS program. The 2042 General Plan contains the following goals, policies, and implementation programs that focus on climate change resiliency, GHG reductions, and energy efficiency, all of which would help to minimize the occurrence of inefficient, wasteful, and unnecessary electricity and natural gas consumption during operation of future development:

**Goal HS-G** To improve the sustainability and resiliency of the County through continued efforts to reduce the causes of adapt to climate change.

**Policy HS-G.1: Reduce Impacts of Climate Change.** The County shall support plans, standards, regulation, incentives, and investments to reduce the impacts of climate change.

**Policy HS-G.4: Climate Pollution Reduction Practices for Low-Income Homes.** The County shall support programs to provide financial assistance for the retrofitting of low-income homes (such as energy efficiency upgrades, improved insulation, renewable energy upgrades, and use of electric appliances).

**Policy LU-H.7: Principles for Planned Development.** The County shall apply the following general principles to planned development proposals:

- (j) Energy conservation and utilization of renewable resources should be given prominent consideration.

**Policy PF-F.11: Resource Recovery Facilities Requirements.** The County shall require the following siting criteria for resource recovery facilities:

- (b) Sites should provide opportunities for steam use or development of steam users or otherwise maximize energy use.

In addition to the above policies and implementation programs that aim to reduce energy consumption, the 2042 General Plan contains policies that would increase the County's reliance on renewable energy sources and decrease the County's reliance on energy procured by fossil fuels.

Vehicle trips generated by future development facilitated by the GPR/ZOU would use energy in the form of fuel consumed by passenger, transit, and goods movement vehicles. Fuel consumption is closely associated with VMT. Essentially, the more miles a vehicle travels, the more fuel that is required and consumed by that vehicle. Increases in motor vehicle trips are primarily a combined function of population and employment growth. Trip length is primarily a function of the commute distance between where one lives and one works (i.e., the proximity of different land uses) and the distance of travel for goods and services. As described in Section 4.14, *Transportation*, the proposed GPR/ZOU is projected to decrease baseline per capita VMT to 14.4 daily VMT per capita and 23.7 VMT per employee. Furthermore, the 2042 General Plan policies and implementation programs encourage infill and transit-oriented development and active transportation to reduce overall energy consumption, resulting in greater energy efficiency throughout the county. For example, the 2042 General Plan contains land-use strategies to encourage higher-density and mixed-use development adjacent to public transportation hubs. Mixed-use, transit-oriented, and higher-density development improves energy efficiency as it places county residents closer to places of employment, businesses those residents patronize, and public transit facilities. The 2042 General Plan further identifies infill development and redevelopment of existing sites as the primary means for accommodating future growth. The following 2042 General Plan policies would improve the availability of alternative transportation modes and help reduce congestion and overall demand for transportation fuels:

**Policy TR-A.14: Multi-modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right of Way Plan and Precise Plans of streets and highways.

**Policy TR-A.15: Bikeways and Trails.** The County shall develop and maintain a program to construct bikeways and recreation trails in accordance with the adopted Regional Bicycle and Recreational Trail Master Plan. The County shall seek funding for construction and maintenance of bicycle and trails.

**Policy TR-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;
- Minimizing curb cuts along non-local streets to improve safety and capacity;
- Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- Constructing sidewalks and bike lanes on both sides of streets, where feasible;
- Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- Coordinating with local jurisdictions and Fresno Council of Governments to ensure multi-modal connections are established and maintained between jurisdictions; and
- Incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes.

**Policy TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- Coordinating with local jurisdictions and Fresno Council of Governments to ensure multi-modal connections are established and maintained between jurisdictions.

**Policy TR-B.1: Transit Service Coordination.** The County shall work with transit providers to provide transit services within the county that are responsive to existing and future transit demand and that can demonstrate cost-effectiveness by meeting minimum farebox recovery levels required by state and federal funding programs.

**Policy TR-B.2: Transit Service.** The County shall promote transit services in designated corridors and communities where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors and in communities in the rural area of the county.

**Policy TR-B.3: Transit Supportive Development.** The County shall work with the cities of Fresno and Clovis and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors shown in General Plan Figure TR-3.

**Policy TR-B.6: Convenient Transit Transfers.** The County shall encourage the development of facilities for convenient transfers between different transportation systems (e.g., train-to-bus, bus-to-bus).

**Policy TR-B.7: Safe Routes to School.** The County shall work with the school districts to plan transit routes to schools and to identify safe routes to encourage other modes of transportation such as biking to reduce vehicle trips to schools.

**Policy TR-C.3: Alternative Employee Transportation Modes.** The County shall work with the cities of Fresno and Clovis to encourage new urban development within the Fresno Clovis Metropolitan Area (FCMA) to provide appropriate onsite facilities that encourage employees to use alternative transportation modes as air quality and transportation mitigation measures. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.

**Policy TR-D.4: Bikeway Improvements.** The County shall develop bikeways in conjunction with street improvement projects occurring along streets and roads designated on the Regional Bikeways Plan map.

**Policy TR-D.8: Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation.

**Policy TR-E.5: Multi-modal Rail Stations.** The County shall support multi-modal stations at appropriate locations to integrate rail transportation with other transportation modes.

**Policy OS-G.1: Air Quality Evaluation.** The County shall develop standard methods for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents. The County will do this in conjunction with the San Joaquin Valley Air Pollution Control District.

**Policy OS-G.2: Air Quality Impact Assessment.** The County shall ensure that air quality impacts identified during the CEQA review process are fairly and consistently mitigated. The County shall require projects to comply with the County's adopted air quality impact assessment and mitigation procedures.

**Policy OS-G.6: Employer-base Trip Reduction.** The County shall develop and implement employer-based trip reduction programs for County employees.

**Policy OS-G.7: Telecommuting.** The County shall encourage its departments to consider telecommuting programs as a trip reduction strategy.

**Policy OS-G.8: Fleet Replacement.** The County fleet vehicle operators shall implement vehicle replacement practices that place a priority on replacement of older higher-emission vehicles and on purchasing new vehicles with engines using best available technologies and advanced fuels where feasible, consistent with cost-effective management of the program.

**Policy OS-G.9: Teleconferencing.** The County shall support the use of teleconferencing in lieu of employee travel to conferences and meetings when feasible.

**Policy OS-G.10: Work Centers.** The County shall encourage the establishment of public/private partnerships to develop satellite and neighborhood work centers for telecommuting.

By placing services and amenities close to where people live and work and emphasizing alternative transportation use, the land-use scenario envisioned by the 2042 General Plan would minimize the

need to drive and reduce per capita energy consumption and GHGs. County fleet replacement and telecommuting would also reduce the wasteful, inefficient, or unnecessary consumption of energy resources in Fresno County. Furthermore, increasingly stringent state and federal vehicle fuel economy and emission standards would continue to minimize the potential for inefficient use of transportation fuels.

Therefore, given compliance with existing regulations and the proposed land-use scenario and policies included in the 2042 General Plan, operation of future development facilitated by the GPR/ZOU would not result in potentially significant environmental effects from wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

<b>Threshold 2:</b> Would the GPR/ZOU conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
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**IMPACT E-2 CONSTRUCTION AND OPERATION OF PROJECTS FACILITATED BY THE GPR/ZOU WOULD NOT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY. NO IMPACT WOULD OCCUR.**

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The County of Fresno has not adopted any specific renewable energy or energy efficiency plans. However, as discussed in Section 4.6(b), *Regulatory Setting*, several state plans include energy conservation and energy efficiency strategies intended to enable the State and the City to achieve GHG-reduction and energy-conservation goals. A full discussion of the 2042 General Plan's consistency with GHG-reduction plans is included in Section 4.7, *Greenhouse Gas Emissions*. Table 4.6-4 outlines the 2042 General Plan's consistency with state renewable energy and energy efficiency plans.



**Table 4.6-4 Consistency with State Renewable Energy and Energy Efficiency Plans**

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
<p><b>California Energy Plan.</b> The plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.</p>	<p><b>Consistent.</b> The 2042 General Plan would include policies to encourage infill and transit-oriented development. The 2042 General Plan would also result in the implementation of land-use strategies to encourage higher-density and mixed-use development adjacent to public transportation hubs. The GPR/ZOU includes goals and policies to promote transit service and achieve land use patterns for development that directly support transit services. The GPR/ZOU also includes goals and policies to encourage multi-modal transportation systems and establish a connected transportation network for all modes of travel, including pedestrians, bicyclists, and transit passengers. Furthermore, the 2042 General Plan includes policies for vehicle replacement practices that place a priority on replacement of older higher-emission vehicles and on purchasing new vehicles with engines using best available technologies and advanced fuels. In light of these features, the 2042 General Plan would ultimately encourage urban design that reduces VMT and accommodates pedestrian and bicycle access as well as facilitates fleet replacement of zero-emission vehicles. Therefore, the 2042 General Plan would not conflict with or obstruct implementation of the California Energy Plan.</p>
<p><b>AB 2076: Reducing Dependence on Petroleum.</b> Pursuant to AB 2076, the CEC and CARB prepared and adopted a joint-agency report, <i>Reducing California’s Petroleum Dependence</i>, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand.</p>	<p><b>Consistent.</b> The 2042 General Plan would result in the implementation of goals, policies, and programs that focus on the coordination of a multi-modal transportation system and the development of complete streets, to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers of all ages and abilities. The 2042 General Plan would also implement goals, policies, and programs geared towards improving and expanding transit services, bicycle facilities, and rail transportation. Such goals, policies, and programs would result in an overall reduction in VMT per capita. Furthermore, as discussed in Section 4.14, <i>Transportation</i>, the proposed 2042 General Plan is projected to decrease VMT per capita below baseline conditions. Therefore, the 2042 General Plan would facilitate the reduction of per capita VMT and would not conflict with or obstruct implementation of AB 2076 and <i>Reducing California’s Petroleum Dependence</i>.</p>
<p><b>2018 Integrated Energy Policy Report.</b> Volume I highlights the implementation of California’s innovative policies and the role they have played in establishing a clean energy economy. Volume II provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.</p>	<p><b>Consistent.</b> The 2042 General Plan would include several components that promote the use of renewable energy and energy efficiency. For example, the proposed 2042 General Plan would implement policies requiring that planned development proposals give prominent consideration to energy conservation and utilization of renewable resources. Furthermore, the 2042 General Plan would result in the support of programs to provide financial assistance for the retrofitting of low-income homes, such as energy efficiency upgrades, improved insulation, renewable energy upgrades, and use of electric appliances. Therefore, the 2042 General Plan would not conflict with or obstruct implementation of the 2018 Integrated Energy Policy Report.</p>

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
<p><b>AB 1493: Reduction of Greenhouse Gas Emissions.</b> AB 1493 requires CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.</p>	<p><b>Consistent.</b> Vehicles used by future residents, employees, visitors, and patrons of development facilitated by the 2042 General Plan would be subject to the regulations adopted by CARB pursuant to AB 1493. Therefore, the 2042 General Plan would not conflict with or obstruct implementation of AB 1493.</p>
<p><b>Energy Action Plan.</b> In the October 2005, the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the state’s ongoing actions in the context of global climate change. The nine major action areas in the EAP include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change.</p>	<p><b>Consistent.</b> As described above, the 2042 General Plan would include several components that promote the use of renewable energy and energy efficiency. For example, the proposed 2042 General Plan would implement policies requiring that planned development proposals give prominent consideration to energy conservation and utilization of renewable resources. Furthermore, the 2042 General Plan would result in the support of programs to provide financial assistance for the retrofitting of low-income homes, such as energy efficiency upgrades, improved insulation, renewable energy upgrades, and use of electric appliances. Furthermore, the proposed 2042 General Plan would implement policies to support plans, standards, regulation, incentives, and investments to reduce the impacts of climate change. Electricity in Fresno County is provided by PG&amp;E, which source some or all of their power from renewable sources. Given these features, the 2042 General Plan would facilitate implementation of the nine major action areas in the EAP. Therefore, the 2042 General Plan would not conflict with or obstruct implementation of the EAP.</p>
<p><b>Bioenergy Action Plan, Executive Order S-06-06.</b> The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050.</p>	<p><b>Consistent.</b> The General Plan Review and Zoning Ordinance Update would not interfere with or obstruct the production of biofuels in California. Vehicles used by future residents, employees, visitors, and patrons of development facilitated by the 2042 General Plan would be fueled by gasoline and diesel fuels blended with ethanol and biodiesel fuels as required by CARB regulations. Therefore, the 2042 General Plan would not conflict with or obstruct implementation of the Bioenergy Action Plan.</p>

CARB = California Air Resources Board; CEC = California Energy Commission; EO = executive order; GHG = greenhouse gas emissions; VMT = vehicle miles traveled

As shown in Table 4.6-4, the 2042 General Plan would be consistent with state renewable energy and energy efficiency plans. Additionally, given compliance with policies included in the 2042 General Plan, construction and operation of future development facilitated by the GPR/ZOU would not conflict with state renewable-energy and energy-efficiency plans. Therefore, no impact would occur, and no mitigation is required.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

No impact would occur without mitigation.

### **c. Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065(a)(3)). The geographic scope for energy consumption is Fresno County. This geographic scope is appropriate, because the smallest scale at which energy consumption information is readily available is the county level. Cumulative buildout of the County's 2042 General Plan is considered part of this cumulative analysis.

Cumulative development in Fresno County would increase demand for energy resources. However, new iterations of the California Building Energy Efficiency Standards and CALGreen would require increasingly more efficient appliances and building materials that reduce energy consumption in new development. In addition, vehicle fuel efficiency is anticipated to continue improving through implementation of the existing Pavley regulations under AB 1493. Furthermore, the policies included in the 2042 General Plan would serve to minimize the potential for wasteful, inefficient, and unnecessary energy usage to occur as a result of future development. Therefore, no significant cumulative impact would occur.

The geographic scopes for the cumulative impact analysis of consistency with renewable-energy and energy-efficiency plans are the State of California and Fresno County, because the applicable plans include statewide plans. Projects throughout the state would be required to adhere to applicable renewable energy and energy efficiency laws, programs, and policies such as California's RPS, AB 1493, and Title 24 standards. All other pending and future projects in Fresno County would be required to adhere to 2042 General Plan policies to mitigate energy impacts where feasible. In addition, all pending and future projects would be reviewed for consistency with the 2042 General Plan or the general plan of the local jurisdiction (i.e., an incorporated city). Therefore, the cumulative impact would be less than significant. As discussed under Impact E-2, construction and operation of future development facilitated by the GPR/ZOU would be consistent with the energy-related goals and policies of the statewide plans; therefore, the GPR/ZOU would not result in a cumulatively considerable contribution to a significant cumulative impact with respect to consistency with renewable energy and energy efficiency plans.

## 4.7 Geology and Soils

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This section analyzes the potential physical environmental effects related to seismic hazards, underlying soil characteristics, slope stability, and erosion within Fresno County from implementation of the proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU).

### 4.7.1 Setting

#### **a. Regional Geology**

California geology is separated into 11 general geomorphic provinces or regions. Fresno County is located in three of these regions: the Coast Ranges, Great Valley, and Sierra Nevada Geomorphic Provinces (Fresno County 2010).

The Coast Ranges Province extends along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The eastern side is characterized by strike-ridges and valleys in the Upper Mesozoic strata. The Coast Ranges province runs parallel to and overlaps the San Andreas Fault in some areas (CGS 2002a).

The Great Valley Province is a broad alluvial plain, extending from the northern part of the Sacramento Valley to the southern part of the San Joaquin Valley. This Province is approximately 50 miles wide and 400 miles in length. The majority of the County is located within the San Joaquin Valley section of this Province. The western portion of the County extends through this Province to the eastern section of the Sierra Nevada Geomorphic Province (California Geological Survey [CGS] 2002a).

The Great Valley Province is a trough in which sedimentation has been occurring since the Jurassic Period (about 208 to 144 million years ago). However, most of the sedimentation in the Great Valley Province occurred in the Cenozoic Era (beginning 65 million years ago). Sediments in the San Joaquin Valley are generally of two types. The upper sediments range from the recent Holocene Epoch to Oligocene Epoch (37 to 24 million years ago). The lower sediments are composed of marine rocks of the Pliocene Epoch (5.3 to 1.6 million years ago) to Eocene Epoch (58 to 37 million years ago) (CGS 2002b). These sediments average approximately 2,400 feet in thickness in the Great Valley Province. However, the deepest deposits occurring in the San Joaquin Valley can be more than 9,000 feet thick in portions of the Tulare Basin, which is partly located in Fresno County (Fresno County 2010).

The Sierra Nevada Geomorphic Province parallels the western side of the Great Valley Geomorphic Province and is a tilted fault block formed by historical tectonic plate movement. This province is also approximately 400 miles long. The eastern portion of the County extends into this Province.

The eastern side of the Sierra Nevada Province is characterized by high, rugged scarp, while the western side tends to have gentler slopes, averaging about two degrees. Deep river canyons along the western slope cut this Province. Many of these rivers have formed large alluvial fans as they leave the mountainous area of the Sierra Nevada Province and enter the flat, level terrain of the Great Valley Province. The most notable in the Fresno County region are the alluvial fans of the San Joaquin River and the Kings River (Fresno County 2010).

The upper granites of the Sierra Nevada Mountains have been scoured by glacial activity. Most of the granitic rocks of this Province are Mesozoic Era (approximately 248 to 65 million years ago). These granitic rocks are partially capped by Cenozoic Era, Tertiary Period (between 65 to 1.6 million years ago) volcanic material (CGS 2002b).

## **b. Local Geologic Setting**

Fresno County is comprised of foothills, flat agricultural land of the central San Joaquin Valley, and rugged coniferous mountains of the Sierra Nevada mountain range, which leaves much of the surface soils exposed in the County. Approximately 36 percent of the County is covered by quaternary alluvium and marine deposits, which Mesozoic granitic rocks cover approximately 34 percent of the County (United States Geologic Survey [USGS] n.d.). The elevation of the County ranges from approximately 200 feet above mean sea level (amsl) in the central San Joaquin Valley portion of the County to approximately 1,200 feet amsl in the eastern portion of the County adjacent to the Sierra Nevada Mountains (topographic-map n.d.). Unique geological features and paleontological resources are common in the county, including in the geologic formations, quaternary fan, and basin deposits.

Fresno County was mapped at a scale of 1:750,000 by Bryant et al. (2010). These authors mapped the entire state of California, so they primarily divided geologic units based on their general lithology and age. Bryant et al. (2010) identified 23 geologic units within Fresno County, as shown in Figure 4.7-1:

- Q—Quaternary alluvium, lake, playa, and terrace deposits
- Qg—Quaternary glacial till
- Qv—Quaternary volcanic flow deposits
- QPc—Pliocene to Pleistocene continental sedimentary rocks
- Tc—Tertiary non-marine sedimentary rocks
- Tv—Tertiary volcanic flow rocks
- Mc—Miocene non-marine sedimentary rocks
- E—Eocene marine sedimentary rocks
- Ec—Eocene non-marine sedimentary rocks
- Mzv—Mesozoic volcanic rocks
- Ku—Upper Cretaceous marine sedimentary rocks
- Kl—Lower Cretaceous marine sedimentary rocks
- KJf—Franciscan Complex
- J—Jurassic marine sedimentary rocks
- ls—Paleozoic or Mesozoic limestone
- Pm—Permian sedimentary marine sedimentary rocks
- Pz—Paleozoic marine sedimentary rocks
- grMz—Mesozoic granitic rocks
- um—Mesozoic ultramafic rocks
- gb—Mesozoic gabbroic rocks
- gr-m—Mesozoic to Precambrian granitic and metamorphic rocks

- m—undivided pre-Cenozoic metamorphic rocks
- mv—undivided pre-Cenozoic metavolcanic rocks

### **c. Seismic and Other Hazards**

Geologic hazards include earthquake-induced hazards (e.g., groundshaking, surface fault ruptures, and soil liquefaction), slope instability, ground subsidence, and soil erosion.

#### **Faults**

Generally defined, an earthquake is an abrupt release of accumulated energy in the form of seismic waves when movement occurs along a fault. The severity of an earthquake is generally expressed in two ways: magnitude and intensity. The energy released, measured on the Moment Magnitude (MW) scale, represents the magnitude of an earthquake. The Richter Magnitude (M) scale has been replaced in most modern building codes by the MW scale because the MW scale provides more useful information to design engineers (Fresno County 2021).

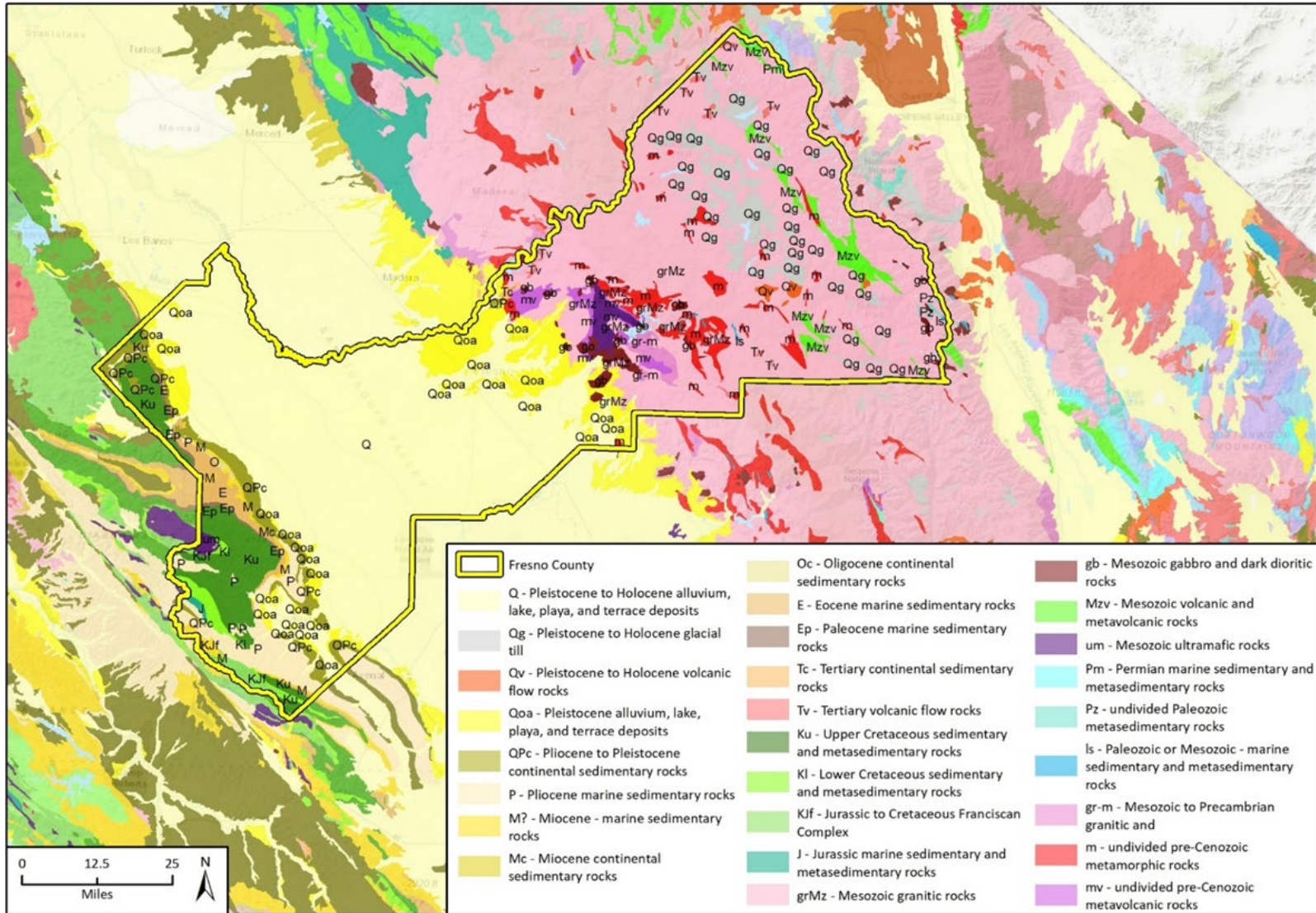
Faults are categorized as active, potentially active, and inactive. A fault is classified as active if it has moved during the Holocene time (during the last 11,000 years). A fault is classified as potentially active if it has experienced movement in Quaternary time (during the last 1.8 million years). Faults that have not moved in the last 1.8 million years are generally considered inactive (Fresno County 2021).

#### **Regional Faults**

The majority of Fresno County is not in an earthquake fault zone as designated by the Alquist-Priolo Earthquake Fault Zoning Act. However, there are a number of active and potentially active faults in and adjacent to Fresno County, as shown in Figure 4.7-1. The county is bounded on the east and west by active fault zones along the southern California Coastal Range and the Sierra Nevada Range.

Two active or potentially active faults, shown in Figure 4.7-1, are identified in the western portion of the county by the Alquist-Priolo Earthquake Fault Maps (California Department of Conservation [DOC] 2015). The Nunez fault is a historically active and relatively minor oblique-slip fault that dips steeply eastward and is located in the southwest part of the county, northwest of the City of Coalinga. The Ortigalita fault is a complex zone of reverse, normal, and right-lateral strike-slip faults located in the northwestern-most corner of the county in the Panoche Valley area that is considered a Quaternary active area. The Clovis fault is a concealed fault believed to be northwest trending, located approximately six miles east of the City of Clovis, and extending from approximately the San Joaquin River to Fancher Creek. The Clovis fault is a Pre-Quaternary fault and is not considered active (Fresno County 2021).

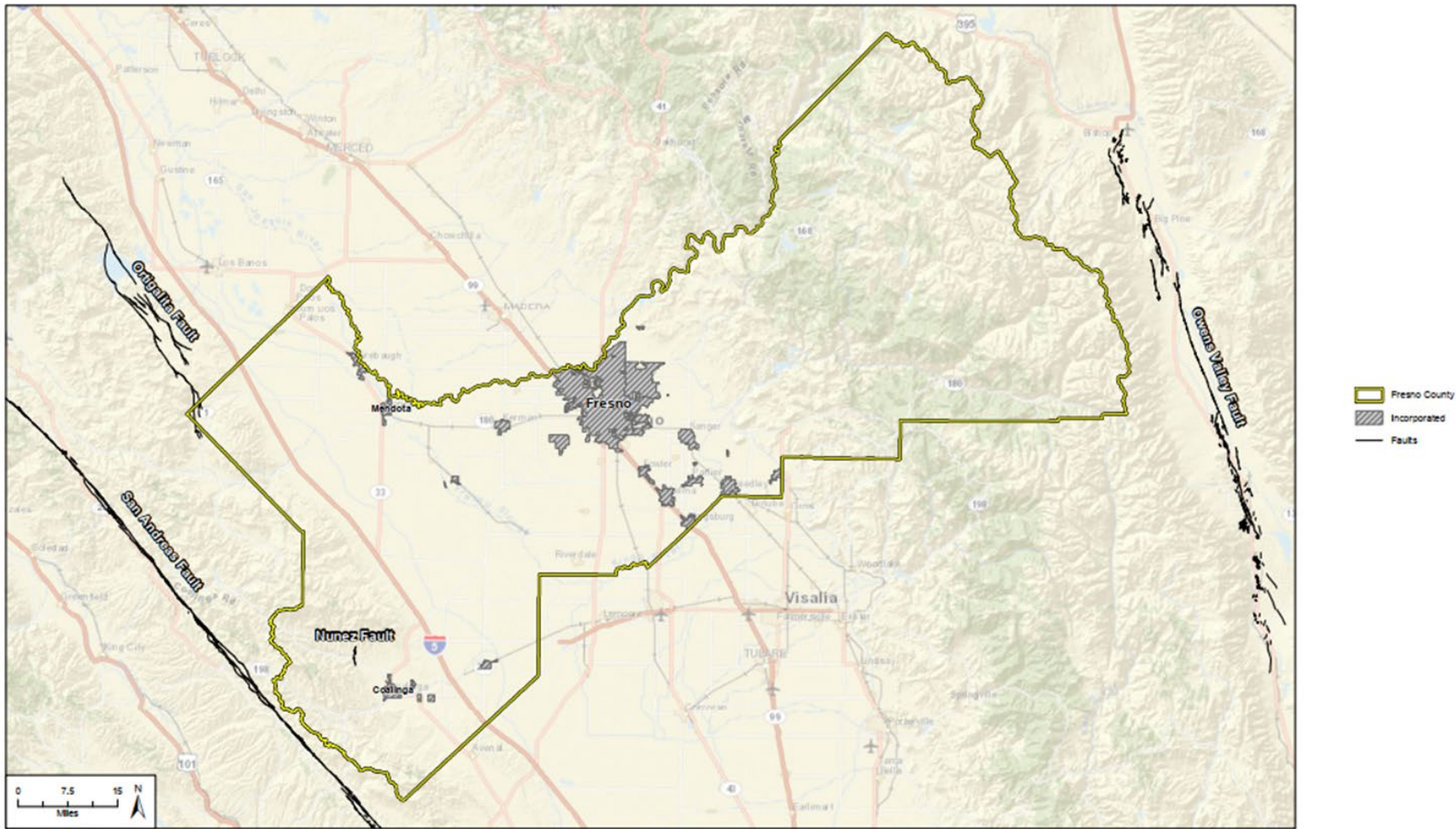
Figure 4.7-1 Geologic Units within Fresno County



Imagery provided by Esri and its licensors © 2022.  
 Data provided by California Department of Conservation 2010 Geologic Map of California.

Fig X Geologic Map of Fresno County Landscape

Figure 4.7-2 Regional Faults



Regional Fault



The San Andreas Fault Zone trends northwest through the Coastal Range roughly parallel to the western boundary of Fresno County. The San Andreas Fault comes within two miles of the county line along the southwest border, south of State Route (SR) 198. The San Andreas Fault is considered active and is the primary concern in evaluating seismic hazards throughout Fresno County. The Sierra Nevada Fault Zone, primarily defined by the Owens Valley Fault, lies east of the county, along the eastern slope of the Sierra Nevada. This is a lengthy and complex system containing both active and potentially active faults (DOC 2015).

## **Seismic Hazards**

Hazards associated with earthquakes include primary hazards, such as surface rupture and groundshaking, and secondary hazards, such as liquefaction and tsunamis.

### *Surface Rupture*

Surface rupture represents the breakage of ground along the surface trace of a fault, the intersection of the fault surface area ruptured in an earthquake within the earth's surface. Fault displacement occurs when material on one side of a fault moves relative to the material on the other side of the fault. This can have particularly adverse consequences when buildings are located in the rupture zone. It is not feasible from a structural or economic perspective to design and build structures that can accommodate rapid displacement involved with surface rupture. Amounts of surface displacement can range from a few inches to tens of feet during a rupture event. Surface rupture is generally limited to a linear zone a few yards wide (Fresno County 2021).

### *Groundshaking*

The major cause of structural damage from earthquakes is groundshaking. The intensity of ground motion expected at a particular site depends upon the magnitude of the earthquake, the distance to the epicenter and the geology of the area between the epicenter and the property. Greater movement can be expected at sites located on poorly consolidated material, such as alluvium, in proximity to the causative fault, or in response to a seismic event of great magnitude. Although Fresno County is situated in a zone of relatively low seismic activity, the fault systems along the western and eastern boundaries of the county have potential to produce high magnitude earthquakes throughout the county. A high magnitude earthquake along the faults could cause moderate intensity groundshaking in the county. The western part of the county is the most susceptible to groundshaking due to regional geology and the proximity of the San Andreas Fault (Fresno County 2016).

### *Liquefaction*

Liquefaction is a seismic phenomenon in which loose, saturated granular and non-plastic fine grained soils lose their structure or strength when subjected to high-intensity groundshaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater, within the top 50 feet of the ground surface; 2) low-density non-plastic soils; and 3) high-intensity ground motion. Areas with shallow groundwater generally are found in the valley where soil types are mostly coarse or high in clay content, and thus not conducive to liquefaction. Areas in western and eastern parts of the county, which are subject to greater groundshaking, generally have groundwater at greater depths (Fresno County 2021). This minimizes the potential for liquefaction.

### *Settlement*

Settlement can occur in poorly consolidated soils during groundshaking. During settlement, groundshaking physically rearranges the soil materials to result in a less stable alignment of the individual minerals. Settlement of sufficient magnitude to cause significant structural damage is normally associated with rapidly deposited alluvial soils or improperly founded or poorly compacted fill. The only urban area directly affected by settlement is Coalinga (Fresno County 2021).

## **Soil Hazards**

Hazards associated with soils include erosion, expansiveness, landslides, and subsidence.

### *Soil Erosion*

Erosion refers to the removal of soil by water or wind. Factors that influence erosion potentially include the amount of rainfall and wind, the length and steepness of the slope, and the amount and type of vegetation cover. Soils in the eastern part of the County have been identified as having moderate to high erosion potential. These soils generally are located in the Sierra Nevada and the foothills where slopes exceed 30 percent. Many of these soils are located in the Sierra National Forest, Sequoia National Park, or Kings Canyon National Park. In the western part of the county, soils located in the Coastal Range foothills have also been identified as being associated with moderate to severe sheet and gully erosion. Additionally, soils in the western part of the county are particularly susceptible to erosion due to human activity. These soils are often associated with recent alluvial fans in the central part of the western area (Fresno County 2021).

### *Expansive Soils*

Soils with relatively high clay content are considered expansive due to the capacity of clay minerals to take in water and expand to greater volumes. Highly expansive soils can cause structural damage to foundations and roads without proper structural engineering and require detailed geologic investigations and costlier grading applications. This makes highly expansive soils less suitable for development. Expansive soils can be found predominantly in the eastern part of the county in a northwest trending belt approximately parallel to the Friant-Kern Canal foothills in Kings Canyon National Park. Another expansive soil formation is located along the Fresno Slough from Madera County to Kings County (Fresno County 2021).

### *Landslides*

The geologic and topographic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside can aid in predicting the probability of slope failure. Common triggering mechanisms of slope failure include undercutting slopes by erosion or grading; saturation of marginally stable slopes by rainfall or irrigation; and shaking of marginally stable slopes during earthquakes. Landslide hazard areas include foothill and mountain areas of the Sierra Nevada where fractured and steep slopes are present, areas of the Coastal Range where less consolidated or weathered soils overlie bedrock, and areas along the San Joaquin River where inadequate ground cover accelerates erosion. Areas along State Route 168 in eastern Fresno County and SR 198 in western Fresno County have been identified as areas potentially affected by landslides (Fresno County 2000). The western part of the county has been identified as having a moderate risk of landslides, while the central and eastern areas have a low risk (Fresno County 2000).

### *Subsidence*

Subsidence occurs below the surface when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, or oil) resulting in sinking of the ground. Subsidence is common in parts of the Central Valley where subsidence in excess of 20 feet has occurred in the past 50 years. Areas susceptible to subsidence are typically composed of open-textured soils that become saturated. In some areas along the valley trough and in parts of western Fresno County, groundwater pumping has caused subsidence of the land surface. Periods of drought tend to exacerbate subsidence trends due to increased pumping of groundwater. Specific areas where subsidence has been a problem include the Westlands Water District and the Pleasant Valley Water District.

### **Paleontological Resources**

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in “soil” but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

### *Paleontological Resources Sensitivity*

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered to be nonrenewable. Such impacts have the potential to be significant and, under the *CEQA Guidelines*, may require mitigation. Sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the taxa, their radiometric age, evolutionary characteristics, depositional environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur more rarely than invertebrates or plants. Thus, geological units having the potential to contain vertebrate fossils are considered the most sensitive.

The SVP outlines in its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) guidelines for categorizing paleontological sensitivity of geologic units within a project area. The SVP (2010) describes sedimentary rock units as having a

high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrates or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically, stratigraphically, taxonomically, or regionally. The paleontological sensitivity of the Planning Area has been evaluated according to the following SVP (2010) categories:

- **High Potential (Sensitivity).** Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant. Full-time monitoring is typically recommended during any project-related ground disturbance in geologic units with high sensitivity.
- **Low Potential (Sensitivity).** Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic (processes affecting an organism following death, burial, and removal from the ground), phylogenetic species (evolutionary relationships among organisms), and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations.
- **Undetermined Potential (Sensitivity).** Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
- **No Potential.** Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources

## 4.7.2 Regulatory Setting

### a. Federal

#### **Clean Water Act**

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and

restore water quality through the regulation of point source and non-point source discharges to surface water, including soil erosion. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). Fresno County is within a watershed administered by the Central Valley Regional Water Quality Control Board (RWQCB), (State Water Resources Control Board 2018).

### **Disaster Mitigation Act of 2000**

Congress passed the Disaster Mitigation Act of 2000 to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act by invoking new and revitalized approaches to mitigation planning. Section 322 of the Act emphasized the need for state and local government entities to closely coordinate on mitigation planning activities, and makes the development of a hazard mitigation plan a specific eligibility requirement for any local government applying for federal mitigation grant funds. Communities with an adopted and federally-approved hazard mitigation plan thereby become pre-positioned and more apt to receive available mitigation funds before and after the next declared disaster.

To implement the new Stafford Act provisions, FEMA published requirements and procedures for local hazard mitigation plans in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 201.6. These regulations specify minimum standards for developing, updating, and submitting local hazard mitigation plans for FEMA review and approval at least once every five years.

### **Archaeological and Paleontological Salvage (23 USC 305)**

Statute 23 USC 305 amends the Antiquities Act of 1906. Specifically, it states:

Funds authorized to be appropriated to carry out this title to the extent approved as necessary, by the highway department of any State, may be used for archaeological and paleontological salvage in that state in compliance with the Act entitled "An Act for the preservation of American Antiquities," approved June 8, 1906 (PL 59-209; 16 USC 431-433), and State laws where applicable.

This statute allows funding for mitigation of paleontological resources recovered pursuant to federal aid highway projects, provided that "excavated objects and information are to be used for public purposes without private gain to any individual or organization" (Federal Register 46(19): 9570).

### **National Environmental Policy Act of 1969 (NEPA)**

NEPA (United States Code, section 4321 et seq.; 40 Code of Federal Regulations, section 1502.25), as amended, directs federal agencies to "Preserve important historic, cultural, and natural aspects of our national heritage" (Section 101(b) (4)). The current interpretation of this language has included scientifically important paleontological resources among those resources that may require preservation.

### **Paleontological Resources Preservation Act of 2009 (PRPA)**

The Paleontological Resources Preservation Act (PRPA) is part of the Omnibus Public Land Management Act of 2009 (PL 111-011 Subtitle D). This act directs the Secretary of the Interior or the Secretary of Agriculture to manage and protect paleontological resources on federal land and to

develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources. It prohibits the removal of paleontological resources from federal land without a permit issued under this act, establishes penalties for violation of this act, and creates a program to increase public awareness about these resources. A paleontological resource use permit is required to collect paleontological resources of scientific interest. The act requires that paleontological resources collected under a permit remain United States property, preserved for the public in an approved repository, and available for scientific research and public education. The act also requires that the nature and location of paleontological resources on public lands remain confidential as a means of protecting the resources from theft and vandalism. Section 6301 of the PRPA and Departmental Proposed Rule at 43 CFR Part 49 define a paleontological resource as:

Any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include— (A) any materials associated with an archaeological resource... (B) any cultural item... (3) Resources determined in writing by the authorized officer to lack paleontological interest or not provide information about the history of life on earth, based on scientific and other management considerations.

Consistent with the definition of a paleontological resource under the PRPA, those paleontological resources that lack scientific interest (e.g., resources that are ubiquitous or do not provide information about the history of life on earth) are considered scientifically non-significant fossils.

## **b. State**

### **California Building Code**

The CBC, Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. The 2016 California Building Code is based on the 2015 International Building Code with the addition of more extensive structural seismic provisions. Chapter 16 of the California Building Code contains definitions of seismic sources and the procedure used to calculate seismic forces on structures. The CBC requires addressing soil-related hazards, such as treating hazardous soil conditions involving removal, proper fill selection, and compaction. In cases where soil remediation is not feasible, the CBC requires structural reinforcement of foundations to resist the forces of expansive soils.

### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971, M6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

### **Seismic Hazards Mapping Act**

The Seismic Hazards Mapping Act (the Act) of 1990 was passed into law following the destructive October 17, 1989 M6.9 Loma Prieta earthquake. The Act directs the CGS to delineate Seismic Hazard

Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones.

### **California Environmental Quality Act – Paleontological Resources**

Paleontological resources are protected under CEQA, which states in part a project will “normally” have a significant effect on the environment if it, among other things, will disrupt or adversely affect a paleontological site except as part of a scientific study. Specifically, in Section VII(f) of Appendix G of the State CEQA Guidelines, the Environmental Checklist Form, the question is posed thus: “Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.” To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). Therefore, CEQA mandates mitigation of adverse impacts, to the extent practicable, to paleontological resources.

CEQA does not define “a unique paleontological resource or site.” However, the Society of Vertebrate Paleontology (SVP) has defined a “significant paleontological resource” in the context of environmental review as follows:

Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

The loss of paleontological resources meeting the criteria outlined above (i.e., a significant paleontological resource) would be a significant impact under CEQA, and the CEQA lead agency is responsible for ensuring that impacts to paleontological resources are mitigated, where practicable, in compliance with CEQA and other applicable statutes.

### **California Public Resources Code**

Section 5097.5 of the Public Resources Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here “public lands” means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

## **c. Local**

### **Fresno County Ordinance Code**

The Fresno County Ordinance Code (Chapter 15.08) adopts by reference the 2019 California Building Code Standards and the Uniform International Building Code standards. The Code of the County of Fresno (Chapter 14.24, Section 14.24.130) also contains Best Management Practices to reduce and/or prevent soil erosion.

#### *Fresno County Multi-Hazard Mitigation Plan*

The Fresno County Multi-Hazard Mitigation Plan, published in May 2018, aims to reduce or eliminate long-term risk to people and property from hazards (Fresno County 2018). The plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Fresno County would be eligible for the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Assistance Grants. The plan was originally developed in 2007-2008 and FEMA approved in 2009. The plan was comprehensively updated in 2017-2018. Earthquakes and land subsidence are among the hazards that could have a medium-significance impact on the County; no high-significance hazards are related to geology or soils. The plan identifies goals and objectives to reduce Fresno County's vulnerability to hazards, along with a number of mitigation actions specific to participating jurisdictions.

## 4.7.3 Impact Analysis

### **a. Methodology and Significance Thresholds**

#### **Methodology**

This section describes the potential environmental impacts of the proposed GPR/ZOU relevant to geology and soils. The impact analysis is based on an assessment of baseline conditions for the proposed Planning Area, including topography, geologic and soil conditions, and seismic hazards, as described above under the Subsection 4.5.1, *Setting*. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to development under the proposed GPR/ZOU. This section describes impacts in terms of location, context, duration, and intensity, and recommends mitigation measures, when necessary, to avoid or minimize impacts.

#### **Significance Thresholds**

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the proposed GPR/ZOU may have a significant adverse impact if it would do any of the following:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
  - Strong seismic ground shaking
  - Seismic-related ground failure, including liquefaction



- Landslides
2. Result in substantial soil erosion or the loss of topsoil
  3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
  4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
  5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
  6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

**Threshold 1:** Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides; or,

**Threshold 3:** Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

**IMPACT GEO-1 NEW DEVELOPMENT ENVISIONED IN THE GENERAL PLAN REVIEW AND ZONING ORDINANCE UPDATE (GPR/ZOU) COULD RESULT IN EXPOSURE OF PEOPLE OR STRUCTURES TO A RISK OF LOSS, INJURY, OR DEATH FROM SEISMIC EVENTS. ADDITIONALLY, DEVELOPMENT UNDER THE GENERAL PLAN HAS THE POTENTIAL TO BE LOCATED ON AN UNSTABLE GEOLOGIC UNIT OR UNSTABLE SOIL, OR SOIL THAT COULD BECOME UNSTABLE AS A RESULT OF THE PROJECT. HOWEVER, ADHERENCE TO THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE AND IMPLEMENTATION OF THE POLICIES IN THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR LOSS, INJURY, OR DEATH FOLLOWING A SEISMIC EVENT, AS WELL AS THE POTENTIAL FOR ON OR OFF-SITE LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION OR COLLAPSE DUE TO UNSTABLE SOILS OR UNSTABLE GEOLOGIC UNITS. IMPACTS WOULD BE LESS THAN SIGNIFICANT LEVEL.**

As discussed above in Subsection 4.6.1, *Setting*, due to the presence of multiple faults within the County, there is the potential for strong ground shaking during a large earthquake along the Nunez or Ortigalita faults in the western part of the Planning Area. The western part of the Planning Area is also at moderate risk for landslides.

Implementation of the proposed GPR/ZOU would facilitate residential and nonresidential development within the Planning Area. The residents and employees of these developments would be potentially exposed to the effects of fault rupture, seismic groundshaking, liquefaction, and landslides from local and regional earthquakes; particularly in the western part of the county, which is more prone to seismic hazards As described in Chapter 2, *Project Description*, the proposed GPR/ZOU includes only minimal changes to the County’s land use designations and will direct growth to existing communities. Increased zoning densities would be introduced in some areas of the western portion of the County and residents may be potentially exposed to seismic hazards. Structures that would be built on unstable soils or unstable geology on steep slopes could be exposed to an existing risk of landslide or if improperly constructed could exacerbate existing landslide conditions or soil instabilities. New structures built under the proposed project could also experience substantial damage during seismic groundshaking events.

Policy LU-F.A in the 2042 General Plan would encourage compact urban development and infill development, which would in many cases replace older buildings subject to seismic damage with newer buildings built to current seismic standards that could better withstand the adverse effects of strong ground shaking.

Potential structural damage and the exposure of people to the risk of injury or death from structural failure would be further minimized by compliance with California Building Code engineering design and construction measures. Policy HS-D.4 would require that all proposed structures, additions to structures, utilities, or public facilities situated within areas subject to geologic-seismic hazards as identified in the soils engineering and geologic-seismic analysis are sited, designed, and constructed in accordance with applicable provisions of the California Building Code (Title 24 of the California Code of Regulations) and other relevant professional standards to minimize or prevent damage or loss and to minimize the risk to public safety. Foundations and other structural support features would be designed to resist or absorb damaging forces from strong ground shaking and liquefaction.

In addition to compliance with mandatory California Building Code requirements, implementation of several General Plan goals and policies would further reduce the potential for loss, injury, or death following a seismic event. General Plan goals, policies, and programs would result in the avoidance of siting critical facilities or other structures within areas susceptible to seismic hazards. Pursuant to Policy HS-D.3, the County would require that a soils engineering and geologic-seismic analysis be prepared by a California-registered engineer or engineering geologist prior to permitting development, including public infrastructure projects, in areas prone to geologic or seismic hazards. Policy HS-D.7 would require a soils report by a California-registered engineer or engineering geologist for any proposed development, that requires a County permit and is located in an area containing soils with high “expansive” or “shrink-swell” properties. Development in these areas would be prohibited unless suitable design and construction measures are incorporated to reduce the potential risks associated with these conditions. Policy HS-D.10 would ensure new development is not located in areas with slopes greater than 30 percent unless public safety hazards can be appropriately mitigated. Policy HS-D.11, would require the County to prohibit alteration of landslide hazard areas in a manner that could increase the hazard (for example, concentrating water by drainage, irrigation, or septic systems; undercutting slope bases; removing vegetative cover; or steepening slopes). Policy HS-D.12, would ensure new development is not located in avalanche hazard areas. Adherence to these requirements would ensure a detailed review of design and construction plans and incorporation of additional structural safety features, as necessary, for structures that would be located on steep slopes or in areas subject to seismic hazards such as extreme ground shaking, landslides, liquefaction, surficial debris flows, expansive soils, subsidence and settlement, and fault displacement. Specifically, Policy LU-B.12 would require a preliminary soils report when discretionary projects would be subject to moderate or high landslide potential. Similarly, Policy HS-D.7 would require a soils report for public infrastructure if it were to be constructed in an area with expansive soils and Policy HS-D.6 would require special design considerations for critical facilities (including police and fire stations, schools, hospitals, hazardous material manufacture and storage facilities, bridges, and large public assembly halls). These policies would address site-specific soil and geology instabilities, if present. Policy HS-D.6, for example, requires project design to account for potential unstable soils and instabilities.

Policy HS-D.8 would protect hillsides and slopes in the Planning Area from erosion and slope failure by minimizing erosion through building design and construction techniques, and Policy HS-D.9

would require preparation of drainage plans for development or infrastructure projects in hillside areas to ensure runoff is directed away from unstable slopes.

Implementation of the policies and programs listed above, in addition to compliance with applicable laws and regulations, would minimize the potential for loss, injury, or death following a seismic event or unstable soils and geologic units and would reduce this potential impact to a less than significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

<b>Threshold 2: Would the project result in substantial soil erosion or the loss of topsoil?</b>
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**IMPACT GEO-2 CONSTRUCTION OF NEW DEVELOPMENT ENVISIONED IN THE GPR/ZOU WOULD REQUIRE GROUND DISTURBANCE SUCH AS EXCAVATION AND GRADING THAT WOULD RESULT IN LOOSE OR EXPOSED SOIL. THIS DISTURBED SOIL COULD BE ERODED BY WIND OR DURING A STORM EVENT, WHICH WOULD RESULT IN THE LOSS OF TOPSOIL. COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE CLEAN WATER ACT, AND IMPLEMENTATION OF THE POLICIES IN THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR EROSION AND THE LOSS OF TOPSOIL AND WOULD REDUCE THIS POTENTIAL IMPACT TO A LESS-THAN-SIGNIFICANT LEVEL.**

As discussed above under Subsection 4.6.1, *Setting*, soils in the eastern part of the County have been identified as having moderate to high erosion potential. Many of these soils are located in the Sierra National Forest, Sequoia National Park, or Kings Canyon National Park. In the western part of the county, soils located in the Coastal Range foothills have also been identified as being associated with moderate to severe sheet and gully erosion. Additionally, soils in the western part of the county are particularly susceptible to erosion due to human activity. Development under the GPR/ZOU would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils are more prone to erosion and loss of topsoil by wind and water.

Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a storm water pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Fresno County Municipal Code (Chapter 14.24), which requires the development of an erosion and sediment control plan that is equivalent to the required SWPPP.

The Fresno County Municipal Code (Section 14.24.130) also requires Best Management Practices which include erosion and sediment control for new development and redevelopment. Additionally, the Fresno County Municipal Code (Section 17.32.030) requires the preparation of a preliminary soils report which would identify any potential site-specific soil issues. Foundation support and grading parameters would be incorporated into the design as required by the Code. Adherence to the requirements of the Fresno County Municipal Codes would reduce the potential for new construction under the GPR/ZOU to cause erosion or the loss of topsoil by ensuring proper management of loose and disturbed soil.

In addition to compliance with mandatory Clean Water Act regulations and the Fresno County Municipal Code requirements, implementation of 2042 General Plan policies would further reduce the potential erosion and loss of topsoil from construction-related soil disturbance. Policy LU-A.19, Reduced Soil Erosion, would aim encourage landowners to participate in programs that reduce soil erosion and increase soil productivity. Through Policy, HS-D.8 Minimize Soil Erosion, the County seeks to minimize soil erosion by maintaining compatible land uses, suitable building designs, and appropriate construction techniques. Contour grading, where feasible, and revegetation would be required to mitigate the appearance of engineered slopes and to control erosion.

Compliance with applicable regulations in the Clean Water Act, the Fresno County Municipal Code, and implementation of the policies in the 2042 General Plan would minimize the potential for erosion and the loss of topsoil and would reduce this potential impact to a less-than-significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation

**Threshold 4:** Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

**IMPACT GEO-3 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD RESULT IN THE CONSTRUCTION OF STRUCTURES ON EXPANSIVE SOILS, WHICH COULD CREATE A SUBSTANTIAL RISK TO LIFE OR PROPERTY. HOWEVER, NEW DEVELOPMENT WOULD BE REQUIRED TO COMPLY WITH THE STANDARDS OF THE CALIFORNIA BUILDING CODE PERTAINING TO EXPANSIVE SOILS. COMPLIANCE WITH THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, THE FRESNO COUNTY MUNICIPAL CODE, AND POLICES IN THE 2042 GENERAL PLAN WOULD REDUCE IMPACTS RELATED TO EXPANSIVE SOILS TO A LESS-THAN-SIGNIFICANT LEVEL.**

Expansive soils can be found predominantly in the eastern part of the County in a northwest trending belt. Another expansive soil formation is located along the Fresno Slough from Madera County to Kings County (Fresno County 2021). The GPR/ZOU would involve minimal land use changes in these areas but would increase development intensity in existing communities. New development envisioned in the GPR/ZOU that is constructed on expansive soils could be subject to damage or could become unstable when the underlying soil shrinks or swells. Soils with high clay content have the highest potential for shrink-swell.

Buildout under the GPR/ZOU would be required to comply with the California Building Code includes requirements to address soil-related hazards. Typical measures to treat hazardous soil

conditions involve removal, proper fill selection, and compaction. In cases where soil remediation is not feasible, the California Building Code requires structural reinforcement of foundations to resist the forces of expansive soils. The Fresno County Municipal Code (Section 17.32.030) requires the preparation of a preliminary soil report which would include expansive qualities of the soil encountered on individual project sites. If the preliminary soil report indicates the presence of critically expansive soils, then the soil report must include recommendations for corrective action in order to prevent structural damage. Additionally, Policy HS-D.7, Soils Report, would require a soils report by a California-registered engineer or engineering geologist for any proposed development, that requires a County permit and is located in an area containing soils with high “expansive” or “shrink-swell” properties.

Compliance with the requirements of the California Building Code, the Fresno County Municipal Code, and polices in the 2042 General Plan would reduce impacts related to expansive soils to a less-than-significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 5:** Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

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**IMPACT GEO-4 DEVELOPMENT ENVISIONED IN THE GPR/ZOU WOULD BE REQUIRED TO CONNECT TO PUBLIC SEWER SYSTEMS WHERE THEY ARE AVAILABLE. IN AREAS WHERE PUBLIC SEWER SYSTEMS ARE NOT AVAILABLE, DEVELOPMENT WOULD HAVE TO COMPLY WITH 2042 GENERAL PLAN POLICIES. IMPLEMENTATION OF THE FRESNO COUNTY MANDATORY SEWER CONNECTION ORDINANCE AND THE 2042 GENERAL PLAN POLICIES WOULD REDUCE IMPACTS TO LESS-THAN-SIGNIFICANT.**

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The Fresno County Mandatory Sewer Connection Ordinance (Chapter 14.12) requires connection to public sewer systems where they are available, precluding the issuance of permits for installation of individual on-site septic systems in such cases. In areas where public systems become available where they did not previously exist, structures served by individual septic systems must be connected to the public system within three years, or sooner if the existing facilities pose a health risk. Additionally, with adherence to Policy PF-D.4, Available Wastewater Treatment Capacity, the County would limit the expansion of unincorporated, urban density communities to areas where community wastewater treatment facilities can be provided. Through Policy PF-D.6, On-site Sewage Disposal Systems, the County would permit individual on-site sewage disposal systems on parcels that have the area, soils, and other characteristics that permit installation of such disposal facilities without threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be provided.

Furthermore, development requiring onsite wastewater treatment systems would need to adhere to the County’s Onsite Wastewater Treatment System Guidance Manual. The Manual provides the procedural and technical details for implementation of the provisions of the Fresno Local Agency Management Plan (LAMP) codified in Chapter 15.20 of the Fresno County General Ordinance Code. The provisions within the Manual are designed to protect public health, groundwater and surface

water bodies from degradation and provide safely operating wastewater treatment systems through proper design siting, installation, maintenance and monitoring. The Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division would be the agency responsible for the enforcement of the Ordinance and provisions in the Manual.

Potential soil impacts associated with septic tanks would be reduced to less than significant levels through adherence to the Onsite Wastewater Treatment System Guidance Manual and the 2042 General Plan policies.

### Mitigation Measures

No mitigation is required.

### Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 6:** Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

**IMPACT GEO-5 INDIVIDUAL DEVELOPMENT PROJECTS FACILITATED BY THE GPR/ZOU MAY RESULT IN GROUND DISTURBANCE THAT HAS THE POTENTIAL TO DIRECTLY OR INDIRECTLY DESTROY A PALEONTOLOGICAL RESOURCE OR UNIQUE GEOLOGIC FEATURE. 2042 GENERAL PLAN POLICIES WOULD ENSURE THAT INDIVIDUAL DISCRETIONARY DEVELOPMENT PROJECTS ARE REVIEWED, DESIGNED, AND MITIGATED TO REDUCE POTENTIAL IMPACTS TO PALEONTOLOGICAL RESOURCES; HOWEVER, THIS POLICY WOULD NOT APPLY TO ALL DEVELOPMENT FACILITATED BY THE GPR/ZOU. THIS WOULD BE A POTENTIALLY SIGNIFICANT IMPACT, AND THERE WOULD BE NO FEASIBLE MITIGATION. THEREFORE, IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

Fresno County contains a number of geologic units with varying levels of paleontological sensitivity. Igneous and metamorphic rocks that occur in the upland portions of eastern Fresno County (i.e., Sierra Nevada Mountain area) have no paleontological sensitivity because, with very rare exceptions, these rock types do not preserve fossils. Sedimentary rocks of the Coast Range Foothills, Westside Valley, Eastside Valley, and Sierra Foothills areas, include numerous geologic formations and geologic units that have a record of paleontological resources. These sedimentary units may have paleontological sensitivity classifications of low, moderate, high, or unknown. Fresno County has an extensive record of scientifically significant paleontological resources from numerous formations and geologic units (Jefferson 2010; Paleobiology Database 2022; University of California Museum of Paleontology 2022).

Ground-disturbing activities in geologic units with high paleontological sensitivity have the potential to damage or destroy paleontological resources. Therefore, activities resulting from implementation of the GPR/ZOU, specifically those projects that include ground-disturbing actions in areas with paleontological sensitivity, could damage or destroy fossils, resulting in a potentially significant impact. However, the proposed 2042 General Plan contains goals and policies to protect paleontological resources and would reduce impacts resulting from ground-disturbing activities in areas with paleontological sensitivity. Goal OS-J is meant to “identify, protect, and enhance Fresno County’s important historical, archeological, paleontological, geological, and cultural sites and their contributing environment, and promote and encourage preservation, restoration, and rehabilitation of Fresno County’s historically significant resources in order to promote historical awareness, community identify, and to recognize the county’s valued assets that have contributed to past

county events, trends, styles of architecture, and economy.” Policy OS-J.4 would require discretionary development projects, as part of any required CEQA review, to identify and protect important paleontological sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible: “Project-level mitigation shall include accurate site surveys, consideration of project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.”

Since mitigation to the “maximum extent feasible,” as required under Policy OS-J.4, may not protect paleontological resources for all by-right development or ministerial approvals that would be facilitated by adoption of the GPR/ZOU, impacts would be significant and unavoidable.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be significant and unavoidable as the County does not have a mechanism to require paleontological evaluations for by-right projects.

#### **b. Cumulative Impacts**

Fresno County is comprised of foothills, flat agricultural land of the central San Joaquin Valley, and rugged coniferous mountains of the Sierra Nevada Mountain range, which leaves much of the surface soils exposed in the County. Future development facilitated by GPR/ZOU could place structures at risk to impacts caused by unstable soils, including expansive, collapsible, or unstable soils; landsliding; and cause erosion or loss of topsoil. Additionally, the project could expose people and structures to seismic hazards such as ground shaking, fault rupture, liquefaction, earthquake-induced landslides. Impacts would generally be confined to a specific project area, rather than result in an incremental cumulative effect over the County. For example, while an earthquake can be detected over many counties or multiple states, the risks to property or life from fault rupture or landslides occurs within a typically smaller area closer to the earthquake epicenter. Future development would be required to adhere to the design standards described in the CBC, the Fresno County Municipal Code, and 2042 General Plan policies, which regulate the design and construction buildings and structures and effectively reduce the effects of seismic activity and geologic hazards at the project level. Compliance with the CBC and 2042 General Plan policies would reduce cumulative impacts to less than significant.

## 4.8 Greenhouse Gas Emissions

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This section analyzes the potential impacts of the GPR/ZOU related to greenhouse gas (GHG) emissions and climate change. The analysis herein is based partially on the growth forecasts contained in *Fresno County 2050 Growth Projections* (FCOG 2019), as well as traffic modeling and vehicle miles traveled (VMT) data provided by GHD (2022). Traffic data provided by GHD is provided in the Traffic Impact Analysis, which is contained in Appendix TIS of this EIR.

### 4.8.1 Environmental Setting

#### a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate changes continuously, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed substantial acceleration in the rate of warming during the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric carbon dioxide (CO<sub>2</sub>) concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO<sub>2</sub> was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO<sub>2</sub>, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (United States Environmental Protection Agency [U.S. EPA] 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are usually by-products of fossil fuel combustion, and CH<sub>4</sub> results from off-gassing associated with agricultural practices and



landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases and SF<sub>6</sub> (U.S. EPA 2021b).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO<sub>2</sub>e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO<sub>2</sub> on a molecule per molecule basis (IPCC 2021).<sup>1</sup>

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat-trapping effect of GHGs, the earth’s surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2020). However, since 1750, estimated concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O in the atmosphere have increased by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity (Forster et al. 2007). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

## **b. Greenhouse Gas Emissions Inventory**

### **Global Emissions Inventory**

In 2015, worldwide anthropogenic GHG emissions totaled 47,000 billion metric tons (MT) of CO<sub>2</sub>e, which is a 43 percent increase from 1990 GHG levels (USEPA 2022). Specifically, 34,522 million metric tons (MMT) of CO<sub>2</sub>e of CO<sub>2</sub>, 8,241 MMT of CO<sub>2</sub>e of CH<sub>4</sub>, 2,997 MMT of CO<sub>2</sub>e of N<sub>2</sub>O, and 1,001 MMT of CO<sub>2</sub>e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed for three percent and two percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change and forestry (USEPA 2022).

### **United States Emissions Inventory**

Total U.S. GHG emissions were 6,558 MMT of CO<sub>2</sub>e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019; since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (U.S. EPA 2021a).

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<sup>1</sup> The Intergovernmental Panel on Climate Change’s (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change’s (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

## California Emissions Inventory

Based on the California Air Resources Board (CARB) California GHG Inventory for 2000-2019, California produced 418.2 MMT CO<sub>2</sub>e in 2019 (CARB 2021a). The largest single source of GHG in California is transportation, contributing 40 percent of the State's total GHG emissions. Industrial sources are the second-largest source of the state's GHG emissions, contributing 21 percent of the State's GHG emissions (CARB 2021a). The magnitude of California's total GHG emissions is due in part to its large size and population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO<sub>2</sub>e (CARB 2021a). The annual 2030 statewide target emissions level is 260 MMT of CO<sub>2</sub>e (CARB 2017).

## County of Fresno Municipal Emissions Inventory

In 2012, the County of Fresno County published an inventory of GHG emissions resulting from government operations during the 2010 calendar year. The data compiled therein represents the best analysis possible of the County's total GHG emissions and energy costs for 2010. The GHG emissions are broken down by sector and source, which are unique to the operations of Fresno County. The inventory states that emissions for Fresno County government operations was approximately 117,977 MT CO<sub>2</sub>e in 2010. The inventory shows that the largest municipal source of GHG emissions is solid waste facilities (45%), followed by buildings (22%) and vehicles (18%). The inventory has not been updated since 2012 (Fresno County 2012).

### c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21<sup>st</sup> century than were observed during the 20<sup>th</sup> century. Long-term trends have found that each of the past four decades has been warmer than all the previous decades in the instrumental record and the decade from 2011 through 2020 has been the warmest. The observed global mean surface temperature (GMST) for the decade from 2011 to 2020 was approximately 1.09°C (0.95°C to 1.20°C) higher than the average GMST over the period from 1850 to 1900 (IPCC 2021). Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, the latest IPCC report states that "human-induced climate change is already affecting many weather and climate extremes in every region across the globe" (IPCC 2021). These climate change impacts include climate change sea level rise, increased weather extremes, and substantial ice loss in the Arctic over the past three decades.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what

local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

## **Public Health**

Climate change is expected to cause a number of impacts which could negatively affect public health in the Central Valley. As temperatures increase, the Central Valley is set to experience an increased number of extreme heat days, which may lead to increases in the number of heat-related deaths and illnesses (State of California 2018). An increase in the frequency and severity of wildfires may contribute to worsening air quality and cause additional illnesses such as asthma. Higher temperatures could also lead to increased air pollution formation and potentially accelerate the spread of certain diseases and pests. These adverse impacts may also disproportionately burden vulnerable populations. (State of California 2018)

## **Air Quality**

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (State of California 2018).

## **Water Supply**

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

## Agriculture

California has a roughly \$49 billion annual agricultural industry that produces nearly a third of the country's vegetables and over half of the country's fruits and nuts (California Department of Food and Agriculture 2021). Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

## Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects at the global and local scale. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

### 4.8.2 Regulatory Setting

#### a. Federal Regulations

##### *Federal Clean Air*

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

##### *Safer Affordable Fuel-Efficient Vehicles Rule*

On September 27, 2019, the USEPA and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the USEPA and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised

corporate average fuel economy and CO<sub>2</sub> emissions standards for passenger cars and trucks of model years 2021-2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors on June 26, 2020 to adjust GHG emissions outputs from the EMFAC model (CARB 2020).

## **b. State Regulations**

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions, which are summarized below.

### *Executive Order S-3-05*

In 2005, the governor issued Executive Order (EO) S-3-05, which identifies statewide GHG emission reduction targets to achieve long-term climate stabilization as follows:

- Reduce GHG emissions to 1990 levels by 2020; and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.

In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

### *Assembly Bill 32 and Senate Bill 32*

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO<sub>2</sub>e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

CARB approved the 2013 Scoping Plan update in May 2014. The update defined CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of six MT of CO<sub>2</sub>e by 2030 and two MT of CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

#### *Senate Bill 375*

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The FCOG region was assigned targets of a six percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 13 percent reduction in per capita GHG emissions from passenger vehicles by 2035.

#### *Senate Bill 350*

Adopted on October 7, 2015, SB 350 supports the reduction of GHG emissions from the electricity sector through a number of measures, including requiring electricity providers to achieve a 50 percent renewables portfolio standard by 2030, a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by retail customers by 2030.

#### *Senate Bill 100*

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

### *Senate Bill 1383*

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

### *Executive Order B-55-18*

On September 10, 2018, the former Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

### *Executive Order N-79-20*

On September 23, 2020, Governor Newsom issued Executive Order (EO) N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the state to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor’s Office of Business and Economic Development, the CEC, the California Department of Transportation, and other state agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

### *California Building Standards Code*

California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. The California Building Standards Code’s energy-efficiency and green building standards are outlined below.

## **PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE**

The California Code of Regulations Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California’s energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local

building permit review authority and the California Energy Commission (CEC). The 2019 Title 24 standards are the applicable building energy efficiency standards for the project because they became effective on January 1, 2020.

## **PART 11 – CALIFORNIA GREEN BUILDING STANDARDS**

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2019 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers (Tiers I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;<sup>2</sup>
- 65 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle charging stations for certain land uses;
- Installation of electric vehicle charging stations for certain land uses; and
- PV systems battery, storage systems, and solar ready for newly constructed residential dwellings, including single-family, and low-rise (three or fewer habitable floors) multifamily buildings.

The voluntary standards require:

- **Tier I:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste with third-party verification, 10 percent recycled content for building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof; and
- **Tier II:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste with third-party verification, 15 percent recycled content for building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar reflective roof.

### *California Integrated Waste Management Act (Assembly Bill 341)*

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995 through source

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<sup>2</sup> Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.



reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

### **c. Local Regulations**

#### **SJVAPCD**

The San Joaquin Valley Air Pollution Control District (SJVAPCD) policies for addressing GHG emissions in CEQA are documented in their *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (SJVAPCD 2009a). In the guidance, SJVAPCD recommends using performance-based standards approach that determines significance based on project design elements that would reduce GHG emissions. This approach would pre-quantify the emissions reduced and would negate the need to quantify project emissions. Implementation of SJVAPCD-approved Best Performance Standards (BPS) would demonstrate that a new project would have a less than cumulatively significant impact. For land use development projects, examples of BPS include zero net energy buildings, energy efficient appliances, and reducing vehicle miles travelled (SJVAPCD 2009b). However, SJVAPCD guidance does not address SB 32 goals or CARB's latest 2017 Scoping Plan.

#### **Fresno Council of Governments 2018 Regional Transportation Plan**

Fresno Council of Governments' (FresnoCOG) 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) outlines a regional transportation network that is environmentally sensitive and reduces GHG emissions through the year 2042 (FresnoCOG 2017). New transportation facilities must avoid or fully mitigate all significant impacts on environmentally sensitive areas and natural resources such as minimizing loss of farmland. Increased transportation and facility design is encouraged, along with infill development near existing public transportation, which is intended to reduce VMT and the associated GHG emissions from those mobile sources. The following objectives and policies from the 2018 RTP/SCS are relevant to the project:

**Goal:** A multimodal regional transportation network compatible with adopted land use plans and consistent with the intent of SB375 (Senate Bill 375 also known as the Sustainable Communities Protection Act of 2008).

- **Objective:** Development of a regional transportation network which is environmentally sensitive, fosters sustainable regional growth, and helps reduce GHG emissions wherever possible.
  - **Policies:**
    - Encourage infill development in areas that take advantage of remaining capacity in existing transportation facilities.
    - Encourage energy conservation through alternatives to single occupancy vehicles, increased transportation efficiency and facility design.
    - Project level decisions should give priority to safety, air pollution reduction, noise impacts and energy conservation considerations.
    - Support the implementation of Transportation System Management, Transportation Demand Management, and Transportation Control Measures that reduce emissions on the traffic circulation system.
    - Continue participation in the development of State Implementation Plans (SIPs) to attain the National Ambient Air Quality Standards (criteria pollutants) with the SJVAPCD.

- Continue to support coordinated transportation planning efforts between and among the eight Valley Metropolitan Planning Organizations (MPOs) located in the San Joaquin Valley nonattainment air basin.
- Encourage active transportation projects and public transit that will provide other transportation options than private autos and advance public health.
- Support and encourage local jurisdictions to adopt Complete Street Policies where feasible

**Goal:** A coordinated policy for public transportation that complements land use and air quality/climate change policies.

- **Objective:** Support transportation investments that work toward accomplishing air quality and climate change goals, optimizing the utilization of land and encourage a stable economic base.
  - **Policies:**
    - Provide incentives to reduce dependency on single occupancy travel without compromising mobility.

### 4.8.3 Impact Analysis

#### a. Methodology and Significance Thresholds

##### Significance Thresholds

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the GPR/ZOU would be significant if the project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

Section 15064.4 of the *CEQA Guidelines* recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions. Neither the County of Fresno nor the SJVAPCD has adopted a numeric threshold to address project-level GHG emissions. The SJVAPCD’s Best Performance Standards (BPS) approach does not include measures to address the 2030 target established by SB 32.

*CEQA Guidelines* Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (*CEQA Guidelines* Section 15064.7[c]).

According to *CEQA Guidelines* Section 15183.5, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). However, the County of Fresno does not have a qualified GHG reduction plan.

At this time, the State Legislature has codified a target of reducing emissions to 40 percent below 1990 emissions levels by 2030 (SB 32) and has developed the 2017 Scoping Plan to demonstrate how the State will achieve the 2030 target and make substantial progress toward the 2050 goal of an 80 percent reduction in 1990 GHG emission levels set by EO S-3-05. In EO B-55-18, which identifies a new goal of carbon neutrality by 2045, CARB has been tasked with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update. While state and regional regulators of energy and transportation systems, along with the State's Cap-and-Trade program, are designed to be set at limits to achieve most of the reductions needed to attain the State's long-term targets, local governments can do their fair share toward meeting the State's targets by siting and approving projects that accommodate planned population growth and projects that are GHG-efficient. Avoiding interference with, and making substantial progress toward, these long-term State targets is important because these targets have been set at levels that achieve California's share of international emissions reduction targets that will stabilize global climate change effects and lessen the adverse environmental consequences of climate change (EO B-55-18). Currently it is infeasible to meet the State's long-term targets because achieving these targets will depend on substantial technological innovation in GHG emission reduction measures and changes in legislation and regulations that will need to occur over the next 23 years. Therefore, an efficiency-based threshold based on the CARB 2017 Scoping Plan is the appropriate threshold to apply to the proposed project.

Efficiency based thresholds represent the rate of emission reductions needed to achieve a fair share of California's GHG emission reduction target established under SB 32. Accordingly, a year 2030 GHG efficiency threshold can be calculated to represent the rate of emissions reduction necessary for the proposed project to achieve a fair share of statewide GHG reductions necessary to meet 2030 SB 32 targets. Additionally, the reductions necessary to meet the 2030 SB 32 target will advance the state's ability to reach the 2045 goal of carbon neutrality recommended under EO B-55-18.

With the release of the 2017 Scoping Plan, CARB recognized the need to balance population growth with emissions reductions and in doing so, provided a new local plan level methodology for target setting that provides consistency with state GHG reduction goals using per capita efficiency targets. These statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 and 2050 statewide target under SB 32. The targets are generated by dividing the statewide 2030 GHG emissions targets by the statewide service population (employees plus residents) for that year. The 2017 Scoping Plan recommends that local governments aim to achieve a community-wide goal of no

more than 6 MT of CO<sub>2</sub>e per service population by 2030 (CARB 2017). In addition, EO B-55-18 recommends the state reach carbon neutrality by 2045. To evaluate emissions from full buildout facilitated by the GPR/ZOU, a threshold for year 2042 is established via linear interpolation from the County specific 2030 target to the year 2042 using carbon neutrality as the ultimate goal by 2045.

Based on FCOG Regional Growth Forecasts and adjustments to disaggregate growth from spheres of influence, the County is anticipated to have a service population of approximately 328,694 (220,529 persons and 108,165 jobs) in 2030.<sup>3</sup> As shown in Table 4.8-1 the communitywide emissions target of 6.0 MT of CO<sub>2</sub>e may be equated to approximately 4.0 MT of CO<sub>2</sub>e per service population (SP) in the year 2030 and 0.8 MT of CO<sub>2</sub>e per service population (SP) in the year 2042.

**Table 4.8-1 GHG Performance Threshold Determination**

Metric	Quantity
<b>Service Population</b>	
2030 Population	220,529 persons
2030 Employment	108,165 jobs
2030 Service Population	328,694 SP
<b>2030 Communitywide Target Derivation</b>	
Per Capita Target	6.0 MT of CO <sub>2</sub> e per capita
Mass Emissions Target <sup>1</sup>	1,323,174 MT of CO <sub>2</sub> e
<b>Service Population Target 2030<sup>2</sup></b>	<b>4.0 MT of CO<sub>2</sub>e/SP</b>
<b>Service Population Target 2042<sup>3</sup></b>	<b>0.8 MT of CO<sub>2</sub>e/SP</b>

MT of CO<sub>2</sub>e = metric tons of carbon dioxide equivalent; SP = service population

<sup>1</sup> 6.0 MT of CO<sub>2</sub>e per capita \* 220,529 persons = 1,323,174 MT of CO<sub>2</sub>e

<sup>2</sup> 1,323,174 MT of CO<sub>2</sub>e/328,694 SP = 4.0 MT of CO<sub>2</sub>e/SP

<sup>3</sup> This is a straight line projection from 2030 to 2042 assuming a threshold of Net Zero by 2045.

Source: FCOG 2019

The targets recommended by the 2017 Scoping Plan, adjusted to be specific for Fresno County, are appropriate for the County (a local government) to use as the basis for determining compliance with the 2017 Scoping Plan. Based on the above, the GPR/ZOU must meet the target for GHG emissions of approximately 4.0 MT CO<sub>2</sub>e per service population per year by the year 2030. Emissions greater than 4.0 MT CO<sub>2</sub>e per service population per year in the year 2030 may conflict with substantial progress toward the long-term reduction targets identified by SB 32 and the 2017 Scoping Plan. Additionally, the GPR/ZOU must meet the emissions target for 2042, which represents buildout of the GPR/ZOU. The adjusted service population threshold of 0.8 MT CO<sub>2</sub>e by the year 2042 is used in the analysis to determine whether the proposed project would result in a significant GHG impact with respect to the generation of GHGs.

## Methodology

Construction and operational GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., high-rise condominiums,

<sup>3</sup> For the purposes of this analysis, 2030 population and employment are estimated via linear interpolation using 2021 and 2042 data. In 2021 the population for the unincorporated County was approximately 209,984 people and employment was 99,274. In 2042 the unincorporated County is forecast to have a population of 243,591 persons and 120,019 jobs (See Section 2, *Project Description*).

hotel, enclosed parking garage), and location, to estimate a project's construction and operational emissions. Emissions were modeled for reasonably foreseeable development, which would consist of residential growth of 11,275 residential units, as outlined in Section 2, *Project Description*, and non-residential growth across different land uses (See Section 4.3, *Air Quality*). Buildout of non-residential development was estimated using employment data for the various land uses. GHG emissions were modeled for year 2042, which is the horizon year of the GPR/ZOU. For the purpose of quantifying emissions, the extent of non-residential land use growth was calculated using projected employment growth and U.S. Energy Information Administration (U.S. EIA) statistics for square footage per employee. Detailed calculations can be found in Appendix AQ.

### *Construction Emissions*

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and in on-road construction vehicles and in the commute vehicles of the construction workers. Smaller amounts of GHGs are emitted indirectly through the energy required for water used for fugitive dust control and lighting for the construction activity. Every phase of the construction process, including demolition, grading, paving, building, and architectural coating, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. Heavier equipment typically emits more GHGs per hour than does lighter equipment because of its engine design and greater fuel consumption. CalEEMod estimates construction emissions by multiplying the time equipment is in operation by emission factors. Construction of the GPR/ZOU was analyzed based on the estimated growth in square footage for each land use type and the CalEEMod default construction equipment lists.

The buildout assumptions and CalEEMod inputs used for air quality modeling (see Section 4.3, *Air Quality*) were used for estimating GHG emissions from construction activities as well.

This analysis conservatively assumes that all construction activities facilitated by the GPR/ZOU would occur within the first 15 years of the planning horizon. Emissions were calculated for one full year of construction occurring in 2022. If buildout occurs over a longer timeframe, or occurs later than estimated, construction equipment would be more efficient in later years and would emit fewer GHG emissions than those estimated herein. This analysis assumes that buildout under the GPR/ZOU would comply with all applicable regulatory standards. Construction emissions are typically short-term in duration and are therefore amortized over the lifespan of an individual project. This analysis uses a 30 year project lifespan for amortization of construction emissions. The amortized construction emissions are then combined with operational emissions to determine total annual emissions.

### *Operational Emissions*

#### **AREA SOURCE EMISSIONS**

Area sources include GHG emissions that would occur from the use of landscaping equipment and fireplaces, which emit GHGs associated with fuel combustion. The landscaping equipment emission values were derived from the 2011 Off-Road Equipment Inventory Model (California Air Pollution Control Officers Association 2021).

#### **ENERGY USE EMISSIONS**

GHGs are emitted on-site during the combustion of natural gas for space and water heating and off-site during the generation of electricity from fossil fuels in power plants. CalEEMod estimates GHG

emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider. Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. In accordance with Section 150.1(b)14 of the 2019 Building Energy Efficiency Standards in Title 24, all new residential uses under three stories must install photovoltaic (PV) solar panels that generate an amount of electricity equal to expected electricity usage.

### **MOBILE SOURCE EMISSIONS**

Mobile source emissions consist of emissions generated by vehicle trips. VMT data from the Traffic Analysis prepared by GHD (2022) was used to estimate mobile source emissions from the GPR/ZOU. As stated therein, daily VMT in the Fresno County jurisdiction would decrease from 26.3 per resident and 38.4 per employee in 2019 to 23.4 per resident and 35.5 per employee by 2042. Total daily VMT was derived by multiplying VMT per resident by population, and VMT per employee by employment. Although per capita VMT would decrease by 2042, total daily VMT would increase by approximately 248,599 due to growth in population and employment. Calculations are included in Appendix AQ. Accordingly, the default trip lengths in CalEEMod were adjusted to reflect the estimated annual VMT.

### **WATER AND WASTEWATER EMISSIONS**

Water used and wastewater generated by a project generates indirect GHG emissions. These emissions are a result of the energy used to supply, convey, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, the wastewater treatment process itself can directly emit both methane and nitrous oxide. Indoor and outdoor water use consumption for residential land uses was reduced by 20 percent pursuant to 2019 CalGreen requirements (see Appendix AQ). CalEEMod default water use consumption data was used for all other land use subtypes. Wastewater generation was similarly based on CalEEMod defaults and adjusted per 2019 CalGreen requirements.

### **SOLID WASTE EMISSIONS**

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. CalEEMod does not incorporate the 75 percent solid waste diversion rate as mandated by AB 341. Instead, CalEEMod uses a default solid waste diversion rate of 50 percent. Off-model adjustments were made to account for newer solid waste diversion rates (see Appendix AQ).

### **SERVICE POPULATION**

The service population of a project is the number of estimated residents and employees accommodated by the project. The 2030 and 2042 service population, as detailed in *Significance Thresholds* above, are used in this analysis.

As discussed in Section 4.12, *Population and Housing*, the population and employment of the Planning Area would increase by approximately 24,607 persons and 20,745 employees by 2042, assuming full build-out of the GPR/ZOU. Therefore, the growth in service population facilitated by the GPR/ZOU is 45,352 persons. To compare the estimated emissions to the locally-applicable, project-specific efficiency thresholds (see *Significance Thresholds* above) for 2030 and 2042, the per person GHG emissions for the GPR/ZOU were calculated by dividing total GHG emissions by this growth in service population.

**b. Project Impacts and Mitigation Measures**

**Threshold 1:** Would the GPR/ZOU generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

**IMPACT GHG-1 DEVELOPMENT ENVISIONED UNDER THE GPR/ZOU WOULD GENERATE BOTH SHORT-TERM AND LONG-TERM GHG EMISSIONS. IMPLEMENTATION OF THE GPR/ZOU WOULD RESULT IN GHG EMISSIONS EXCEEDING THE LOCALLY APPLICABLE, PROJECT-SPECIFIC EFFICIENCY THRESHOLDS. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

The GPR/ZOU land-use scenario concentrates the forecasted growth in population and employment in the region in urban areas (primarily in existing sphere of influence (SOI) areas of incorporated cities) and along developed corridors in the County. Regardless, development carried out under the GPR/ZOU would generate GHG emissions through construction and operational activities.

**Construction**

Construction activities associated with individual development projects envisioned under the GPR/ZOU would generate temporary short-term GHG emissions primarily due to the operation of construction equipment and truck hauling trips.

Construction emissions were quantified based on annualized growth assumptions as detailed in Section 4.7.3, Methodology. Construction emissions for the GPR/ZOU are shown in Table 4.8-2. Amortized total emissions are added to the operational emissions estimates to determine significance.

**Table 4.8-2 Amortized Construction Emissions**

Land Use	Annual Emissions (MT CO <sub>2</sub> e)
Single Family	494
Low Rise Multi	291
Mobile Home	393
Education	472
Government	357
Health Services	355
Hospitality	507
Industrial	480
Manufacturing	410
Office	273
Retail	265

Land Use	Annual Emissions (MT CO <sub>2</sub> e)
<b>Total</b>	<b>4,297</b>
<b>Amortized (over 30 years)</b>	<b>144</b>

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalents  
 Source: Appendix AQ

## Operation

Development facilitated by the GPR/ZOU would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. Implementation of the GPR/ZOU is estimated to result in GHG emissions of approximately 145,769 MT CO<sub>2</sub>e annually through the year 2042, as shown in Table 4.8-3. This total, divided by the estimated increase in service population (45,352 persons) from developments under the GPR/ZOU in 2042 would equate to an estimated 3.2 MT CO<sub>2</sub>e per capita. This is inconsistent with the 2042 locally applicable target of 0.8 MT CO<sub>2</sub>e to meet the long-term goal of carbon neutrality by 2045. Impacts would be potentially significant.

**Table 4.8-3 Combined Annual GHG Emissions**

Emission Source	Annual Emissions (MT of CO <sub>2</sub> e per year)
<b>Construction</b>	144
<b>Operational</b>	
Area	19,698
Energy	64,888
Mobile	33,040
Solid Waste	20,552
Water	7,447
<b>Total Emissions</b>	<b>145,769</b>
Service Population	44,352
Emissions per Service Person	3.2
<b>2042 Threshold</b>	<b>0.8</b>
<b>Threshold Exceeded?</b>	<b>Yes</b>

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalents  
 Source: Appendix AQ

## Mitigation Measures

The County shall add the following policies to the 2042 General Plan to reduce, minimize, or avoid significant adverse environmental impacts related to GHG emissions.

*GHG-1 Funding for a Greenhouse Gas Inventory and Preparation of a Climate Action Plan*

**Policy HS-H.10 Funding for a Greenhouse Gas Inventory and Preparation of a Climate Action Plan.**

The County shall seek a variety of sources including, but not limited to, grants, state funding, and or



impact fees to fund the preparation and implementation of a Fresno County specific Climate Action Plan. Once funding is available, the County shall proceed to prepare a Climate Action Plan.

### *GHG-2 Preparation and Implementation of a Climate Action Plan*

**Policy HS-H.11 Preparation and Implementation of a Climate Action Plan.** The County shall undertake a countywide Climate Action Plan (CAP) within two years of the adoption of General Plan Amendment No. 529 (General Plan Review) with the objective of meeting a GHG emissions reduction trajectory consistent with State law (currently codified in Health and Safety Code Section 38566 et seq. [Senate Bill 32] and Executive Order B-55-18).

### **Significance After Mitigation**

Mitigation Measure GHG-1 and GHG-2 would lead to the development and implementation of a County CAP to reflect the most recent GHG reduction regulations and establish a countywide GHG reduction target. In the absence of a CAP, this EIR establishes per service population GHG emission thresholds for the year 2042, specific to the GRP/ZOU update that is used for this CEQA document only. If implemented in accordance with Mitigation Measures GHG-1 and GHG-2, a revised target may be included in the CAP that incorporates more detailed and County specific inventory information than is provided within this EIR analysis of the GPR/ZOU. Buildout of the 2042 General Plan exceeds the established EIR threshold established for this EIR and impacts would be significant and unavoidable until a CAP is prepared and implemented under Mitigation Measure GHG-1 and GHG-2 to reflect the per service population targets in line with the reduction trajectory that meets statewide targets for emissions reductions. If and when a County CAP is prepared and implemented in accordance with statewide emissions targets, this impact may be reduced to a less than significant level. However, until the County prepares a CAP in accordance with Mitigation Measure GHG-1 and GHG-2, impacts from GHG emissions would remain significant and unavoidable.

<b>Threshold 2:</b> Would the Plan conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?
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**IMPACT GHG-2 THE GPR/ZOU WOULD NOT CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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### **2017 Scoping Plan**

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goals of SB 32 are to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the 2030 goals and further the State's ability to attain the 2050 goal. The 2017 Scoping Plan does not outline a strategy required to meet the 2050 goal as the technology needed to reach these goals is currently unavailable (CARB 2017).

The 2017 Scoping Plan's strategies that are applicable to the GPR/ZOU include reducing fossil fuel use, energy demand, and VMT; maximizing recycling and diversion from landfills; and increasing water conservation. The policies contained in the GPR/ZOU and listed in Section 4.3.2, *Air Quality, Regulatory Setting*, would be consistent with the goals in the 2017 Scoping Plan. Specifically, policies

in the GPR/ZOU include requirements for design of future projects (i.e. Policy HS-D.4), which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards and installing energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation, and EV charging stations. Furthermore, individual projects facilitated by the GPR/ZOU would be required to comply with solid waste diversion rates mandated by AB 341 and the State's recycling and composting requirements for commercial businesses under AB 341 and AB 1826. AB 341 requires businesses generating four or more cubic yards of solid waste per week to recycle and AB 1826 requires businesses generating two or more cubic yards of solid waste per week to recycle organic waste. Compliance with these state laws would maximize the recycling and solid waste diversion for development under the GPR/ZOU.

The GPR/ZOU would be served by Pacific Gas and Electric, which is required to increase its renewable energy procurement in accordance with SB 100 targets. SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. It requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

As stated in Impact GHG-1, the GPR/ZOU would facilitate development that does not exceed the locally applicable efficiency threshold of 4 MT CO<sub>2</sub>e per service population by 2030. While the Plan's 2042 service population emissions with construction emissions exceed the service population target of 0.8 MT CO<sub>2</sub>e by 2042, the threshold was developed based on the scoping plan emissions which does not account for temporary construction emissions amortized over the life of the project. Additionally, the amortized construction emissions do not take into account GHG emissions reductions to the standard fleet used due to the turn-over of older equipment between 2022 and 2042, nor does it take into account the use of alternative fueled equipment (such as electric) that may be required on a project-by-project basis to meet threshold requirements for Plan projects that may be required to undergo the CEQA process independent of this analysis. Given that the technology does not currently exist to reach carbon neutrality by 2045, and that construction emissions were not accounted for in the threshold emissions projections, the reduction of per service population emissions to 3.2 MT CO<sub>2</sub>e annually by 2042 when including plan related construction emissions, satisfies the emissions reduction requirement of below the 2030 goal of 4 MT CO<sub>2</sub>e per service population threshold and the Plan would be consistent with the 2017 Scoping Plan. Impacts would be less than significant.

### **FCOG 2018-2042 Regional Transportation Plan / Sustainable Communities Strategy**

The 2018-2042 RTP/SCS includes goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies (FCOG 2022). Table 4.8-4 summarizes policies contained in FCOG's RTP/SCS that are applicable to the GPR/ZOU and evaluates the GPR/ZOU's consistency with these policies.

**Table 4.8-4 GPR/ZOU Consistency with 2018-2042 RTP/SCS**

Strategy/Action	Project Consistency
<b>RTP/SCS Chapter 2 Policies</b>	
<p><b>Development of a regional transportation network which is environmentally sensitive, fosters sustainable regional growth, and helps reduce greenhouse gas emissions wherever possible.</b></p>	<p><b>Consistent.</b> The following GPR/ZOU policies would support this initiative.</p> <ul style="list-style-type: none"> <li>▪ TR-A.9 The County shall ensure that land development that affects roadway use or operation or requires roadway access to plan, dedicate, and construct required improvements consistent with the criteria in the Circulation Diagram and Standards section of the General Plan.</li> <li>▪ TR-A.13 The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities.</li> <li>▪ OS-G.7 The County shall encourage its departments to consider telecommuting programs as a trip reduction strategy.</li> </ul>
<p><b>Improve multimodal mobility and accessibility for all people.</b></p>	<p><b>Consistent.</b> The following GPR/ZOU policies would support this initiative.</p> <ul style="list-style-type: none"> <li>▪ TR-A-14 The County shall develop and maintain a program to construct bikeways and recreation trails in accordance with the adopted Regional Bicycle and Recreational Trail Master Plan.</li> <li>▪ TR-A.22 The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities.</li> <li>▪ TR-A.23 The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to safely serve bicyclists, transit passengers, and agricultural machinery operators.</li> <li>▪ OS-H.6 The County shall encourage the development of parks near public facilities such as schools, community halls, transit stops, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible.</li> <li>▪ EJ-B.3 The County shall collaborate with local school districts to ensure that all schools have safe and walkable routes to school.</li> <li>▪ EJ-B.4 The county shall encourage new multi-family, residential, commercial, and industrial developments to provide bicycle parking racks on-site.</li> </ul>
<p><b>Manage the transportation system in a manner designed to increase operational efficiency, conserve energy and space, reduce air pollution and noise, and provide for effective goods movement, safety, personal mobility and accessibility.</b></p>	<p><b>Consistent.</b> The following GPR/ZOU policies would support this initiative.</p> <ul style="list-style-type: none"> <li>▪ LU-F.1 The County shall encourage mixed-use development that locates residences near compatible jobs and services.</li> <li>▪ OS-G.3 The County shall participate with cities, surrounding counties, and regional agencies to address cross-jurisdictional and regional transportation and air quality issues.</li> <li>▪ OS-G.7 The County shall encourage its departments to consider telecommuting programs as a trip reduction strategy.</li> </ul>

Strategy/Action	Project Consistency
<p><b>Encourage infill development in areas that take advantage of remaining capacity in existing transportation facilities.</b></p>	<p><b>Consistent.</b> The following GPR/ZOU policies would support this initiative.</p> <ul style="list-style-type: none"> <li>▪ LU-F.3 The County shall promote development of higher-density housing in areas located along major transportation corridors and transit routes and served by the full range of urban services, including neighborhood commercial uses, community centers, and public services.</li> <li>▪ LU-F.4 The County shall selectively redesignate vacant land for higher-density uses or mixed uses to facilitate infill development.</li> <li>▪ LU-F.20 The County shall require residential project design to consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors.</li> </ul>

Source: FCOG 2017

The 2042 General Plan includes various goals and policies to directly and indirectly reduce per-capita GHG emissions in Fresno County, including Policies TR-A.22, LU-F.1, LU-F.3, and OS-G.3. These policies are intended to increase the use of alternative transportation, shorten vehicle trips throughout the County, and improve efficiency (e.g., water conservation), contributing to a decrease in VMT and energy use and, consequently, a decrease in GHG emissions.

The policies listed above promote mixed-use development, an enhanced pedestrian and bicycle network, improved access to and quality of public transportation, and infill and mixed-use housing. Such initiatives would encourage the use of alternative transportation and discourage vehicle trips. Because the GPR/ZOU would encourage infill development and promote the establishment and use of alternative transportation such as walking, bicycling, and public transit, the GPR/ZOU would contribute to long-term reductions in per capita GHG emissions, and therefore be consistent with FCOG’s 2018-2042 RTP/SCS. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### **c. Cumulative Impacts**

“Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355). The vast majority of projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change. Therefore, climate change analysis for the GPR/ZOU involved an analysis of whether a GPR/ZOU’s contribution toward an impact would be cumulatively considerable. The GPR/ZOU is cumulative in nature as it represents growth through the Planning Area over approximately the next 20 years. The GPR/ZOU is not one individual project, but a number of as yet undefined future projects that may occur under the GPR/ZOU. Therefore, cumulative impacts with respect to GHG emissions represents emissions associated with buildout of individual projects and thus cumulative

**General Plan Review and Zoning Ordinance Update**

emissions. Because emissions facilitated by the GPR/ZOU would exceed the locally applicable efficiency threshold as discussed above in Impact GHG-1, cumulative impacts with respect to GHG emissions would be significant and unavoidable.

## 4.9 Hazards and Hazardous Materials

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This section addresses impacts associated with exposure to hazards and hazardous materials from implementation of the General Plan Review and Zoning Ordinance Update (GPR/ZOU). Specifically, this analysis addresses impacts related to hazardous materials use and transportation, the accidental release of hazardous materials, new development or re-development on contaminated sites, air traffic hazards, and interference with emergency response and evacuation plans.

### 4.9.1 Setting

#### **a. Definition of Hazardous Materials**

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (California Code of Regulations, Title 22, Section 66261.10).

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosiveness, and reactivity. California Code of Regulations, Title 22, Sections 66261.20 through 66261.24 defines the aforementioned properties. The release of hazardous materials into the environment can contaminate soils, surface water, and groundwater supplies.

#### **Hazardous Materials Production and Disposal**

Fresno County Environmental Health implements the Hazardous Waste Generator Program and the Hazardous Waste Treatment/Tiered Permit Program to ensure that hazardous waste generated by Fresno County businesses is properly handled, recycled, treated, stored, and disposed. Hazardous waste generators in Fresno County include industries, businesses, public and private institutions, and households. The 2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan identified 1,678 small quantity hazardous waste generators and 150 large quantity hazardous waste generators in Fresno County (Fresno County 2018). As of June 2020, there were approximately 45 active leaking underground storage tanks (LUST) throughout Fresno County according to the State Water Resources Control Board (Fresno County 2018, 2021).

Disposal of hazardous waste in the county is handled in three locations. Safety Kleen Corporation operates two facilities in the county, one treatment facility located in Reedley and one collection facility located in the City of Fresno. The Reedley recycling facility handles cleaning solvents such as mineral spirits and immersion cleaners. Fresno County owns and operates the third facility, the Regional Permanent Household Hazardous Waste Facility, located in Kerman, to accommodate the disposal of household hazardous waste.

## **Hazardous Materials Transportation**

Hazardous materials are transported into and through Fresno County by two methods: truck and rail. The two major north-south roadways through the county are State Route 99 and Interstate 5. State Route 99 runs north and south through the central part of the county, passing through the city of Fresno and Interstate 5 runs north and south through the western part of the county along the base of the Coast Range foothills. Major rail lines are in the vicinity of State Route 99. These include Union Pacific and the Burlington Northern Santa Fe Railroads. Additionally, local service to urban and rural areas of the county is provided by State Routes 33, 41, 43, 63, 145, 168, 180, and 198.

The United States Department of Transportation (USDOT) has established nine hazardous materials classifications: explosive, compressed gases, flammable/combustible liquids, flammable solids, oxidizers, poisons, corrosive, radioactive, and miscellaneous. Transporters of such materials must adhere to routing requirements that are enforced by the California Highway Patrol. Transportation must take the most direct route, utilizing State or interstate highways whenever possible, and only roadways with sufficient width and load bearing capacity. All nine classes of hazardous materials, including hazardous waste, may be transported on Interstate 5. Materials that are poisonous by inhalation, explosives or high level radioactive may be transported on certain State Routes, including SR 33, 41, 63, 99, 180, and 198, but are subject to restrictions.

## **Agricultural Chemicals**

Fresno County contains more than 1.8 million acres of farmland. Many farms use agricultural chemicals such as pesticides and inorganic fertilizers. Sensitive receptors such as residential or school uses in proximity to agricultural uses that use pesticides may be exposed to increased health risks. Pesticide and herbicide application permits are renewed on an annual basis by the County Agricultural Commissioner. Regulated commercial applications of pesticides are documented on a monthly basis in an annual report submitted to the County. Disturbance of soils with residual quantities of agricultural chemicals due to historic agricultural use can also pose health threats.

## **Existing Hazardous Material Contamination**

Several existing contaminants, including asbestos, lead (in sources such as lead-based paint in buildings or in soil), and contaminated soil and groundwater are present in Fresno County. Asbestos may be present in structures built prior to 1973 when asbestos was banned. Similarly, lead may be present in paint that was sold prior to 1978 when it was banned or in soil that was contaminated by leaded gasoline or improperly discarded batteries. Existing soil contamination may also be present in urbanized residential areas of the County due to contamination from household hazardous wastes. The United States Environmental Protection Agency (USEPA) describes household hazardous waste as leftover household products that can catch fire, react, explode under certain circumstances, or that are corrosive or toxic. Household hazardous wastes are similar to the operational project-related hazardous materials described above, and include products such as paints, cleaners, oils, batteries, and pesticides (USEPA 2021).

The State Water Resources Control Board (SWRCB) GeoTracker website identifies Leaking Underground Storage Tanks (LUST) cleanup sites, Cleanup Program Sites (formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites), military sites, land disposal sites (landfills), permitted underground storage tank sites, Waste Discharge Requirement sites, Irrigated Lands Regulatory Program sites, and Department of Toxic Substances Control cleanup and hazardous waste permit sites. A search of the GeoTracker database was conducted on May 19, 2021

(SWRCB 2021). In addition, the Department of Toxic Substances Control’s (DTSC) EnviroStor database was searched on May 19, 2021, for cleanup sites in the County (DTSC 2021). According to these database searches, there are 60 open or active known hazardous waste/materials sites (including in incorporated Fresno County cities), 41 of which have been identified as LUST sites. These LUST sites and open or active hazardous waste/materials sites are listed in Table 4.9-1 and shown in Figure 4.9-1 . CalEPA’s list of solid waste disposal sites and active CDO and CAOs are also provided in Table 4.9-1 and shown in Figure 4.9-1.

**Table 4.9-1 Known Hazardous Materials and Waste Sites in the General Plan Area**

Site Name	Address <sup>1</sup>	Site ID	Site Type	Status/Pollutant
Abes' Liquor & Food	423 West Barstow, Clovis	T0601909308	LUST	Open - site assessment
Alamos Food Mart & Motel	36010 South Lassen Avenue, Huron	T10000016363	LUST	Open - site assessment
Auberry Garage	33246 Auberry Road, Auberry	T0601920015	LUST	Open - eligible for closure
Big g's Automotive Center	1091 N Street, Firebaugh	T10000007687	LUST	Open - site assessment
Bubble Clean	443 Shaw Ave W, Clovis	T0601900620	LUST	Open - remediation
C & T Service Station	36560 Lassen, Huron	T0601900553	LUST	Open - remediation
Camacho Property	36781 W. Shaw Ave, Firebaugh	T10000007762	LUST	Open – site assessment
Chevron (RV Jensen Inc)	33105 Auberry Rd, Auberry	T0601991433	LUST	Open – eligible for closure
Colorado's Auto Care	1157 Draper St, Kingsburg	T0601900590	LUST	Open – site assessment
Country Corner Market	22015 Adams E, Reedley	T0601991631	LUST	Open – site assessment
D's Mini Mart	22023 Colorado W, San Joaquin	T0601900637	LUST	Open – site assessment
E-Z Go Mini Mart	518 Shields Ave W, Fresno	T0601900516	LUST	Open – site assessment
Family Express Food & Liquor	4205 East Butler, Fresno	T0601953207	LUST	Open – remediation
Former Britton Fertilizer	7155 Washoe Ave N, Firebaugh	T10000003149	LUST	Open – eligible for closure
Fuel Depot (formerly Shell)	36270 Lassen, Huron	T0601900571	LUST	Open – site assessment
Golden State Market	3269 Golden State Blvd, Fresno	T0601946034	LUST	Open – eligible for closure
Gonzales Auto Service	940 Park Blvd, Orange Cove	T0601900594	LUST	Open – remediation
Italo's Mini Mart	785 N St, Firebaugh	T0601900394	LUST	Open – site assessment
Kactus Korner	24611 Kings Canyon E, Reedley	T0601900444	LUST	Open – site assessment
Park Blvd Gas	714 Park Blvd, Orange Cove	T0601900586	LUST	Open – remediation
Private Farm	10098 Manning Ave W, Raisin City	T0601900015	LUST	Open – site assessment
Private Residence	Private Residence, Fresno	T0601900275	LUST	Open – site assessment
Private Residence	Private Residence, Fresno	T0601900579	LUST	Open – site assessment
Private Residence	Private Residence, Fresno	T0601900332	LUST	Open – site assessment



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Site Name	Address <sup>1</sup>	Site ID	Site Type	Status/Pollutant
Ralphs Triangle Service	36374 Lassen S, Huron	T0601900685	LUST	Open – site assessment
Ramirez Property	1435 9 <sup>th</sup> St, Firebaugh	T0601900591	LUST	Open – site assessment
Rancheria Enterprises II	62311 Huntington Lake Road, Lakeshore	T10000002321	LUST	Open – eligible for closure
Rhodes, Inc.	609 Reed, Reedley	T0601956337	LUST	Open – remediation
Safety Kleen	3561 Maple S, Fresno	T0601900369	LUST	Open – inactive
Salwasser 2014 Trust	415 S Dickenson Avenue, Fresno	T10000016745	LUST	Open – site assessment
Truck City	2768 Railroad S, Fresno	T0601900563	LUST	Open – eligible for closure
Union 76	Colorado & Main, San Joaquin	T0601900236	LUST	Open – site assessment
Vacant Building	812 Oller St, Mendota	T0601900210	LUST	Open – site assessment
Valley Gas	2139 Elm S, Fresno	T0602991950	LUST	Open – remediation
Visa Petroleum	2414 Monterey, Fresno	T10000006494	LUST	Open – remediation
Washington Elementary School	1599 5 <sup>th</sup> St, Mendota	T0601900113	LUST	Open – eligible for closure
Westside Ford Lincoln Mercury	1503 Eighth Streete, Firebaugh	T10000011142	LUST	Open – site assessment
Wish-I-Ah Care Center (Admin Bldg)	35680 N. Wish-I-Ah Rd, Auberry	T10000004965	LUST	Open – site assessment
Wish-I-Ah Care Center (Annex Bld)	35680 North Wish-I-Ah Road, Auberry	T10000005548	LUST	Open – site assessment
Wish-I-Ah Care Center (Canyon View Bldg)	35680 North Wish-I-Ah Road, Auberry	T10000005549	LUST	Open – site assessment
Xpress Mart	5790 N. Fresno Street, Fresno	T10000014374	LUST	Open – site assessment
Atlas Asbestos Mine	20 miles NW of Coalinga-Los Gatos Ck Rd, Coalinga	10320044	Federal superfund – listed	Active – land use restrictions as of 1/1/1983
Fresno Sanitary Landfill	SW Corner Of Jensen & West Avenues, Fresno	10490097	Federal superfund – listed	Active – land use restrictions as of 1/1/1989
Purity Oil Sales, Inc	3265 South Maple Avenue, Malaga	10500005	Federal superfund – listed	Active as of 1/1/1985
Selma Treating Company	1735 Dockery Ave & Adjoining, Selma	10240051	Federal superfund – listed	Active – land use restrictions as of 1/1/1983
City Of Coalinga Asbestos Site	Area SE of Lucille Avenue & Hwy 198, Coalinga	10330041	Federal superfund – delisted	Certified / operation & maintenance – land use restrictions as of 6/25/1991
Coalinga Asbestos Mine	Pine Canyon, 15 miles NW of Coalinga, Coalinga	10140003	Federal superfund – delisted	Certified / operation & maintenance – land use restrictions as of 6/30/1994

Environmental Impact Analysis  
**Hazards and Hazardous Materials**

Site Name	Address <sup>1</sup>	Site ID	Site Type	Status/Pollutant
T H Agriculture & Nutrition, L.L.C.	7183 East Mckinley Avenue, Fresno	10280334	Federal superfund – delisted	Certified / operation & maintenance – land use restrictions as of 1/12/2006
Britz Fertilizers, Inc – Five Points	21817 South Coalinga Road, Five Points	10280077	State response	Certified / operation & maintenance – land use restrictions as of 2/19/2004
Commercial Electroplaters	2940 South Elm Avenue, Fresno	10340074	State response	Active as of 4/28/1993
FMC Corporation – Fresno	2501 South Sunland Avenue, Fresno	10280013	State response	Active as of 1/1/1985
Fresno Air Terminal/Old Hammer Field (J09CA0823)	Mckinley And Clovis Avenues, Fresno	10450005	State response	Active as of 1/1/1990
H S Mann Metal Waste Company	5404 South Del Rey Avenue, Del Rey	10330038	State response	Active – land use restrictions as of 1/1/1984
Mount Owen Rifle Range- IR/MMRP (J09CA0877)	Approximately 6 miles Northeast of Clovis, Clovis	71000033	State response	Active as of 5/20/2008
South Fresno PCE Groundwater Plume	2376 S. RAILROAD AVENUE, Fresno	60000706	State response	Active as of 10/17/2003
South Fresno Regional Groundwater Plume	North of Church Avenue at South East Ave, Fresno	10400005	State response	Active as of 11/26/2002
Tri-Air, Incorporated	915 Tenth Street, Firebaugh	10070021	State response	Active – land use restrictions as of 5/1/1986
Valley Foundry And Machine Works	2510 South East Avenue, Fresno	10390001	State response	Active as of 5/16/2011
Vendo Company, The	7209 North Ingram Avenue, Pinedale	10590001	State response	Active – land use restrictions as of 10/1/1990
Weir Floway Inc.	2494 South Railroad Avenue, P.O. Box 164, Fresno	10340137	State response	Certified / operation & maintenance – land use restrictions as of 6/11/2015
Orange Cove WWTF	1805 Monson Avenue, Orange Cove	273127	CDO	effective 1/29/2004
Malaga CWD WWTF	3749 South Maple Avenue, Fresno	273180	CDO	effective 12/4/2014
Harris Ranch Processing Plant	16277 Mccall, Selma	229740	CDO	effective 2/24/2017
Kerman WWTF	15480 Church, Kerman	234841	CDO	effective 9/14/2007
O’Neill Vintners Reedley Winery	8418 Lac Jac, Parlier	252286	CDO	effective 3/28/2014
Riverbend Mobile Home Park	17604 East Kings Canyon Road, Sanger	257951	CDO	effective 4/27/1990
San Joaquin WWTF	23599 Manning, San Joaquin	273132	CDO	effective 8/2/2007

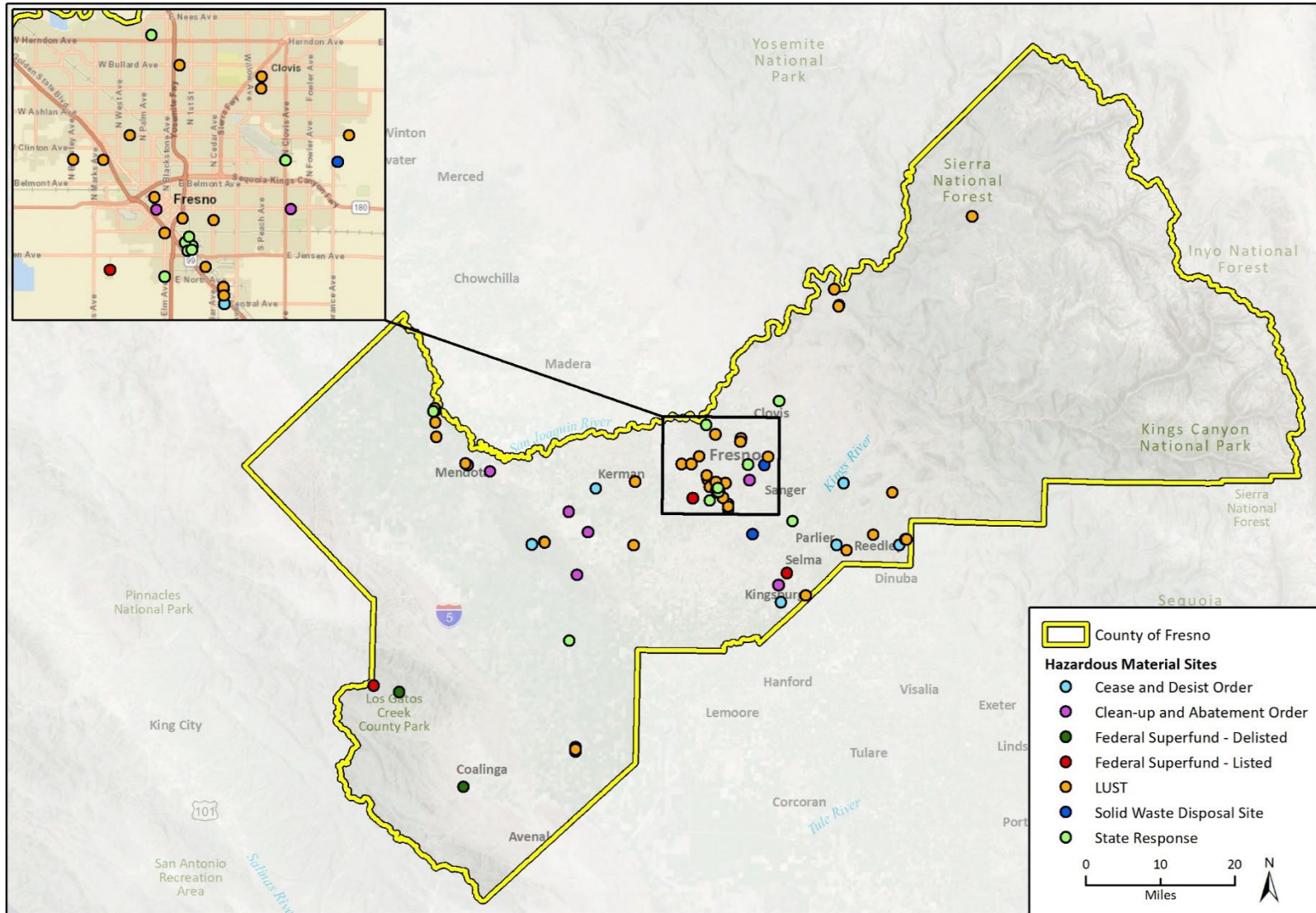
County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Site Name	Address <sup>1</sup>	Site ID	Site Type	Status/Pollutant
Wish I AH Care Center WWTF	35680 Wish I Ah, Auberry	273158	CAO	effective 6/9/1999
Helm Fertilizer Plant	12688 Colorado, Helm	230023	CAO	effective 4/29/1991
USA SS #96	5698 Kings Canyon, Fresno	269508	CAO	effective 5/17/1991
Colorado Auto Care	1157 Draper Street, Kingsburg	835068	CAO	effective 9/20/2007
Raisin City Oil Field, Surfluh 14 Lease	Raisin City Oil Field, Kerman	813689	CAO	effective 6/4/2015
American Avenue Municipal Solid Waste Landfill	18950 American, San Joaquin	205463	CAO	effective 1/29/1998
former ROCHA & SONS DAIRY	9389 Kamm, Selma	253104	CAO	effective 6/25/2001
G Street Lamoure's Fresno	1304 G Street, Fresno	797417	CAO	effective 10/7/2011
Former Spreckels Mendota Facility	29400 Whitesbrige, Mendota	240340	CAO	effective 4/6/2018
McKinley Ave Yard, T.H. Agriculture and Nutrition	7183 E McKinley Ave, Fresno	5D100300001-01	Solid Waste Disposal Site	
Fowler City Landfill		5D100325N01-01	Solid Waste Disposal Site	

Notes: CDO = Cease and Desist Order; CAO = Clean-up and Abatement Order

<sup>1</sup>Includes sites in incorporated Fresno County cities. Source: DTSC 2021; SWRCB 2021; CalEPA 2021a, 2021b

**Figure 4.9-1 Location of Open and Active Known Hazardous Materials and Waste Sites**



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 Additional data provided by SWRCB and DTSC, 2021; CalEPA, 2021a, CalEPA, 2021b.

Fig 4.8-1 Hazardous Material Sites

## **b. Hazards Regulatory Setting**

### **Federal**

#### *U.S. Environmental Protection Agency*

USEPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. Applicable Federal regulations pertaining to hazardous materials are contained in the Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR

The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et. Seq.)
- Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99 499)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. USEPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

### **HAZARDOUS SUBSTANCES**

Hazardous substances are a subclass of hazardous materials. They are regulated under CERCLA and SARA. Under CERCLA, USEPA has authority to seek the parties responsible for releases of hazardous substances and ensure their cooperation in site remediation. CERCLA also provides Federal funding (the “Superfund”) for remediation.

#### *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*

CERCLA, commonly known as Superfund, established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. Under CERCLA, USEPA has the authority to hold parties responsible for releases of hazardous substances and require their cooperation in site remediation.

#### *SARA Title III, the Emergency Planning and Community Right to Know Act*

SARA requires companies to declare potential toxic hazards to ensure that local communities can plan for chemical emergencies. USEPA maintains a National Priority List of uncontrolled or abandoned hazardous waste sites identified for priority remediation under the Superfund program. USEPA also maintains the CERCLIS database, which contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation.

## **HAZARDOUS WASTE**

Hazardous wastes, although included in the definition of hazardous materials and hazardous substances, are regulated separately under the Resource Conservation and Recovery Act (RCRA). A waste is legally considered hazardous if it is classified as ignitable, corrosive, reactive, or toxic. Title 22, Section 66261.24 of the California Code of Regulations (CCR) (i.e., 22 CCR 66261.24) defines characteristics of toxicity.

### *Resource Conservation and Recovery Act (RCRA)*

Under RCRA, USEPA regulates hazardous waste from the time that the waste is generated until its final disposal. RCRA also gives USEPA or an authorized State the authority to conduct inspections to ensure that individual facilities comply with regulations, and to pursue enforcement action if a violation is discovered. USEPA can delegate its responsibility to a state if the state's regulations are at least as stringent as the Federal regulations. RCRA was updated in 1984 by the passage of the Federal Hazardous and Solid Waste Amendments, which required phasing out land disposal of hazardous waste. Title 22, Section 66261.24 of the CCR defines characteristics of toxicity, which is used to help guide the Federal program.

### *The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*

FIFRA (7 USC 136 et seq.) provides Federal control of pesticide distribution, sale, and use. USEPA was given authority under FIFRA not only to study the consequences of pesticide usage, but also to require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered (licensed) by USEPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment.

### *Occupational Health and Safety Administration (OSHA)*

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for enforcement and implementation of Federal laws and regulations pertaining to worker health and safety. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (29 CFR 1910.120).

### *Hazardous Waste Operations and Emergency Response (HAZWOPER)*

HAZWOPER requirements include Federal regulations that involve procedures for clean-up operations required by a governmental body, whether Federal, State, local, or other, involving hazardous substances that are conducted at uncontrolled hazardous waste sites. This includes the USEPA's National Priority Site List (NPL), State priority site lists, sites recommended for the USEPA NPL, and other initial investigations of government-identified sites, which are conducted before the presence or absence of hazardous substances has been ascertained. A person who is engaged in work with any potential for exposure to hazardous substances must comply with HAZWOPER regulations.

## **State**

### *The Department of Toxic Substances Control (DTSC)*

DTSC is a division of California Environmental Protection Agency (CalEPA) and has primary regulatory responsibility over hazardous materials in California, working in conjunction with the USEPA to enforce and implement hazardous materials laws and regulations. DTSC can delegate enforcement responsibilities to local jurisdictions.

### *The Hazardous Waste Control Act*

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. The State program is similar to, but more stringent than, the Federal program under RCRA. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in California Code of Regulations (CCR) Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State called the Cortese List.

### *Unified Program*

CalEPA has established a unified hazardous waste and hazardous materials management regulatory program (Unified Program) as required by Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental programs under CalEPA, the State Water Resources Control Board (SWRCB), including the Regional Water Quality Control Boards (RWQCB) in each region of the state, State Office of Emergency Services, and the State Fire Marshal:

- Underground Storage Tank program
- Hazardous materials release response plans and inventories
- California Accidental Release Prevention Program (CalARPP)
- Above ground Petroleum Storage Act requirements for spill prevention, control, and countermeasure plans
- California Uniform Fire Code (UFC) hazardous material management plans and inventories

The five environmental programs in the Unified Program are implemented at the local level by local agencies, known for this purpose as Certified Unified Program Agencies (CUPA). CUPAs carry out the responsibilities previously handled by approximately 1,300 State and local agencies, providing a central permitting and regulatory agency for permits, reporting, and compliance enforcement.

### *Regional Water Quality Control Board (RWQCB)*

The RWQCB is authorized by the Porter Cologne Water Quality Control Act of 1969 to protect the waters of the State. The RWQCB provides oversight for sites where the quality of groundwater or surface waters is threatened. Extraction and disposal of contaminated groundwater due to investigation/remediation activities or due to dewatering during construction require a permit from the RWQCB if the water is discharged to storm drains, surface water, or land.

*California Department of Pesticide Regulations, Department of Food and Agriculture, and the Department of Public Health*

The California Department of Pesticide Regulations (DPR), a division of CalEPA, in coordination with the California Department of Food and Agriculture (CDFA), a division of Measurement Standards and the California Department of Public Health (CDPH) have the primary responsibility to regulate pesticide use, vector control, food, and drinking water safety. CCR Title 3 requires the coordinated response between the County Agricultural Commissioner and SBDEH to address the use of pesticides used in vector control for animal and human health on a local level. DPR registers pesticides, and pesticide use is tracked by the County. Title 22 is used also to regulate both small (less than 200 connections regulation by the SBC Water District) and large CDPH water systems.

*California Department of Industrial Relations, Division of Occupational Health Administration*

The California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal/OSHA), assumes primary responsibility for developing and enforcing workplace safety regulations in the State. Cal/OSHA standards are more stringent than Federal OSHA regulations and are presented in CCR Title 8. Standards for workers dealing with hazardous materials include practices for all industries (General Industry Safety Orders); specific practices are described for construction, hazardous waste operations, and emergency response. Cal/OSHA conducts on site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

## **Local**

*Fresno County Area Plan for Emergency Response to Hazardous Materials Incidents*

The County of Fresno Environmental Health Division, CUPA Program, prepared the 2016 Area Plan for Emergency Response to Hazardous Materials Incidents pursuant to California Health and Safety Code (HSC), Division 20, Chapter 6.95, Section 25503(c). The statute requires administering agencies to establish an area plan for emergency response to a release or threatened release of a hazardous material within its jurisdiction.

*Fresno County General Plan Review*

The proposed 2042 Fresno County General Plan contains goals, policies, and implementation programs aimed to minimize the risks associated with hazardous materials in Fresno County. Goal HS-F in the Health and Safety Element, and included below, intends to minimize the risks resulting from the use, transport, treatment and disposal of hazardous materials and hazardous waste. Policies to achieve the goal, listed below, include building and operation standards as well as requiring permitting for facilities handling hazardous materials, formalizing emergency response, and conducting site investigations before development of sites suggested to be impaired, establishing demolition requirements, ensuring compliance with state and federal laws and promotion of household hazardous waste collection programs. Implementation programs include County review of discretionary permits which involve hazardous waste or materials, development and operation of a household hazardous waste facility and County review of plans to mitigate groundwater and soil contamination prior to development.



**Goal HS-F** To minimize the risk of loss of life, injury, serious illness, and damage to property resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous wastes.

**Policy HS-F.1:** Hazardous Materials Facilities. The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.

**Policy HS-F.2:** Hazardous Waste Applications. The County shall require that applications for discretionary development projects that will use hazardous materials or generate hazardous waste in large quantities include detailed information concerning hazardous waste reduction, recycling, and storage.

**Policy HS-F.3:** Hazardous Materials Incident Response Plan. The County, through its Hazardous Materials Incident Response Plan, shall coordinate and cooperate with emergency response agencies to ensure adequate countywide response to hazardous materials incidents.

**Policy HS-F.4:** Soil and Groundwater Contamination Reports. For redevelopment or infill projects or where past site uses suggest environmental impairment, the County shall require that an investigation be performed to identify the potential for soil or groundwater contamination. In the event soil or groundwater contamination is identified or could be encountered during site development, the County shall require a plan that identifies potential risks and actions to mitigate those risks prior to, during, and after construction.

**Policy HS-F.5:** Demolition Standards. The County shall require that demolition of structures where friable asbestos or other hazardous materials could be released into the environment comply with applicable regulations and standards.

**Policy HS-F.6:** Timely Site Cleanup. The County shall work cooperatively with the State Department of Toxic Substances Control and Regional Water Quality Control Board to promote the timely and efficient cleanup of contaminated sites under the regulatory oversight of these agencies.

**Policy HS-F.8:** Household Hazardous Waste Collection Programs The County shall encourage and promote household hazardous waste information and collection programs.

#### *Fresno County Multi-Jurisdictional Hazard Mitigation Plan*

The Multi-Jurisdictional Hazard Mitigation Plan was developed to better guide hazard mitigation planning in the county. The Plan discusses risks associated with human-caused hazards such as hazardous waste. Facilities that involve hazardous material or hazardous waste are identified, counted and located. Additionally, the Plan identifies sites of previous hazardous material release and previous transportation incidents involving hazardous waste and past hazardous materials incidents. The Plan goes on to establish goals and policies aimed to mitigate potential hazards throughout Fresno County. Policies include requiring permitting and specialized building design and regulation for handling hazardous materials, cooperation with state and federal agencies with expertise in hazardous materials, assessment and remediation of any contamination, disaster and

emergency preparedness and public information. The Plan also established hazardous material safeguards for the County.

#### *Fresno County Municipal Code*

Chapter 8.60, Storage of Hazardous Substances in Underground Tanks, was adopted to comply with the provisions of Chapter 6.7 of Division 20 of the California Health and Safety Code, which govern the construction, maintenance, testing and use of underground tanks used for the storage of hazardous substances. Chapter 14.24.180 mandates that in the event of a release of hazardous material discharge into stormwater, storm drain system, or waters of the United States, must notify emergency response officials immediately.

#### *Fresno County Agricultural Commissioner*

The regulation of pesticide storage, application, and waste disposal is under the jurisdiction of the County Agricultural Commissioner; the Commissioner implements the CalEPA Department of Pesticide Regulation (DPR) program. Regulatory functions are mandated by state and federal laws and regulations and by local measures and ordinances by the Fresno County Board of Supervisors.

### **c. Airports and Aircraft Hazards**

Fresno County's aviation system consists of six publicly owned airports, three public use/private owned airports, one public use privately owned facility, 13 privately-owned and used airports, and nine heliports. Fresno Yosemite International Airport is the busiest in Fresno County, serving over 850,000 passengers per year. Specific land use policy plans have been developed for six airports in Fresno County: Reedley Municipal Airport, Fresno Yosemite International Airport, Coalinga Airport, Harris Ranch Airport, Sierra Sky Park Airport, and Fresno Chandler Executive Airport. In addition, Fresno Council of Government's (FCOG) Airport Land Use Commission (ALUC) prepared a Fresno County Airport Land Use Compatibility Plan (ALUCP) in December 2018 to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents; protect the public from the adverse effects of airport noise; and ensure that no structures or activities encroach upon, or adversely affect, the use of navigable airspace (Fresno County 2021). The ALUCP replaces all previous land use plans for public use Fresno County airports.

### **d. Emergency Response Planning**

#### **Mutual and Automatic Aid**

Mutual aid is defined as the provision of resources (personnel, apparatus, and equipment) to a requesting jurisdiction already engaged in emergency operations, which have exhausted or will shortly exhaust local resources. Mutual aid was designed as a cost-effective solution to help mitigate this shortage of resources as well as providing for those rare major emergencies that borer upon or are actual disasters. Mutual aid is simply a plan designed to allow fire agencies to assist each other during situations when an agency cannot muster sufficient resources to bring a successful completion to the incident. Mutual aid is provided using a progressive system, commencing with the closest neighboring agencies and working out from the incident until all resource needs are fulfilled (Fresno County 2021).

The Fresno County Fire Protection District participates in mutual aid and response agreements with other agencies to obtain enhanced levels of service and coverage. These include cities and special

districts in Fresno County, adjacent counties, CAL FIRE, and the United States Army Corps of Engineers (Fresno County 2021).

Automatic aid is a relatively new concept in the fire service. It is the process whereby the closest piece of emergency apparatus responds to a call for assistance regardless of jurisdiction. As city boundaries continue to expand, County fire stations find themselves surrounded by annexed neighborhoods and in a position to assist the cities with response in the area surrounding them. Conversely, the city fire stations constructed to mitigate development allow the County Fire Department to relocate its equipment and stations to locations better serving the county residents by automatically responding to county areas to which they are closer. In this way, automatic aid also helps agencies become more cost effective by doing away with duplication of services (Fresno County 2021).

### **Office of Emergency Services**

The Fresno County Office of Emergency Services (OES) is located within the Department of Public Health, Environmental Health Division. It coordinates planning, response, and recovery efforts for disasters occurring within the unincorporated area of the County and develops the Fresno County Operational Area Master Emergency Services Plan. This plan serves as a guide for the County's response to emergencies/disasters and works to ensure the most effective and economical use of all resources, materials, and manpower, for the maximum benefit and protection of affected populations (Fresno County 2021).

In 1995, the Fresno County Board of Supervisors established Fresno County OES as the County's Operational Area Lead Agency responsible for maintaining communication to maintain and enhance the community's ability to respond to disastrous events. During disasters, these communications concern situation reports; damage assessments; declarations of emergency for local, state, and federal agencies; mutual aid requests; and disaster cost reimbursement application procedures and coordination. Additionally, Fresno County OES collects and circulates information on training opportunities, emergency alerting, communications systems, emergency plans, resources directories, and disaster response equipment (Fresno County 2021).

### **Emergency Medical Services Division**

The Emergency Medical Services Division manages the Central California Emergency Medical Services (CCEMS) Agency and its Emergency Medical Services Communications Center. Through the Communications Center, CCEMS provides the only ambulance dispatch service for all ambulance requests in Fresno, Kings, and Madera Counties. CCEMS also provides fire dispatch services to the City of Fresno and the City of Clovis Fire Departments. Staff includes 38 dispatchers and nine dispatch supervisors (Fresno County 2021).

### **Ambulance Service**

In 2016, Fresno County was served by six ambulance services: American, which serves the Fresno/Clovis areas; Coalinga, which serves the Coalinga area; Selma, which serves the Selma area; Sanger, which serves the Sanger area; Sequoia Safety Council, which serves the Reedley area; and Kingsburg, which serves the Kingsburg region. Table 4.9-2 lists ambulance service providers. There are 19 First Responder Agencies in the County. Table 4.9-3 lists the First Responder Agencies and their service areas. Fire Protection Districts throughout the county provide paramedic or emergency medical response. This service is critical, especially for children and the elderly.

The service population for the various agencies ranges from 20,000 in the Kingsburg region to 450,000 in the Fresno/Clovis area. The average response time for emergency calls ranges from five minutes in the Sanger area to eight minutes in the Fresno/Clovis area. The average number of runs per day varies from three in the Kingsburg area to 185 in the Fresno/Clovis area.

**Table 4.9-2 Ambulance Service Providers: Fresno County 2016**

Agency	Address	Area Served
American Ambulance	2911 E. Tulare St., Fresno, CA. 93721	Fresno/Clovis
Coalinga City Fire	300 W. Elm Ave., Coalinga, CA. 93210	Coalinga
Kingsburg City Fire	1880 Bethel, Kingsburg, Ca. 93631	Kingsburg
Sanger City Fire Dept.	1700 Seventh St, Sanger, CA 93657	Sanger
Selma City Fire Dept.	2857 A Street, Selma, CA. 93662	Selma
Sequoia Safety Council	500 E. 11th Street, Reedley, CA 93654	Reedley

Source: Fresno County Department of Public Health, Emergency Medical Services, Fresno County Operations, <http://www.co.fresno.ca.us/DivisionPage.aspx?id=7590>; calls to provider agencies.

**Table 4.9-3 First Responder Agencies**

Agency	Area Served
Auberry Volunteer Fire	Auberry
Bald Mountain Volunteer Fire	Auberry Road and Bald Mt. Road, 2 miles Southwest of Shaver Lake
Cal-Fire/Fresno Co. Fire Protection District	Fresno County
Clovis City Fire Department	Clovis
Coalinga City Fire Department	Coalinga
Firebaugh Volunteer Fire Department	Firebaugh
Fowler Fire Department	Fowler
Fresno City Fire Department	Fresno
Hume Lake Volunteer Fire and Rescue Co.	Hume Lake/SR 180
Huntington Lake Volunteer Fire	Huntington Lake Northeast of Big Creek
Kingsburg City Fire	Kingsburg
Laton Volunteer Fire	Laton
Mountain Valley Volunteer Fire	Areas of SR 180, SR 245, and SR 63 near Dunlap
North Central Fire Protection District	Kerman
Orange Cove Fire District	Orange Cove
Reedley City Fire Department	Reedley
Riverdale Volunteer Fire Department	Riverdale
Sanger City Fire Department	Sanger
Selma City Fire Department	Selma
Shaver Lake Volunteer Fire	Shaver Lake

Source: Fresno County Department of Public Health, Emergency Medical Services, Fresno County Operations, <http://www.co.fresno.ca.us/DivisionPage.aspx?id=7590>, accessed March 18, 2016.

Medical care delivered by paramedics in the field is accomplished primarily through standing orders, however, some medications or procedures require the paramedic to contact the base hospital

physician for consultation. Unstable patients are taken to the closest most appropriate hospital, which may include a receiving hospital, trauma center, burn center, or pediatric facility. Stable patients may be taken to the facility of their choice.

## **e. Emergency Response Regulatory Setting**

### **Federal**

Homeland Security Presidential Directive-5, issued by President George W. Bush, directs the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). This system provides a consistent nationwide template to enable Federal, State, local, and tribal governments and private-sector and nongovernmental organizations to work together effectively and efficiently to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity, including acts of catastrophic terrorism. Fresno County has acted to reduce potential damages from disaster events by adopting and complying with the National Incident Management System (NIMS) standards. Fresno County formally adopted NIMS in December 2013 to facilitate better coordination with internal and external organizations, and to meet federal grant program requirements (Fresno County 2017).

### **State**

The Emergency Services Act is the State of California's basic law establishing the foundation for emergency response. This Act is contained in the California Government Code beginning with Section 8550. The Act gives the Governor and chief executives of all political subdivisions emergency powers; establishes the Governor's Office of Emergency Services; assigns emergency functions to State agencies; provides for mutual aid; and authorizes such organizations as are necessary to carry out the provisions of the law. This regulatory area applies to OES only. Division 2.5 of the Health and Safety Code provides the statutory authority and describes the duties of the State Emergency Medical Services Authority and local (County) EMS agencies for the administration and planning of EMS systems. This statute requires the local county EMS agencies to "plan, implement, and evaluate an emergency medical services system consisting of an organized pattern of readiness and response services based on public and private agreements and operational procedures." As pertains to EMS planning activities, the State EMS Authority has developed planning and implementation guidelines which are used by county EMS Agencies as a planning tool by which to measure and improve all aspects of their EMS system. As set forth in the EMS Act, these EMS System Standards and Guidelines are comprised of the following topic areas: (1) Manpower and training; (2) Communications; (3) Transportation; (4) Assessment of hospitals and critical care centers; (5) System organization and management; (6) Data collection and evaluation; (7) Public information and education; and (8) Disaster response.

## **4.9.2 Impact Analysis**

### **a. Methodology**

This section describes the potential environmental impacts of the GPR/ZOU relevant to hazards and hazardous materials. The impact analysis is based on an assessment of baseline conditions for the Planning Area, including locations of hazardous materials use and storage, existing contaminated sites, air traffic hazards, and emergency response and evacuation plan requirements, as described in Subsection 4.8.1, *Setting*. This analysis identifies potential impacts based on the predicted

interaction between the affected environment and construction, operation, and maintenance activities related to the predicted development that would occur under the GPR/ZOU. This section describes impacts in terms of location, context, duration, and intensity.

### **b. Significance Thresholds**

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the GPR/ZOU may have a significant adverse impact if it would do any of the following:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires

Threshold 7 pertains to wildland fire hazards. Wildfire hazards and impacts are evaluated in Section 4.17, *Wildfire*.

### **c. Project Impacts and Mitigation Measures**

<b>Threshold 1:</b> Would the GPR/ZOU create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
<b>Threshold 2:</b> Would the GPR/ZOU create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**IMPACT HAZ-1      IMPLEMENTATION OF THE GPR/ZOU COULD RESULT IN AN INCREMENTAL INCREASE IN THE OVERALL ROUTINE TRANSPORT, USE, STORAGE, AND DISPOSAL OF HAZARDOUS MATERIALS WITHIN THE COUNTY AND INCREASE THE RISK OF RELEASE OF HAZARDOUS MATERIALS. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS RELATED TO THE HANDLING AND STORAGE OF HAZARDOUS MATERIALS AND COMPLIANCE WITH 2042 GENERAL PLAN POLICIES WOULD MINIMIZE THE RISK OF SPILLS AND THE PUBLIC'S POTENTIAL EXPOSURE TO THESE SUBSTANCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Implementation of the GPR/ZOU would facilitate development in the County, including more intense use of land throughout the unincorporated County near incorporated cities that may extend

their boundaries or spheres of influence. Development under the GPR/ZOU would be primarily residential, commercial, office, and industrial uses. Residential and office land use typically do not use or require the handling of large quantities of hazardous materials.

The GPR/ZOU would encourage most new office or commercial development to be located near major transportation corridors and concentrations of residential uses through 2042 General Plan policies and land uses, as well as the ZOU. New office development may serve as buffers between residential uses and higher-intensity commercial uses. New residential development could be introduced in proximity to existing and/or future industrial and commercial development throughout unincorporated Fresno County through 2042 General Plan and land uses, as well as the ZOU.

The precise increase in hazardous materials transported within the County as a result of the GPR/ZOU cannot be predicted because specific projects have not been proposed allowing for such analysis. This analysis focuses on the potential nature and magnitude of risks associated with the accidental release, storage, transportation, and use of hazardous materials used during operations of typical residential, industrial, and retail-commercial development projects. As described below, compliance with applicable federal and State laws related to the transport, storage and handling of hazardous materials would reduce the likelihood and severity of accidents associated with the use of hazardous materials.

Exposure of persons to hazardous materials could occur through improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; demolition of existing buildings; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of material that is potentially hazardous; in others, it is the amount of material that could present a hazard. However, the 2042 General Plan contains almost no changes to land use designations compared with the current General Plan. Therefore, the 2042 General Plan would not expose more people to hazardous materials than under the current General Plan.

Whether a person exposed to a hazardous substance would suffer adverse health effects depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics such as age, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer. Existing hazardous materials regulations were established at the State level to ensure compliance with federal regulations in order to reduce the risk to human health and the environment from the routine use of hazardous substances.

Although the overall quantity of hazardous materials and waste generated in the County could incrementally increase as a result of implementation of the GPR/ZOU, all new developments that handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by the USEPA, State, and Fresno County related to storage, use, and disposal of hazardous materials.

The transport of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from new residential and retail-commercial sites in Fresno County under the GPR/ZOU. However, appropriate documentation for all hazardous waste transported in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code. In addition, individual developers would be required to comply with all applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to, Title 49 of the Code of Federal Regulations.

California Building Code requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with applicable federal and State laws related to the storage of hazardous materials would maximize containment (through safe handling and storage practices described above) and provide for prompt and effective cleanup if an accidental release occurs.

For those employees that would work with hazardous materials, the amounts of hazardous materials that are handled at any one time are generally relatively small, reducing the potential consequences of an accident during handling. Further, specific project activities would be required to comply with federal and State laws to eliminate or reduce the consequence of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used.

The Fresno County Environmental Health Division responds to hazardous materials incidents in Fresno County. Major hazardous materials accidents associated with residential, industrial, and retail-commercial uses are fairly infrequent, and additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from implementation of the GPR/ZOU. Further, adherence to applicable regulations as discussed above would be required to reduce any potential consequences of a hazardous material's operational accident.

Goals and policies in the 2042 General Plan Health and Safety Element would minimize any impacts related to the use, storage, transport, and release of hazardous materials in the County. Goal HS-F and associated policies in the 2042 General Plan encourages the reduction of risk of loss of life, injury, serious illness, and damage to property resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous wastes.

Compliance with existing applicable regulations and the 2042 General Plan policies would ensure that risks from routine use, transport, handling, storage, disposal, and release of hazardous materials would be minimized. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. Therefore, impacts from a hazard to the public or the environment through routine transport, use or disposal of hazardous materials would be less than significant.

## **Mitigation Measures**

No mitigation is required.



## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 3:** Would the GPR/ZOU emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**IMPACT HAZ-2 IMPLEMENTATION OF THE GPR/ZOU COULD RESULT IN HAZARDOUS EMISSIONS OR HANDLING OF HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN 1/4 MILE OF AN EXISTING OR PROPOSED SCHOOL, BUT COMPLIANCE WITH EXISTING REGULATORY REQUIREMENTS WOULD MINIMIZE RISKS TO SCHOOLS AND STUDENTS, RESULTING IN A LESS THAN SIGNIFICANT IMPACT.**

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Under the GPR/ZOU, new commercial development, including gas stations, dry cleaners, and auto-body shops, could occur within 0.25-mile of an existing school. Consequently, hazardous materials sites may be located within 0.25-mile from school sites.

The GPR/ZOU does not include any specific development projects, meaning that the quantity of hazardous materials proposed for use by future commercial developments within the County is currently unknown. Accidental release or combustion of hazardous materials at new commercial and industrial developments could endanger students in the surrounding community.

Several schools are located within 0.25-mile of a facility that has or could emit hazardous air emissions or handle hazardous materials or wastes. It is possible that future development associated with the GPR/ZOU may result in an increase in hazardous emissions and handling of hazardous materials and wastes within 0.25-mile of an existing or future proposed school. However, the California Education Code (Section 17210 et seq.) outlines the requirements for siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste.

Hazardous materials and waste generated from future development would not pose a health risk to nearby schools because businesses that handle or have on-site storage of hazardous materials would be required to comply with the provisions of the California Fire Code adopted by the County (Fresno County Municipal Code Chapter 15.10) and any additional elements as required in the California Health and Safety Code Article 1 Chapter 6.95 for Business Emergency Plan. As described in the Regulatory Setting above, both the federal and State governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to a regulating agency. As such, compliance with the provisions of the California Fire Code and existing applicable State and federal regulations would minimize the risks associated with exposure of sensitive receptors to hazardous materials. Impacts would be less than significant.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 4:** Would the GPR/ZOU be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

**IMPACT HAZ-3 IMPLEMENTATION OF THE GPR/ZOU COULD RESULT IN DEVELOPMENT ON SITES CONTAMINATED WITH HAZARDOUS MATERIALS. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS RELATING TO SITE CLEANUP AND 2042 GENERAL PLAN POLICIES WOULD MINIMIZE IMPACTS FROM DEVELOPMENT ON CONTAMINATED SITES, RESULTING IN A LESS THAN SIGNIFICANT IMPACT.**

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Existing sites that may potentially contain hazardous land uses in the County include large and small-quantity generators of hazardous waste, such as gas stations. As noted previously, under Section 4.8.1, *Setting*, 60 active sites containing or potentially containing hazardous materials contamination are located within the proposed Planning Area or incorporated cities in Fresno County. New development occurring on documented hazardous materials sites as listed in Table 4.9-1 would be preceded by remediation and cleanup under the supervision of the DTSC before construction activities could begin. In addition, the 2042 General Plan contains policies related to contaminated sites. Policy HS-F.6 requires that the County work cooperatively with the DTSC and RWQCB to promote the timely and efficient cleanup of contaminated sites under the regulatory oversight of these agencies.

It is also possible that underground storage tanks (USTs) that were in use prior to permitting and record keeping requirements may be present in the County. If an unidentified UST were uncovered or disturbed during construction activities facilitated by the General Plan, it would be closed in place or removed pursuant to Fresno County Municipal Code Chapter 8.60, which adopted the provisions of Chapter 6.7 of Division 20 of the California Health and Safety Code regarding USTs. Removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing Fresno County standards as enforced and monitored by the Environmental Health Division. The extent to which groundwater may be affected, if at all, depends on the type of contaminant, the amount released, and depth to groundwater at the time of the release. If groundwater contamination is identified, remediation activities would be required by the RWQCB prior to the commencement of any new construction activities. If contamination exceeds regulatory action levels, the developer would be required to undertake remediation procedures prior to grading and development under the supervision of the County Public Works Department or RWQCB (depending upon the nature of any identified contamination). Compliance with existing state and local regulations as well as implementation of the 2042 General Plan policies would reduce impacts to less than significant.

**Mitigation Measures**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 5:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the GPR/ZOU result in a safety hazard or excessive noise for people residing or working in the project area?

**IMPACT HAZ-4 SEVERAL PUBLIC AND PRIVATE AIRPORTS ARE LOCATED WITHIN FRESNO COUNTY. INCREASED POPULATION, FORECASTED OVER THE SPAN OF THE PROPOSED GENERAL PLAN'S HORIZON YEAR OF 2042, WOULD RESULT IN ADDITIONAL AIRPORT AND AIRSTRIP ACTIVITY. IMPACTS WOULD BE AVOIDED THROUGH IMPLEMENTATION OF GOALS AND POLICIES IN THE 2042 GENERAL PLAN AND HAZARDOUS IMPACTS ON PEOPLE WORKING AND RESIDING WITHIN THE AIRPORT AREA OF INFLUENCE WOULD BE LESS THAN SIGNIFICANT.**

There are nine public and private airports within Fresno County. Specific land use policy plans have been developed for six airports in Fresno County: Reedley Municipal Airport, Fresno Yosemite International Airport, Coalinga Airport, Harris Ranch Airport, Sierra Sky Park Airport, and Fresno Chandler Executive Airport. In addition, FCOG's ALUC prepared a Fresno County ALUCP in December 2018, which replaces all previous land use plans for public use Fresno County airports. Fresno County is also home to 26 private-use and military airports (Fresno County 2021). In addition to the numerous daily aircraft operations that originate and terminate at these airports daily, overflights of the area by aircraft not utilizing the regional airports frequently occur. In addition to the public-use airports, the private airstrips in the County would be expected to service some of the additional flights associated with increased business and employment in the region. During the life of the General Plan, which extends to 2042, increased intensity of development in proximity to the airports and the other airstrips in the County could occur in Special Commercial land uses or the Westside Freeway Corridor Overlay. Therefore, additional safety hazards associated with the increased flights could result in a greater safety hazard for people residing or working in the County.

In accordance with Public Utilities Code Section 21676, ALUCs must review general and specific plans of local jurisdictions for consistency with the Fresno County's ALUCP. As mentioned above in Section 4.8.1, *Setting*, several specific land use policy plans have been developed for the various airports located in Fresno County, all of which were superseded by the adoption of the Fresno County ALUCP. The FCOG ALUC has the authority to establish policies, evaluate proposed policy actions, and review individual development projects, as they are relevant to airport-to-airport operations. The ALUC also ensures compatibility with airport operations, the Fresno County ALUCP, noise and safety standards according to state laws, and the area of influence where each airport is located. Additionally, the Fresno County ALUCP include a noise compatibility criteria matrix, included in Section 4.11, *Noise*, which limits development of land uses that are particularly sensitive to noise, such as residences, schools and hospitals, in airport vicinity. This ensures that people residing or working in the vicinity of airports are protected from excessive noise.

Health and Safety policies in Goal HS-E would limit the exposure of the public to high noise levels and safety hazards through land use controls and policies for property near airports, and to limit urban encroachment around airports in order to preserve the safety of flight operations and the continued viability of airport facilities. Specifically, Policy HS-E.2 would ensure that new development, including public infrastructure projects, does not create safety hazards and Policy HS-E.3 would ensure that development, including public infrastructure projects, within the airport approach and departure zones complies with Part 77 of the Federal Aviation Administration Regulations. Compliance with the ALUCP and applicable 2042 General Plan policies would reduce airport hazards and excessive noise within the County and impacts would be less than significant.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 6:** Would the GPR/ZOU impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**IMPACT HAZ-5 THE 2042 GENERAL PLAN POLICIES ADDRESS MAINTENANCE OF A LOCAL HAZARD MITIGATION PLAN AND EMERGENCY ACCESS IMPLEMENTATION. THEREFORE, THE GPR/ZOU WOULD NOT RESULT IN INTERFERENCE WITH THESE TYPES OF ADOPTED PLANS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

The Health and Safety Element of the 2042 General Plan directs the county to accommodate safety needs when planning and designing, while increasing the resiliency of the County's residences and businesses to respond to and be prepared for potential emergencies. This would include emergency vehicle access and location of emergency response facilities. The 2042 General Plan Goal HS-A and related policies would ensure adequate emergency response within Fresno County. Emergency access is also addressed in Section 4.18, *Wildfire*, and Section 4.15, *Transportation*, where impacts (WFR-3 and T-4, respectively) are found to be less than significant and 2042 General Plan goals and policies to reduce emergency access impacts are included.

In addition, the Fresno County Fire Protection District reviews and approves projects to ensure that emergency access meets fire safety standards. Implementation of the 2042 General Plan policies and actions associated with emergency planning and response, in addition to Fire District review would ensure that potential impacts from implementation of the GPR/ZOU on emergency response and evacuation would be less than significant.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

### d. Cumulative Impacts

Because the GPR/ZOU is composed of a General Plan update, cumulative impacts are treated somewhat differently than would be the case for a project-specific development. Section 15130 of the State CEQA Guidelines provides the following direction relative to cumulative impact analysis:

Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact...

By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur within a county's plan area. Therefore, the analysis of the GPR/ZOU impacts also constitutes the cumulative analysis. The GPR/ZOU may cumulatively increase the

potential for community risk from hazards and hazardous materials. However, implementation of the 2042 General Plan Health and Safety policies and compliance with existing laws and regulations would reduce cumulative hazards and hazardous materials impacts to a less than significant level.

## 4.10 Hydrology and Water Quality

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This section evaluates the potential environmental effects related to hydrology and water quality associated with implementation of the proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU). It discusses the regional and local watershed characteristics, including water quality, drainage and infiltration patterns, and flood hazards. The analysis includes a review of surface water, groundwater, water supply, water quality, flooding, and stormwater. Water supply is also discussed in Section 4.16, *Utilities and Service Systems*, as is wastewater conveyance. Issues regarding wetlands and waters of the U.S. are discussed in Section 4.4, *Biological Resources*.

### 4.10.1 Setting

Fresno County covers approximately 6,000 square miles in California's San Joaquin Valley, extending from the Coast Range Mountains to the west to the Sierra Nevada Range to the east. Water resources in Fresno County include rivers and streams, artificial or constructed waterways, and groundwater.

#### **a. Surface Water**

The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions, which are further divided into Hydrologic Units (HU), and even smaller Hydrologic Areas (HA) within each HU. Most of Fresno County is within the Tulare Lake Hydrologic Region, while a northeastern portion and a small northwestern portion of the County is in the San Joaquin River Hydrologic Region. The Kings River Watershed makes up much of the eastern portion of the County and is its main source of surface water. Bordering this area to the north is a portion of the Upper San Joaquin River Watershed. Other watersheds within the County include the Tulare Lake Bed, Upper Dry, Middle San Joaquin-Lower Chowchilla, and the Upper Kaweah Watersheds. In Western Fresno County there are five major stream systems: Little Panoche Creek, Panoche Creek, Tumey Gulch/Arroyo Ciervo, Cantua Creek, and Arroyo Pasajero (Fresno County 2018).

The hydrologic cycle in Fresno County is driven by the annual cycle of accumulation and melting of snowpack in the Sierra Nevada Mountains to the east of the County. The Kings and San Joaquin Rivers both originate in the Sierra Nevada Mountains. The many creeks and lakes in the elevated Sierra Nevada area within Fresno County all feed into the Kings or San Joaquin Rivers. The western part of the County is drier, with streams that drain very large watersheds and thus are more prone to high flows and flooding (Fresno County 2000).

#### **b. Groundwater**

Fresno County overlies four groundwater basins: the Kings, , Delta-Mendota, Westside, and Pleasant Valley Groundwater Basins, which are all subbasins of the San Joaquin Valley Groundwater Basin, in the San Joaquin River and Tulare Lake Hydrologic Regions. The San Joaquin Valley is a structural trough up to 200 miles long and 70 miles wide that is filled with up to 32,000 feet of marine and continental sediments (Fresno County 2021). Groundwater recharge in the Valley occurs by watershed seepage from the Kings and San Joaquin Rivers, deep percolation of irrigation water, canal seepage, and intentional recharge.

The California Department of Water Resources (DWR) has designated the Kings, Delta-Mendota, and Westside subbasins as high-priority basins. These subbasins are subject to a condition of critical overdraft as identified in DWR's Bulletin 118 and are subject to the Sustainable Groundwater

Management Act (SGMA), requiring a Groundwater Sustainability Agency (GSA) to be identified for each subbasin by June 30, 2017, each of which will develop and implement a Groundwater Sustainability Plan (GSP) for their respective subbasin in accordance with the SGMA-specified deadlines (DWR 2020). In response, local public agencies, including the County established numerous GSAs that collectively provide full coverage for the subbasins. GSAs are commonly formed as joint powers authorities through the collaboration of multiple agencies relying upon a common groundwater resource. The GSP developed by each GSA is required to identify sustainability goals for the respective basin, and establish management actions and requirements to meet those sustainability goals. GSP are designed to ensure that groundwater is not produced from the basin in excess of its sustainable yield, thereby facilitating recovery from overdraft conditions and avoiding future overdraft conditions as well as other undesirable results.

There are numerous groundwater supply plans and related water management plans applicable to groundwater resources in Fresno County; four, in particular, address the ground water supply conditions and sustainable management of the four subbasins addressed herein as water supply sources for Fresno County. Effective groundwater management requires coordination between managers of adjacent subbasins, to account for hydrologic connectivity between subbasins, and to ensure that groundwater management of one subbasin does not negatively impact the management of another subbasin. The four GSPs below effectively address all four subbasins in Fresno County, including the Kings, , Delta-Mendota, Westside, and Pleasant Valley Subbasins:

- A GSP for the Delta-Mendota Subbasin was developed by six separate GSA groups represented by numerous GSAs within the subbasin. Each GSA group prepared a part of the GSP that covered their portion of the subbasin and coordinated on the common elements of the GSP. Implementation of the plan is coordinated through a coordination agreement between the six GSA groups.
- A GSP for the Westside Subbasin was developed by the Westlands GSA, and adopted in 2020 (Westlands Water District GSA and County of Fresno GSA-Westside 2020). The Westlands GSA consists of the Westlands Water District and the County of Fresno. A GSP for the Kings Subbasin was developed by seven separate GSA groups. Similar to the Delta-Mendota Subbasin each GSA group prepared a part of the GSP that covered their portion of the subbasin and coordinated on the common elements of the GSP. Implementation of the plan is coordinated through a coordination agreement.
- A GSP for the Pleasant Valley Subbasin was developed by three GSA groups within the subbasin. The GSA consists of the Pleasant Valley Water District, the City of Coalinga and the County of Fresno. The GSP covers the entire Subbasin, the majority of which falls within the Pleasant Valley Water District's boundaries. The County is the GSA for portions of the Subbasin outside of the district's boundaries that lie within Fresno County.
- The schedules for implementation of the GSPs above provide time for the respective GSAs to develop and implement specific projects and management actions designed to meet the GSP sustainability objectives by 2040, or 2042 as is the case for the Pleasant Valley GSP, as required by SGMA. Each GSP provides an annual update to DWR on their progress towards their sustainability goals and is required to provide a more detailed update to the plan every five years through 2040/2042. Water Supply

The water supply in Fresno County is sourced from surface water and groundwater resources. Water supply in unincorporated areas of Fresno County is provided by 16 County Service Areas, five County Waterworks Districts, and various private water districts, community services or public utility

districts, irrigation districts, and individual sources. Each of these water supply providers delivers water that is originally sourced from the federal Central Valley Project (CVP), and/or from local groundwater supply available from one or more of the local subbasins to the San Joaquin Valley Groundwater Basin.

Surface water supply in Fresno County is sourced locally from the Kings River and San Joaquin River and is also imported via the Delta-Mendota Canal and the California Aqueduct from the northern part of the state.

Groundwater supply in Fresno County is sourced from the San Joaquin Valley Groundwater Basin; as discussed above under item (b) Groundwater, there are four subbasins of the San Joaquin Valley Groundwater Basin within Fresno County, including the Kings, , Delta-Mendota, Westside, and Pleasant Valley Subbasins, the management of each is addressed in a GSP by respective GSAs for compliance with SGMA. Although all of these subbasins are identified as critically overdrafted, through the implementation of water supply projects and management actions under the aforementioned GSPs, sustainable conditions in all basins are anticipated by year 2040. Meanwhile the subbasins may continue to be used to meet water demands within the County, in accordance with the General Plan populations trend projections which inform the GSPs.

### **c. Water Quality**

The Central Valley Regional Water Quality Control Board (RWQCB) is responsible for implementation of State and Federal water quality protection guidelines in Fresno County. This includes implementation of the Tulare Lake Basin Water Quality Control Plan and the Sacramento River Basin and San Joaquin River Basin Water Quality Control Plan, which are regional master policy documents for water quality control.

Land use affects the quality of surface water and groundwater in the County. Agricultural drainage and urban runoff are sources of non-point pollutant discharges into surface water and groundwater. Agricultural drainage moves pesticides, fertilizers, and animal waste into surface water bodies, while urban runoff carries suspended solids, oil, grease, pesticides, and pathogens. The composition of subsurface geologic materials also affects water quality, particularly groundwater, as mineralization can lead to poor water quality. In the Kings River drainage area, the groundwater system is largely calcium bicarbonate type, while the central parts of the county have greater concentrations of sodium, and groundwater in the northern part of the county is sodium chloride type. In the central part of the county, most recent data estimates the average total dissolved solids (TDS) at 250 parts per million, with concentrations up to over 2,000 parts per million at greater depths (Fresno County 2016). Declining groundwater levels lead to the use of water from greater depths, making increased concentrations of TDS a concern.

The Clean Water Act Section 303(d) requires States to keep registers of impaired waters that do not meet water quality standards. California's current 2018 303(d) list includes several water bodies in Fresno County, including Cantua Creek, Hume Lake, Little Panoche Creek, Fresno Slough, Murphy Slough, Poso Slough, Los Gatos Creek, San Joaquin River, James Bypass, Mill Creek, Millerton Lake, Mendota Pool, Pine Flat Reservoir, Kings River, and Ramona Lake, with listed pollutants including pH, alkalinity, mercury, lead, selenium, toxicity, salinity, indicator bacteria, and chlorpyrifos (State Water Resources Control Board 2021).



#### **d. Flood Hazards**

Flood hazards can occur when the amount of rainfall exceeds the infiltration capacity of the surrounding landscape or the conveyance capacity of the stormwater drainage system. Flood risk is defined as an annual percent chance of flooding, or the probability that flooding would occur in any given year. Although a 100-year flood will, on average, occur once every 100 years, the probability of a 100-year flood is one percent for any particular year. Two 100-year floods could occur in the same year or even in the same month, but the likelihood that two 100-year flood events would occur consecutively is very small.

Precipitation and water cycling in Fresno County follow seasonal patterns. Heavy rainfall and snow melt swell the river systems in the winter and spring months typically, while summers are generally dry. The County faces a variety of flood hazard factors that vary with the geography, and 100-year floodplain occurs in association with numerous surface waters in the County.

#### **Western Fresno County**

Western Fresno County consists of the San Joaquin Valley and the Coast Range to the west. Streams drain from the eastern slope of the Coast Range into the Valley, and there are many creeks in the area that are prone to high flows and erosion. Average annual precipitation in Western Fresno County ranges from just six to eight inches, but storms can cause flooding in the Valley due to the large drainage basins of the streams. Because the region is largely unpopulated, flooding poses little threat to life or private property (Fresno County 2016).

#### **Central Fresno County**

Central Fresno County consists of the area between the Fresno Slough valley floor eastward to the Sierra Nevada foothills, where most of the County's residents live. Streams in Central Fresno County are generally sourced from the Sierra Nevada and flow to the west. The Kings and San Joaquin Rivers, along with several small creeks and stream systems, drain into central Fresno County. Average annual precipitation is just six to eight inches. Flood potential in the fall and winter is generally from rain, while spring flooding potential is from rapid snow melt in the Sierra Nevada.

#### **Eastern Fresno County**

Most of Eastern Fresno County is in the Sierra Nevada. Most of the streams in Eastern Fresno County are controlled by the U.S. Army Corps of Engineers (USACE) or by the Fresno Metropolitan Flood Control District. Precipitation falls mainly as snow, which melts in the springtime and flows westward. Small, local watersheds in the region drain to the reservoirs upstream of Millerton and Pine Flat Lakes. Heavy flows that originate from rapid snowmelt in the mountains and foothills can lead to flooding problems in the valley floor to the west.

#### **e. Regulatory Setting**

##### **Federal**

##### *Clean Water Act*

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and

restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollution Discharge Elimination System (NPDES) permit process, as authorized by the U.S. Environmental Protection Agency (USEPA) (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine RWQCBs. Fresno County's watersheds are administered by the Central Valley RWQCB.

Section 404 of the CWA authorizes USACE to regulate the discharge of dredged or fill material to the waters of the U.S. and adjacent wetlands. Discharges to waters of the U.S. must be avoided where possible and minimized and mitigated where avoidance is not possible. Section 303(d) of the CWA requires identification and listing of water bodies that do not meet water quality standards and are considered "impaired." Total maximum daily loads (TMDLs) must be established for the pollutants or flows that are causing the impairment.

#### *National Flood Insurance Act/Flood Disaster Protection Act*

The National Flood Insurance Act of 1968 made flood insurance available for the first time. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. These laws are relevant because they led to mapping of regulatory floodplains and to local management of floodplain areas according to guidelines that include prohibiting or restricting development in flood hazard zones.

### **State**

#### *California Porter Cologne Water Quality Control Act*

The Porter Cologne Water Quality Control Act of 1967 addresses water quality and protection of State waters. Water quality criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The Porter-Cologne Act has provisions to address requirements of the CWA, including NPDES permitting, dredge and fill programs, and civil and administrative penalties. The SWRCB and its nine RWQCBs are agencies of the California Environmental Protection Agency that are responsible for developing and implementing water quality policy. The RWQCB responsible for Fresno County is the Central Valley RWQCB.

### **Local**

#### *Fresno County Code of Ordinances*

Chapter 14.24 of the Fresno County Code of Ordinances, *Regulation of Stormwater Discharges*, controls stormwater discharge throughout the county, including stormwater drainage systems and drainage to waterways. This chapter includes best management practices; requires remediation, monitoring and analysis of discharges; establishes a requirement to notify authorities of releases; and authorizes county's access, inspection, sampling, installation or establishment of sampling devices, and testing.

Chapter 15.48 of the Fresno County Code of Ordinances, *Flood Hazard Areas*, includes flood management regulations to promote public health, safety, and general welfare of county residents. This chapter restricts or prohibits certain uses due to water or erosion hazards, requires vulnerable uses be protected against flood damage, limits alterations to floodplains and stream channels, and regulates the construction of flood barriers.

## 4.10.2 Impact Analysis

### a. Methodology and Thresholds of Significance

#### Methodology

This section describes the potential environmental impacts of the proposed project relevant to hydrology and water quality. The impact analysis is based on an assessment of baseline conditions for the proposed project area, including climate, topography, watersheds and surface waters, groundwater, and floodplains, as described above under Subsection 4.9.1, *Setting*. This analysis identifies potential impacts based on the predicated interaction between the affected environment and construction, operation, and maintenance activities related to anticipated future development that would occur under the GPR/ZOU as described in Section 2.4, and recommends mitigation measures, when necessary, to avoid or minimize impacts.

#### Significance Thresholds

The following thresholds of significance are based on Appendix G to the CEQA Statute and Guidelines. For the purposes of this EIR, implementation of the GPR/ZOU may have a significant adverse impact if it would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i. result in substantial erosion or siltation on- or off-site;
  - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - iv. impede or redirect flood flows?
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the GPR/ZOU violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

**IMPACT HWQ-1 DEVELOPMENT ENVISIONED BY THE GPR/ZOU COULD RESULT IN A DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR CONTAMINATION OF SHALLOW GROUNDWATER THROUGH INCREASED SOIL DISTURBANCE AND EROSION, DISCHARGE OF CONTAMINATED WASTEWATER OR STORMWATER, OR ACCIDENTAL SPILLS OR LEAKS OF HAZARDOUS MATERIALS. COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR WATER QUALITY DEGRADATION AND WOULD REDUCE THIS IMPACT TO A LESS-THAN-SIGNIFICANT LEVEL.**

Implementation of the proposed project could result in a discharge of pollutants to surface waters or contamination of shallow groundwater. The GPR/ZOU could facilitate physical development, changes in land use, and an increased population. These changes could lead to water quality impacts due to construction activities and increased operational water demand.

Individual project construction activities facilitated by the General Plan could include road improvements and realignments, installation and realignment of utility infrastructure, demolition of existing structures, new structure development, and the potential replacement and/or improvement of drainage facilities. Water quality degradation from construction would be specific to each construction site. The topography of the site, the amount of soil disturbance, the duration that disturbed soil would be exposed, the amount of rainfall and wind that would occur during construction, and the individual project's proximity to the nearest waterbody all affect the potential for water quality degradation during construction. Development facilitated by the General Plan would be limited to the Planning Area and prioritizes infill development, which would minimize the need for new infrastructure.

Individual project construction could result in soil erosion due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the construction site. The types of pollutants contained in runoff from urban construction sites typically include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants, such as nutrients and fertilizers, trace metals, and hydrocarbons, often bond with sediment and are transported to downstream drainages and ultimately into collecting waterways, contributing to degradation of water quality.

Through required compliance with the NPDES General Permit and State and local regulations, including Fresno County Code of Ordinances Chapter 14.24, projects would be required to implement Best Management Practices (BMP) for erosion control that may include scheduling and timing of grading activities; timely revegetation of graded areas; the use of sod, hydroseed, and hydraulic mulches; and installation of erosion control blankets. Pollution prevention practices may include designated washout areas or facilities, control of trash and recycled materials, tarping of stockpiled materials on site, and proper location and maintenance of temporary sanitary facilities. The combination of BMPs employed must be customized to the site using up-to-date standards and practices. Prior to and/or during construction, the County may establish controls on the volume and rate of stormwater runoff from new developments and redevelopment as appropriate to minimize

peak flows or total runoff volume, and to mimic the pre-development site hydrology. These controls may include limits on impervious areas or provisions for detention and retention of runoff on site.

Construction activities, including excavation and trenching, may encounter shallow groundwater. The 2042 General Plan Policy Update includes Policy OS-A.24 to prevent groundwater degradation, stating that the County shall only approve land uses with low risk of degrading groundwater. In the event that shallow groundwater is encountered, dewatering of the excavation or trenching site may be required. If improperly managed, these dewatering activities could result in discharge of contaminated groundwater. In accordance with the Central Valley RWQCB Groundwater General Permit (Order No. 5-00-175; NPDES No. CAG995001), contaminated groundwater would be treated prior to discharge or disposed of at an appropriate disposal facility or wastewater treatment plant, if there is doubt about the ability for continuous compliance with requirements (Central Valley CRWQCB 2000).

USEPA regulations on stormwater discharges, known as Phase I of the NPDES program, prohibit discharges of stormwater to waters of the United States from construction projects that encompass one or more acres of soil disturbance, unless in compliance with an NPDES permit. Phase II of the NPDES program expands the requirements to operators of small municipal separate storm sewer systems (MS4s) in urban areas and small construction sites, requiring NPDES permit coverage and pollution control measures. Discharges to the County's storm water conveyance system that would not be covered by the Phase II General Permit would be required to obtain coverage under an individual NPDES permit or comply with individual Waste Discharge Requirements, as approved by the Central Valley RWQCB.

The General Plan envisions a mix of development types and land uses in the County, such as residential development, commercial development, industrial development, and development of public uses, such as roadways and trails. Generally, during operation, residential land uses do not involve activities with the potential for substantial degradation of water quality or violation of water quality standards. Residential land uses typically involve the use of non-toxic chemicals that are used within the interior of residential buildings and have no potential for discharge to water. Residential development could involve the use of household cleaning products, paint, and gasoline for small motors, such as lawnmowers and leaf blowers. Similarly, depending on the specific business, operation of commercial or retail development could involve the storage and use of petroleum products or other chemicals that could degrade water quality. However, the use and storage of these products would be in conformance with all regulations and legal requirements and would generally be of small quantities. Industrial development and industrial processes could generate pollutants with potential to affect water quality. Likewise, the General Plan envisions the continuation of agriculture in the County, which could also potentially affect water quality from discharges or runoff of chemicals such as fertilizers and pesticides. These chemicals must also be stored, handled, and used in compliance with mandatory CWA, state, and local requirements, reducing the potential for discharge and substantial water quality degradation.

In addition to compliance with mandatory CWA, state, and local requirements, including the Fresno County Code of Ordinances Chapter 14.24, implementation of the proposed General Plan goals and policies would further reduce the potential for water quality degradation (Fresno County 2021). The following goals contain specific policies involved with water quality protection: Goal LU-C describes protections for river environments, surface water, and groundwater; Goal OS-A is "to protect and enhance the water quality and quantity in Fresno County's streams, creeks, and groundwater basins;" Goal PF-C is "to ensure the availability of an adequate and safe water supply for domestic and agricultural consumption;" Goal PF-D is "to ensure adequate wastewater collection and

treatment and the safe disposal of wastewater;” Goals OS-D and OS-E describe protection of wetlands, riparian areas, and aquatic wildlife; and Goal HS-F addresses minimizing risks from groundwater contamination due to hazardous waste. Compliance with these goals, NPDES permit requirements, and applicable state and local requirements, including the Fresno County Code of Ordinances Chapter 14.24, would reduce the risk of water contamination within the County from implementation of the GPR/ZOU to the maximum extent practicable. Therefore, this impact would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the GPR/ZOU substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**Threshold 5:** Would the GPR/ZOU conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**IMPACT HWQ-2 THE GPR/ZOU WOULD NOT SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE DUE TO THE COUNTY’S POLICIES TO RECHARGE THE BASIN. THE GPR/ZOU WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Groundwater is an important source of agricultural and domestic water supply in Fresno County, providing 41 percent of the total water demand, on average, across the Tulare Lake Hydrologic Region. As mentioned in Section 4.9.1, *Setting*, water supply in the region is strained. Historically, groundwater resources have made up for shortages in surface water supply, but the combination of expansive irrigated agriculture operations, increased urban use, and multiple years of drought statewide have caused critical overdraft in three of the four subbasins of the San Joaquin Valley Groundwater Basin that are relied upon by public and private entities throughout Fresno County. Potential impacts to groundwater supply may occur directly, through the production and consumption of local groundwater resources, or indirectly, through changes to infiltration rates or patterns associated with the conversion of permeable (undeveloped) surfaces to impermeable (developed) surfaces.

The GPR/ZOU facilitates future development within Fresno County. As shown in Table 2-3 in Section 2, *Project Description*, the population in 2042 is projected to be 234,591, which would require new residential development. However, although population growth would occur under the General Plan Update, this growth is already accounted for in the existing General Plan; no additional population growth is proposed or projected under the General Plan Update. As discussed in Section 4.9.1, *Setting*, under item (b) Groundwater, the four subbasins of the San Joaquin Valley Groundwater Basin that are used to meet water demands in Fresno County are actively being managed by designated GSAs in accordance with GSPs that will ultimately be approved by DWR for compliance with SGMA. The purpose of each GSP is to achieve sustainable groundwater conditions by year 2040, through the implementation of projects and management actions that improve groundwater

supply conditions while continuing to support existing and planned land uses. Therefore, direct impacts to groundwater supply would be less than significant, because water demands associated with population growth under the General Plan Update are the same as would occur under the General Plan, which was used to inform the GSPs that are being implemented to provide sustainable groundwater conditions in the area.

In addition, as described in Section 4.16, *Utilities and Service Systems*, proposed 2042 General Plan policies would reduce potential impacts from increased demand on groundwater. Policy PF-A4 states the County shall require new industrial development to be served by community sewer, stormwater, and water systems where such systems are available or can feasibly be provided. Policy PF-C.7 requires the preparation of infrastructure master plans for the provision of potable water for areas undergoing growth. Policy PF-C.6 recommends to all cities and urban areas within the county that they adopt the most cost-effective Urban Water Management Plans published by State agencies to assist in meeting future water supply needs. Lastly, Policy PF-C.23 requires water conservation features in new development. These policies further facilitate water supply reliability for future development in County focus areas, through requiring the implementation of water conservation measures and local analysis of available water supplies in future years.

As mentioned above, groundwater supply may also be indirectly impacted through land use conversions that affect groundwater recharge. Between 2016 and 2018, Fresno County converted 3,176 acres of Important Farmland to urban uses (DOC 2018). Urbanization covers land with impervious surfaces, which can interfere with groundwater recharge, potentially reducing the amount of groundwater in storage, which is commonly evidenced by increasing depths to groundwater. Throughout much of Fresno County, groundwater is in a state of overdraft and historically increasing depths to groundwater are common. Reducing the amount of groundwater in storage also impacts water quality, by concentrating water quality constituents in a smaller amount of water; throughout Fresno County, the most common water quality constituents are salts and total dissolved solids (TDS) associated with agricultural operations.

Where land use conversion would occur under the General Plan, infill development would be prioritized under the GPR/ZOU through Policies LU-F.4, LU-F-14, and LU-G.4. Under policy LU-F.4, the County would selectively redesignate vacant land for higher-density uses or mixed uses to facilitate infill development. Policy LU-F-14 would allow the County to permit a density increase in Low and Medium Density Residential areas to facilitate development of by-passed remnant parcels in substantially developed areas. Policy LU-G.4 would ensure that the County encourages infill development prior to allowing outward expansion of urban development. Prioritization of infill development would minimize the conversion of permeable surfaces to impervious surfaces by concentrating future residential development within the spheres of influence of existing unincorporated cities and communities. In addition, the following policies also seek to avoid adverse impacts to groundwater recharge: Policy OS-A.2 seeks to protect, enhance, monitor, and manage groundwater resources within its boundaries; Policy OS-A.5 seeks to encourage, where economically, environmentally, and technically feasible, efforts to directly or indirectly recharge the county's groundwater; Policy OS-A.6 proposes that the County would ensure that new development does not limit the capacity or function of groundwater recharge areas; Policy OS-A.7 states that the County would direct, to the extent feasible, its available water resources to groundwater recharge areas; Policy OS-A.11 would permit and encourage, where economically, environmentally, and technically feasible, over-irrigation of surface water as a means to maximize groundwater recharge; and Policy OS-A.14 would require the County to protect floodplain lands and, where appropriate, acquire public easements for groundwater recharge among other purposes. Therefore, indirect

impacts to groundwater supply would be less than significant, because changes to recharge rates or patterns associated with land use conversions would be effectively managed under the aforementioned policies and practices.

The General Plan would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge, or obstruct implementation of a sustainable groundwater management plan. Potential impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 3a:** Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

**IMPACT HWQ-3 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD ALTER THE EXISTING DRAINAGE PATTERNS ON FUTURE DEVELOPMENT SITES AND POTENTIALLY RESULT IN EROSION AND SILTATION. COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE CLEAN WATER ACT, AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR EROSION AND SILTATION AND WOULD REDUCE THIS POTENTIAL IMPACT TO A LESS THAN SIGNIFICANT LEVEL.**

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Development under the GPR/ZOU would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Development would also result in alterations to drainage patterns through structural changes to ground surface permeability and changes in topography from grading and excavation. As described under Impact HWQ-1, construction of future projects could result in soil erosion due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport and siltation of local streams via storm water runoff from the construction sites.

Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a storm water pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Fresno County Municipal Code (Chapter 14.24), which requires the development of an erosion and sediment control plan that is equivalent to the required SWPPP.



Changes to drainage patterns that may result from new development associated with implementation of the GPR/ZOU could result in operational increases in the rate and amount of surface runoff, which in turn could result in increased soil erosion. Compliance with the Clean Water Act would minimize post-construction runoff and maximize infiltration of stormwater, thus minimizing the potential impact of drainage pattern alteration from new development.

In addition to compliance with Clean Water Act requirements, the 2042 General Plan includes goals and policies to reduce erosion and siltation from drainage pattern alterations. Policy HS-D.9 would require the preparation of drainage plans for development or public infrastructure projects in hillside areas to direct runoff and drainage away from unstable slopes. Policies within Goal PF-E would address drainage issues. Policy PF-E.4 would encourage the local agencies responsible for flood control or storm drainage to require that storm drainage systems be developed and expanded to meet the needs of existing and planned development. Policy PF-E.11 would encourage project designs that minimize drainage concentrations and maintain, to the extent feasible, natural site drainage patterns. Policy PF-E.13 would encourage the use of natural storm water drainage systems to preserve and enhance natural drainage features. Policy PF-E.16 would minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles and would discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat. Policy PF-E.20 would require new development of facilities near rivers, creeks, reservoirs, or substantial aquifer recharge areas to mitigate any potential impacts of release of pollutants in flood waters, flowing rivers, streams, creeks, or reservoir waters.

These policies, in addition with Clean Water Act requirements, reduce this potential impact to a less-than-significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 3b:** Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

**Threshold 3c:** Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

**Threshold 3d:** Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows?

**IMPACT HWQ-4 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD ALTER THE EXISTING DRAINAGE PATTERNS AND INCREASE THE AMOUNT OF RUNOFF IN SPHERES OF INFLUENCE OF INCORPORATED CITIES AND IN EXISTING UNINCORPORATED COMMUNITIES, WHICH COULD RESULT IN FLOODING ON- OR OFF-SITE, EXCEEDING THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS, OR CREATE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF. COMPLIANCE WITH APPLICABLE REGULATIONS AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR INCREASED RUNOFF AND FLOODING. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

Development facilitated by the GPR/ZOU could incrementally increase the total impervious area, and thus stormwater runoff, in spheres of influence of incorporated cities and in existing unincorporated communities within the County (refer to Section 2, *Project Description*). However, as described above, implementation of the 2042 General Plan's goals and policies and adherence to the requirements of the Clean Water Act would minimize the off-site runoff and pollutant from project sites. The GPR/ZOU would encourage infill development and development in areas without prohibitive environmental or resource management concerns, further reducing impacts to drainage.

The majority of the storm drainage systems within unincorporated Fresno County are managed by the Fresno Metropolitan Flood Control District. District facilities include drainage facilities, flood control water courses, and retention basins. A small number of individual communities are served by special districts, which facilitate stormwater through management of retention basins and ditches. Development facilitated by the General Plan could increase stormwater runoff and may require the construction or expansion of stormwater drainage facilities. Should these facilities be required, they would be subject to CEQA review and appropriate environmental mitigation.

As the drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains, flooding is a natural occurrence in Fresno County. During winter and spring months, heavy rainfall and snowmelt swell the County's river systems. Stormwater is collected and controlled in the gutters, inlets, underground storm drains, retention basins, pumping stations, and open channels managed by the Fresno Metropolitan Flood Control District and the special districts that serve small individual communities. Development will add to the County's impervious surface areas and increase the flow that enters drainage facilities. To reduce the impacts of anticipated

future development on the County’s drainage systems, goals and policies in the 2042 General Plan seek to ensure safe and efficient means to drain stormwater and manage urban growth. Policy LU-G.4 encourages orderly outward expansion of urban development by supporting infill development programs for cities. Goal PF-E is “to provide efficient, cost-effective, and environmentally-sound storm drainage and flood control facilities that protect both life and property and to divert and retain stormwater runoff for groundwater replenishment.” Policies within this goal, described below, would substantially reduce impacts to drainage patterns.

Policy HS-D.9 would require preparation of drainage plans for development or infrastructure projects in hillside areas to ensure runoff is directed away from unstable slopes. Policy OS-A.21 would require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff.

Implementation of these goals and policies would ensure that the County maintains and implements effective stormwater management, and that the stormwater drainage system provides adequate drainage for both existing and new development. However, if new or updated stormwater drainage facilities are required, their development and construction would be subject to CEQA and appropriate mitigation measures. Implementation of these goals and policies, in addition to compliance with applicable laws and regulations, would minimize the potential for increased runoff and flooding and would reduce this potential impact to a less-than-significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 4:** Would the GPR/ZOU in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**IMPACT HWQ-5 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION. COMPLIANCE WITH APPLICABLE REGULATIONS AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR ADVERSE EFFECTS RELATED TO FLOOD HAZARD AND WOULD REDUCE THIS POTENTIAL IMPACT TO A LESS THAN SIGNIFICANT LEVEL.**

Tsunamis are generally a coastal phenomenon and are not a risk in Fresno County, as no portion of the county borders the coast of California. A seiche is a standing wave in a body of water. Seiches are a risk for lakes in seismically active areas, but earthquake-induced seiches are not considered a risk in Fresno County (Fresno County 2018).

Relatively small areas in Fresno County are subject to flooding from a 100-year or 500-year storm. High-risk areas in the County are associated with the San Joaquin River, Kings River, and other stream systems, and mostly occur in the central and eastern portions of the County. In western Fresno County, many creeks are prone to high flows and erosion. Because development facilitated by the General Plan would be concentrated in existing city sphere of influences and unincorporated communities, risks to life and property are reduced. Central Fresno County is more densely populated and faces flood issues from swelled rivers and streams. The San Joaquin River from Gravelly Ford to the Chowchilla Bypass outside Fresno County is confined by a levee system. Levee maintenance is generally performed by local reclamation or irrigation districts.

Although 100-year flood hazard areas exist within the County, future development within these areas would be subject to the requirement of the Fresno County Ordinance Code (Chapter 15.48) which mandates designation of a Floodplain Administrator who holds permit review authority. In all areas of special floor hazard, standards apply to prevent unsafe development regarding flood risks.

The 2042 General Plan includes goals and policies to address impacts related to flood or levee failure and development in flood hazard areas. Policies within this goal describe compliance with the Federal Flood Insurance Program and management of floodplains. Goal PF-E is “to provide efficient, cost effective, and environmentally-sound storm drainage and flood control facilities that protect both life and property and to divert and retain stormwater runoff for groundwater replenishment”. Policy E-1 ensures that the county coordinates with the agencies responsible for flood control or storm drainage to assure that construction and acquisition of flood control and drainage facilities are adequate for future urban growth authorized by the County General Plan and city general plans. Policy PF-E.12 ensures that the County coordinates with the local agencies responsible for flood control or storm drainage to ensure that future drainage system discharges comply with applicable State and Federal pollutant discharge requirements. Policy PF-E.9 100-year Flood Protection requires new development to provide protection from the 100-year flood as a minimum. Policy PF-E.20 requires that the County’s new development of facilities near rivers, creeks, reservoirs, or substantial aquifer recharge areas to mitigate any potential impacts of release of pollutants in flood waters, flowing rivers, streams, creeks, or reservoir waters. Policy HS-C.2 requires the County prohibit new development in existing undeveloped areas (i.e., areas devoted to agriculture or open space that are not designated for development) protected by a State flood control project without appropriately considering significant known flooding risks and taking reasonable and feasible action to mitigate the potential property damage to the new development resulting from a flood. Policy HS-C.9 encourages construction of dams to control flows from the Fresno County Stream Group, and Policy HS-C.10 requires that dams and levees are designed and located in accordance with applicable design standards and construction practices. Policy HS-C.11 states that the County shall promote a floodplain management approach in flood hazard areas that are presently undeveloped by giving priority to regulation of land uses over development of structural controls as a method of reducing flood damage. Policy HS-C.12 states that “New development, including public infrastructure projects, shall not be allowed along the river until the risk of flooding at the site has been determined and appropriate flood risk reduction measures identified.” Policy HS-C.16 states that the County shall continue to implement and enforce its Floodplain Management Ordinance, Chapter 15.48 of the Fresno County Ordinance Code. Policy HS-C.20 states that the County shall consider dam failure inundation maps of all reservoirs in making land use and related decisions.

Compliance with the goals and policies in the 2042 General Plan, along with other applicable laws and regulations, will reduce this impact to a less than significant level.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### 4.10.3 Cumulative Impacts

The geographic scope for the cumulative analysis of hydrology and water quality includes the Kings, Madera, Delta-Mendota, Westside, and Pleasant Valley Groundwater Basins, which are all subbasins of the San Joaquin Valley Groundwater Basin, in the San Joaquin River and Tulare Lake Hydrologic Regions. Cumulative development in Fresno County allowable under the Fresno County General Plan would also increase impermeable surfaces, which could increase runoff, exacerbate flooding conditions, and reduce groundwater recharge. The impacts of increased impervious surface (e.g., increased runoff, altered drainage patterns, decreased water quality) would be reduced through adherence to the NPDES General Construction Permit administered by the State Water Resources Control Board (SWRCB). Every construction project that disturbs one or more acres of land surface or that is part of a common plan of development or sale that disturbs more than one acre of land surface would require coverage under the Construction General Permit. For projects less than one acre in size, Fresno County requires the implementation of Countywide BMPs to protect water quality. Compliance with these regulations would reduce impacts to a less than significant level.

The proposed GPR/ZOU would not result in a substantial increase of pollutant discharges to local water sources, alteration of drainage patterns in the project corridor, or otherwise result in a substantial contribution to cumulative impacts, and thus would not be cumulatively considerable.

## 4.11 Land Use and Planning

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This section summarizes the County's land use characteristics, including the overall land use pattern as well as a more detailed analysis by major land use type, and analyzes existing plans and focus areas in order to determine the land use and planning effects of the General Plan Review and Zoning Ordinance Update (GPR/ZOU). The area of analysis is the Planning Area as described in Section 2, *Project Description*.

### 4.11.1 Setting

#### **a. Current Land Use Pattern**

Fresno County is one of eight counties that collectively form the area known as the San Joaquin Valley. The County covers approximately 3,833,600 acres or 6,000 square miles. About 114,700 of the County's acreage is part of an incorporated city, while the remaining acreage is unincorporated.

The major land use in Fresno County is agriculture, where roughly 50 percent of the land is used for agricultural purposes (Fresno County 2021). The Sierra Nevada Mountains take up much of the eastern half of the County. Eastern Fresno County consists mostly of public lands, including the Sierra and Sequoia National Forests and Kings Canyon National Park. The central and western portions of the County are dominated by agriculture and open space, with the largest city, Fresno, occurring near the county's east-west center.

The 2000 Fresno County General Plan divides the county into five geographic subareas. From west to east, roughly, these are: Coast Range Foothill Area, Westside Valley Area, Eastside Valley Area, Sierra Foothill Area, and Sierra Nevada Mountain Area. The subareas do not have policy status but are useful for orientation and framing of land use planning issues. The County currently has the following existing land use designations:

- Agriculture
- Irrigated Agriculture
- Westside Rangeland
- Eastside Rangeland
- Open Space
- Public Lands and Open Space
- Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- Mountain Residential
- Rural Residential
- Foothill Rural Residential
- Planned Urban Village
- Planned Rural Community
- Rural Settlement Area
- Office Commercial

- Neighborhood Commercial
- Community Commercial
- Central Business Commercial
- Regional Commercial
- Highway Commercial
- Service Commercial
- Special Commercial
- Mountain Commercial
- Limited Industry
- General Industry
- Public Facilities
- Mountain Urban
- Reserve Overlay
- San Joaquin River Corridor Overlay
- Westside Freeway Corridor Overlay

## **b. Existing Plans and Studies**

### **2000 Fresno County General Plan**

The 2000 Fresno County General Plan contains the following policies aimed at reducing potential land use conflicts.

**Policy LU-A.1:** The County shall maintain agriculturally-designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available.

**Policy LU-A.7:** The County shall generally deny requests to create parcels less than the minimum size specified in Policy LU-A.6 based on concerns that these parcels are less viable economic farming units, and that the resultant increase in residential density increases the potential for conflict with normal agricultural practices on adjacent parcels. Evidence that the affected parcel may be an uneconomic farming unit due to its current size, soil conditions, or other factors shall not alone be considered a sufficient basis to grant an exception. The decision-making body shall consider the negative incremental and cumulative effects such land divisions have on the agricultural community.

**Policy LU-A.12:** In adopting land use policies, regulations and programs, the County shall seek to protect agricultural activities from encroachment of incompatible land uses.

**Policy LU-A.13:** The County shall minimize potential land use conflicts between agricultural activities and urban land uses through the provision of appropriate buffers or other measures.

**Policy LU-A.14:** The County shall generally condition discretionary permits for residential development within or adjacent to agricultural areas upon the recording of the Right-to-Farm Notice, which is an acknowledgment that residents in the area should be prepared to accept the inconveniences and discomfort associated with normal farming activities and that an established agricultural operation shall not be considered a nuisance due to changes in the surrounding area.

**Policy LU-E.15:** The County shall not designate additional land for Rural Residential or Foothill Rural Residential development, except for unique circumstances to be determined by the Board of Supervisors.

**Policy LU-E.17:** The County shall consider redesignating undeveloped parcels ten (10) acres or larger in size to the Reserve designation if such parcels are located within the sphere of influence of a city and designated for future urban use on the city's general plan.

**Policy LU-E.18:** In areas outside the sphere of influence of a city, the County shall encourage owners of parcels twenty (20) acres or larger in size to seek redesignation of their land for agricultural uses by establishing procedures that allow the related General Plan Amendment and rezoning applications to be processed without cost to the property owner provided that the property owner concurrently executes a California Land Conservation contract with the County.

**Policy LU-G.1:** The County acknowledges that the cities have primary responsibility for planning within their LAFCO-adopted spheres of influence and are responsible for urban development and the provision of urban services within their spheres of influence.

**Policy LU-G.2:** The County shall encourage the cities to adopt policies consistent with Urban Development Policies LU-F.1 through LU-F.10 of the 2000 Fresno County General Plan.

**Policy LU-G.3:** The County shall encourage orderly outward expansion of urban development by only supporting city sphere of influence expansion proposals where the city has demonstrated a need for additional territory after documenting a good faith effort to implement an infill development program.

**Policy LU-G.4:** The County shall encourage the cities to incorporate in their general plans County land use policies for neighborhoods that were established under County jurisdiction.

**Policy LU-G.5:** The County shall encourage cities to incorporate in their general plans land use policies that minimize potential land use conflicts with agriculturally-related industrial operations and other agricultural activities at the urban interface through the provision of appropriate buffers or other measures.

**Policy LU-G.6:** Within the spheres of influence, and two miles beyond, the County shall encourage consultation between the cities and the County at the staff level in the early stages of preparing General Plan Amendments and other policy changes which may impact growth or the provision of urban services. Staff consultations, particularly concerning community plans, shall provide for meaningful participation in the policy formulation process and shall seek resolution of issues prior to presentation to the decision-making bodies.

**Policy LU-G.7:** Following city adoption of a community plan, the County shall update the applicable County-adopted community plan. Any unresolved conflicts between the County and city plans shall be identified for the decision-making bodies. The County shall establish and maintain land use controls on unincorporated lands within the spheres of influence consistent with the policies of County community plan and this countywide Land Use Element.

**Policy LU-G.8:** The County shall promote consultation between the cities and the County at the staff level when cities are developing proposed annexation boundaries and proposed sphere of influence expansions.

**Policy LU-G.9:** The County shall encourage the cities to generally include in their annexation proposals only those parcels that are proposed for immediate development.



**Policy LU-G.11:** The County shall not approve any discretionary permits for new urban development within a city's sphere of influence unless that development has first been referred to the city for consideration of possible annexation pursuant to the policies of this section and provisions of any applicable City/County memorandum of understanding.

**Policy LU-G.14:** Within that portion of a city's planned urban boundary which the County has identified on its community plan as existing urban and which is within one-half (½) mile of the city, the County shall:

- a. Maintain zoning on existing fully-developed properties consistent with the County's community plan.
- b. Maintain zoning on undeveloped or underdeveloped properties consistent with the County's community plan if such properties are small in size and there is no conflict with provision LU-G.14c below.
- c. Maintain a "holding zone" on undeveloped or underdeveloped properties to minimize further urban development on properties which the County considers appropriate for annexation by the city. Criteria used to determine which properties will be placed in a "holding zone" include, but are not limited to, any one of the following:
  1. The property is adjacent to the city.
  2. The property adjoins a series or grouping of properties which are eighty (80) percent vacant and in aggregate contain a minimum of five (5) acres.
  3. The property is proposed for commercial or industrial use on the County's community plan, is at least two (2) acres in size, and abuts vacant property planned for a similar use.
- d. Refer all applicants for subdivision (except residential parcel maps), rezoning, and conditional use permits to the city for annexation.
- e. Consider additional urban development on properties previously referred to the city for annexation if such action is recommended by the city. Any such urban development must be consistent with the County's community plan.

**Policy LU-G.15:** Within that portion of a city's planned urban boundary which the County has identified on its community plan as existing urban and which is more than one-half (½) mile from the city, the County shall:

- a. Maintain zoning on existing fully developed properties consistent with the County community plan.
- b. Maintain a "holding zone" on undeveloped or underdeveloped properties to preclude further urban development. This zoning may be changed subject to provisions LU-G.15c and d below.
- c. Consider subdivision, rezoning, or conditional use proposals on planned non-industrial properties where the proposed use is consistent with the County community plan. As conditions of approval, the County may require: (1) community sewer and water service; and (2) completion of all roadways providing access to the development as if they were part of the development to the nearest fully developed street.
- d. Consider rezoning and conditional use permit proposals in planned industrial areas consistent with the County community plan.

**Policy LU-G.16:** On land that is not within a city's planned urban boundary but is within a city's sphere of influence, the County shall:

- a. Maintain zoning consistent with the countywide General Plan Land Use Element.
- b. Accept contracts in accordance with the California Land Conservation Program or some other similar program. It is the intent of the County to enter into California Land Conservation contracts on any existing parcel eight (8) acres in size or larger that is devoted to open space use.

**Policy LU-G.17:** The County may designate Special Commercial areas within one-half (½) mile of a city's sphere of influence at intersections of major roads where substantial existing commercial development at the intersection has rendered continued agricultural use of the corner portion of the subject property difficult or infeasible. The following standards and criteria shall apply:

- a. The Special Commercial designation should be allowed only where at least two (2) corners at the intersection are developed with permanent, legally established commercial uses.
- b. The Special Commercial designation should be limited to a maximum total road frontage of one-eighth (1/8) mile and a maximum size of two (2) acres per corner.
- c. The implementing zone for Special Commercial designations granted under this Section shall be the C-6(c) District, limited to uses which provide convenience goods or services to the surrounding area.
- d. Neither the operation nor the physical characteristics of the commercial development or any individual uses shall have a detrimental impact on water resources or the use or management of surrounding properties within at least one-quarter (¼) mile radius.

**Policy LU-H.9:** The County shall adopt minimum format and content guidelines for the preparation of updated and new regional, community, and specific plans to ensure consistency with the countywide General Plan.

**Policy LU-H.10:** The County shall periodically update regional, community, and specific plans to ensure consistency with the countywide General Plan.

### **Fresno Council of Governments 2018 – 2042 Regional Transportation Plan/ Sustainable Communities Strategy**

The Regional Transportation Plan (RTP) is a comprehensive assessment of all forms of transportation available in Fresno County and of the needs for travel and goods movement. Fresno Council of Governments (FCOG) adopted the 2014 RTP on June 26, 2014. The 2014 RTP is the first to contain a Sustainable Communities Strategy (SCS) as required by California Senate Bill (SB) 375. Enacted in 2008, SB 375 requires that each Metropolitan Planning Organization include an SCS that provides an integrated land use and transportation plan for meeting greenhouse gas emission reduction targets set forth by the California Air Resources Board (CARB).

The FCOG adopted its current RTP/SCS, the 2018-2042 RTP/SCS, in July 2017. The 2018-2042 RTP/SCS charts the 25-year course of transportation to 2042 to address greenhouse gas emissions reductions and other air emissions. The RTP also contains a chapter that establishes the SCS to show how integrated land use and transportation planning can lead to lower greenhouse gas emissions from autos and light trucks, as well as improve overall quality of life in the region (FCOG 2017). The RTP/SCS is currently being updated and the draft will be available in Spring 2022 (FCOG 2021).

## **San Joaquin River Parkway Master Plan**

The San Joaquin River Parkway Master Plan (SJRPMMP) establishes standards for the development of low-impact recreational uses, education and protection of natural resources for the San Joaquin River and surrounding areas. The SJRPMMP planning area is generally the area immediately around the San Joaquin River, including portions of the northernmost area of Fresno County. The fundamental goals of the SJRPMMP include:

- Provide for conservation, education and recreation, particularly a continuous trail, in a cooperative manner with affected landowners.
- Protect irreplaceable natural and cultural resources in a way that will also meet recreational and educational needs.

The most recent San Joaquin River Parkway Master Plan is the San Joaquin River Parkway Master Plan Update, which was adopted in 2018 (San Joaquin River Conservancy 2017; 2018).

### *Regional Plans*

#### **Sierra-North Regional Plan**

The Sierra-North Regional Plan covers northeastern Fresno County and land within the Sierra Nevada lying east of the Friant-Kern Canal and north of the Kings River. The Plan covers an area of about 2,270 square miles. The area within the community of Shaver Lake governed by the Shaver Lake Community Plan and the area covered by the Kings River Regional Plan are excluded. About 84 percent of the land within the planning area is owned by the federal government in the form of national parks and forests. The plan has a timeframe of 10 years (County of Fresno 2021).

#### **Coalinga Regional Plan**

The Coalinga Region is located in the southwestern portion of the county and includes about 580 square miles bounded on the east by Interstate 5, township 19 to the north, and the county line to the south and west, and excluding the area within the Coalinga Community Plan. The Coalinga region is diverse and includes agricultural and range land, the foothills of the coast ranges, mineral resource mining sites, oil fields, as well as fragile environmental resources. The Plan covers a timeframe of about twenty years during which the population of the area is expected to decline slightly. Included in the planning area is the proposed Coalinga Air Cargo Port which is expected to generate a substantial number of jobs as the airport is developed into a regional export center for agricultural products (County of Fresno 2021).

#### **Kings River Regional Plan**

The Kings River originates in the high Sierra Nevada and flows to the San Joaquin Valley where it has deposited rich alluvial soils that have contributed greatly to the agricultural economy of Fresno County. This unique river area is rich in natural resources such as natural woodland and riparian vegetation; valuable rock, sand, and gravel resources; and abundant water. The planning area consists of about 19,500 acres located in east-central Fresno County along the Kings River extending from Pine Flat Dam to the Fresno-Tulare County line near Reedley. The planning area includes all of the land within the river valley proper and within one-quarter mile on each side of the river channel. No specific timeframe is provided (County of Fresno 2021).

## **Sierra-South Regional Plan**

The Sierra-South Regional Plan covers an area bounded by the Kings River Regional Plan on the northwest, the South Fork of the Kings River to the north, Kings Canyon National Park on the east, Tulare County to the south, and the Friant-Kern Canal to the west. The planning area includes the foothills of the Sierra and covers a timeframe of about 10 years (County of Fresno 2021).

### *Plans for Unincorporated Communities*

Due to the diverse geography and land uses within the county (ranging from highly urbanized areas to the intensive agricultural uses on the San Joaquin Valley floor to the High Sierra), individual community plans have been prepared within the framework of the overall county plan to address the unique issues and concerns arising in the different unincorporated areas. The community plans supplement the countywide general plan for the areas that they cover, addressing land use, circulation, housing, public services, and other issues in much the same way that the general plans of the incorporated cities address such issues, although not to the same level of detail. The plans contain specific goals, policies, and programs that apply to each particular community and area. Unincorporated Community Plan areas include Biola, Caruthers, Del Rey, Friant, Lanare, Laton, Riverdale, Shaver Lake, and Tranquility (County of Fresno 2021).

### *Specific Plans*

#### **Shaver Lake Forest Specific Plan**

The Shaver Lake Forest Specific Plan was adopted in 1978 and amended in 1993. The specific plan project area consists of about 2.6 square miles adjacent to Shaver Lake in eastern Fresno County about 50 miles east of the city of Fresno. The Specific Plan is designed to accommodate limited residential, commercial, recreation and public/quasi-public land uses within the planning area of about 1,681 acres (County of Fresno 2021).

#### **Bretz Mountain Village Specific Plan**

The Bretz Mountain Village Specific Plan was adopted in 1982 and governs an area south of Shaver Lake just east of Highway 168. The Village is intended to be developed as a recreation residential area with 977 dwelling units on 610 acres. Buildout population is expected to be about 2,500 residents, of which 635 will be year-round and 1,906 would be seasonal. In addition to residences, the Plan provides for limited local-serving commercial uses, open space, and public/quasi-public development such as recreational facilities. About 330 acres, or 54 percent of the planning area, is designated as open space (County of Fresno 2021).

#### **Wildflower Village Specific Plan**

Wildflower Village is located about two miles southwest of Shaver Lake and abuts the Shaver Lake Community Plan area. Similar to the other mountain community specific plans, Wildflower Village is intended to accommodate primarily seasonal residential and recreational land uses on lots ranging in size from 19,000 square feet to about 29,000 square feet. The Plan designates a substantial amount of open space (340 acres, or 54 percent). The Plan will accommodate about 1,600 residents at buildout, of which about 435 will be year-round residents (County of Fresno 2021).

### **Millerton Specific Plan**

The Millerton Specific Plan area consists of 820 acres located two miles east of the community of Friant along both sides of Millerton Road just south of Millerton Lake State Recreation Area. The Plan was adopted in 1984 and amended in 2004, and periodically since then to accommodate an expected buildout population of between 8,000 to 10,000 residents. Land is designated for limited residential, commercial, public/quasi-public and open space land uses (County of Fresno 2021).

### **Quail Lake Specific Plan**

The Quail Lake Specific Plan is the most recent of the specific plans adopted by the County (1994). The Plan addresses land use, circulation, housing, environmental resources, public facilities, and community design. The planning area is located east of the city of Clovis on 375 acres. Land use is primarily residential, although limited commercial and public/quasi-public land uses are also designated in the Specific Plan. Densities range from 4,000 square foot lot “patio style” homes to estate lots of 20,000 square feet or more. The Plan could accommodate as many as 2,000 residents at buildout (County of Fresno 2021).

## **c. Fresno County Land Use Designations**

### *Existing Land Use Designations*

The current General Plan includes 30 resource, residential, commercial, industrial, and other land use designations that depict the types of land uses that will be allowed throughout the unincorporated county. 27 of the land use designations are primary designations, while three are overlay designations: Reserve, San Joaquin River Corridor, and Westside Freeway Corridor.

### *Proposed Land Use Designations*

The GPR/ZOU includes 31 resource, residential, commercial, industrial, and other land use designations that are allowed throughout the incorporated county. Similar to the existing General Plan, 27 of the land use designations are primary designations. However, the proposed GPR/ZOU would include four overlay designations instead of three: Reserve, San Joaquin River Corridor, Westside Freeway Corridor, and Golden State Industrial Corridor. In addition, the GPR/ZOU would increase density of the following land use designations:

- Medium High-Density Residential from 5.8 dwelling units per acre to 14.5 dwelling units per acre, to 5.8 dwelling units per acre to 20 dwelling units per acre
- Neighborhood Commercial from n/a, to 5.8 dwelling units per acre to 20 dwelling units per acre
- Community Commercial from n/a, to 5.8 dwelling units per acre to 20 dwelling units per acre
- Central Business Commercial from 5.8 dwelling units per acre to 14.5 dwelling units per acre, to 5.85 dwelling units per acre to 20 dwelling units per acre

The types of land uses are shown in Table 2-2 of Section 2, *Project Description*.

## **d. Regulatory Setting**

### **State**

#### *General Plan Law (California Government Code Section 65300)*

California Government Code Section 65300 regulates the substantive and topical requirements of general plans. State law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning.” The California Supreme Court has called a general plan the “constitution for future development.” A general plan expresses the community’s development goals and embodies public policy relative to the distribution of future land uses, both public and private.

#### *California Government Code Section 65301*

Section 65301 of the California Government Code requires a general plan to address the geographic territory of the local jurisdiction and any other territory outside its boundaries that bears relation to the planning of the jurisdiction. The jurisdiction may exercise their own judgment in determining what areas outside of its boundaries to include in the Planning Area. The State of California General Plan Guidelines state that a county general plan should address all unincorporated areas and consider the general plans of every city within the county as well as adjacent jurisdictions even if they are in a different county.

#### *California Government Code Section 65860*

Section 65860 of the California Government Code requires that county or city zoning ordinances be consistent with county or city general plans, if a general plan has been adopted and the land uses authorized therein are compatible with those in the general plan. If a zoning ordinance becomes inconsistent with a general plan due to amendments to the plan, the ordinance shall be amended to regain consistency.

#### *Cortese Knox Hertzberg Local Government Reorganization Act of 2000 (CKH Act)*

The Cortese Knox Hertzberg Local Government Reorganization Act of 2000 (CKH Act) established procedures for local agency changes of organization, including city incorporation, annexation to a city or special district, and consolidation of cities or special districts (Section 56000, et seq.) A LAFCO does not have direct land use authority. However, the CKH Act assigns LAFCOs a role in planning issues by requiring them to review proposed boundary changes.

### **Regional**

#### *Fresno County Zoning Ordinance*

Zoning is the instrument that implements the land use designations of the General Plan. In addition to establishing permitted uses, zoning may also establish development standards relating to issues such as intensity, setbacks, height, and parking. Projects submitted to the County for review and approval are generally evaluated for consistency with the zoning designations.

The Fresno County Zoning Ordinance is used by the County to implement the General Plan. The Zoning Ordinance is officially known as Division VI of the Ordinance Code of the County of Fresno, and the Ordinance would be updated as part of the proposed project. The purpose of the Zoning Ordinance is to classify and regulate development in the County’s unincorporated areas in a manner

**General Plan Review and Zoning Ordinance Update**

consistent with the General Plan. Each district in the Zoning Ordinance corresponds to a General Plan land use designation and has a stated purpose, typical use, and minimum parcel size. The current Zoning Ordinance consists of the following districts:

- **Agricultural**
  - AE - Exclusive Agricultural
  - AL - Limited Agricultural
  - A-1 - Agricultural
  - A-2 - General Agricultural
- **Residential**
  - R-A - Single Family Residential Agricultural
  - R-R - Rural Residential
  - R-1-A, R-1-AH, R-1-B, R-1-C, R-1 - Single Family Residential
  - R-1-E, R-1-EH - Single Family Residential Estates
  - R-2, R-2-A - Low Density Multiple Family Residential
  - R-3, R-3-A - Medium Density Multiple Family Residential
  - R-4 - High Density Multiple Family Residential
  - T-P - Trailer Park Residential
- **Commercial**
  - AC - Agricultural Commercial Center
  - C-P - Administrative and Professional Office
  - C-R - Commercial Recreation
  - C-1 - Neighborhood Shopping Center
  - C-2 - Community Shopping Center
  - C-3 - Regional Shopping Center
  - C-4 - Central Trading
  - C-6 - General Commercial
  - RCC - Rural Commercial Center
  - R-P - Residential and Professional Office
- **Industrial**
  - C-M - Commercial and Light Manufacturing
  - M-1 - Light Manufacturing
  - M-2 - General Industrial
  - M-3 - Heavy Industrial
- **Special Purpose Zones**
  - RRE - Exclusive Railroad
  - O - Open Conservation Land Use
  - P - Off-Street Parking
  - R-C - Resource Conservation

- R-E - Recreational
- RS - Rural Settlement
- TPZ - Timberland Preserve
- **Overlay/Combining Zones**
  - M - Mountain Overlay

## 4.11.2 Impact Analysis

### Methodology and Significance Thresholds

The analysis in this section focuses on the compatibility of land uses identified in the proposed project with existing and planned land uses within the Planning Area, as well as consistency with any applicable land use plans, policies, or regulations. The following thresholds of significance are based on Appendix G of the State CEQA Guidelines. For purposes of this EIR, implementation of the proposed GPR/ZOU may have a significant adverse impact if it would do any of the following:

1. Physically divide an established community
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

<b>Threshold 1:</b> Would the GPR/ZOU physically divide an established community?
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**Impact LU-1      IMPLEMENTATION OF THE GPR/ZOU WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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The proposed project does not include substantial land use or circulation changes that would physically divide an established community, residential or otherwise. For example, no major roads or other facilities would be constructed that would physically divide an established community. The GPR/ZOU includes the following growth management strategies that would: 1) direct new growth to areas within already existing or planned development, 2) encourage new development at infill sites, and 3) support development consistent with the County's economic development strategies:

**Goal LU-F** To encourage mixed-use pedestrian and transit-oriented development and to establish development standards for residential, commercial, and industrial development in urban and urbanizing areas.

**LU-F.1: Mixed-Use Development.** The County shall encourage mixed-use development that locates residences near compatible jobs and services.

**LU-F.2: Mixed-Use Development Configuration.** The County shall encourage the combination of residential, commercial, and office uses in mixed-use configurations on the same site.

**LU-F.3: High-Density Housing.** The County shall promote development of higher-density housing in areas located along major transportation corridors and transit routes and served by the full range of urban services, including neighborhood commercial uses, community centers, and public services.

**LU-F.4: Urban Infill.** The County shall selectively redesignate vacant land for higher-density uses or mixed uses to facilitate infill development.



**LU-F.14: Residential Infill.** The County may permit land designated Low and Medium Density Residential to develop to the next higher-density when such development will not have an adverse impact on surrounding land uses. This density increase is intended to be used to facilitate development of by-passed remnant parcels in substantially developed areas.

- a. The circumstances where more intensive development may be permitted include the following:
  1. Property which is contiguous to a higher density residential or other intensive non-residential urban uses.
  2. Property which has a shape or size that would make it difficult to be developed in a manner similar to other surrounding property having the same land use designation.
- b. If either of these circumstances exists, development of multiple-family and planned residential developments should be guided by the following criteria:
  1. The building height should not exceed the height of surrounding structures.
  2. The site development of residential units or a residential complex should be compatible with existing and planned uses on adjacent properties.
  3. Off-street parking should be sufficient for residents of the development and their guests, and should be designed to minimize the impact on neighboring development.

The GPR/ZOU seeks to preserve resource areas and prioritize pedestrian and transit-oriented development and infill of vacant or underutilized urban land. This approach helps create more efficient and cost-effective infrastructure, maximizes the use of underutilized parcels within the County, and minimizes the loss of open space.

Furthermore, the Traffic and Circulation Element of the 2042 General Plan contains policies that promote complete streets in both urban and rural areas, as well as connectivity within the county.

**TR-A.14: Multi-Modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right-of-way Plan and Precise Plans of streets and highways. *(RDR/PSP)*

**TR-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;
- b. Minimizing curb cuts along non-local streets to improve safety and capacity;
- c. Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- d. Constructing sidewalks and bike lanes on both sides of streets, where feasible;

- e. Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- f. Coordinating with local jurisdictions and Fresno Council of Governments to ensure multimodal connections are established and maintained between jurisdictions; and
- g. Incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes. (RDR)

**TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- a. Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- b. Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- c. Coordinating with local jurisdictions and FCOG to ensure multimodal connections are established and maintained between jurisdictions. (RDR)

These policies would promote the enhancement of the County's multimodal circulation by incorporating Complete Streets practices in planning, design, and operation of the County's circulation network. Therefore, the GPR/ZOU would not divide established communities. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the GPR/ZOU cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Impact LU-2 IMPLEMENTATION OF THE GPR/ZOU WOULD BE GENERALLY CONSISTENT WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS ADOPTED TO AVOID OR MITIGATE ENVIRONMENTAL EFFECTS, SUCH AS FCOG'S REGIONAL TRANSPORTATION PLAN 2018-2042 AND THE SJVAPCD AIR QUALITY MANAGEMENT PLANS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

The GPR/ZOU seeks to ensure that development occurs in a way that protects open space and agricultural land, boosts the local economies, provides housing opportunities, brings jobs and services to the County, and creates quality places that enhance the experience for residents, workers, and visitors. The proposed project promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities where utilities and public infrastructure are available or can be consistently provided, all the while protecting and conserving the County's natural resources such as soils, water, air quality, minerals, vegetation, and wildlife and habitats.

Furthermore, the County recognizes the importance of correlating land uses with the County's and respective cities' transportation systems to ensure appropriate growth occurs to anticipate for development during the General Plan planning period. The GPR/ZOU emphasizes the integration of land use and transportation with strategies to encourage efficient use of land by placing more intensive development near transit centers, encouraging alternative transportation modes, and increasing development density.

Additionally, the GPR/ZOU ensures preservation of productive resources such as water resources, agriculture resources, and mineral resources; and, recreation and cultural resources such as parks and recreation, recreational trails, historic resources, cultural resources, geologic resources, scenic resources, and scenic highways, through goals and policies in the General Plan and promoting infill for new development in underutilized parcels in urban areas.

The 2042 General Plan contains the following applicable goals and policies which would conserve natural resources and agricultural land, and promote pedestrian and transit-oriented development in urbanized or urbanizing areas:

## **Agriculture and Land Use Element**

**Goal LU-A** To promote the long-term conservation of productive and potentially productive agricultural lands and to accommodate agricultural-support services and agriculturally-related activities that support the viability of agriculture and further the County's economic development goals.

**LU-A.1: Agricultural Land Conservation.** The County shall maintain agriculturally-designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available or can be provided consistent with the adopted General or Community Plan. *(RDR)*

**LU-A.2: Agriculture-related Uses.** The County shall allow by right in areas designated Agriculture activities related to the production of food and fiber and support uses incidental and secondary to the on-site agricultural operation. *(RDR)*

**LU-A.7: Exceptions to Minimum Agricultural Parcel Size.** The County shall generally deny requests to create parcels less than the minimum size specified in Policy LU-A.6 based on concerns that these parcels are less viable economic farming units, and that the resultant increase in residential density increases the potential for conflict with normal agricultural practices on adjacent parcels. Evidence that the affected parcel may be an uneconomic farming unit due to its current size, soil conditions, or other factors shall not alone be considered a sufficient basis to grant an exception. The decision-making body shall consider the negative incremental and cumulative effects such land divisions have on the agricultural community. *(RDR)*

**LU-A.12: Agricultural Protection.** In adopting land uses policies, regulations, and programs, the County shall seek to protect agricultural activities from encroachment of incompatible land uses. *(RDR)*

**LU-A.13: Agricultural Buffers.** The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations. *(RDR)*

**LU-A.16: Agricultural Land Preservation Programs.** The County should implement agricultural land preservation programs for long-term conservation of viable agricultural operations. Examples of programs to be considered include: land trusts; conservation easements; dedication incentives; new and continued Williamson Act contracts; Farmland Security Act contracts; the California Farmland Conservancy Program; agricultural education programs; zoning regulations; agricultural mitigation fee program; urban growth boundaries; transfer of development rights; purchase of development rights; and agricultural buffer policies. *(PSP)*

**LU-A.17: Williamson Act Contracts.** The County should accept Williamson Act contracts on all designated agricultural land subject to location, acreage, and use limitations established by the County provided that the County receives full subvention payment as partial replacement of local property tax revenue foregone as a result of participating in the Williamson Act program. All development and uses and activities that occur on land under contract shall comply with the requirements of the California Land Conservation Act and adopted County Rules. *(PSP)*

- Goal LU-B** To preserve the unique character of the Westside Rangelands, which includes distinctive geologic and topographic landforms, watersheds, important agricultural activities, and significant biological resources, while accommodating agriculture, grazing, recreation, resource recovery, and other limited uses that recognize the sensitive character of the area.
- Goal LU-C** To preserve and enhance the value of the river environment as a multiple use, open space resource; maintain the environmental and aesthetic qualities of the area; protect the quality and quantity of the surface and groundwater resources; provide for long-term preservation of productive agricultural land; conserve and enhance natural wildlife habitat; and maintain the flood-carrying capacity of the channel at a level equal to the one (1) percent flood event (100-year flood).
- Goal LU-D** To promote continued agricultural uses along Interstate 5, to the extent water is available, protect scenic views along the freeway, promote the safe and efficient use of the freeway as a traffic carrier, discourage the establishment of incompatible and hazardous uses along the freeway, and provide for attractive, coordinated development of commercial and service uses that cater specifically to highway travelers, and of agriculture-related uses at key interchanges along Interstate 5.
- Goal LU-E** To provide for the continued development of areas already designated for rural-residential development in a manner that minimizes environmental impacts and public infrastructure and service costs while restricting designation of new areas for such development.
- Goal LU-F** To encourage mixed-use pedestrian and transit-oriented development and to establish development standards for residential, commercial, and industrial development in urban and urbanizing areas.

**LU-F.4: Urban Infill.** The County shall selectively redesignate vacant land for higher-density uses or mixed uses to facilitate infill development. *(RDR)*

**LU-F.8: Complete Streets Design Guidelines.** The County shall adopt Complete Streets design guidelines and incorporate them into community plans and specific plans. The County shall review development proposals for compliance with its Complete Streets

design guidelines to identify design changes that can improve transit, bicycle, and pedestrian access. *(RDR)*

**Goal LU-G** To direct urban development within city spheres of influence to existing incorporated cities and to ensure that all development in city fringe areas is well planned and adequately served by necessary public facilities and infrastructure.

**LU-G.4: Orderly Outward Expansion.** The County shall encourage orderly outward expansion of urban development by supporting only those city sphere of influence expansion proposals where the city has demonstrated a need for additional territory after documenting a good faith effort to implement an infill development program, maximize the residential density, address the population growth needs, and minimize conversion of productive agricultural lands to urban uses. *(RDR/IGC)*

**LU-G.6: Minimize Land Use Conflicts.** The County shall encourage cities to incorporate in their general plans land use policies that minimize potential land use conflicts with agriculturally-related industrial operations and other agricultural activities at the urban interface through the provision of appropriate buffers or other measures. *(RDR/IGC)*

## Transportation and Circulation Element

**Goal TR-A** To plan and provide a unified, multi-modal, coordinated, and cost-efficient countywide street and highway system that ensures the safe, orderly, and efficient movement of people and goods, including travel by walking, bicycle, or transit.

**TR-A.14: Multi-modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right-of-way Plan and Precise Plans of streets and highways. *(RDR/PSP)*

**TR-A.15: Bikeways and Trails.** The County shall develop and maintain a program to construct bikeways and recreation trails in accordance with the adopted Regional Bicycle and Recreational Trail Master Plan. The County shall seek funding for construction and maintenance of bicycle and trails. *(PSP)*

**TR-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;
- b. Minimizing curb cuts along non-local streets to improve safety and capacity;
- c. Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- d. Constructing sidewalks and bike lanes on both sides of streets, where feasible;
- e. Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- f. Coordinating with local jurisdictions and Fresno Council of Governments to ensure multimodal connections are established and maintained between jurisdictions; and

- g. Incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes. *(RDR)*

**TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- a. Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- b. Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- c. Coordinating with local jurisdictions and FCOG to ensure multimodal connections are established and maintained between jurisdictions. *(RDR)*

**Goal TR-B** To promote a safe and efficient mass transit system that provides service to residents without access to automobiles and, in urban areas, helps to reduce congestion, improves the environment, and provides viable non-automotive means of transportation.

**TR-B.2: Transit Service.** The County shall promote transit services in designated corridors and communities where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors and in communities in the rural area of the county. *(PSP/IGC/PI)*

**TR-B.3: Transit Supportive Development.** The County shall work with the Cities of Fresno and Clovis and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors shown in Figure TR-3. *(RDR/IGC)*

**TR-B.6: Convenient Transit Transfers.** The County shall encourage the development of facilities for convenient transfers between different transportation systems (e.g., train-to-bus, bus-to-bus). *(RDR/PSP/IGC)*

**Goal TR-D** To plan and provide a safe, continuous, and easily accessible bikeway system that facilitates the use of the bicycle as a viable alternative transportation mode and as a form of recreation and exercise.

**TR-D.1: Bicycle Routes.** The County shall implement a system of recreational, commuter, and inter-community bicycle routes in accordance with the Regional Bikeway Plan described in the Circulation Diagram and Standards section and depicted in Figure TR-2. The plan designates bikeways between cities and unincorporated communities, to and near major traffic generators such as recreational areas, parks of regional significance, and other major public facilities, and along recreational routes. *(PSP)*

**TR-D.8: Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation. *(RDR/PSP/IGC)*

**Goal TR-E** To plan for a safe, efficient, and environmentally-sound rail system to meet the needs of all Fresno County residents, industry, commerce, and agriculture.

**TR-E.5: Multi-modal Rail Stations.** The County shall support multi-modal stations at appropriate locations to integrate rail transportation with other transportation modes. *(PSP/IGC)*

The Fresno County Zoning Ordinance is the primary method of implementing the 2042 General Plan. Implementation of the proposed project includes revisions to the Zoning Ordinance and Zoning Map to ensure consistency with the 2042 General Plan. Specifically, revisions to the Zoning Map would need to be consistent with the 2042 General Plan, incorporating revisions to the land use categories and other recommended design and development standards. The 2042 General Plan would apply similar land use designations as the County's 2000 General Plan, with the addition of the Golden State Industrial Corridor Overlay land use designation and an update to residential intensities for the Medium High-Density Residential, Neighborhood Commercial, Community Commercial, and Central Business Commercial land use designations. Because the proposed project includes updating the County's Zoning Ordinance to be consistent with the 2042 General Plan, the proposed project would not conflict with the Fresno County Zoning Ordinance.

The FCOG 2018-2042 RTP/SCS addresses greenhouse gas emissions reductions and other air emissions related to transportation and buildout envisioned in adopted general plans, with the goal of preparing for future growth in a sustainable manner. The SCS component of the 2018-2042 RTP/SCS integrates land use and transportation planning to meet the California Air Resources Board's greenhouse gas reduction targets. The RTP contains 24 goals with supporting objectives and policies. Table 4.11-1 includes the RTP goals, objectives, and policies related to environmental protection and describes consistency of the proposed land use designations and patterns in the 2042 General Plan with these goals and policies.

**Table 4.11-1 2042 General Plan Consistency with the FCOG 2018-2042 RTP/SCS**

FCOG 2018 – 2042 RTP/ SCS Goals and Policies	General Plan Consistency
<b>Goal: Coordinate planning that is consistent with efforts that affect the region.</b>	
<p>Policy: During planning processes, seek to ensure that planning efforts are consistent and feasible with planning efforts such as: the Blueprint Planning Principles, Health in All Policies, the Senate Bill 375 (also known as the Sustainable Communities Protection Act of 2008), Caltrans’ Complete Streets Program, performance-based planning initiated by MAP-21, California Transportation Plan 2040, and statewide and federal air quality goals, etc.</p> <p>Policy: Minimize the loss of farmland with regard to construction of transportation projects.</p>	<p>Consistent. The Agricultural and Land Use Element addresses efforts that are regionally important such as farmland preservation, the Complete Streets Program, and Senate Bill 375. Goal LU-A and its associated policies specifically protect productive agricultural resources through land preservation and zoning, thereby minimizing the loss of farmland while being consistent with planning efforts in the region and state. Goal LU-F encourages mixed use development and locating residential uses near jobs and services, which is consistent with the Health in All Policies planning approach, SB 375, and statewide goals.</p>
<b>Goal: Attainment and maintenance of California and National Ambient Air Quality Standards (criteria pollutants) as set by the Environmental Protection Agency and the California Air Resources Board.</b>	
<p>Policy: Support the efforts of the San Joaquin Valley Air Pollution Control District to integrate appropriate policies and implementation measures identified in the Air Quality Guidelines for General Plans into local general plans.</p> <p>Policy: Encourage non-single occupancy and lower/zero emission vehicle as preferred alternatives</p> <p>Policy: Support the development of infrastructure required for alternative fueled vehicles as well as zero emission vehicles.</p> <p>Policy: Consider the air quality impacts of mobile sources when planning transportation systems to accommodate expected growth in the community thereby reducing the consumption and dependence upon non-renewable energy resources.</p>	<p>Consistent. The 2042 General Plan Transportation and Circulation Element and Open Space and Conservation Element addresses efforts to meet regional planning air quality goals and reduce greenhouse gas emissions through the encouragement of alternative modes of transportation, active transportation and support for electric vehicle charging stations. Goal TR-A and applicable policies promote multi-modal transportation including travel by walking, bicycle, or transit. Policies TR-A.23 and TR-A.24 under Goal TR-A identifies the importance of complete streets in both urban and rural areas to support pedestrian and transit-oriented development. Goal OS-G and its associated policies identify the importance of the County’s efforts to reduce emissions and improve air quality, particularly by reducing automobile travel and planning for a multi-modal transportation system that shifts travel away from single-occupancy vehicles.</p>
<b>Goal: A multimodal regional transportation network compatible with adopted land use plans and consistent with the intent of SB375 (Senate Bill 375 also known as the Sustainable Communities Protection Act of 2008).</b>	
<p>Policy: Encourage infill development in areas that take advantage of remaining capacity in existing transportation facilities.</p> <p>Policy: Project level decisions should give priority to safety, air pollution reduction, noise impacts and energy conservation considerations.</p> <p>Policy: Encourage jurisdictions to incorporate access management principles into transportation and land use planning.</p>	<p>Consistent. The 2042 General Plan fulfills intent of SB 375 by prioritizing infill development, preserving the surrounding agricultural areas, and coordinating land use and transportation planning. Goal LU-F encourages mixed-use development in urban and urbanizing areas in order to better promote better connectivity and locate residences near transit systems and services.</p> <p>The Transportation and Circulation Element contains policies to connect land use and transportation planning and improve and enhance the multimodal transportation network. Policies TR-A.14, TR-A.15, TR-A.23, TR-A.24, and TR-B.7 ensure consistency between land use and transportation planning, require complete streets planning, eliminate gaps in the transportation system, and encourage safe routes to school programs.</p> <p>These goals and policies promote infill development, prioritize VMT reduction, and promote a multimodal transportation network, fulfilling the intent of SB 375.</p>



**FCOG 2018 – 2042 RTP/  
SCS Goals and Policies**

**General Plan Consistency**

**Goal: An efficient, safe, integrated, multimodal transportation system.**

Policy: Manage the transportation system in a manner designed to increase operational efficiency, conserve energy and space, reduce air pollution and noise, and provide for effective goods movement, safety, personal mobility and accessibility.

Consistent. The 2042 General Plan Transportation and Circulation Element and Open Space and Conservation Element contains goals and policies to improve multimodal transportation and to reduce air pollution and noise. Goal TR-A and applicable policies promote multi-modal transportation including travel by walking, bicycle, or transit. Policies TR-A.23 and TR-A.24 under Goal TR-A identifies the importance of complete streets in both urban and rural areas to support pedestrian and transit-oriented development. Goal TR-B and applicable policies aim to improve the County's transit system in order to reduce reliance on single-occupancy vehicles and therefore VMTs. Goal OS-G and its associated policies identify the importance of the County's efforts to reduce emissions and improve air quality, particularly by reducing automobile travel and planning for a multi-modal transportation system that shifts travel away from single-occupancy vehicles.

Source: FCOG 2017

As shown in Table 4.11-1, the proposed GPR/ZOU would be consistent with the goals and policies contained in the FCOG 2018-2042 RTP/SCS that pertain to avoiding or reducing adverse environmental impacts, such as GHG emissions.

As described above in *Existing Plans and Studies*, the San Joaquin River Parkway Master Plan establishes standards for the development of low-impact recreational uses, education and protection of natural resources for the San Joaquin River and surrounding areas, including cultural resources. The 2042 General Plan includes goals and policies to protect natural resources, such as wetlands and vegetation, as well as cultural resources. For example, as described in Section 4.4, *Biological Resources*, 2042 General Plan Goals OS-D and OS-E would minimize impacts from potential direct effects to special-status species because these goals would protect, preserve, and enhance natural areas, including forests and wetlands, which are natural resources. Policies under these goals, such as E.6, would result in less development in environmentally sensitive areas, which generally are considered natural resources. While the GPR/ZOU could result in potentially significant impacts to natural resources, such as special-status species (see Impact BIO-1 in Section 4.4, *Biological Resources*), the GPR/ZOU would not conflict with the San Joaquin River Parkway Master Plan because the General Plan contains policies supportive of the San Joaquin River Parkway Master Plan.

Furthermore, regional plans, unincorporated community plans, and specific plans described in the *Existing Plans and Studies* section all contain standards for development in their respective Plan areas. Since the 2042 General Plan is a comprehensive, long-term framework for the protection of the county's agricultural, natural, and cultural resources and for development with the county, all goals and policies listed within would complement and support the goals and policies listed in all Plans under the *Existing Plans and Studies* section.

Consistency with the San Joaquin Valley Air Pollution Control District SJVAPCD plan impacts is discussed in the Section 4.3, *Air Quality*, of this EIR.

As concluded within this impact discussion, as well as discussion in Section 4.3, *Air Quality*, and Section 4.8, *Greenhouse Gas Emissions*, implementation of the GPR/ZOU would be generally consistent with applicable adopted plans, regulations, or policies. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### **Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future project" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative land use and planning impacts is generally the County of Fresno and surrounding areas. This geographic scope is appropriate because the county limits represent the planning area for the County's GPR/ZOU.

As discussed under Impact LU-1, the project would encourage infill development within urban or urbanizing areas and would not impede existing community connections. Cumulative development would be required to meet applicable design standards and would undergo environmental review, including consideration of whether the projects would physically divide an established community. With these considerations prior to project approval, cumulative impacts related to dividing an established community resulting from most projects in the County would be less than significant. Generally linear projects are the type of projects that divide communities. The California High-Speed Rail system is a reasonably foreseeable future project that is also a linear project that would traverse Fresno County. The rail could divide communities, resulting in a significant cumulative impact. However, because the GPR/ZOU would not impact neighborhood connectivity, the project would not have a cumulatively considerable contribution to a significant cumulative impact related to physically dividing an established community.

As discussed under Impact LU-2, the project would be consistent with the applicable goals and policies in the 2042 General Plan, the County's Zoning Ordinance, FCOG 2018-2042 RTP/SCS, the San Joaquin River Parkway Master Plan, and all other regional plans, unincorporated community plans, and specific plans described in the *Existing Plans and Studies* section. All other pending and future projects envisioned in the region (including the adjacent counties and within the cities in Fresno County) would be required to adhere to applicable zoning and development regulations and their own respective policies to mitigate environmental impacts where feasible. In addition, all pending and future projects in unincorporated Fresno County would be reviewed for consistency with the 2042 General Plan, and all other applicable regulatory land use actions prior to approval, including the proposed Zoning Ordinance update. Therefore, it is anticipated that each cumulative project would be found consistent with applicable plans and policies prior to approval, such that the projects would not cause a significant cumulative environmental impact due to a conflict and as noted previously, the project-specific impact would be less than significant. Therefore, the GPR/ZOU in combination with other development envisioned in the region would not result in significant cumulative impact with respect to consistency with land use plans.

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## 4.12 Noise

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This section describes the existing noise conditions, major or prevalent noise sources, and regulatory framework related to noise levels in Fresno County. This section also evaluates potential impacts related to noise resulting from the GPR/ZOU. Impacts related to noise from construction, building operations, traffic, and flight operations are addressed.

### 4.12.1 Setting

#### a. Overview of Noise and Vibration Measurement

##### Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hertz (Kinsler et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy. The perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (eight times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding”

depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level ( $L_{eq}$ ); it considers both duration and sound power level.  $L_{eq}$  is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically,  $L_{eq}$  is summed over a 1-hour period.  $L_{max}$  is the highest root mean squared (RMS) sound pressure level within the sampling period, and  $L_{min}$  is the lowest RMS sound pressure level within the measuring period (Crocker 2007).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. Community noise is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 1 dBA. The relationship between the peak-hour  $L_{eq}$  value and the DNL/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60+ CNEL range. Normal conversational levels are in the 60 to 65 dBA  $L_{eq}$  range; ambient noise levels greater than 65 dBA  $L_{eq}$  can interrupt conversations (Federal Transit Administration [FTA] 2018).

## **Vibration**

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from

vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration, because it is related to the stresses that are experienced by buildings (Caltrans 2020).

### **b. Sensitive Receivers**

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The County's current 2000 General Plan states that noise-sensitive land uses include, but are not limited to, residential neighborhoods, schools, and hospitals.

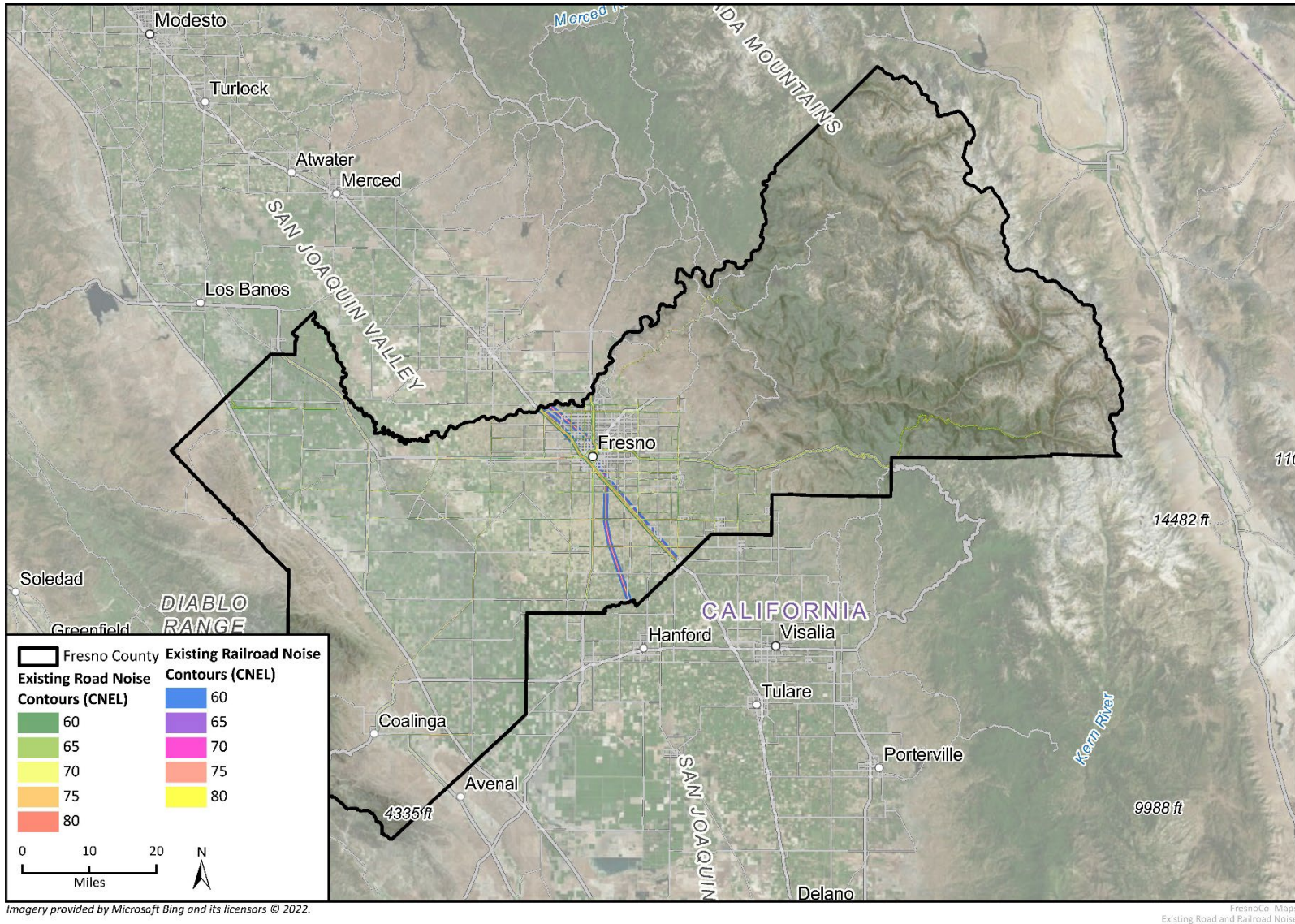
### **c. Existing Noise Conditions and Sources**

Roadway traffic from highways is the most pervasive source of noise throughout the county. Other expressways and arterials in the unincorporated County also have substantial local influences on noise levels. The most intense traffic noise sources tend to be those with either or both heavy truck traffic and high proportions of nighttime traffic (County of Fresno 2000). In addition to roadway noise, other noise sources affecting localities throughout the county include railroads, airports, and stationary sources (e.g., heavy industrial or manufacturing operations, power plants, car washes).

## **Ground Transportation**

Traffic is the main source of transportation noise in Fresno County. Traffic noise exposure is mainly a function of the number of vehicles on a given roadway per day, the speed of those vehicles, the percentage of medium and heavy trucks in the traffic volume, and the receiver's proximity to the roadway. Existing (2021) traffic noise level contours for Fresno County and the metropolitan areas of the cities of Fresno, Coalinga, Reedley, Sanger, and Selma are shown in Figure 4.12-1 through Figure 4.12-6. Noise levels would be typically highest along the County's Regionally Significant Roads System. Noise levels between 150 to 175 feet from such roadways in Fresno County typically average around 75 dBA (Fresno Council of Governments 2014). Fresno County's Regionally Significant Roads System consists of one interstate and 12 state routes. Interstate 5 and State Route (SR) 99 are major routes that generally run in a north-south direction. SR 33, 41, 43, 63, 145, 245, and 269 also provide north-south access, while SR 168, 180, 198, and 201 generally run in an east-west direction. In addition, many city and county roads are used for commute, agricultural, recreational, and scenic purposes (Fresno Council of Governments 2014).

Figure 4.12-1 Unincorporated Fresno County Existing Noise Contours



**Figure 4.12-2 Existing Noise Contours Unincorporated Fresno County in the Vicinity of Fresno**

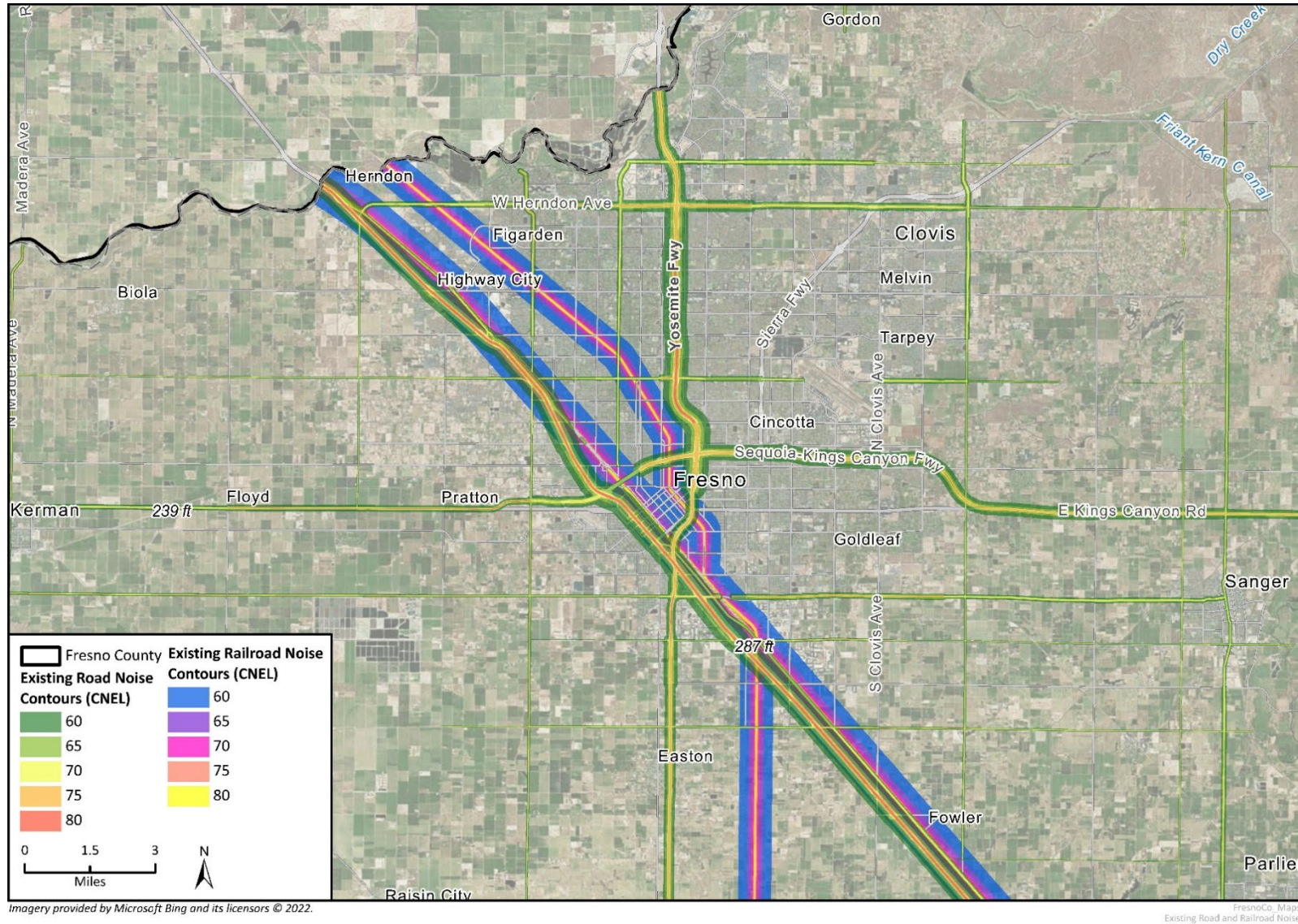
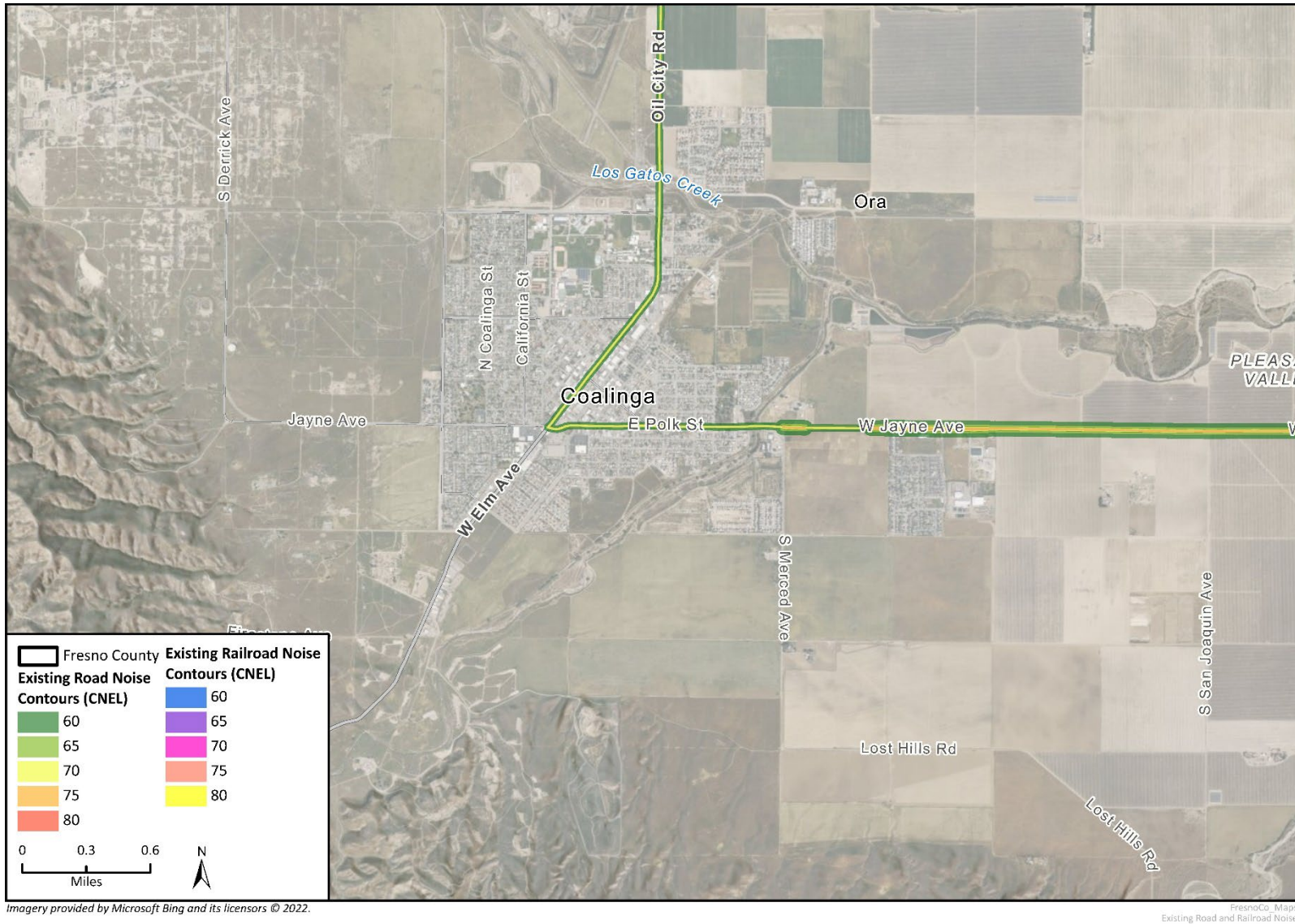




Figure 4.12-3 Existing Noise Contours Unincorporated Fresno County in the Vicinity of Coalinga



**Figure 4.12-4 Existing Noise Contours Existing Noise Contours Unincorporated Fresno County in the Vicinity of Reedley**

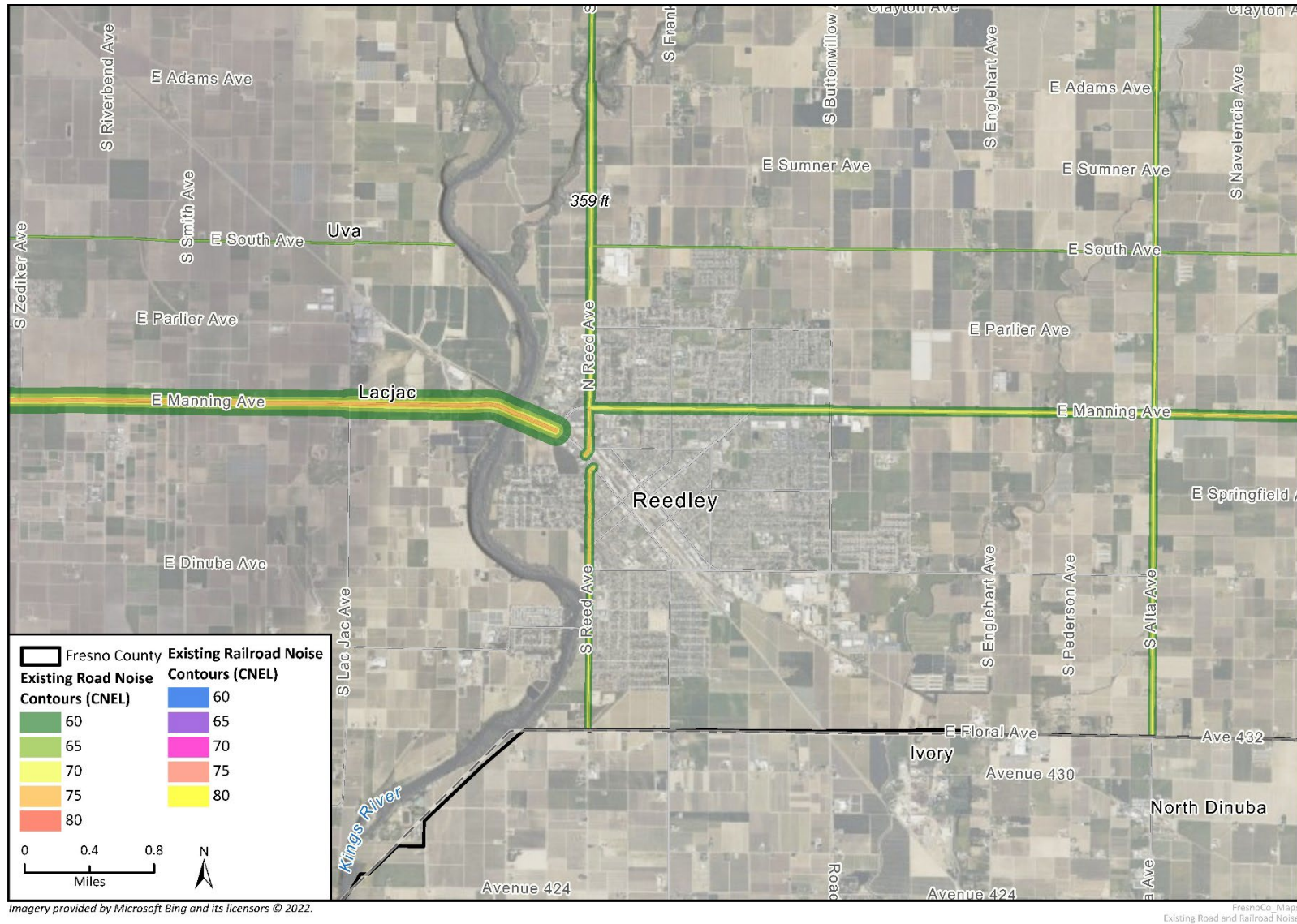
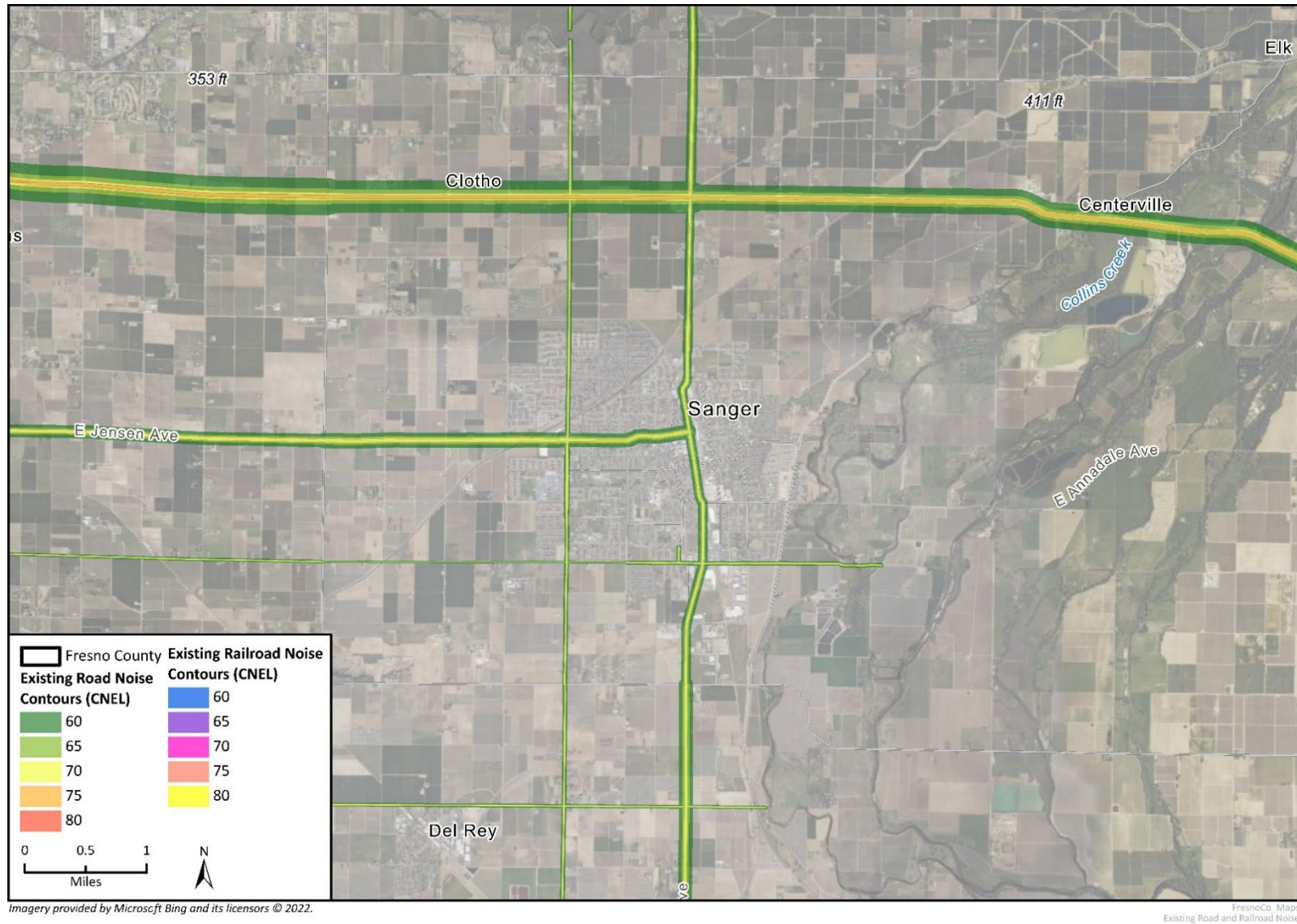
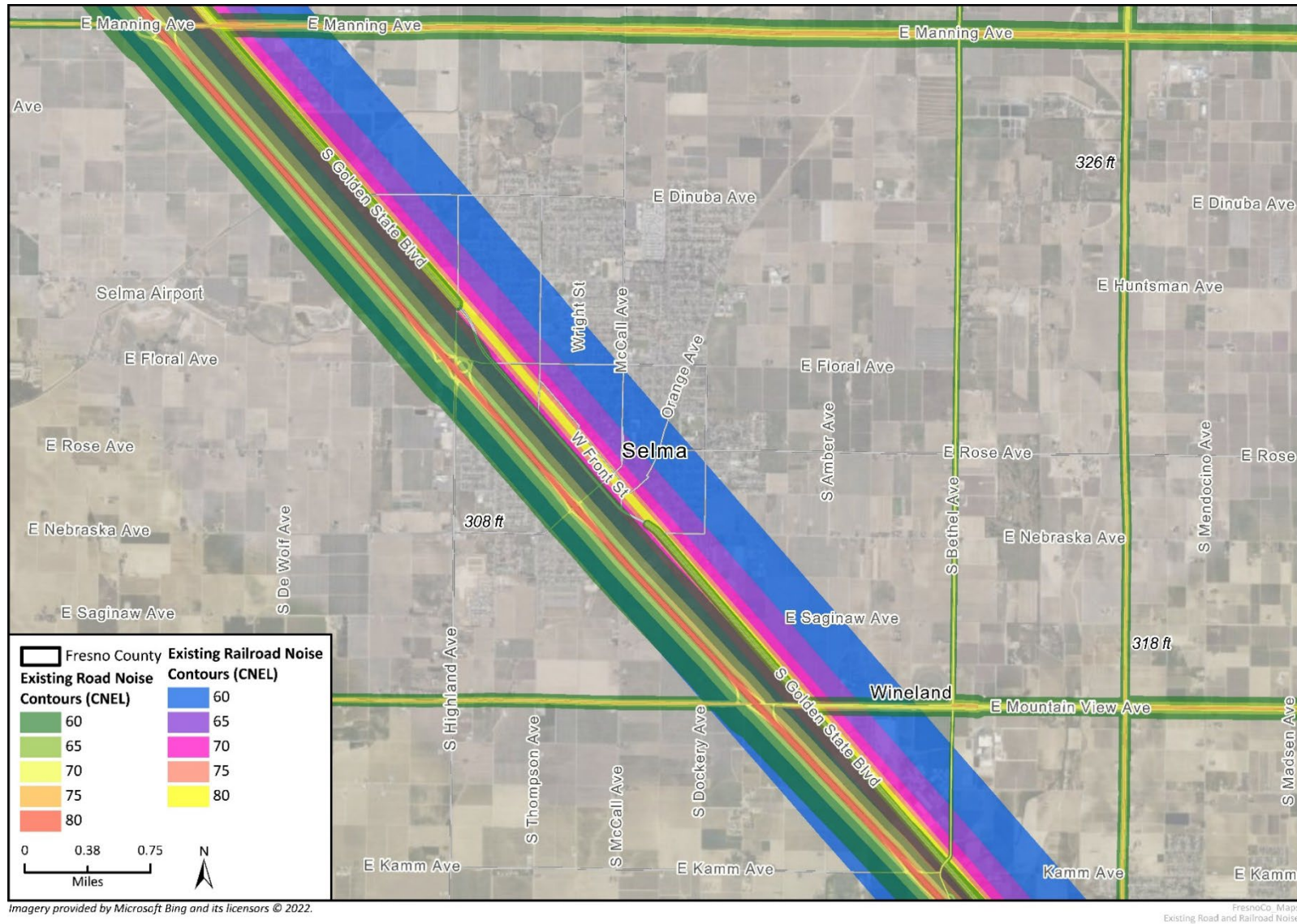


Figure 4.12-5 Existing Noise Contours in Unincorporated Fresno County in the Vicinity of Sanger



**Figure 4.12-6 Existing Noise Contours in Unincorporated Fresno County in the Vicinity of Selma**



## **Railway**

The region experiences noise from existing freight and passenger railroad operation along the San Joaquin Amtrak route, Union Pacific Railroad (UPRR) railroad lines, Burlington Northern and Santa Fe Company (BNSF) railroad lines, San Joaquin Valley Railroad lines, and the Tulare Valley Railroad lines. While these operations generate significant noise levels in the immediate vicinity of the railroad tracks during train passages, these operations are intermittent, and the tracks are widely dispersed throughout the county. For these reasons, the contribution of railroad noise to the overall ambient noise environment in the county is relatively small. The two main line rail operations in Fresno County are UPRR and BNSF. Numerous freight train operations per day occur on UPRR and BNSF lines that extend from their respective yards in Fresno County to points north and south of the county. Seven northbound and seven southbound passenger rail operations occur each day on the BNSF lines. In addition, plans are currently being made for the future implementation of high-speed rail service in California, which will pass through Fresno County.

High-noise levels can be expected within approximately 100 feet of the main line railroad tracks with moderate noise levels from 100 to 700 feet and low noise levels at distances greater than about 700 feet. These noise levels may be lesser or greater depending on site-specific factors, such as sound walls, grade crossings, and topographic shielding. Insignificant noise levels can be expected adjacent to the several small branch lines in Fresno County (Fresno Council of Government 2014). Railway noise contours are shown in Figure 4.12-1 through Figure 4.12-6 with roadway noise contours.

## **Aviation**

Fresno County's aviation system consists of nine public use airports, 26 private-use and military airports, and nine heliports. Fresno Yosemite International Airport is the busiest in Fresno County, serving over 850,000 passengers per year. In addition, the other public-use airports in the County are Firebaugh Airport, Fresno Chandler Executive Airport, Harris Ranch Airport, New Coalinga Municipal Airport, Reedley Municipal Airport, Selma Airport, Sierra Sky Park Airport, and William Robert Johnson Municipal Airport (County of Fresno 2000). In addition to the numerous daily aircraft operations that originate and terminate at these airports daily, overflights of the area by aircraft not utilizing the regional airports frequently occur. All of these operations contribute in some degree to the overall ambient noise environment in the county.

The intensity of aircraft noise exposure depends on one's proximity to the aircraft flight path, the type, speed, and altitude of aircraft, as well as atmospheric conditions. The farther away the noise source is, the more the sound propagation from source to receiver is affected by weather. Airport noise level contours have been established for all public airport facilities in the county and are consistent with the Federal Aviation Administration Integrated Noise Model. The airport noise level contour maps show noise levels generated by airport traffic at varying distances to nearby land uses. Noise level contours for existing and future conditions at each of the airports are contained in various plans or studies, including airport master plans, airport land use compatibility plan, comprehensive airport land use plans, airspace plans, and airport layout plans. Each of these plans or studies includes implementation goals, objectives, and policies and/or recommendations to lessen noise impacts.

## Non-Transportation Sources

There is a wide variety of industrial and other non-transportation noise sources in Fresno County, including heavy industrial or manufacturing operations, power plants, food packaging and processing facilities, lumber mills, aggregate mining and processing plants, racetracks, shooting ranges, amphitheaters, and car washes. Noise generated by these sources varies significantly but can provide a greater contribution to the local ambient noise environment than traffic, depending on the nature of the noise source. Although non-transportation noise sources can define the ambient noise environment within a given distance to the noise source, the regional ambient noise environment is, nonetheless, defined primarily by traffic (Fresno Council of Governments 2014).

### 4.12.2 Regulatory Setting

#### a. Federal

There are no federal noise requirements or regulations that apply directly to the implementation of GPR/ZOU. However, there are federal regulations that influence the audible landscape, especially for projects where federal funding is involved. For example, the FHWA requires abatement of highway traffic noise for highway projects through rules in 23 Code of Federal Regulations Part 772. The Federal Railroad Administration establishes noise standards for federally funded transit projects, and the FTA establishes noise standards for federally funded rail projects. According to the Federal Railroad Administration, fragile buildings can be exposed to groundborne vibration levels of 0.5 in./sec. PPV without experiencing structural damage. The FTA has identified the human annoyance response to vibration levels as 80 vibration decibels (VdB).

In addition, the Federal Aviation Administration has prepared guidelines for acceptable noise exposure in its Federal Aviation Regulations Part 150 Noise Compatibility Planning program for airports. The program is aimed at balancing an airport's operational needs and its impact on the surrounding community. Its purpose is to reduce noise impacts on existing incompatible land use and to prevent the introduction of new incompatible land uses in the areas impacted by aircraft noise. It establishes standard noise methodologies and noise metrics, identifies land uses normally compatible with various levels of airport noise, and provides for voluntary development and submission of noise exposure maps and noise compatibility programs by airport operators.

#### b. State

##### California Code of Regulations (Title 24)

Known as the California Building Code, the California Code of Regulations contains standards for allowable interior noise levels associated with exterior noise sources. The standards state that "Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room." The standards apply to new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family residences (i.e., apartments). The code goes on to indicate that:

Residential structures to be located where the annual Ldn or CNEL exceeds 60 dB shall require an acoustical analysis showing that the proposed design will achieve the prescribed allowable interior level. For public use airports or heliports, the Ldn or CNEL shall be determined from the airport land use plan prepared by the County in which the airport is located. For all other airports or heliports, or public use airports or heliports for which a land use plan has not been

developed, the Ldn or CNEL shall be determined from the noise element of the general plan of the local jurisdiction.

### **California Code of Regulations (Title 21)**

The State Division of Aeronautics has adopted standards for airport-related noise. The standards establish an acceptable noise level of 65 dB for uses near airports. This standard applies to persons residing in urban residential areas where houses are of typical California construction and may have windows partially open.

### **California Government Code Section 65302(f)**

California Government Code Section 65302(f) requires all general plans to include a Noise Element that addresses noise-related impacts in the community. The California Office of Planning and Research has prepared guidelines for the content of the noise element, which includes the development of current and future noise level contour maps. These maps must include contours for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Commercial, general aviation, heliport, and military airport operations, aircraft flyovers, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation
- Local industrial plants, including, but not limited to, railroad classification yards
- Other stationary ground noise sources identified by local agencies as contributing to the community noise environment

### **c. Regional and Local**

#### **Comprehensive Airport Land Use Plans**

Section 65302.3 of the California Government Code requires general plans and applicable specific plans to be consistent with amended comprehensive airport land use plans. The latter are intended to protect the public from the adverse effects of airport noise, to ensure people and facilities are not concentrated in areas susceptible to high risk of aircraft accidents, and to ensure no structures or activities encroach upon or adversely affect the use of navigable airspace (Fresno Council of Governments 2018). The Fresno County Airport Land Use Commission drafted the Fresno County Airport Land Use Commission Plan (ALUCP) in December 2018, which replaces and supersedes previous airport land use compatibility plans adopted for individual public use airports (Fresno Council of Governments 2018).

The Fresno County ALUCP covers the environs of the nine public use airports in Fresno County and incorporates the recommendations from the Air Installations Compatible Use Zones Report for Naval Air Station, Lemoore that apply in Fresno County. Existing and 20-year future CNEL aircraft noise exposure contours have been established for each airport covered in the ALUCP. In addition, Table 4.12-1 shows the noise compatibility criteria from the Fresno County ALUCP for uses in these noise level contours.

**Table 4.12-1 Land Use Noise Compatibility Criteria for Fresno County Airports**

Land Use Category	Noise Level (CNEL)			
	60 - 64	65 - 69	70 - 74	75+
<b>Residential</b>				
Single-family units (detached, semi-detached, attached row) <sup>3</sup>	Conditionally Compatible <sup>1,2</sup>	Not Compatible	Not Compatible	Not Compatible
Multifamily (two or more units, group quarters)	Conditionally Compatible <sup>1,2</sup>	Not Compatible	Not Compatible	Not Compatible
Mobile homes	Conditionally Compatible <sup>1,2</sup>	Not Compatible	Not Compatible	Not Compatible
<b>Public</b>				
Education facilities	Conditionally Compatible <sup>1,2</sup>	Not Compatible	Not Compatible	Not Compatible
Religious facilities, libraries, museums, galleries, clubs, lodges	Conditionally Compatible <sup>1,2</sup>	Not Compatible	Not Compatible	Not Compatible
Hospitals, nursing homes, and other health care services	Compatible	Not Compatible	Not Compatible	Not Compatible
Governmental services <sup>4</sup>	Compatible	Not Compatible	Not Compatible	Not Compatible
Outdoor music shells, amphitheaters	Compatible	Not Compatible	Not Compatible	Not Compatible
Cemeteries, cemetery chapels, mortuaries	Compatible	Compatible	Compatible	Not compatible
<b>Recreational</b>				
Outdoor sport events, stadiums, playgrounds, campgrounds, recreational vehicle parks, nature exhibits, wildlife reserves, zoos	Compatible	Not Compatible	Not Compatible	Not Compatible
Indoor recreation, amusements, athletic clubs, gyms, movie theaters, parks, outdoor recreation	Compatible	Conditionally Compatible <sup>1</sup>	Not Compatible	Not Compatible
<b>Commercial and Industrial</b>				
Wholesale and retail trade, finance, insurance, real estate, business services, repair services, professional services	Compatible	Compatible	Conditionally Compatible <sup>1</sup>	Not Compatible
Hotels, motels, transient lodgings, bed and breakfasts <sup>5</sup>	Compatible	Conditionally Compatible <sup>1</sup>	Not Compatible	Not Compatible
All industrial	Compatible	Compatible	Compatible	Compatible
<b>Agriculture</b>				
Agriculture (non-livestock)	Conditionally Compatible <sup>1,2</sup>	Conditionally Compatible <sup>1,2</sup>	Conditionally Compatible <sup>3</sup>	Not Compatible
Livestock farming, animal breeding, animal shelters, kennels	Conditionally Compatible <sup>1,2</sup>	Conditionally Compatible <sup>1,2</sup>	Conditionally Compatible <sup>3</sup>	Not Compatible



Land Use Category	Noise Level (CNEL)			
	60 - 64	65 - 69	70 - 74	75+
Agricultural, forestry, and fishing activities and related services	Compatible	Conditionally Compatible <sup>1,2</sup>	Conditionally Compatible <sup>3</sup>	Not Compatible

CNEL = Community Noise Equivalent Level

**Compatible:** Land use and related structures compatible without restrictions.

**Conditionally Compatible:** Land use and related structures are permitted, provided that sound insulation is provided to reduce interior noise levels from exterior sources to CNEL 45 dB or lower.

**Not Compatible:** Land use and related structures are not compatible.

<sup>1</sup> Requires an aviation easement be granted to the airport operator

<sup>2</sup> Residential buildings must be sound-insulated to achieve an indoor noise level of CNEL 45 dB or less from exterior sources

<sup>3</sup> Accessory dwelling units are not compatible

<sup>4</sup> Airport Rescue and fire-fighting facilities are exempt from this requirement due to Federal Aviation Administration regulations.

<sup>5</sup> Lodging intended for stays by an individual person for no more than 25 days consecutively and no more than 90 days total per year; facilities for longer stays are in the extended-stay hotel category.

Note: Land uses not specifically listed shall be evaluated, as determined by the ALUC, using the criteria for similar uses.

Source: Fresno County Council of Governments 2018

## 2042 Fresno County General Plan

The Health and Safety Element of the 2042 Fresno County General Plan Policy Document establishes policies to protect noise-sensitive land uses from exposure to excessive ambient noise. The Health and Safety Element sets normally acceptable, conditionally acceptable, and generally unacceptable ambient noise levels for proposed developments according to their land use, as shown in Table 4.12-2. When a project would be exposed to normally acceptable ambient noise, mitigation or special noise insulation measures would not required if normal conventional construction methods are employed. When a project would be exposed to conditionally acceptable ambient noise, the project should only be undertaken after a detail analysis of noise reduction requirements is made and needed insulation features are incorporated into the building design. When a project would be exposed to generally unacceptable ambient noise, the project should generally be discouraged, and if it does proceed, a detail analysis of noise reduction requirements must be made and needed insulation features incorporated into the project design.

**Table 4.12-2 Fresno County Land Use Noise Compatibility Matrix**

Land Use Category	Community Noise Exposure Acceptability (Outdoors) (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Generally Unacceptable	Land Use Discouraged
Residential: Low-Density Single-Family, Duplex, Mobile Homes	50-60	55-65	65-75	More than 75
Residential: Multiple Family	50-60	55-65	65-75	More than 75
Transient Lodging: Motels, Hotels	50-65	60-70	70-80	More than 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	55-65	65-75	More than 75
Auditoriums, Concert Halls, Amphitheaters	Not Applicable	50-70	Not Applicable	More than 65
Sports Arena, Outdoor Spectator Sports	Not Applicable	50-75	Not Applicable	More than 70
Playgrounds, Neighborhood Parks	50-70	Not Applicable	67.5-75	More than 72.5
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	Not Applicable	70-80	More than 80
Office Buildings, Business Commercial and Professional	50-70	67.5-77.5	More than 75	Not Applicable
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	More than 75	Not Applicable

CNEL = Community Noise Equivalent Level

**Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**Generally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**Land Use Discouraged:** New construction or development should generally not be undertaken.

Source: County of Fresno 2021

In addition to the ambient noise standards shown in Table 4.12-2, the Health and Safety Element also provides policies that set noise standards and protect noise-sensitive uses from excessive noise either through noise-reducing project design features or by allowing noise sensitive land uses to only locate in areas with ambient noise levels below specific thresholds. All of the policies support Goal HS-H, which aims to protect residential and other noise-sensitive uses from exposure to harmful or annoying noise levels; to identify maximum acceptable noise levels compatible with various land use designations; and to develop a policy framework necessary to achieve and maintain a healthful noise environment. Policies include the following:

**Policy HS-H.1: Minimize Noise Impacts.** The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.

**Policy HS-H.2: Acceptable Road Noise Levels.** The County shall require new roadway improvement projects to achieve and maintain the normally acceptable noise levels shown in Table 4.12-2.

**Policy HS-H.3: Noise-Sensitive Land Uses.** The County shall allow the development of new noise-sensitive land uses (which include, but are not limited to, residential neighborhoods, schools, and hospitals) only in areas where existing or projected noise levels are “acceptable” according to Table 4.12-2. Noise mitigation measures may be required to reduce noise in outdoor activity areas and interior spaces to these levels.

**Policy HS-H.4: Noise Mitigation Design and Acoustical Analysis.** So that noise mitigation may be considered in the design of new projects, the County shall require an acoustical analysis as part of the environmental review process where:

- a. Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels that are “generally unacceptable” or higher according to Table 4.12-2;
- b. Proposed projects are likely to produce noise levels exceeding the levels shown in the County’s Noise Control Ordinance at existing or planned noise sensitive uses.

**Policy HS-H.5: Noise Mitigation Measures.** Where noise mitigation measures are required to achieve acceptable levels according to land use compatibility or the Noise Control Ordinance, the County shall place emphasis of such measures upon site planning and project design. These measures may include, but are not limited to, building orientation, setbacks, earthen berms, and building construction practices. The County shall consider the use of noise barriers, such as soundwalls, as a means of achieving the noise standards after other design-related noise mitigation measures have been evaluated or integrated into the project.

**Policy HS-H.6: Construction-Related Noise.** The County shall regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County's Noise Control Ordinance.

**Policy HS-H.7: Noise Impacts to Sensitive Uses.** Where existing noise-sensitive uses may be exposed to increased noise levels due to roadway improvement projects, the County shall apply the following criteria to determine the significance of the impact:

- a. Where existing noise levels are less than 60 dB Ldn at outdoor activity areas of noise-sensitive uses, a 5 dB Ldn increase in noise levels will be considered significant;
- b. Where existing noise levels are between 60 and 65 dB Ldn at outdoor activity areas of noise-sensitive uses, a 3 dB Ldn increase in noise levels will be considered significant; and
- c. Where existing noise levels are greater than 65 dB Ldn at outdoor activity areas of noise-sensitive uses, a 1.5 dB Ldn increase in noise levels will be considered significant.

**Policy HS-H.8: Noise Levels Compatibility** The County shall evaluate the compatibility of proposed projects with existing and future noise levels through a comparison to Table 4.12-2

**Policy HS-H.9: Noise Impacts Adjacent to Airports** The County shall not allow the development of new residential land uses in areas exposed to existing or projected levels of noise from aircraft operations at any airport or air base which exceed 60 dB Ldn or CNEL.

Additionally, the following policy in the Agriculture and Land Use Element addresses discretionary use permits in relation to conditions like vibration.

**Policy LU-F.30: Industrial Discretionary Use Permit.** The County may approve rezoning requests and discretionary permits for new industrial development or expansion of existing industrial uses subject to conditions concerning the following criteria or other conditions adopted by the Board of Supervisors:

- a. Operational measures or specialized equipment to protect public health, safety, and welfare, and to reduce adverse impacts of noise, odor, vibration, smoke, noxious gases, heat and glare, dust and dirt, combustibles, and other pollutants on abutting properties.

### Ordinance Code of Fresno County

Chapter 8.40 of the Ordinance Code of Fresno County contains the County’s Noise Control Ordinance. Section 8.40.040 sets maximum exterior noise level standards, and Section 8.40.050 sets maximum interior noise level standards at receiving land uses subject to noise generated by activities on nearby properties. The County’s maximum exterior noise level standards are shown in Table 4.12-3. These standards apply specifically to noise exposure at residences, schools, hospitals, churches, and libraries. The County’s maximum interior noise level standards are shown in Table 4.12-4 and apply to noise exposure within residential dwelling units. Pursuant to the Noise Control Ordinance, in the event the measured ambient noise level at a receiving land use exceeds the applicable noise level standard in any category in either table below, the applicable standard shall be adjusted so as to equal the measure ambient noise level. Additionally, each of the noise level standards specified in the tables below are to be reduced by 5 dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

**Table 4.12-3 Fresno County Exterior Noise Level Standards**

Category	Cumulative Number of Minutes in Any 1-Hour Time Period	Noise Level Standards (dBA)	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

dBA = decibel using the A-weighted sound pressure level  
 Source: Ordinance Code of Fresno County Section 8.40.040

**Table 4.12-4 Fresno County Interior Noise Level Standards**

Category	Cumulative Number of Minutes in Any 1-Hour Time Period	Noise Level Standards (dBA)	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	5	45	35
2	1	50	40
3	0	55	45

dBA = decibel using the A-weighted sound pressure level  
 Source: Ordinance Code of Fresno County Section 8.40.050

Section 8.40.060 of the Noise Control Ordinance establishes activities that are exempted from the provisions of the County’s Noise Control Ordinance. These activities include:

- a. Activities conducted in public parks, public playgrounds, and public or private school grounds, including, but not limited to, school athletic and school entertainment events;
- b. Any mechanical device, apparatus or equipment used, related to or connected with emergency activities or emergency work;
- c. Noise sources associated with construction, provided such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day except Saturday or Sunday, or before 7:00 a.m. or after 9:00 p.m. on Saturday or Sunday;
- d. Noise sources associated with the maintenance of residential property provided such activities take place between the hours of 6:00 a.m. and 9:00 p.m. on any day except Saturday or Sunday, or between the hours of 7:00 a.m. and 9:00 p.m. on Saturday or Sunday;
- e. Noise sources associated with agricultural activities on agricultural property;
- f. Noise sources associated with a lawful commercial or industrial activity caused by mechanical devices or equipment, including air conditioning or refrigeration systems, installed prior to the effective date of this chapter; that this exemption shall expire on July 1, 1980;
- g. Noise sources associated with work performed by private or public utilities in the maintenance or modification of its facilities;
- h. Noise sources associate with the drilling or redrilling of petroleum, gas, injection or water wells;
- i. Noise sources associated with the collection of waste or garbage from property devoted to commercial or industrial uses;
- j. Any activity to the extent regulation thereof has been preempted by state or federal law.

### 4.12.3 Impact Analysis

#### a. Significance Thresholds and Methodology

##### Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, a significant noise impact would occur if new development facilitated by the GPR/ZOU would:

1. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

2. Generate excessive groundborne vibration or groundborne noise levels;
3. For a project located in the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, in 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

*Construction and Stationary Operational Noise*

New development facilitated by the GPR/ZOU would have a significant impact if construction noise or operational noise generated by new stationary sources would result in a substantial temporary or permanent increase in ambient noise levels at noise-sensitive receivers.

*Transportation Noise*

For transportation noise, impacts would be significant if vehicular or rail traffic would result in exposure of sensitive receivers to an unacceptable increase in noise levels. For purposes of this analysis, a significant impact would occur if project-related traffic increases the ambient noise environment of noise-sensitive locations by 3 dBA or more (a barely perceptible increase) if the locations are subject to noise levels in excess of the conditionally acceptable noise levels specified in Table 4.12-2, or by 5 dBA or more (a readily perceptible increase) if the locations are not subject to noise levels in excess of the aforementioned standards.

*Vibration*

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities are based on information contained in Caltrans’ *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). Maximum recommended vibration limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 4.12-5.

**Table 4.12-5 AASHTO Maximum Vibration Levels for Preventing Damage**

Type of Situation	Limiting Velocity (in./sec.)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

in./sec. = inches per second  
 Source: Caltrans 2020

Based on AASHTO recommendations, limiting vibration levels to below 0.4 in./sec. PPV at residential structures would prevent structural damage (plastered walls are indicative of construction processes that have not been common for over 100 years and are therefore not anticipated to be near construction sites under buildout of the GPR/ZOU). These limits are applicable regardless of the frequency of the source. However, as shown in Table 4.12-6 and Table 4.12-7, potential human annoyance associated with vibration is usually different if it is generated by a steady state or a transient vibration source.

**Table 4.12-6 Human Responses to Steady State Vibration**

PPV (in./sec.)	Human Response
3.6 (at 2 Hz)–0.4 (at 20 Hz)	Very disturbing
0.7 (at 2 Hz)–0.17 (at 20 Hz)	Disturbing
0.10	Strongly perceptible
0.035	Distinctly perceptible
0.012	Slightly perceptible

PPV = peak particle velocity; Hz = Hertz; in./sec. = inches per second  
 Source: Caltrans 2020

**Table 4.12-7 Human Response to Transient Vibration**

PPV (in./sec.)	Human Response
2.0	Severe
0.9	Strongly perceptible
0.24	Distinctly perceptible
0.035	Barely perceptible

PPV = peak particle velocity; in./sec. = inches per second  
 Source: Caltrans 2020

As shown in Table 4.12-6, the vibration level threshold at which steady vibration sources are considered to be distinctly perceptible is 0.035 in./sec. PPV, which is used in this analysis for the purposes of assessing stationary sources of vibration. However, as shown in Table 4.12-7, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 0.24 in./sec. PPV. This analysis uses the distinctly perceptible threshold for purposes of assessing construction-related vibration impacts related to human annoyance.

**Methodology**

*Construction Noise*

Construction noise associated with buildout under the GPR/ZOU was estimated based on reference noise levels reported by the FTA’s *Noise and Vibration Impact Assessment (2018)* for various pieces of construction equipment. It is conservatively assumed that construction equipment would typically operate as close as 50 feet from the nearest noise-sensitive receivers. Given the rural and agricultural characteristics of much of the unincorporated County, a distance of 50 feet between construction and the nearest sensitive receivers is reasonable. Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations.

*Groundborne Vibration*

Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020, FTA 2018). Table 4.12-8 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors, and the vibration level threshold for human perception is

assessed at occupied structures (FTA 2018). Therefore, vibration impacts are assessed at the structure of an affected property.

**Table 4.12-8 Vibration Levels Measured during Construction Activities**

Equipment	PPV at 25 feet (in./sec.)
Jackhammer	0.035
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003
Vibratory Roller	0.21

PPV = peak particle velocity; in./sec. = inches per second  
 Source: FTA 2018

### Onsite Operational Noise

Onsite activities at new development facilitated by the GPR/ZOU would have a significant impact if they would expose neighboring noise-sensitive land uses to noise levels exceeding the County’s existing exterior noise level standards shown in Table 4.12-3.

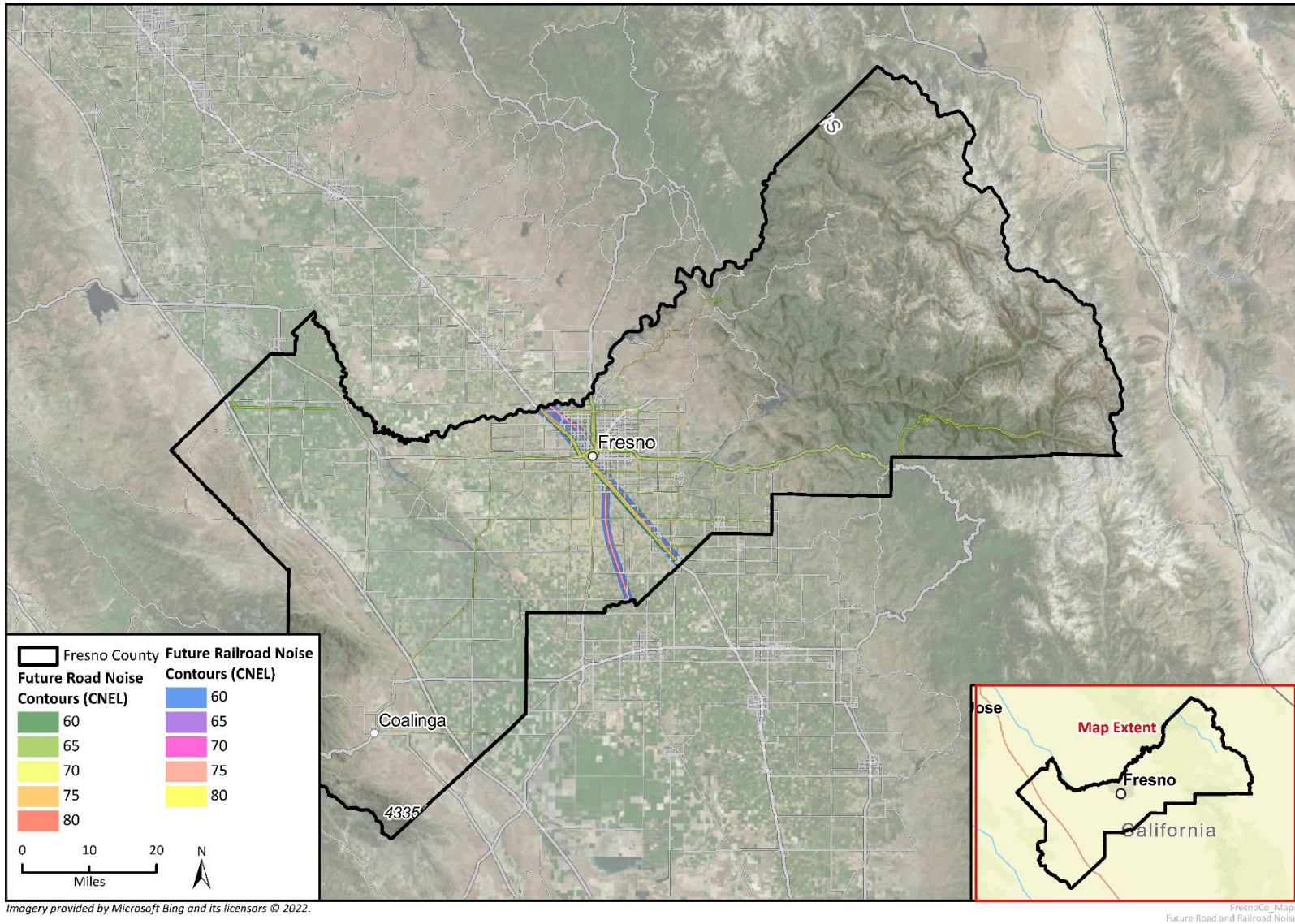
### Transportation Noise

To evaluate transportation noise impacts associated with buildout of the GPR/ZOU, noise level contours were modeled to estimate noise levels associated with existing and future (2042) vehicular and rail traffic. Projected vehicular traffic volumes in the year 2042, provided by GHD, were used to create the future noise level contours for area roadways. Future noise level contours were also mapped for noise generated by the UPRR and BNSF lines that run north-south throughout the county. The 2018 California Rail Plan estimates that the UPRR Fresno Subdivision, at the busiest segment, experiences daily freight train volumes of up to 44 trains and that daily rail volumes in this Subdivision will increase by approximately 46 freight trains by 2040 for a total daily volume of approximately 90 trains (Caltrans 2018). The 2018 California Rail Plan estimates that BNSF lines in Fresno County, at their busiest segment, experience daily freight train volumes of up to 30 trains and that daily rail volumes along these lines will increase by approximately 28 freight trains by 2040 for a total daily volume of approximately 58 trains (Caltrans 2018). It is conservatively assumed that the busiest volume is experienced throughout unincorporated Fresno County. This analysis assumes an average train speed of 26 miles per hour, an average train length of 103 cars (8,798 feet or approximately 1.6 miles), an average of two engines per train, and a 15 percent night fraction (Union Pacific Corporation 2020). Future railway noise levels were quantified using the HUD Day/Night Noise Level (DNL) Calculator. The results were mapped as 60 dBA Ldn, 65 dBA Ldn, 70 dBA Ldn, 75 dBA Ldn, and 80 dBA Ldn noise level contours parallel to the railroad, assuming a distance attenuation rate of 4.5 dBA per doubling of distance given the rural nature of unincorporated Fresno County (i.e. soft ground conditions) and intervening development around train stations (i.e. intervening development).

Projected noise level contours for 2042 are shown in Figure 4.12-7 through Figure 4.12-12. Existing and future noise level contours (Figure 4.12-1 through Figure 4.12-6) are compared to assess the increase in noise-sensitive receivers’ exposure to traffic noise upon full buildout of the GPR/ZOU. Proposed policies are then evaluated for the ability to protect noise-sensitive receivers from substantial increases in ambient noise levels.



Figure 4.12-7 Unincorporated Fresno County Future Noise Contours



**Figure 4.12-8 Future Noise Contours Unincorporated Fresno County in the Vicinity of Fresno**

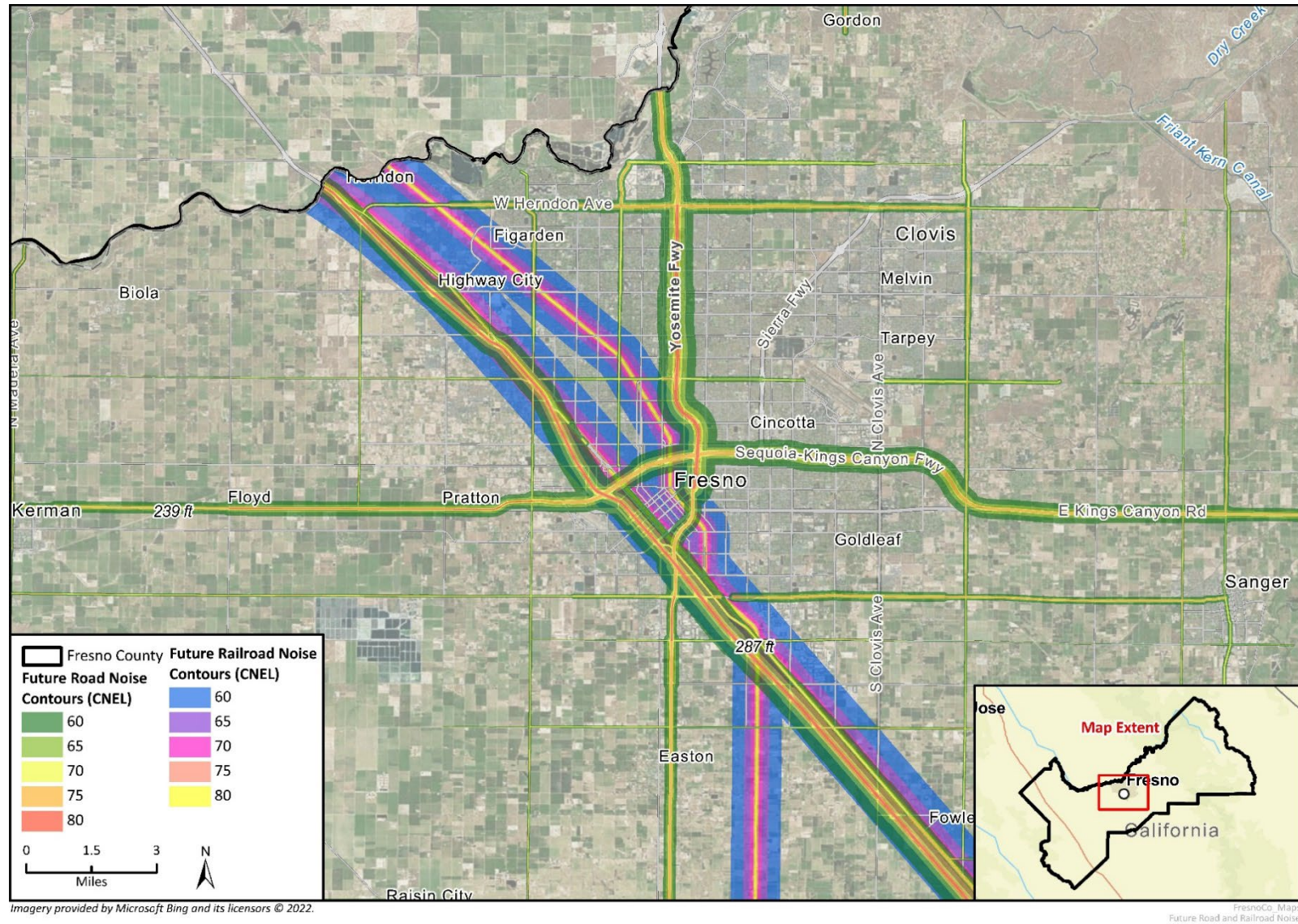
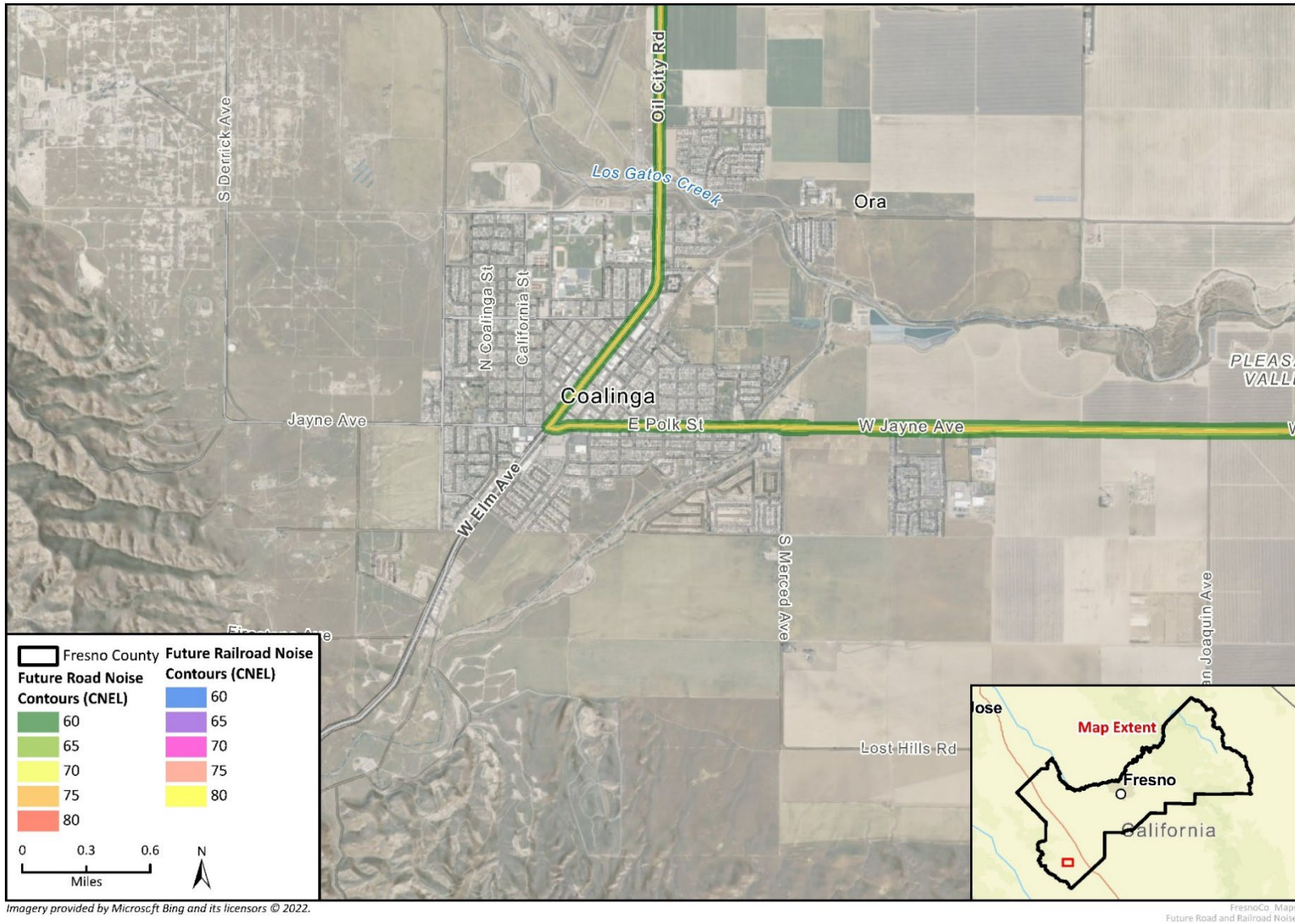


Figure 4.12-9 Future Noise Contours Unincorporated Fresno County in the Vicinity of Coalinga



**Figure 4.12-10 Future Noise Contours Unincorporated Fresno County in the Vicinity of Reedley**

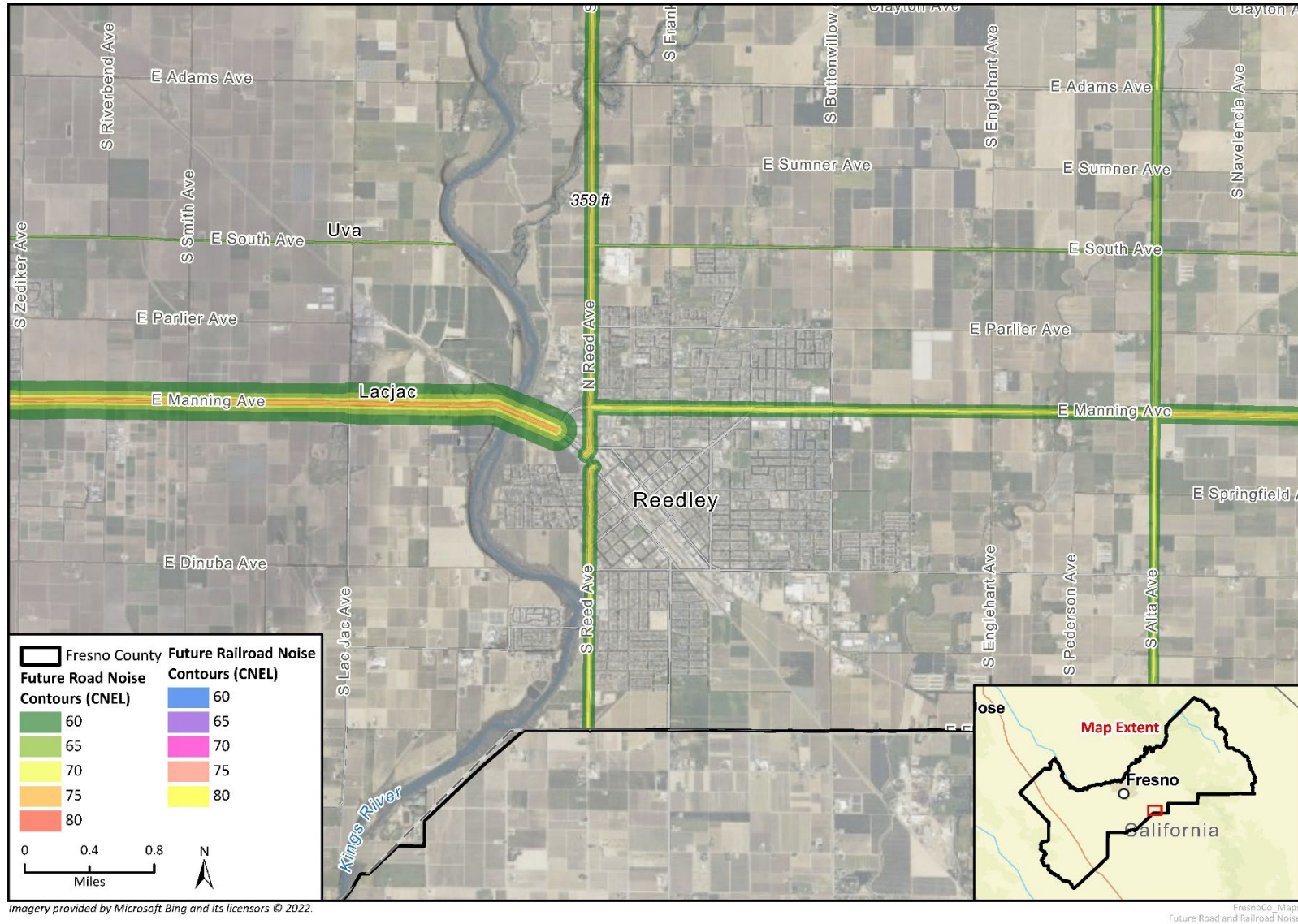
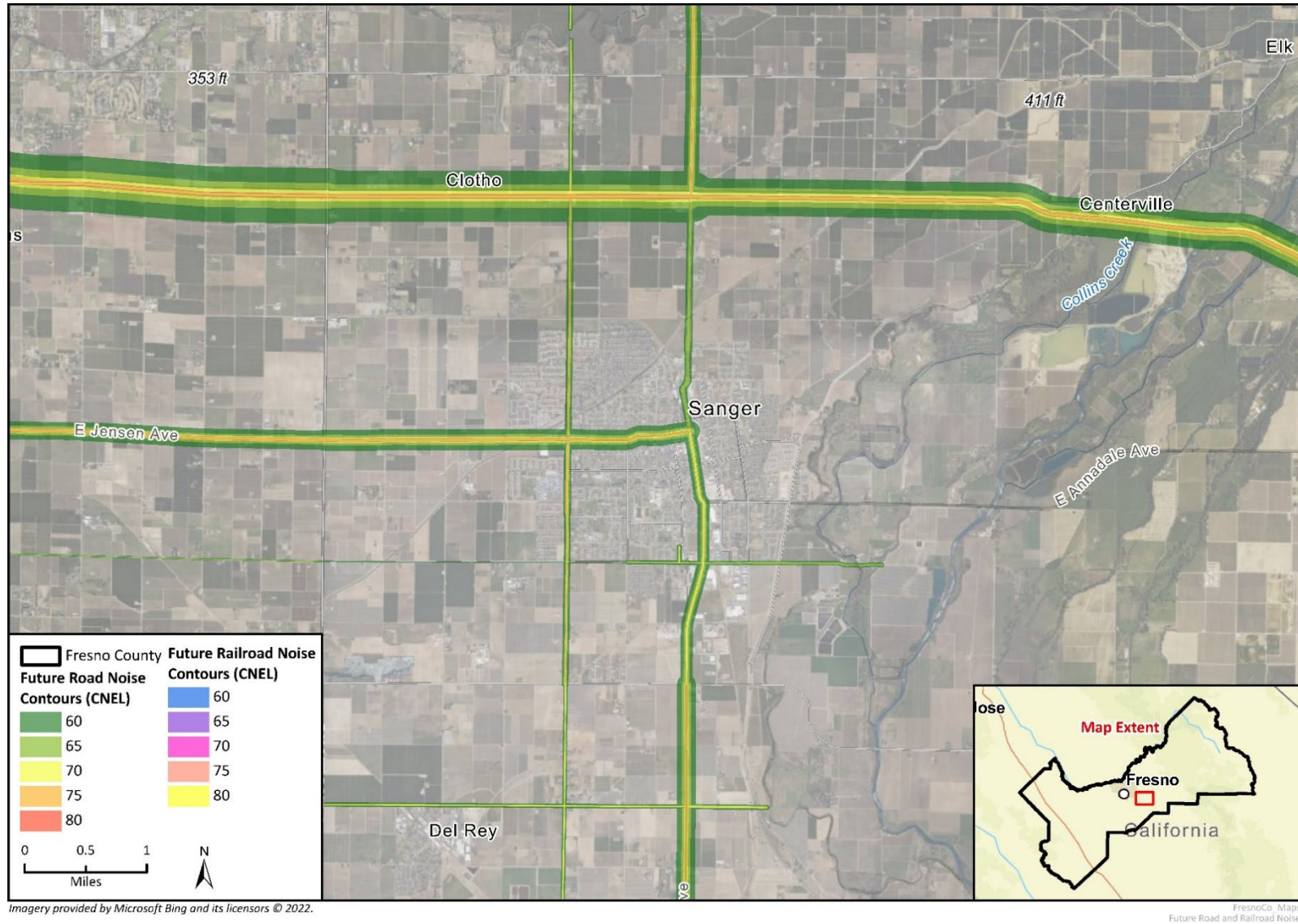
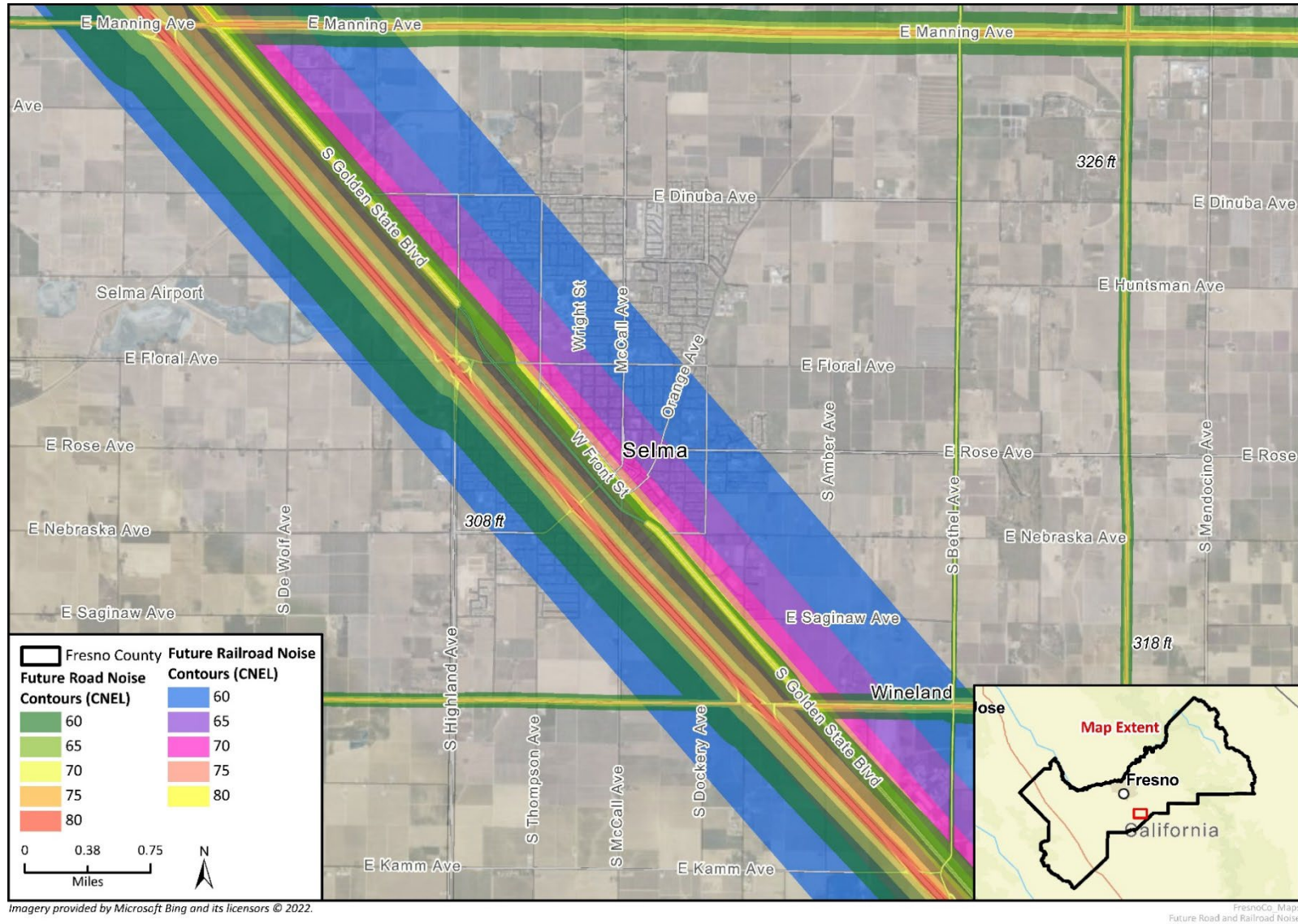


Figure 4.12-11 Future Noise Contours Unincorporated Fresno County in the Vicinity of Sanger



**Figure 4.12-12 Future Noise Contours Unincorporated Fresno County in the Vicinity of Selma**



## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the GPR/ZOU generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**IMPACT N-1 CONSTRUCTION OF DEVELOPMENT ENVISIONED IN THE GPR/ZOU WOULD TEMPORARILY GENERATE INCREASED NOISE LEVELS, POTENTIALLY AFFECTING NEARBY NOISE-SENSITIVE LAND USES. HOWEVER, PROVISIONS IN THE FRESNO COUNTY ORDINANCE CODE AND 2042 GENERAL PLAN POLICIES WOULD LIMIT CONSTRUCTION-RELATED NOISE DISTURBANCE, AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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New development under the GPR/ZOU would result from conversion of uses in response to market demand, as well as increased density in mixed-use developments in areas of the County designated as Neighborhood Commercial, Community Commercial, and Central Business Commercial. Mixed-use development would facilitate construction activity over the span of the GPR/ZOU, considering that mixed-use projects are often large, phased projects spread over years. Construction activities required for the development envisioned in the GPR/ZOU that would generate noise include demolition, site preparation, grading, building construction, paving, architectural coating, hauling, and other construction traffic. Noise from construction activities would temporarily increase ambient noise levels on and adjacent to individual construction sites. The 2042 General Plan, including the proposed Zoning Ordinance update, is a program document with no specific plans or time scales for individual development projects. Therefore, it would be speculative to determine exact noise levels, locations, or time periods for construction of such projects. However, sites adjacent to areas, where a higher density of future development/redevelopment is anticipated to occur, would be exposed to the highest levels of construction noise for the longest duration.

Table 4.12-9 illustrates typical noise levels associated with various common types of construction equipment at 50 feet, which is representative of the exposure of adjacent noise-sensitive receivers to construction noise. Noise from stationary sources of equipment typically drops off at a rate of about 6 dBA per doubling of distance; therefore, noise levels would be about 6 dBA lower than shown in the table at 100 feet from a given construction site and 12 dBA lower at 200 feet from a given construction site. This analysis assumes that pile drivers would not be utilized, because this equipment is typically used in construction of structures in areas with high-water tables or for super structures, such as high-rise buildings or other structures with heavy loads over a small area of ground (Daily Civil 2021). Construction in very wet areas, such as standing water, and construction of high-rise structures with heavy loads is not envisioned in the GPR/ZOU.

**Table 4.12-9 Typical Noise Levels for Construction Equipment**

Equipment	Estimated Noise Levels at Nearest Sensitive Receivers (dBA L <sub>eq</sub> )		
	25 feet	50 feet	100 feet
Air Compressor	86	80	74
Backhoe	86	80	74
Concrete Mixer	91	85	79
Dozer	91	85	79
Grader	91	85	79
Jackhammer	94	88	82
Loader	86	80	74
Paver	91	85	79
Roller	91	85	79
Saw	82	76	70
Scarified	89	83	77
Scraper	91	85	79
Truck	90	84	78

dBA L<sub>eq</sub> = equivalent noise level  
Source: FTA 2018

As shown in Table 4.12-9, noise levels from individual pieces of construction equipment could approach 95 dBA L<sub>eq</sub> at adjacent land uses located approximately 50 feet away from an active construction site. Construction noise could exceed ambient noise levels, depending on the project location, and may temporarily disturb people at neighboring properties.

Construction activities conducted during the hours of 6:00 a.m. and 9:00 p.m. on weekdays and 7:00 a.m. and 9:00 p.m. on Saturdays and Sundays are exempt from compliance with the County’s Noise Control Ordinance pursuant to Section 8.40.060(c). However, if construction activities are conducted outside these hours, construction noise would be subject to the exterior noise level standards set by the County’s Noise Control Ordinance, which are shown in Table 4.12-3, and would exceed these standards. Therefore, construction activities occurring outside of the exempted hours would be required to implement methods and controls to achieve the noise standards set by the Noise Control Ordinance, pursuant to the requirements of General Plan Policy HS-H.6.

The temporary nature of construction noise and the requirements to regulate construction noise in accordance with the Noise Control Ordinance and 2042 General Plan policies would reduce noise impacts at nearby noise-sensitive receivers. Adherence to the construction timing restrictions in the Noise Control Ordinance, which is contained in the proposed Zoning Ordinance update component of the project, would prevent substantial construction noise during nighttime hours, when most people are home from work and many people are asleep. Although construction noise may disturb receivers at neighboring properties during the allowed hours of construction under the Noise Control Ordinance, the impacts would be less than significant, because construction activities would be limited to daytime, when people are less sensitive to noise. Therefore, the impact of construction noise associated with development facilitated by the GPR/ZOU would be less than significant.



## Mitigation Measures

Mitigation is not required. Impacts would be less than significant without mitigation.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 1:** Would the GPR/ZOU generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**IMPACT N-2 DEVELOPMENT ENVISIONED IN THE GPR/ZOU WOULD INTRODUCE NEW STATIONARY NOISE SOURCES ASSOCIATED WITH RESIDENTIAL, COMMERCIAL AND INDUSTRIAL LAND USES AND WOULD CONTRIBUTE TO AN INCREASE IN TRAFFIC AND RAILWAY NOISE. THE CONTINUED REGULATION OF STATIONARY NOISE SOURCES, CONSISTENT WITH THE COUNTY'S NOISE CONTROL ORDINANCE, AND IMPLEMENTATION OF GOALS AND POLICIES IN THE 2042 GENERAL PLAN WOULD MINIMIZE DISTURBANCE TO ADJACENT LAND USES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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## Stationary Operational Noise

Noise generated by stationary sources associated with new development would be subject to the County's maximum allowable exterior noise level standards, contained in Section 8.40.040 of the Noise Control Ordinance. The Noise Control Ordinance is also part of the Zoning Ordinance update, which is included as part of the GPR/ZOU. Stationary noise sources at new development would include ground-level and rooftop ventilation and heating (HVAC) systems. New development in commercial and industrial areas could also introduce noise associated with loading activities and industrial equipment. Agricultural operations can also generate loud noises that may be considered stationary noise sources, because the location of agricultural fields is generally fixed over time.

Existing noise-sensitive receivers could be affected by the operational noise generated by stationary noise sources at properties developed or redeveloped under the GPR/ZOU. The Fresno County Noise Control Ordinance, which is both existing and a part of the GPR/ZOU, specifies exterior noise level standards for residences, schools, hospitals, churches, and libraries (see Table 4.12-3). Noise levels produced by stationary noise sources in excess of these exterior noise level standards are prohibited by the ordinance, unless specifically exempted by Section 8.40.060, which exempts noise sources associated with agricultural activities on agricultural property from compliance. Mechanical devices or equipment, including air conditioning or refrigeration systems, associated with commercial or industrial uses are also exempt if they were legally installed prior to 1980. Therefore, mechanical equipment associated with new commercial and industrial development facilitated by the GPR/ZOU would not be exempt and would be required to comply with the exterior noise level standards of the Noise Control Ordinance. The Noise Control Ordinance would, therefore, reduce the impact of new industrial activities and other stationary noise sources on noise-sensitive uses. Furthermore, the Health and Safety Element of the 2042 General Plan includes goals and policies that seek to reduce excess noise generated by new development. Policies related to operational noise from new and proposed development include Policies HS-H.1 through HS-H.9, all of which are detailed in Section 4.11.2, *Regulatory Setting*. Policies HS-H.1 through HS-H.3 and HS.H.7 through HS.H.9 encourage the minimization of noise impacts from new noise-generating land uses, including roadway improvement projects, and limit the placement of noise sensitive land uses. Policies HS-H.4

and HS-H.5 call for acoustical analysis and subsequent mitigation measures for new noise-sensitive land uses in areas with high existing or projected noise levels and for new noise-generating land uses with the potential to result in adverse noise impacts to existing or planned noise-sensitive land uses. Policy HS-H.6 encourages regulation of construction-related noise. Enforcement of the Noise Control Ordinance codified in Chapter 8.40 of the Fresno County Code of Ordinances and implementation of the 2042 General Plan policies would reduce the impact of fixed noise sources to levels not exceeding established noise level standards. Because stationary noise sources would not exceed the noise level standards, permanent increases in ambient noise levels associated with these sources would not be substantial, and the impacts of the GPR/ZOU related to stationary noise sources would be less than significant.

### **Traffic Noise**

The proposed GPR/ZOU would accommodate regional population growth projected in the County through 2042. As shown in Table 2-2 of Section 2, *Project Description*, the population in unincorporated Fresno County is anticipated to increase by 24,607 residents between 2021 and 2042, for a total 2042 population of 234,591 residents. By accommodating new residents, daily volumes of vehicle trips would increase, which would incrementally increase the exposure of land uses along roadways to traffic noise.

Development envisioned in the GPR/ZOU would increase vehicle trips (see Appendix TIS), as well as VMT (Section 4.15, *Transportation*), in unincorporated Fresno County to varying degrees, depending on the location and intensity of individual residential and commercial projects. However, growth would be dispersed throughout unincorporated Fresno County and would primarily be concentrated near existing urban areas that already have elevated traffic levels, such that new development would be unlikely to double traffic volumes on any given roadway segment. As shown in Figures A.4 through E.4 of Appendix TIS, household growth in traffic analysis zones throughout the County would increase by up to 28 percent in any given zone, and as shown in Figures A.7 through E.7 of Appendix TIS, employment growth in traffic analysis zones throughout the county would increase by up to 34 percent in any given zone. Therefore, it is unlikely that household and employment growth ranging between 28 to 34 percent in the most concentrated areas of the county would result in a 100 percent increase in traffic volumes on any given roadway segment. As discussed in Section 4.11.1, *Setting*, the average healthy ear can barely perceive changes of 3 dBA. Depending on the specific uses and locations of development that would be allowed under the GPR/ZOU, a doubling of traffic volumes would be required to reach the threshold of perception (a 3-dBA increase in noise levels). A doubling of traffic volumes (i.e., a 100 percent increase) would not be likely to result from the GPR/ZOU.

Additionally, the market share of electric vehicles, which are quieter than traditional gasoline vehicles, is anticipated to increase over time, especially in response to Executive Order B-48-18, which promotes the use of zero-emission vehicles, electric vehicle charging stations, and hydrogen refueling infrastructure. The increased use of electric vehicles would decrease traffic noise as compared to estimated noise levels that assume the continuation of the existing vehicle fleet mix. However, electric vehicles still generate some traffic noise because one of the main sources of vehicle noise results from the friction between tires and roadway surfaces.

Furthermore, the following 2042 General Plan policies would encourage active transportation modes, such as walking and bicycling, and would encourage the use of public transit, thereby reducing vehicle noise throughout Fresno County. Those policies include:

**Policy ED-B.14: Tourist Transit Initiatives.** The County shall continue advocating public transit services to Yosemite National Park via Yosemite Area Regional Transportation Strategy (YARTS) and to Sequoia and Kings Canyon National Parks via Sequoia/Kings Canyon Shuttle and participate, when feasible, in future regional transportation initiatives providing public transportation to tourist destinations in the foothill and mountain areas.

**Policy LU-F.3: High-Density Housing.** The County shall promote development of higher-density housing in areas located along major transportation corridors and transit routes and served by the full range of urban services, including neighborhood commercial uses, community centers, and public services.

**Policy LU-F.8: Complete Streets Design Guidelines.** The County shall adopt Complete Streets design guidelines and incorporate them into community plans and specific plans. The County shall review development proposals for compliance with its Complete Streets design guidelines to identify design changes that can improve transit, bicycle, and pedestrian access.

**Policy TR-A.14: Multi-Modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right-of-way Plan and Precise Plans of streets and highways.

**Policy TR-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel
- f. Coordinating with local jurisdictions and Fresno Council of Governments to ensure multi-modal connections are established and maintained between jurisdictions

**Policy TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators.

**Policy TR-B.1: Transit Service Coordination.** The County shall work with transit providers to provide transit services within the county that are responsive to existing and future transit demand and that can demonstrate cost effectiveness by meeting minimum farebox recovery levels required by state and federal funding programs.

**Policy TR-B.2: Transit Service.** The County shall promote transit services in designated corridors and communities where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors and in communities in the rural area of the county.

**Policy TR-B.3: Transit Supportive Development.** The County shall work with the cities of Fresno and Clovis and other agencies to achieve land use patterns and densities in areas

planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors shown in Figure TR-3.

- Policy TR-B.4: Transit Service Funding.** The County shall work with the Fresno Council of Governments and transit service providers to pursue all available sources of funding for transit services when consistent with General Plan policies and long-term funding capabilities.
- Policy TR-B.5: Special Transit Needs.** The County shall consider the transit needs of senior, disabled, low-income, and transit dependent persons in making recommendations regarding transit services.
- Policy TR-B.6: Convenient Transit Transfers.** The County shall encourage the development of facilities for convenient transfers between different transportation systems (e.g., train-to bus, bus-to-bus).
- Policy TR-B.7: Safe Routes to Schools.** The County shall work with the school districts to plan transit routes to schools and to identify safe routes to encourage other modes of transportation such as biking to reduce vehicle trips to schools.
- Policy TR-C.3: Alternative Employee Transportation Modes.** The County shall work with the cities of Fresno and Clovis to encourage new urban development within the FCMA to provide appropriate onsite facilities that encourage employees to use alternative transportation modes as air quality and transportation mitigation measures. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.
- Policy TR-D.8: Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation.

Implementation of the above 2042 General Plan policies would reduce vehicle trips and associated traffic noise to the extent feasible. Additionally, Policies HS-H.2 and HS-H.7, discussed under Section 4.11.2, *Regulatory Setting*, would establish thresholds for determining the significance of noise level increases resulting from future roadway improvement projects that affect noise-sensitive land uses. Traffic volumes on streets would not increase by 100 percent, and therefore increases in traffic noise would be less than perceptible. Impacts resulting from increase in roadway noise would be less than significant.

## **Railway Noise**

The 2042 General Plan includes policies that could increase the frequency of railway service along rail lines through Fresno County. Policy ED-B.4 in the Economic Development Element states that the County shall support the development and location of a heavy maintenance and operation facility or maintenance of way facility for High-Speed Rail. Policy LU-F.36 in the Land Use Element states that the County may approve rezonings and discretionary permits within the Golden State Industrial Corridor for properties lying easterly of the UPRR to provide railroad spur access or provide future railroad extensions. Furthermore, policies under Goal TR-E in the Transportation and Circulation Element are related to planning for increased rail service, including:

**Policy TR-E.1: Railway Consolidation.** The County shall support consolidation of the Burlington Northern Santa Fe main line traffic onto the Union Pacific right-of-way from Calwa to the San Joaquin River.

**Policy TR-E.5: Multi-Modal Rail Stations.** The County shall support multi-modal stations at appropriate locations to integrate rail transportation with other transportation modes.

**Policy TR-E.6: High-Speed Rail.** The County shall support the development of a statewide high-speed rail service through the Central Valley that serves downtown Fresno and that parallels the Burlington Northern/Santa Fe corridor south of the city of Fresno and the Union Pacific corridor through the city of Fresno. The County shall support locating a heavy maintenance facility for the high-speed train in Fresno County.

Projected railway noise level contours on the main UPRR and BNSF rail lines in Fresno County are shown in Figure 4.12-7 through Figure 4.12-12. In general, railway noise levels would increase over the planning horizon of the GPR/ZOU, primarily due to increased demand for statewide and regional goods movement that would occur independently of the GPR/ZOU. When consulted in conjunction with the land use compatibility table in Table 4.12-2, these noise level contours indicate the distance at which sensitive land uses should be placed from railroads given the projected increase in service.

While goals and policies in the 2042 General Plan could facilitate increased frequency of railway service and associated noise, sensitive land uses would not be located near railways in accordance with Policy EJ-A.1 in the Environmental Justice Element, which states that, during the discretionary land use permitting/development process, the County shall require new sensitive land uses (such as residential uses and care facilities) to be located an appropriate distance from railroad tracks based on an analysis of the physical circumstances of the project location to minimize the noise impacts and the application of mitigation as needed to reduce significant impacts. In addition, many of the railroad tracks and services in Fresno County currently exist, and buildout of the GPR/ZOU would not induce additional rail volumes on these lines. Should new multi-modal stations be constructed along existing rail lines, these projects would be required to undergo environmental review under CEQA, which would identify and require mitigation for any significant noise impacts related to increased rail traffic that may be induced by additional demand for rail services resulting from these stations. Furthermore, Environmental Impact Reports/Environmental Impact Statements were prepared for the Merced to Fresno and Fresno to Bakersfield segments of the High-Speed Rail project, which is currently under construction. These environmental documents included analyses of operational railroad noise impacts and required mitigation measures where necessary to address significant impacts to noise-sensitive land uses (California High-Speed Rail Authority 2012 and 2014). Therefore, with implementation of General Plan Policy EJ-A.1, impacts of railway noise under buildout of the GPR/ZOU would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the **GPR/ZOU** expose persons to or generate excessive groundborne vibration or groundborne noise levels?

**IMPACT N-3 CONSTRUCTION OF INDIVIDUAL PROJECTS FACILITATED BY THE GPR/ZOU COULD TEMPORARILY GENERATE GROUNDBORNE VIBRATION, POTENTIALLY AFFECTING NEARBY LAND USES. HIGH-VIBRATION LEVELS DURING WORKING CONSTRUCTION HOURS COULD POTENTIALLY DISTURB PEOPLE OR DAMAGE FRAGILE BUILDINGS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION TO APPLY STANDARD VIBRATION CONTROL MEASURES.**

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## Construction Vibration

Construction of individual projects facilitated by the GPR/ZOU could intermittently generate groundborne vibration on and adjacent to construction sites. Buildings in the vicinity of a construction site respond to vibration with varying degrees ranging from imperceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at minor levels, and up to minor damage at the highest vibration levels. Table 4.12-8 lists groundborne vibration levels from various types of construction equipment at 25 feet. This analysis assumes pile drivers would not be utilized because this equipment is typically used in construction of structures in areas with high-water tables or for super structures, such as high-rise buildings or other structures with heavy loads over a small area of ground, would not be used (Daily Civil 2021). Construction in very wet areas, such as standing water, and construction of high-rise structures with heavy loads is not envisioned in the GPR/ZOU.

As shown in Table 4.12-8, vibration-sensitive receivers could experience the strongest vibration during the use of vibratory roller, and large bulldozers at neighboring construction sites. Vibration levels from vibratory rollers could approach 0.21 in/sec PPV at a distance of 25 feet. These vibration levels would not exceed the vibration threshold of 0.24 in/sec PPV at which transient vibration sources (such as construction equipment) are considered distinctly perceptible.

Furthermore, Policy HS-H.6 of the 2042 General Plan requires the County to regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County's Noise Control Ordinance. Section 8.40.060 of the Noise Control Ordinance exempts construction activities from the noise standards when such activities do not occur before 6:00 a.m. or after 9:00 p.m. on weekdays, or before 7:00 a.m. or after 9:00 p.m. on Saturday and Sunday. This would incentivize conducting construction activities during daytime hours, which would protect residents and lodging guests from exposure to vibration during normal sleeping hours. Nevertheless, vibration levels during daytime construction activity could potentially exceed the vibration thresholds of 0.10 in/sec of structural damage to historic sites or other critical locations, 0.20 in/sec for structural damage to residential buildings with plastered walls, and 0.24 in/sec PPV for human annoyance. Therefore, impacts related to construction vibration would be potentially significant.

## Operational Vibration

Development facilitated by the GPR/ZOU may result in increased vibration from stationary sources, such as new industrial development. However, General Plan Policy LU-F.30 encourages approval of rezoning request and discretionary permits for new or expanded industrial development only after operational measures that reduce adverse impacts from vibration are approved by the County Board of Supervisors, which would ensure that vibrational impacts would be reduced enough to protect public health and welfare. Vibration emanating from stationary sources related to residential and commercial uses would not be anticipated to approach distinctly perceptible

vibration levels. Therefore, with implementation of General Plan Policy LU-F.30, impacts of vibration resulting from new industrial development would be less than significant.

As discussed under Impact N-2, goals and policies in the 2042 General Plan could facilitate increased frequency of railway service, which could increase vibration levels at sensitive land uses located near rail lines. However, many of the railroad tracks and services in Fresno County currently exist, and buildout of the GPR/ZOU would not induce additional rail volumes on these lines. Should new multi-modal stations be constructed along existing rail lines, these projects would be required to undergo environmental review under CEQA, which would identify and require mitigation for any significant vibration impacts related to increased rail traffic that may be induced by additional demand for rail services resulting from these stations. Furthermore, Environmental Impact Reports/Environmental Impact Statements were prepared for the Merced to Fresno and Fresno to Bakersfield segments of the High-Speed Rail project, which is currently under construction. These environmental documents included analyses of operational railroad vibration impacts and required mitigation measures where necessary to address significant impacts to noise-sensitive land uses (California High-Speed Rail Authority 2012 and 2014). Therefore, with implementation of General Plan Policy EJ-A.1, impacts of vibration resulting from increased rail traffic under buildout of the GPR/ZOU would be less than significant.

## **Mitigation Measures**

The County shall add the following policy to the 2042 General Plan to reduce construction-related vibration to the extent feasible.

### *N-1 Construction Vibration Control Measures*

**Policy HS-H.12: Construction Vibration Control Measures.** The following measures to minimize exposure to construction vibration shall be included as standard conditions of approval for projects involving construction vibration within 50 feet of historic buildings or nearby sensitive receivers shall:

1. Avoid the use of vibratory rollers within 50 feet of historic buildings or residential buildings with plastered walls that are susceptible to damage from vibration and;
2. Schedule construction activities with the highest potential to produce vibration to hours with the least potential to affect nearby institutional, educational, and office uses that are identified as sensitive to daytime vibration by the Federal Transit Administration in *Noise and Vibration Impact Assessment* (FTA 2018).

## **Significance After Mitigation**

The avoidance of vibratory rollers in proximity to historic buildings would prevent potential structural damage from vibration. In addition, the appropriate scheduling of construction activities would minimize disturbance of people from vibration-generating equipment. Compliance with the vibration control measures in the above policy would reduce impacts to a less-than-significant level.

**Threshold 3:** For a project located in the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, in 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**IMPACT N-4 DEVELOPMENT ENVISIONED BY THE GPR/ZOU WOULD RESULT IN INCREASED AIRPORT AND AIRSTRIP ACTIVITY. THE CONTINUED REGULATION OF AIRPORT NOISE CONSISTENT WITH STATE AND FEDERAL REGULATIONS AS WELL AS THE IMPLEMENTATION OF POLICIES IN THE 2042 GENERAL PLAN WOULD MINIMIZE DISTURBANCE TO PEOPLE RESIDING OR WORKING WITHIN PROXIMITY TO AIRPORTS, AIRSTRIPS, AND AIR BASES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Noise exposures from operations at public use airports in the county are expected to increase due to growth in airport operations that may be caused by growth in population and employment planned under the GPR/ZOU. Based on Fresno Council of Governments growth forecasts, job growth in the unincorporated County is estimated at 8,740 new jobs between 2020 and 2040 (Fresno Council of Governments 2017). When the incorporated cities are included, job growth during this same time period is estimated at 108,200 new jobs (Fresno Council of Governments 2017). In addition to the public use airports, the private airstrips in the county would be expected to service some of the additional flights associated with increased population and business activity in the region. During the planning horizon of the General Plan, which extends to 2042, increased activity at the airports and the other airstrips in the county could increase the noise levels on the ground and expose residential neighborhoods to unacceptable noise conditions.

Existing requirements for airports would reduce the noise impacts of increased airport activity on residents and workers. Title 21 of the California Code of Regulations establishes noise standards for airports and the responsibilities of the regional Airport Land Use Commissions, which prepare land use compatibility plans with thorough evaluations of airport noise, as described above in Section 4.11.2, *Regulatory Setting*. Additionally, the Federal Aviation Administrative Regulation Part 150 Airport Noise Compatibility Program is designed to reduce the effect of airport noise on the surrounding communities as airports expand. Such measures are required for airports in the county. With these requirements in place, increased airport activity would not expose residents and workers to excessive noise levels, and impacts would be less than significant.

Additionally, Policy HS-H.9 of the General Plan prohibits the development of new residential land uses in areas exposed to existing or projected noise levels from aircraft operations, airports, or air bases that exceed 60 CNEL. Furthermore, Policy HS-H.3 allows for the development of noise-sensitive land uses, which includes residential neighborhoods, only in areas where existing or projected noise levels are “acceptable” or can be mitigated to “acceptable” levels according to the land use noise compatibility matrix presented in Table 4.12-2. These General Plan policies, combined with the regulatory requirements outlined above, would prevent exposure of people to excessive aircraft noise or noise levels that exceed noise standards. Impacts would be less than significant.



### **Mitigation Measures**

Mitigation is not required. Impacts would be less than significant without mitigation.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

### **Cumulative Impacts**

Cumulative development in Fresno County in combination with potential growth envisioned under GPR/ZOU may contribute to increased construction and operational noise and groundborne vibration in unincorporated areas of Fresno County. Implementation of the GPR/ZOU would increase density and intensity of existing land uses. However, goals and policies contained in the GPR/ZOU would address increased noise and vibration. Furthermore, implementation of Mitigation Measure N-1 would reduce potential impacts to noise and groundborne vibration. Therefore, cumulative noise impacts would be less than significant.

## 4.13 Population and Housing

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This section evaluates the potential impacts on population growth and housing associated with implementation of the General Plan Review and Zoning Ordinance Update (GPR/ZOU). Because population demographics frequently go beyond city/county boundaries, this analysis uses Fresno County (including its incorporated cities) and California as a whole for comparative analysis. These points of reference provide comparisons and perspective to highlight distinguishing qualities of Fresno County. Data used to prepare this section were taken from the Fresno Council of Governments (FCOG) and Applied Development Economics (ADE) in the Fresno County 2019-2050 Growth Projections, the United States Bureau of the Census (US Census), and the California Department of Finance (California DOF).

### 4.13.1 Setting

Population, housing, and employment data from the agencies listed above are used in the sections below to provide an analysis of potential population and housing impacts for Fresno County, California.

#### **a. Population**

Several governmental agencies estimate or measure the population of Fresno County, including FCOG, the US Census, and California DOF. FCOG prepares a regional growth projection for the County as part of its recurring update to the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The most recent FCOG regional growth projection is the *Fresno County 2050 Growth Projections* (FCOG 2017). According to the FCOG regional growth projection, the population of the unincorporated County in 2021 was approximately 112,336 people (FCOG 2017). The 2021 population estimate does not include people residing within unincorporated areas of the County that occur within the sphere of influence of incorporated cities, such as Fresno and Clovis. When the population of the entire County is accounted for, including people residing within cities and their sphere of influence, the population of the County exceeds 1 million people (FCOG 2017). Therefore, it can be inferred that most of the population in Fresno County lives within cities, such as Fresno, Clovis and Selma, or within the sphere of influence of cities.

The California Department of Finance (DOF) does not publish the population residing within the unincorporated area of the County that is also outside the sphere of influence of incorporated cities in the County. Therefore, the FCOG and DOF 2021 population estimates for the unincorporated area of the County cannot be compared, because unlike the FCOG estimate, DOF includes people within the sphere of influence of cities. However, for informational purposes, the DOF estimates that approximately 170,067 people resided in the unincorporated area of the County in 2021 (DOF 2021).

DOF and the U.S. Census Bureau also collect and analyze demographic data for cities and counties throughout California. DOF then uses the data to estimate population and develop future projections. Table 2-1 shows population change in Fresno County and its cities from 1960 to 2010, including the percentage of the county's population within each city and the share of county population within the unincorporated area and the incorporated cities. Fresno County's population in 1960 was approximately 366,000 and grew to approximately 972,300 by 2015, an increase of 606,300 or 166 percent. During this period, the population of the unincorporated area actually decreased by 11,670, from 182,120 to 170,450, a reduction of 6.4 percent. This reflected a decrease

in population from the county's unincorporated area and an increase in population from the county's cities, with the incorporated-unincorporated split changing from 50.2 percent to 49.8 percent in 1960 to 82.5 percent to 17.5 percent in 2015.

As Table 4.13-1 and Table 4.13-2 show, Fresno County's population and population growth are mostly concentrated in the county's cities. In particular, the metropolitan area of the City of Fresno has accounted for much of the county's population growth, either through annexations or new development. Over 53 percent of the county's population now resides in the city of Fresno and almost 11 percent resides in Clovis. According to the DOF, between 2000 and 2015, the incorporated areas grew by 26.2 percent, accounting for 96.4 percent of the total growth in Fresno County. Unincorporated parts of the county grew between 2000 and 2005, then declined between 2005 and 2010, and then grew again from 2010 to 2015; overall, between 2000 and 2015 the unincorporated population grew by 6,310, or 3.6 percent. In incorporated parts of the county, the City of Fresno experienced the greatest increase in growth in the county, increasing by 21.6 percent (92,510) from 2000 to 2015. The City of Fresno's growth mirrors the rest of Fresno County with the same (21.6) percentage growth between 2000 and 2015 and the same average annual growth rate of 1.3 percent. Kerman experienced the greatest amount of growth, at 67.4 percent (5,760) from 2000-2015. Coalinga experienced the least amount of growth (320 or 2.0 percent) between 2000 and 2015.

**Table 4.13-1 Population Change: 1960 to 2015 Percentage of County Population; Fresno County and Cities**

City/Area	1960		1970		1980		1990		2000		2010		2015	
	Pop	% of County	Pop	% of County	Pop	% of County	Pop	% of County	Pop	% of County	Pop	% of County	Pop	% of County
Clovis	5,550	1.5%	13,860	3.4%	33,020	6.4%	50,320	7.5%	68,470	8.6%	95,630	10.3%	104,340	10.7%
Coalinga	5,970	1.6%	6,160	1.5%	6,590	1.3%	8,210	1.2%	16,210	2.0%	13,380	1.4%	16,530	1.7%
Firebaugh	2,070	0.6%	2,520	0.6%	3,740	0.7%	4,430	0.7%	5,740	0.7%	7,550	0.8%	7,780	0.8%
Fowler	1,890	0.5%	2,240	0.5%	2,500	0.5%	3,210	0.5%	3,980	0.5%	5,570	0.6%	5,960	0.6%
Fresno	133,930	36.6%	165,660	40.1%	217,130	42.2%	354,200	53.1%	427,650	53.5%	494,670	53.2%	520,160	53.5%
Huron	1,270	0.3%	1,530	0.4%	2,770	0.5%	4,770	0.7%	6,310	0.8%	6,750	0.7%	6,820	0.7%
Kerman	1,970	0.5%	2,670	0.6%	4,000	0.8%	5,450	0.8%	8,550	1.1%	13,540	1.5%	14,310	1.5%
Kingsburg	3,090	0.8%	3,840	0.9%	5,120	1.0%	7,210	1.1%	9,200	1.2%	11,380	1.2%	11,710	1.2%
Mendota	2,100	0.6%	2,710	0.7%	5,040	1.0%	6,820	1.0%	7,890	1.0%	11,010	1.2%	11,210	1.2%
Orange Cove	2,890	0.8%	3,390	0.8%	4,030	0.8%	5,600	0.8%	7,720	1.0%	9,080	1.0%	9,360	1.0%
Parlier	1,370	0.4%	1,990	0.5%	2,900	0.6%	7,940	1.2%	11,150	1.4%	14,490	1.6%	15,100	1.6%
Reedley	5,850	1.6%	8,130	2.0%	11,070	2.2%	15,790	2.4%	20,760	2.6%	24,190	2.6%	25,490	2.6%
San Joaquin	880	0.2%	1,510	0.4%	1,930	0.4%	2,310	0.3%	3,270	0.4%	4,000	0.4%	25,130	2.6%
Sanger	8,070	2.2%	10,090	2.4%	12,540	2.4%	16,840	2.5%	18,930	2.4%	24,270	2.6%	4,040	0.4%
Selma	6,930	1.9%	7,460	1.8%	10,940	2.1%	14,760	2.2%	19,440	2.4%	23,220	2.5%	23,910	2.5%
<i>Incorporated</i>	<i>183,830</i>	<i>50.2%</i>	<i>233,760</i>	<i>56.6%</i>	<i>323,320</i>	<i>62.8%</i>	<i>507,860</i>	<i>76.1%</i>	<i>635,270</i>	<i>79.5%</i>	<i>758,730</i>	<i>81.5%</i>	<i>801,850</i>	<i>82.5%</i>
<i>Unincorporated</i>	<i>182,120</i>	<i>49.8%</i>	<i>179,570</i>	<i>43.4%</i>	<i>191,300</i>	<i>37.2%</i>	<i>159,630</i>	<i>23.9%</i>	<i>164,140</i>	<i>20.5%</i>	<i>171,720</i>	<i>18.5%</i>	<i>170,450</i>	<i>17.5%</i>
<b>Fresno County</b>	<b>365,950</b>	<b>100.0%</b>	<b>413,330</b>	<b>100.0%</b>	<b>514,620</b>	<b>100.0%</b>	<b>667,490</b>	<b>100.0%</b>	<b>799,410</b>	<b>100.0%</b>	<b>930,450</b>	<b>100.0%</b>	<b>972,300</b>	<b>100.0%</b>

Source: Fresno County, 2017

**b. Households**

A household is defined by the DOF and the U.S. Census as a group of people who occupy a housing unit. A household differs from a dwelling unit because the number of dwelling units includes both occupied and vacant dwelling units. Not all of the population lives in households. A portion lives in group quarters, such as board and care facilities; others are homeless.

Small households (1 to 2 persons per household [pph]) traditionally reside in units with 0 to 2 bedrooms; family households (3 to 4 pph) normally reside in units with 3 to 4 bedrooms. Large households (5 or more pph) typically reside in units with 4 or more bedrooms. However, the number of units in relation to the household size may also reflect preference and economics; many small households obtain larger units, and some large families live in small units for economic reasons.

Table 4.13-2 compares the number and size of households in Fresno County as a whole for every five years from the period 2000-2020. As shown, the total number of households in the city has increased every five years, including in 2020. There has also been an overall increase in the number of households in the county over the past 20 years. The average household size in the city increased slightly from 3.09 pph in 2000 to 3.20 pph in 2020.

**Table 4.13-2 Households in Fresno County (2010-2020)**

Area	2000	2005	2010	2015	2020
<b>Total Households</b>					
Fresno County	252,940	269,166	289,391	302,786	314,417
<b>Average Household Size</b>					
Fresno County	3.09	3.15	3.16	3.16	3.20

Source: US Census Bureau, American Fact Finder, Census 2000 Demographic Profile Highlights (US Census 2000). CA Department of Finance, E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2010-2018, with 2010 Benchmark.

**c. Projections**

**San Joaquin Valley Counties Population Growth**

Table 4.13-3 shows California DOF population forecasts from 2015 through 2060 for the eight counties in the San Joaquin Valley and for California overall. Fresno County’s population is projected to grow by 606,200 over the 45-year period, an increase of 61.8 percent overall and an average annual rate of 1.1 percent. The growth rate is expected to be higher over the first few decades before tapering-off in the later decades. Fresno County’s projected rate falls between those of the San Joaquin Valley (76.1 % overall and 1.4% annually) and California (32.8% overall and 0.6% annually). The rate of growth is similar for the Valley and for the state, with decreasing rates over time. Fresno County’s growth rate through 2060 is expected to be lower than all other San Joaquin Valley counties except Stanislaus County (59.0% overall and 1.0% annually).

**Table 4.13-3 California and San Joaquin Valley County Population Forecasts (2015 to 2060)**

County/Region	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
<b>Fresno</b>	981,700	1,055,100	1,130,400	1,200,700	1,269,700	1,332,900	1,396,800	1,464,400	1,528,400	1,587,900
Avg Annual Change	—	1.5%	1.4%	1.2%	1.1%	1.0%	0.9%	0.9%	0.9%	0.8%
<b>Kern</b>	894,500	989,800	1,088,700	1,189,000	1,291,900	1,396,300	1,501,900	1,604,400	1,703,000	1,793,200
Avg Annual Change	—	2.0%	1.9%	1.8%	1.7%	1.6%	1.5%	1.3%	1.2%	1.0%
<b>Kings</b>	155,100	167,500	180,400	192,600	205,200	218,400	230,200	240,600	250,500	259,500
Avg Annual Change	—	1.6%	1.5%	1.3%	1.3%	1.3%	1.1%	0.9%	0.8%	0.7%
<b>Madera</b>	157,700	173,100	189,300	205,000	221,800	238,500	255,100	272,400	288,800	304,700
Avg Annual Change	—	1.9%	1.8%	1.6%	1.6%	1.5%	1.4%	1.3%	1.2%	1.1%
<b>Merced</b>	269,600	289,000	313,100	337,800	364,300	389,900	414,900	439,100	463,100	485,700
Avg Annual Change	—	1.4%	1.6%	1.5%	1.5%	1.4%	1.3%	1.1%	1.1%	1.0%
<b>San Joaquin</b>	723,500	766,600	822,800	893,400	966,900	1,037,800	1,104,900	1,171,400	1,239,300	1,306,300
Avg Annual Change	—	1.2%	1.4%	1.7%	1.6%	1.4%	1.3%	1.2%	1.1%	1.1%
<b>Stanislaus</b>	538,700	573,800	611,400	648,100	681,700	714,900	748,300	783,000	819,600	856,700
Avg Annual Change	—	1.3%	1.3%	1.2%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%
<b>Tulare</b>	467,200	498,600	537,000	578,900	616,500	650,800	683,500	715,700	747,900	779,800
Avg Annual Change	—	1.3%	1.5%	1.5%	1.3%	1.1%	1.0%	0.9%	0.9%	0.8%
<b>San Joaquin Valley</b>	4,188,000	4,513,500	4,873,100	5,245,500	5,618,000	5,979,500	6,335,600	6,691,000	7,040,600	7,373,800
Avg Annual Change	—	1.5%	1.5%	1.5%	1.4%	1.3%	1.2%	1.1%	1.0%	0.9%
<b>California</b>	38,897,000	40,619,300	42,373,300	44,085,600	45,747,600	47,233,200	48,574,100	49,779,400	50,817,800	51,663,800
Avg Annual Change	—	0.9%	0.8%	0.8%	0.7%	0.6%	0.6%	0.5%	0.4%	0.3%

Source: Fresno County, 2017

## Fresno County Projected Population Growth

In May 2017, the Fresno Council of Governments (FCOG) completed growth projections through 2050 to assist with updating the FCOG Regional Transportation Plan (RTP) and the Sustainable Communities Strategy (SCS). The FCOG projections cover the spheres of influence (SOIs) of each of the county's 15 cities and the unincorporated area outside city SOIs. FCOG's overall county population projection is lower than both the existing DOF projections and the previous FCOG projections for 2050 (prepared in 2012). This is because those projections significantly overestimated recent population growth and exceeded the actual 2015 population reported by DOF by 9,400 and 38,000, respectively. To support the RTP/SCS process, FCOG disaggregated the countywide population projection to the city sphere of influence level using a population cohort survival model that accounted for age- and race-adjusted birthrate and death rate factors to estimate the natural change in population, as well as in-migration and out-migration patterns. FCOG also accounted for each city's long-term development capacity based on adopted general plans.

Table 4.13-4 shows FCOG's RTP/SCS population projections in five-year increments from 2015 through 2050. It also shows the population distribution among cities and the unincorporated area as a percentage of the county total and the overall and annualized growth rates for each city and the unincorporated area. As noted above, the city-based projections are for SOIs, which includes areas that have not yet been annexed, but are expected to be prior to development. As a result, the city totals for 2015 shown in Table 4.13-4 are higher than those shown in Table 4.13-1 and Table 4.13-2, which account for population only within the current city limits of each city. In terms of the rate of population growth, the unincorporated area will lag far behind the overall city rate. Population growth from 2015 through 2050 will be 15.0 percent in the unincorporated area and 52.7 percent in the cities, and the annualized rate will be 0.4 percent in the unincorporated area and 1.2 percent in the cities.

As Table 4.13-4 shows, the FCOG projections suggest a continuation of the historic trend of an increasing percentage of population growth occurring in Fresno County's cities, compared with the unincorporated areas. Between 2015 and 2050, 96.9 percent of the population change is projected to occur in city SOIs. This will result in only 7.9 percent of the county's population residing in the unincorporated area by 2050.

**Table 4.13-4 Fresno County Population Forecasts (2015 to 2050)**

<b>Cities (within SOIs)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2050</b>
Clovis	114,770	126,850	136,350	145,050	153,490	161,580	169,220	177,210
Coalinga	16,530	17,350	18,170	18,920	19,650	20,350	21,010	21,700
Firebaugh	7,780	8,370	8,880	9,340	9,790	10,220	10,630	11,060
Fowler	6,580	7,240	7,890	8,490	9,070	9,630	10,160	10,710
Fresno	574,590	624,040	676,820	725,120	772,030	816,980	859,410	903,790
Huron	6,820	7,430	7,600	7,750	7,900	8,050	8,180	8,330
Kerman	14,880	15,900	16,930	17,860	18,770	19,650	20,470	21,330
Kingsburg	12,750	13,670	14,590	15,440	16,260	17,050	17,790	18,570
Mendota	11,210	11,920	12,630	13,280	13,920	14,520	15,090	15,690
Orange Cove	9,360	9,540	9,710	9,880	10,030	10,190	10,330	10,480
Parlier	15,100	15,870	16,640	17,350	18,040	18,700	19,330	19,980
Reedley	25,570	27,150	28,740	30,200	31,610	32,960	34,240	35,580
Sanger	26,310	27,860	29,410	30,840	32,220	33,540	34,790	36,100
San Joaquin	4,040	4,310	4,580	4,830	5,070	5,310	5,520	5,750
Selma	26,680	28,250	29,810	31,250	32,640	33,980	35,240	36,550
<b>Subtotal Cities</b>	<b>872,970</b>	<b>945,750</b>	<b>1,018,750</b>	<b>1,085,600</b>	<b>1,150,490</b>	<b>1,212,710</b>	<b>1,271,410</b>	<b>1,332,830</b>
Unincorporated	99,330	101,710	104,080	106,250	108,350	110,370	112,280	114,270
<b>Total County</b>	<b>972,300</b>	<b>1,047,460</b>	<b>1,122,830</b>	<b>1,191,850</b>	<b>1,258,840</b>	<b>1,323,080</b>	<b>1,383,690</b>	<b>1,447,100</b>



County of Fresno  
**General Plan Review and Zoning Ordinance Update**

<b>Cities (within SOIs)</b>	<b>2015</b>	<b>2015 % of Total</b>	<b>2050</b>	<b>2050 % of Total</b>	<b>'15 to '50 Change</b>	<b>Change % of Total</b>	<b>'15 to '50 Percent Change</b>	<b>'15 to '50 Annual Rate</b>
Clovis	114,770	11.8%	177,210	12.2%	62,440	13.2%	54.4%	1.2%
Coalinga	16,530	1.7%	21,700	1.5%	5,170	1.1%	31.3%	0.8%
Firebaugh	7,780	0.8%	11,060	0.8%	3,280	0.7%	42.2%	1.0%
Fowler	6,580	0.7%	10,710	0.7%	4,130	0.9%	62.8%	1.4%
Fresno	574,590	59.1%	903,790	62.5%	329,200	69.3%	57.3%	1.3%
Huron	6,820	0.7%	8,330	0.6%	1,510	0.3%	22.1%	0.6%
Kerman	14,880	1.5%	21,330	1.5%	6,450	1.4%	43.3%	1.0%
Kingsburg	12,750	1.3%	18,570	1.3%	5,820	1.2%	45.6%	1.1%
Mendota	11,210	1.2%	15,690	1.1%	4,480	0.9%	40.0%	1.0%
Orange Cove	9,360	1.0%	10,480	0.7%	1,120	0.2%	12.0%	0.3%
Parlier	15,100	1.6%	19,980	1.4%	4,880	1.0%	32.3%	0.8%
Reedley	25,570	2.6%	35,580	2.5%	10,010	2.1%	39.1%	0.9%
Sanger	26,310	2.7%	36,100	2.5%	9,790	2.1%	37.2%	0.9%
San Joaquin	4,040	0.4%	5,750	0.4%	1,710	0.4%	42.3%	1.0%
Selma	26,680	2.7%	36,550	2.5%	9,870	2.1%	37.0%	0.9%
<b>Subtotal Cities</b>	<b>872,970</b>	<b>89.8%</b>	<b>1,332,830</b>	<b>92.1%</b>	<b>459,860</b>	<b>96.9%</b>	<b>52.7%</b>	<b>1.2%</b>
Unincorporated	99,330	10.2%	114,270	7.9%	14,940	3.1%	15.0%	0.4%
<b>Total County</b>	<b>972,300</b>	<b>100.0%</b>	<b>1,447,100</b>	<b>100.0%</b>	<b>474,800</b>	<b>100.0%</b>	<b>48.8%</b>	<b>1.1%</b>

Source: FCOG, 2050 Projections Final Report, May 4, 2017

## d. Regulatory Setting

### State Housing Element Law

State housing element statutes (Government Code Sections 65580-65589.9) mandate that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. As a result, State housing policy rests largely upon the effective implementation of local general plans and in particular, housing elements. Additionally, Government Code Section 65588 dictates that housing elements must be updated at least once every five years. Fresno County’s most recent housing element, (Fresno County Multi-Jurisdictional 2015-2023 Housing Element) was adopted in April 2016.

### Regional Housing Needs Allocation Plan

California’s Housing Element law requires that each county and city develop local housing programs to meet their “fair share” of future housing growth needs for all income groups, as determined by the DOF. The regional councils of government (COGs), including Fresno Council of Governments (FCOG), are then tasked with distributing the State-projected housing growth need for their region among their city and county jurisdictions by income category. This fair share allocation is referred to as the Regional Housing Needs Assessment (RHNA) process. The RHNA represents the minimum number of housing units each community is required to plan for through a combination of: 1) zoning “adequate sites” at suitable densities to provide affordability; and 2) housing programs to support production of below-market rate units. Table 4.13-5 shows Fresno County’s allocation from the 2013 RHNA Plan distributed among the four income categories. These categories include: very low (up to 50 percent of area median income); low (between 51 and 80 percent of area median income); moderate (between 81 and 120 percent of area median income); and above moderate income.

**Table 4.13-5 FCOG Unincorporated Area Housing Needs Allocations**

<b>Jurisdiction</b>	<b>Very Low</b>	<b>Low</b>	<b>Moderate</b>	<b>Above Moderate</b>	<b>Total</b>
Clovis	2,926	1,549	1,448	3,054	<b>8,977</b>
Coalinga	157	96	89	224	<b>566</b>
Firebaugh	102	46	66	229	<b>443</b>
Fowler	94	57	47	141	<b>339</b>
Fresno	9,440	5,884	5,638	15,904	<b>36,866</b>
Huron	45	45	55	174	<b>319</b>
Kerman	285	134	168	476	<b>1,063</b>
Kingsburg	248	161	150	323	<b>882</b>
Mendota	129	68	97	348	<b>642</b>
Orange Cove	66	49	86	268	<b>469</b>
Parlier	147	94	108	384	<b>733</b>
Reedley	403	183	211	666	<b>1,463</b>

Jurisdiction	Very Low	Low	Moderate	Above Moderate	Total
Sanger	412	193	245	644	<b>1,494</b>
San Joaquin	39	28	36	97	<b>200</b>
Selma	393	165	233	701	<b>1,492</b>
Unincorporated County	706	391	370	883	<b>2,350</b>
<b>Total</b>	<b>15,592</b>	<b>9,143</b>	<b>9,047</b>	<b>24,516</b>	<b>58,298</b>

Source: FCOG RHNA Plan 2022

## 4.13.2 Impact Analysis

### a. Methodology and Significance Thresholds

Population and housing trends in the county were evaluated by reviewing the most current data available from the U.S. Census Bureau, the California DOF, the current Fresno County General Plan, FCOG, and the 2022 RHNA. Impacts related to population are generally social or economic in nature. Under CEQA, a social or economic change generally is not considered a significant effect on the environment unless the changes are directly linked to a physical change. This EIR focuses on the physical environmental impacts that could result from population and housing growth or displacement.

The following thresholds of significance are based on Appendix G to the CEQA Guidelines. For purposes of this EIR, implementation of the GPR/ZOU may have a significant adverse impact if it would do any of the following:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

For purposes of this analysis, “substantial” population growth is defined as growth exceeding FCOG population forecasts for Fresno County. “Substantial” displacement would occur if allowed land uses would displace more residences than would be accommodated through growth accommodated by the GPR/ZOU.

### b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the GPR/ZOU induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads and infrastructure)?

**IMPACT PH-1 IMPLEMENTATION OF THE GPR/ZOU WOULD FACILITATE NEW HOUSING IN FRESNO COUNTY, WHICH WOULD INCREASE THE COUNTY’S POPULATION OVER TIME. HOWEVER, THE GROWTH ACCOMMODATED BY THE GPR/ZOU WOULD NOT EXCEED FCOG POPULATION FORECASTS AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

As shown in Table 2-3 in Section 2, *Project Description*, implementation of the GPR/ZOU would facilitate population growth of 24,607 through 2042. Additionally, implementation would facilitate

the creation of 20,745 employment jobs through 2042 and the construction of 11,275 new housing units through 2042. Some of the land use designations in the 2042 General Plan (Medium High-Density Residential, Neighborhood Commercial, Community Commercial, Central Business Commercial) envision development of land with residential and commercial uses in higher densities than the 2000 General Plan. For example, land designated as Medium High-Density Residential in the 2000 General Plan could be developed with residential units at a density ranging from 5.8 dwelling units per acre to 14.5 dwelling units per acre, while the same land use designation in the GPR/ZOU could be developed at an increased density ranging from 5.8 dwelling units per acre to 20 dwelling units per acre. Residential development would result in more places to reside in the County in different locations, increasing population. Similarly, new commercial development would create new employment opportunities, which could encourage people to move to the County for work and increase County population. However, the population growth facilitated by the GPR/ZOU would not be substantial unplanned growth. One of the primary purposes of the GPR/ZOU is to plan for future growth within the County. In other words, the GPR/ZOU plans for the growth it would facilitate, and therefore, such growth would not be unplanned. Additionally, the population growth facilitated by the GPR/ZOU would be the same amount of population growth that FCOG forecasts for unincorporated County through 2042. This is because FCOG uses existing general plans to determine and forecast population growth in Fresno County, based on buildout of the land use designations in the general plans. FCOG's most recent growth projections are based on the County's current General Plan, as well as the current general plans of the cities in the County. The 2042 General Plan contains almost no changes to land use designations compared with the current General Plan. Therefore, the 2042 General Plan would not accommodate growth that would exceed the FCOG population projections as well. The GPR/ZOU would not directly or indirectly induce substantial population growth.

One of the fundamental purposes of the 2042 General Plan is to minimize pressure to develop on open space and agricultural land, minimizing the need for new roads and infrastructure. Specifically, Policies LU-A.1 through LU-A.22 would ensure the conservation of productive and potentially productive agricultural land to prevent incompatible land uses and to strengthen the county's economic base of agriculture; Policies LU-B.1 through LU-B.14 would ensure the conservation of the western rangelands in order to protect important watershed areas, decrease flood hazards, and prevent the loss of wildlife habitat and grazing land; Policies LU-C.1 through LU-C.12 would ensure the conservation of river influence areas such as the San Joaquin and Kings River valleys by encouraging environmentally-friendly recreational and agricultural activities; Policies LU-D.1 through LU-D.4 would ensure the protection of scenic views along the Westside Freeway (Interstate Route 5) and regulation of the appropriate development along major and minor interchange areas; Policies LU-E.1 through LU-E.24 would ensure the continued development of areas already designated for rural-residential development by restricting designation of new areas for such development. Another purpose of the GPR/ZOU is to direct future intensive development to cities, unincorporated communities and areas with existing public facilities and infrastructure. Policies LU-F.1 through LU-F.11 would encourage pedestrian and transit-oriented development and infill of vacant or under-utilized urban land. The GPR/ZOU would not indirectly induce growth in the County by encouraging new roads or other infrastructure in areas that would facilitate development. Therefore, impacts would be less than significant.

## **Mitigation Measures**

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the GPR/ZOU displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

**IMPACT PH-2 IMPLEMENTATION OF THE GPR/ZOU WOULD NOT RESULT IN THE DISPLACEMENT OF SUBSTANTIAL NUMBERS OF HOUSING OR PEOPLE. THE GPR/ZOU WOULD FACILITATE THE DEVELOPMENT OF NEW HOUSING IN ACCORDANCE WITH STATE AND LOCAL HOUSING REQUIREMENTS, WHILE PRESERVING EXISTING RESIDENTIAL NEIGHBORHOODS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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The 2042 General Plan contains land use designations for most land within the unincorporated county. Some land use designations, such as residential designations, would allow for development of land at higher densities than those at which the land is currently developed. Therefore, if the land were redeveloped based on the 2042 land use designation, the existing housing on the site could be demolished and replaced with higher density residential uses. Thus, although no projects have been identified that would displace existing units, if displacement did occur, new residential units would be constructed to replace existing displaced residences. In addition, Policies LU-F.5 (High-Density Housing), LU-H.1 (Mobile Homes), LU-H.4 (Second Units), and LU-G.A in the 2042 General Plan as well as Goal 2 (Affordable Housing) in the 2015-2023 Housing Element aims to encourage and facilitate affordable and high density housing in order to further reduce impacts of displacement.

The GPR/ZOU directs new growth and new urban development near incorporated cities and existing unincorporated communities. Focusing development in urbanized areas over the life of the GPR/ZOU would not result in displacement of existing residences in order to accommodate the planned increase in development intensity due to the 2042 General Plan and 2015-2023 Housing Element goals of encouraging affordable and higher density housing. As stated above, the GPR/ZOU would facilitate the development of new housing and promote new development in urban and urbanizing areas, possibly at higher density. Furthermore, Policies 1.3, 1.5, 1.6, 1.9, 3.1, and 3.3 in the county's 2015-2023 Housing Element would ensure impacts associated with displacement of people and/or housing would be reduced to a less than significant level.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

### 4.13.3 Cumulative Impacts

Cumulative development surrounding Fresno County and within cities in the County in combination with development proposed under the GPR/ZOU may result in increased population, job, and housing projections. Implementation of the project would increase density and intensity of existing land uses potentially resulting in increased growth and displacement of existing housing. However, the project would be consistent with FCOG and DOF forecasts, which include regional development throughout the County. Therefore, the GPR/ZOU would not result in a considerable incremental contribution to cumulative impacts associated with population and housing. The GPR/ZOU would increase the number and density of housing. Therefore, the GPR/ZOU would not result in significant

cumulative impacts related to displacement of people or housing. Cumulative impacts would be less than significant.

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## 4.14 Public Services

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This section assesses potential impacts on public services, including fire and police protection, public schools, libraries, and parks from the General Plan Review and Zoning Ordinance Update (GPR/ZOU). Impacts related to water and wastewater infrastructure and solid waste collection and disposal are discussed in Section 4.16, *Utilities and Service Systems*.

### 4.14.1 Setting

### 4.14.2 Fire Protection

Fire protection services in the Unincorporated Fresno County are provided by the Fresno County Fire Protection District, Fig Garden Fire Protection District, North Central Fire Protection District, Orange Cove Fire Protection District, Bald Mountain Fire Protection District, Laton Community Service District, Riverdale Public Utilities District, County Service Area 31 (Shaver Lake Volunteer Fire), County Service Area 50 (Auberry Volunteer Fire), and the California Department of Forestry and Fire Protection (CDF).

These Fire Protection Districts (FPD) provide full-service emergency delivery for fire protection, emergency medical response, and hazardous spills in addition to fire prevention and public education services within the services areas of Fresno County.

### ISO Ratings

The Insurance Services Office (ISO) rates fire departments and assigns public protection classifications for the establishment of fire insurance rates. Many districts have multiple ISO ratings depending on distance to fire stations or water hydrants and are often broken up by city and rural service areas. The higher the Insurance Rating number the lower the level of service and the higher the cost for a homeowner's fire insurance. An area with no organized fire protection services is assigned a Class 10 rating. The ISO ratings for fire protection service providers are included in the following profiles.

### Personnel, Facilities and Equipment

#### *Fresno County Fire Protection District*

The Fresno County FPD provides fire prevention and suppression, emergency medical response, search and rescue, building permits and inspections, and emergency dispatch services. The FPD service area encompasses approximately 2,655 square miles and serves a population of more than 220,000 residents. The service area extends from Kings and Tulare Counties on the south to Madera County on the north, and from the coastal range on the west to the foothills of the Sierras on the east. FPD service area includes unincorporated "islands" surrounded by the Cities of Clovis and Fresno. The FPD contracts with Cal Fire for staff and is administered by the FPD Fire Chief.

Fresno County FPD operates 13 permanent fire stations located throughout its boundaries. An additional five stations are staffed with paid call firefighters. The FPD operates its fire engine companies with a minimum of 2-3 career firefighters on duty every day, totaling 48 firefighters on duty daily. It employs 101 full-time paid firefighters, 112 paid call firefighters, for a ratio of one firefighter for every 1,221 residents of the FPD. FPD fire apparatus include 18 engines, 1 ladder truck, 1 rescue apparatus, 6 water tenders, and 2 support vehicles (Fresno County FPD 2021).



**General Plan Review and Zoning Ordinance Update**

The FPD response standard is five minutes in commercial and residential areas near Fresno and Clovis and 20 minutes in rural areas. It normally meets these standards unless multiple incidents are occurring, or the incidents are in a few areas that cannot be reached within the referenced time standard. The FPD's ISO ratings are as follows:

- West of SR 99: Generally, an ISO rating of 6 applies, except in areas with a municipal water system (Mendota, Huron) where the rating of 5 has been assigned.
- East of SR 99: Generally, within the residential and industrial areas around Fresno and Clovis an ISO rating of 5 has been assigned, based on water system availability. In other areas greater than 5 miles from a fire station, ratings range from 6 to 8.
- Eastern Foothill Area: An ISO rating of 9 has assigned to these locations.

The Fresno County FPD and the North Central FPD have faced substantial reductions in the size of their districts due to the growth of the Cities of Fresno and Clovis. Such growth has resulted in the reduction of FPD tax bases, as a significant portion of FPD revenues are generated from property taxes on properties located within the Spheres of Influence of the Cities of Fresno and Clovis. Although a transition agreement is in effect between the FPD and the Cities of Fresno and Clovis, continued detachments of FPD land will result in substantial revenue loss, closure of several fire stations, and reduced service levels.

*Bald Mountain Fire Protection District*

The Bald Mountain FPD encompasses approximately 9,977 acres located north of Highway 168 and southwest of Shaver Lake. It is staffed by 14 volunteer firefighters and provides fire prevention and suppression and emergency medical response services. District inventory includes a 1997 Ford F-350 Medical/Fast Attack Vehicle, a 1996 Chevrolet ¾ ton Command Truck, a 2012 Freightliner type 2 engine, and a 2007 Kenworth Water Tender. In 2015, the District's average response time to emergency calls was three minutes or less, and its ISO rating was 7 (Bald Mountain FPD Municipal Service Review (MSR) 2015).

*Fig Garden Fire Protection District*

The Fig Garden FPD encompasses 442 acres within an unincorporated island surrounded by the City of Fresno. The District is generally bounded by Shaw Avenue to the north, Dakota Avenue to the south, Maroa Avenue to the east, and Palm Avenue to the west. District services include fire prevention and suppression, search and rescue, and hazardous materials response. The District has no employees and contracts for all its services with the City of Fresno, which also staffs a fire station owned by the District (Fig Garden FPD 2021).

*North Central Fire Protection District*

North Central FPD encompasses approximately 230 square miles within the northern portion of Fresno County. Its services include fire prevention and suppression, emergency medical response, search and rescue, building permits and inspections, emergency dispatch services, and hazardous material response.

The Fresno County FPD and the North Central FPD have faced substantial reductions in the size of their districts over the last several years due to the growth of the Cities of Fresno and Clovis. Such growth has resulted in the reduction of district tax bases required to fund their on-going operations. North Central FPD has entered into a long-term contract with the City of Fresno whereby as of July

1, 2007, the City began providing fire protection and suppression and other services to the North Central FPD. North Central FPD employees were transferred to the City and equipment and facilities, though still owned by the FPD, are being used by the City (North Central FPD 2018).

#### *Orange Cove Fire Protection District*

Orange Cove FPD encompasses approximately 14,434 acres including the city of Orange Cove and the surrounding area. It is adjacent to the Fresno County FPD to the west and south and the County of Tulare to the east. The District has one fire station in Orange Cove, one full-time employee, three part time employees, and 31 volunteer employees (Orange Cove FPD MSR 2017). District services include fire prevention and suppression and emergency medical response (Orange Cove FPD MSR 2017).

#### *Additional Fire Departments*

In addition to the aforementioned fire protection districts, other fire departments or volunteer fire departments within Fresno County include the following:

- Auberry Volunteer Fire
- Clovis City Fire Department
- Firebaugh Volunteer Fire Department
- Fowler Fire Department
- Fresno City Fire Department
- Hume Lake Volunteer Fire and Rescue Company
- Huntington Lake Volunteer Fire
- Kingsburg City Fire
- Laton Volunteer Fire
- Mountain Valley Volunteer Fire
- Reedley City Fire Department
- Riverdale Volunteer Fire Department
- Sanger City Fire Department
- Selma City Fire Department
- Shaver Lake Volunteer Fire

#### *Special Districts*

##### **COUNTY SERVICE AREA NO. 31**

County Service Area 31 has one fire station located on Highway 168 near Dorabella. The station serves a permanent population of approximately 1,500 residents, which increases by approximately 2,000 people during the summer months. The station is staffed by one chief and 25 volunteers. In 2000, Response time was approximately five to seven minutes, and the station's ISO rating was 7 (Fresno County 2000).

##### **COUNTY SERVICE AREA NO. 50**

County Service Area No. 50 encompasses 31,114 acres in the vicinity of the communities of Prather and Auberry and supports fire suppression and emergency medical response services. The District

was formed in 2003 to provide a stable revenue stream to support Auberry Volunteer Fire Department activities. It owns two fire engines, one water tender, one rescue squad, two command vehicles and a structure for housing the fire engine (County Service Area No. 50 Auberry FPD MSR 2019)

#### **LATON COMMUNITY SERVICE DISTRICT**

The Laton Community Service District is located in the south-central portion of Fresno County adjacent to the Kings River. It provides fire protection services to about 500 acres and an approximate population of 1,600 during harvest season (August-September) and 1,230 throughout the remainder of the year. The District owns one station located at Dewitty and Fowler Avenues. The station has a staff of one fire chief and ten volunteers. There are no Emergency Medical Technicians. Approximately three to four calls are received each month. The Laton CSD had an ISO rating of 8 (Fresno County 2000).

#### **RIVERDALE PUBLIC UTILITY DISTRICT**

The Riverdale Public Utilities District contracts with Fresno County FPD for fire protection services. Its infrastructure includes one station within the District at 10068 Malsbury in Riverdale, two fire trucks, and an administrative building. The Station is staffed by 18 volunteer firefighters. Response time within a three-mile radius is approximately five minutes. The Riverdale station had an ISO rating of 6 in 2018 (MSR) (LAFCo 2018).

### **Fire Protection Regulatory Setting**

#### *Federal*

#### **DISASTER MITIGATION ACT**

Section 104 of the Disaster Mitigation Act of 2000 (Public Law 106-390) requires a state mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act has also established new requirements for local mitigation plans.

#### **NATIONAL FIRE PLAN (NFP) 2000**

The National Fire Plan was developed under Executive Order 11246 in August 2000, following a landmark wildland fire season. Its intent is to actively respond to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

#### *State*

#### **CALIFORNIA FIRE PLAN**

The Strategic California Fire Plan is the State's road map for reducing the risk of wildfire. The plan was updated in 2012 and directs each CAL FIRE Unit to prepare a locally specific Fire Management Plan. In compliance with the California Fire Plan, individual CAL FIRE units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation

within each of CAL FIRE's 21 units and six contract counties. The plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

### **CALIFORNIA STATE MULTI-HAZARD MITIGATION PLAN, DRAFT**

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector. The California Office of Emergency Services (OES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is Federally required under the Disaster Mitigation Act of 2000 in order for the State to receive federal funding (OES 2018). The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

### **WILDLAND-URBAN INTERFACE BUILDING STANDARDS**

On September 20, 2007, the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the California Building Code (CBC). These codes include provisions for ignition-resistant construction standards in the wildland urban interface.

### **CALIFORNIA FIRE AND BUILDING CODE**

The Fire and Building Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

### **GOVERNMENT CODE 65302.5: GENERAL PLAN FIRE SAFETY ELEMENT REVIEW**

This statute requires the State Board of Forestry and Fire Protection to provide recommendations to a local jurisdiction's General Plan fire safety element at the time that the General Plan is amended. While not a direct and binding fire prevention requirement for individuals, General Plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction.

#### *Local*

### **FRESNO COUNTY GENERAL PLAN**

The following goals and policies from the current Fresno County General Plan are applicable to public services and recreation.

**Goal PF-H** To ensure the prompt and efficient provision of fire and emergency medical facility and service needs, to protect residents of and visitors to Fresno County from injury and loss of life, and to protect property from fire

**Policy PF-H.1:** The County shall work cooperatively with local fire protection districts to ensure the provision of effective fire and emergency medical services to unincorporated areas within the county.

**Policy PF-H.2:** Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in unincorporated areas of the County shall not be approved unless adequate fire protection facilities are provided.

**Policy PF-H.3:** The County shall require that new fire stations be located to achieve and maintain a service level capability consistent with services for existing land uses.

**Policy PF-H.7:** The County shall encourage local fire protection agencies in the county to maintain the following as minimum fire protection standards (expressed as Insurance Service Organization (ISO) ratings): ISO 4 in urban areas; ISO 6 in suburban areas; and ISO 8 in rural areas.

**Policy PF-H.8:** The County shall encourage local fire protection agencies in the county to maintain the following as minimum standards for average first alarm response times to emergency calls:

- a. 5 minutes in urban areas;
- b. 15 minutes in suburban areas; and
- c. 20 minutes in rural areas.

**Policy PF-H.11:** The County shall encourage local fire protection agencies to provide and maintain advanced levels of emergency medical services (EMS) to the public, consistent with current practice.

### 4.14.3 Police Protection Services

The Fresno County Sheriff's Department has 329 sworn officers serving the unincorporated population of Fresno County (234,591), for a ratio of approximately 1.40 officers per 1,000 residents. The ratio is below the standard of 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation. In 2000, The Sheriff's Department had 544 non-sworn clerical and support people (Fresno County 2000).

Law enforcement protection for the unincorporated county and contract cities is divided into four areas. Each area can be divided into as many as eight beats. There is one officer per beat at any one time. On occasion, a Reserve Deputy Sheriff will ride with an officer on his or her beat. Most Fresno County Sheriffs assigned to Patrol Division work the 4-10 Plan, meaning they work ten-hour shifts, four days per week. Detectives work eight-hour shifts, five days per week (Fresno County Sheriff 2021).

## Divisions

### *Communications*

The Fresno County Sheriff's Office Communications Center is the critical link between the community and patrol units in the field. The Center provides law enforcement dispatching services as well as emergency 911 services and non-emergency services for Fresno County as well as four municipal police departments within Fresno County – Fowler Police Department, Kerman Police Department, Parlier Police Department, and Sanger Police Department. The Communications Center handles in excess of 900 emergency and non-emergency calls each day. Service calls range from in-progress emergencies and violent crimes to non-emergency calls (Fresno County Sheriff 2021).

### *Detective Bureau*

The Fresno County Sheriff's Office Detective Bureau consists of a number of specialized units responsible for investigating all serious misdemeanor and felony crimes. Detective Bureau units include: Child Predator Program, Crime Scene Unit, Domestic Violence, Elder Abuse, Forensics Laboratory, Homicide Unit, Internet Crimes Against Children (ICAC), Missing Persons/Runaways, Sex Crimes, Sex Offenders, Special Investigations (Vice, Marijuana Safety Team, Marijuana Incidents, and Meth Task Force) (Fresno County Sheriff 2021).

### *Jail Division*

The Fresno County Sheriff's Office is responsible for the operation of three jails within the county. The South Annex Jail built in 1947, the Main Jail built in 1989, and the North Annex Jail built in 1993. The total combined capacity of all open floors is 2,427 inmates. The inmate population is supervised by over 350 Correctional Officers, Correctional Sergeants, and Correctional lieutenants. Since 1993 the Fresno County Sheriff has been under a Federal Consent Decree which controls the number of inmates that can be held in jail at any given time. The jail population is limited to a percentage of the number of available beds within the three jails, with the overriding mandate that each inmate shall have a bed (Fresno County Sheriff 2021).

### *Patrol*

The Fresno County Sheriff's Office provides patrol services to more than 6,000 square miles. Patrol services are decentralized and divided into four patrol areas. Each area is commanded by a lieutenant who supervises field services from a substation located in each of the areas (Fresno County Sheriff 2021).

### *Property and Evidence*

The Property and Evidence Unit is responsible for the custody, documentation, and preservation of all physical evidence seized or obtained by the Sheriff's Office. The Unit processes items of evidence and property and stores them in over thirty locations throughout the metropolitan area. Each item is documented, secured, and stored by the Property and Evidence Unit, to be safely preserved until it is needed for court or returned to its rightful owner (Fresno County Sheriff 2021).

### *Records*

The Records Unit consists of two shifts operating seven days a week. The Records Unit is currently staffed by 15 Office Assistants and two Supervising Office Assistants. The Records Unit also relies on extra help employees to assist in accomplishing the many tasks the unit is responsible for.

The Records Unit is responsible for processing, distributing and maintaining all police reports written by the Fresno County Sheriff's Office. Over 23,000 reports are generated by the Records Unit each year. These include records of criminal cases, incident reports, traffic citations, impounded and stolen vehicle reports, and other reports for which records are maintained. The Records Unit also processes vehicle releases, background checks, record checks for public and authorized private agencies, subpoenas, and over 42,000 warrants and 6,400 restraining orders each year.

The Records Unit provides over the counter services to citizens. Public services provided by the Records Unit include:

- Providing information and copies of police reports to victims or authorized representatives and insurance companies;
- Providing an incident call summary upon request;
- Providing vehicle release and storage information for impound, towed/stored, recovered stolen and repossessed vehicle;
- Providing a Fresno County Sheriff's Office letter of clearance for immigration or visa purpose;
- Providing a copy of arrest tag with date of release for in custody verification purposes;
- Placing child custody and restraining orders on file; and
- Providing warrant information (Fresno County Sheriff 2021).

### **Specialty Units**

The Fresno County Sheriff's Office operates various Specialty Units to effectively provide service to the general public. Fresno County Sheriff's Office Specialty Units include: Agricultural Task Force, Air Support Unit, Boating Enforcement Unit, Dive Team, Explosive Ordinance Disposal, Help Eliminate Auto Theft (HEAT), Honor Guard, K-9 Unit, Multi-Agency Gang Enforcement Consortium (MAGEC), Mounted Patrol Unit, Off-Road Safety Team, Search and Rescue, SWAT/Crisis Negotiations (Fresno County Sheriff 2021).

### **Police Protection Regulatory Setting**

*State*

#### **SECTION 24000 OF THE CALIFORNIA GOVERNMENT CODE**

The California Government Code mandates that the Office of Sheriff be established in each county in California. The Government Code describes the duties of the Office of Sheriff-Coroner, which include acting as bailiff in the Superior Court, maintaining a jail, and preserving the peace.

#### **CALIFORNIA COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING (POST)**

The California Commission on Peace Officer Standards and Training (POST) advocates for, exchanges information with sets selection and training standards for, and works with law enforcement and other public and private entities. POST was established by the Legislature in 1959 to identify common needs that are shared by representatives of law enforcement.

## Local

### FRESNO COUNTY GENERAL PLAN

The following goals and policies from the current Fresno County General Plan are applicable to the public services and recreation:

**Goal PF-G** To protect life and property by deterring crime and ensuring the prompt and efficient provision of law enforcement service and facility needs to meet the growing demand for police services associated with an increasing population.

**Policy PF-G.1:** The County shall ensure the provision of effective law enforcement services to unincorporated areas in the county.

**Policy PF-G.2:** The County shall strive to maintain a staffing ratio of two (2) sworn officers serving unincorporated residents per 1,000 residents served. (This count of officers includes all ranks of deputy sheriff personnel and excludes all support positions and all sworn officers serving county wide population interests such as bailiffs, and sworn officers serving contract cities and grant specific populations).

**Policy PF-G.3:** The County shall identify and establish funds for acquisition of adequate sheriff facility sites in unincorporated locations of the county.

**Policy PF-G.4:** The County shall require development to pay its fair share of the costs for providing law enforcement facilities and equipment to maintain service standards.

**Policy PF-G.5:** The County shall provide police support to adequately maintain its service standards, within the County's budgetary constraints.

**Policy PF-G.6:** The County shall promote the incorporation of safe design features (e.g., lighting, adequate view from streets into parks) into new development by providing Sheriff Department review of development proposals.

#### 4.14.4 Schools

##### Fresno County School Districts

Public school services are provided throughout the county by 32 school districts. Of the 32 school districts, 18 unified school districts and one charter school district provide educational services for grades K-12. In 2000, the remaining 13 districts consist of 12 elementary school districts and one high school district. Many districts only had one school (Fresno County 2000). Table 4.14-1 summarizes Elementary School Districts in Fresno County.



**Table 4.14-1 Fresno County Elementary School Districts (2020-2021)**

District	Schools	Enrollment	High School Attended
Alvina Elementary	Alvina Elementary Charter	185	Caruthers High
Big Creek	Big Creek Elementary	51	Sierra High
Burrel Union Elementary	Burrel Union Elementary	133	Riverdale High
Clay Joint Elementary	Clay Elementary	215	Kingsburg High
Kingsburg Elementary Charter School District	Lincoln Elementary	387	Kingsburg High
	Rafer Johnson Jr. High	445	
	Reagan Elementary	648	
	Roosevelt Elementary	201	
	Washington Elementary	261	
Monroe Elementary	Monroe Elementary	152	Caruthers High
Orange Center Elementary	Orange Center Elementary	295	Washington High
Pacific Union Elementary	Pacific Union Elementary	354	Washington High
Pine Ridge Elementary	Pine Ridge Elementary	90	Sierra Unified High
Raisin City Elementary	Raisin City Elementary	529	Caruthers High
Washington Colony Elementary	Washington Colony Elementary	446	Washington Union High
Westside Elementary	Westside Elementary	180	Riverdale High School

Sources: California Department of Education (CDE) 2021u

### Unified School Districts

The following Unified School Districts serve Fresno County:

- Caruthers Unified
- Central Unified
- Clovis Unified
- Coalinga-Huron Unified
- Firebaugh-Las Deltas Unified
- Fowler Unified
- Fresno Unified
- Golden Plains Unified
- Kerman Unified
- Kings Canyon Unified
- Laton Joint Unified
- Mendota Unified
- Parlier Unified

- Riverdale Joint Unified
- Sanger Unified
- Selma Unified
- Sierra Unified
- Washington Unified

## High School and Charter School Districts

The following High School and Charter School districts serve Fresno County:

- Kingsburg Joint Union High School
- West Park School District

## Schools Regulatory Setting

K-12 school facilities and their financing are regulated primarily by the Education Code and implementing regulations. There are also sections that relate to the provision of school facilities in the Government Code, Public Contracts Code.

### *State*

#### **MELLO-ROOS COMMUNITY FACILITIES ACT OF 1982**

In 1978 Californians enacted Proposition 13, which limited the ability of local public agencies to increase property taxes based on a property's assessed value. In 1982 the Mello-Roos Community Facilities Act of 1982 (Government Code §53311-53368.3) was created to provide an alternate method of financing needed improvements and services. Mello-Roos bonds provide developers with upfront funds for infrastructure improvements. Repayment of the bonds is shifted to homebuyers through a Special Tax under Proposition 13. Sellers must fully disclose the use of Mello-Roos funding to potential home buyers.

#### **CALIFORNIA CODE OF REGULATIONS**

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the state.

California State Assembly Bill 2926 (AB 2926)—School Facilities Act of 1986. In 1986, AB 2926, entitled the School Facilities Act of 1986, was enacted by the state of California and added to the California Government Code (Section 65995). It authorizes school districts to collect development fees, based on demonstrated need, and generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees (adjustable for inflation) which may be collected under this and any other school fee authorization are \$1.50 per square foot (\$1.50/sf) of residential development and \$0.25/sf of commercial and industrial space.

AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 et seq. of the Government Code. Under this statute, payment of statutory fees by developers serve as total mitigation under CEQA to satisfy the impact of development on school facilities. However, subsequent legislative actions have alternatively expanded and contracted the limits placed on school fees by AB 2926.

### **CALIFORNIA SENATE BILL 50 (SB 50)**

As part of the further refinement of the legislation enacted under AB 2926, the passage of SB 50 in 1998 defined the Needs Analysis process in Government Code Sections 65995.5–65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. The fees (referred to as Level One fees) are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level Two fees require the developer to provide one-half of the costs of accommodating students in new schools, while the state would provide the other half. Level Three fees require the developer to pay the full cost of accommodating the students in new schools and would be implemented at the time the funds available from Proposition 1A (approved by the voters in 1998) are expended. School districts must demonstrate to the state their long-term facilities needs and costs based on long-term population growth in order to qualify for this source of funding. However, voter approval of Proposition 55 on March 2, 2004, precludes the imposition of the Level Three fees for the foreseeable future. Therefore, once qualified, districts may impose only Level Two fees, as calculated according to SB 50.

#### *Local*

### **FRESNO COUNTY GENERAL PLAN**

The following goals and policies from the current Fresno County General Plan are applicable to the public services and recreation:

**Goal PF-I** To provide for the educational needs of Fresno County and provide libraries for the educational, recreational, and literary needs of Fresno County residents.

**Policy PF-I.1:** The County shall encourage school districts to provide quality educational facilities to accommodate projected student growth in locations consistent with land use, infrastructure, and service policies of the General Plan.

**Policy PF-I.2:** The County shall encourage school facility siting that establishes schools as focal points within the neighborhood and community with available school grounds for recreation activities and safe pedestrian and bicycle access.

**Policy PF-I.3:** The County shall consider school district plans when designating existing and future school sites in community plans and specific plans to accommodate school district needs.

**Policy PF-I.4:** The County shall work cooperatively with school districts in monitoring housing, population, and school enrollment trends and in planning for future school facilities, infrastructure, and service needs, and shall assist school districts in locating appropriate sites for new schools.

**Policy PF-I.5:** The County shall involve school districts in the early stages of residential land use and infrastructure planning, such as during the adoption or updating of specific, community, and regional plans or preparation of infrastructure plans, to provide a coordinated effort for the planning of school facilities and provision of services.

**Policy PF-I.7:** The County shall include schools among those public facilities and services that are considered an essential part of the development service facilities that should be in place as development occurs and shall work with residential developers

and school districts to ensure that needed school facilities are available to serve new residential development.

**Policy PF-I.8:** The County and school districts should work closely to secure adequate funding for new school facilities. The County shall support the school districts' efforts to obtain appropriate funding methods such as school impact fees.

#### *4.14.4.1 Other Public Services and Facilities*

##### **Public Libraries**

The Fresno County Public Library System is comprised of interdependent branches providing services to all residents. At present the Fresno County Public Library provides collections and services through its Central Resource Library and 34 branches that are part of the larger San Joaquin Valley Library System of which a majority are located in incorporated cities. The Fresno County Public Library also includes branches that provide specific information and services. These include the Heritage and Genealogy Center, the Literacy Services Center, and the Senior Resource Center.

According to the most recent County Librarian's Update (2014), the Fresno County Library is in the process of evaluating sites for new branches within the incorporated cities of Clovis and Reedley. Additionally, the Clinton and Politi libraries have been identified as branches that need larger and more modern facilities. The Central Library is in need of renovations, but the County Library headquarters and administrative operations must first be moved to another facility.

##### **Parks and Recreational Facilities**

Fresno County has several recreational opportunities that are both functional and scenic, involving significant natural resources. The county contains regional, State, and national parks, national forests, wilderness areas, ecological reserves and other resources. The primary responsibility for maintaining and developing the County park system lies with the County Resources/Parks Division.

Regional recreational facilities maintained by the division include 12 parks, two fishing access areas and a boat-launch/parking facility at Shaver Lake (Fresno County 2022). These areas are used for a variety of activities, such as picnicking, fishing, hiking, jogging, bird watching, nature study, non-organized sports barbecues, softball, soccer, overnight camping, and passive recreation.

Fresno County does not own or operate any public golf courses, but there are privately owned golf courses in the unincorporated area. The County does not provide or manage any organized sports, education, or special events or programs.

In addition to County park facilities, Fresno County residents have access to many other recreational opportunities in State and Federally operated parks, forest lands, and recreational facilities associated with dams, reservoirs, and reserves. This includes Sierra National Forest, Sequoia National Forest, Sequoia National Park, and Kings Canyon National Park. Many of these facilities are internationally recognized national park and wilderness areas and attract national and international visitors (Fresno County 2000).

##### **San Joaquin River Parkway**

The San Joaquin River is a principal natural feature in Fresno County and the entire San Joaquin Valley. The San Joaquin River Parkway provides major recreational facilities along the river corridor and has significant natural habitat areas. The major recreational facilities along this river include the

Riverside Municipal Golf Course, the San Joaquin Country Club, Woodward Park, Lewis S. Eaton Trail, Lost Lake Regional Park, and Skaggs Bridge Regional Park. Recreational amenities include fishing, bike trails, and local elementary school playgrounds, which are open to public use after hours and on the weekends.

## **Recreational Trails**

Recreational bicycle riding takes place primarily in the cities, unincorporated communities, and on rural roads and trails in the eastern part of the county. While many Fresno County communities have bikeways that provide both local and regional service, pedestrian and recreational (including bicycling, equestrian, and hiking) facilities are more localized and do not form a continuous regional system. Recreational trails are designed primarily for the recreational use of bicyclists, pedestrians, or equestrians, or any combination thereof. They are intended to be primarily off-street facilities, although some recreational trails designed for bicycle use only may be on-street bikeways. There are approximately 18.2 miles of Class I bike paths, 213 miles of existing Class II bike lanes, and approximately 10.4 miles of an existing Class III bike route (Fresno County Regional Active Transportation Plan 2018).

## **Parks and Recreation Regulatory Setting**

### *State*

#### **CALIFORNIA GOVERNMENT CODE SECTIONS 6550-65568- OPEN SPACE LANDS**

This section of California planning law defines open space and requires cities and counties to prepare and carry out open space plans, along with state and regional open space plans, to accomplish the objectives of a comprehensive open space program as a required element of its General Plan. Building permits, subdivision approvals, and zoning ordinance approvals must be consistent with the local open space plan.

#### **SECTION 5076, PUBLIC RESOURCES CODE. OPEN-SPACE ELEMENTS AND TRAIL CONSIDERATIONS**

This law requires that during development of the General Plan, counties shall consider trail-oriented recreational use and shall consider such demands in developing specific open-space programs. Further, cities shall consider the feasibility of integrating their trail routes with appropriate segments of the State system.

#### **SECTION 66477, GOVERNMENT CODE, SUBDIVISION MAP ACT (QUIMBY ACT)**

This law authorizes local jurisdictions to require the dedication of land and/or the payment of in-lieu fees, or a combination of both, for park or recreational purposes. The required land dedication and/or fees are based on the residential density, parkland cost, and other factors. Land dedicated and fees collected pursuant to the Quimby Act may only be used for the purpose of developing new or rehabilitating existing neighborhood park or community park or recreational facilities to serve the subdivision. The maximum land dedication and/or fee allowed under current State law is equivalent to providing three acres of parkland per 1,000 persons, unless the park acreage of a municipality exceeds that standard, in which case the maximum dedication is five acres per 1,000 residents.

## *Regional*

### **SAN JOAQUIN RIVER PARKWAY MASTER PLAN**

The San Joaquin River Parkway Master Plan was adopted for the San Joaquin River Conservancy Governing Board on July 20, 2000. The State Legislature passed Assembly Bill No. 3121, which provided funds for a San Joaquin River Parkway Task Force to seek community participation in the planning process to develop a plan based on general goals described in the legislation. Task Force members included representatives of state and local governmental agencies and various organizations with interest in the river and effects of the parkway. Through additional state legislation, the San Joaquin River Conservancy was created to serve as a managing entity for and to promote and establish the proposed Parkway. The Parkway Plan area includes portions of Fresno and Madera County and the City of Fresno and is approximately 23 miles long, from river mile 267.6 at the face Friant Dam to State Highway 99 at river mile 243.2 on both sides of the river. Approximately 2,900 acres of the estimated total acres (including 1,950 acres in Fresno County) that are not publicly owned or operated and are in the general Parkway area may be sought in the future for acquisition by the Conservancy for public use as recreation areas, trail corridors, or other natural reserves. The Parkway plan is intended to further the process of carrying out the policies and meeting the goals of the County's General Plan.

### **FRESNO COUNTY REGIONAL BICYCLE AND RECREATIONAL TRAILS MASTER PLAN**

The Fresno County Board of Supervisors adopted the Fresno County Regional Bicycle and Recreational Trails Master Plan on September 24, 2013. The Plan was created through the coordinated efforts of the Fresno County Department of Public Works and Planning, the Council of Fresno County Governments, the Fresno Cycling Club, the City of Fresno Bicycle Pedestrian Advisory Committee, various government and non-profit agencies, and citizens interested in improving the bicycling environment in Fresno County. The purpose of the Plan is to meet the requirements of the 2006 Measure "C" Transportation Sales Tax Extension, Local Transportation Program by adding recreational trails to the plan. The County of Fresno, Department of Public Works and Planning, Design Division, is responsible for implementing the plan and is currently in the process of updating the plan.

## *Local*

### **FRESNO COUNTY GENERAL PLAN**

The following goals and policies from the current Fresno County General Plan are applicable to the project.

**Goal OS-H** To designate land for and promote the development and expansion of public and private recreational facilities to serve the needs of residents and visitors

**Policy OS-H.1:** The County shall promote the continued and expanded use of national forest, national park, and other recreational areas to meet the recreational needs of County residents.

**Policy OS-H.2:** The County shall strive to maintain a standard of five (5) to eight (8) acres of County-owned improved parkland per one thousand (1,000) residents in the unincorporated areas.

#### 4.14.5 Impact Analysis

##### a. Methodology and Significance Thresholds

According to Appendix G of the adopted *CEQA Guidelines*, impacts related to public services and recreation from implementation of General Plan 2035 would be significant if it would:

1. Result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for:
  - a. Fire protection
  - b. Police protection
  - c. Schools
  - d. Parks
  - e. Other public facilities
2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
3. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

In terms of Threshold 1(e) regarding impacts on “other public facilities,” such facilities include libraries. Impacts related to libraries are discussed in this section. Impacts related to public stormwater facilities are addressed in Section 4.8, *Hydrology and Water Quality*, and Section 4.17, *Utilities and Service Systems*. Impacts related to public wastewater, water, and solid waste facilities are discussed in Section 4.17, *Utilities and Service Systems*.

##### b. Impacts and Mitigation Measures

**Threshold 1a:** Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?

**IMPACT PS-1 IMPLEMENTATION OF THE GPR/ZOU WOULD ADD NEW POPULATION, GENERATING ADDITIONAL NEED FOR FIRE PROTECTION SERVICES. THE PROPOSED 2042 GENERAL PLAN POLICIES WOULD REDUCE IMPACTS ASSOCIATED WITH THE PROVISION OF FIRE PROTECTION SERVICES, AND NEW FACILITIES WOULD BE LOCATED IN DEVELOPED AREAS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Under the GPR/ZOU buildout, an estimated 24,607 new residents would be added to the Planning area. When added to the 2021 population, the GPR/ZOU would increase unincorporated Fresno County’s total population to an estimated 234,591 residents, an increase of 16.7 percent. Because the population of Fresno County is expected to increase by approximately 16.7 percent, demand for public services such as fire protection would also increase.

Fresno County FPD’s most recent Strategic Plan (2022) identifies the goal of prioritizing, promoting, and providing for the mental and physical health and safety of CAL FIRE/ Fresno County FPD employees and the people served. The Strategic Plan identifies Objective E to evaluate facilities and

equipment of Fresno County FPD to increase opportunities to maintain a continuity of operations and Objective V to conduct a community risk assessment of the District to help determine response needs (Fresno County FPD 2022).

Goal PF-H of the 2042 General Plan aims to ensure the prompt and efficient provision of fire and emergency medical facility and service, to protect residents of and visitors to Fresno County from injury and loss of life, and to protect property from fire. Policy PF-H.2, *Adequate Fire Protection Facilities*, requires the County to review all new development projects and determine the need for fire protection services. In addition, Policy PF-H.2 requires that the County shall not approve new development in unincorporated areas until adequate fire protection services are provided.

Policies PF-H.7 and PF-H.8 emphasize that the County shall encourage local fire protection agencies to maintain minimum fire protection standards and minimum response times at varying levels depending on existing land uses. Implementation of these goals and policies would ensure that all new development is adequately served by fire protection and emergency services, reducing the need for additional facilities through proper maintenance and improvement of existing facilities.

Current facilities planning documents for Fresno County and Fresno County FPD include plans for the construction of new fire protection facilities or physical alteration of existing fire protection facilities. Planned and approved projects include expanded firefighting training and equipment facilities at an existing North Central Fire District station in the City of Fresno; new administrative and training facilities for the Fresno County Fire Protection District in the community of Del Rey; installation of a mobile home to house two permanent CAL FIRE firefighters in the community of Prather; and a Millerton Specific Plan land use designation amendment to change the designation of a site to "Public Facilities." The construction of these new or expanded facilities, in addition to construction of future facilities to accommodate increased demand for fire protection services, could have physical environmental impacts. However, these projects have independent utility, as they are already planned and would proceed whether or not the GPZ/ZOU goes forward.

Furthermore, these new and expanded facilities would be located in already developed areas, and would be developed consistent with the goals and policies of the General Plan, including policies to direct growth to existing communities and protect the environment, such as Policy LU-A.1 to protect agricultural land conservation, and goals and policies in the open space and conservation element to protect the natural environment. In addition, these facilities would be subject to project-level planning and environmental review, including project-specific CEQA documentation, if required.

Therefore, the GPR/ZOU would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant.



**Threshold 1b:** Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?

**IMPACT PS-2 IMPLEMENTATION OF THE GPR/ZOU WOULD ADD NEW POPULATION, GENERATING ADDITIONAL DEMAND FOR POLICE SERVICES. THE PROPOSED 2042 GENERAL PLAN POLICIES WOULD REDUCE IMPACTS, AND NEW FACILITIES WOULD BE LOCATED IN DEVELOPED AREAS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

As described in Section 4.13.2.1, *Police Protection Services*, police service in Fresno County is provided by the Fresno County Sheriff's Department (FCSO). In 2000, there was 329 sworn officers serving the unincorporated population of Fresno County, which provides a ratio of 1.40 officers per 1,000 residents (Fresno County 2000). The ratio is below the standard of 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation. Therefore, as of 2000, the County is below the national standard. Implementation of the GPR/ZOU would result in the need for an increase in police staff. Under the GPR/ZOU buildout, an estimated 24,607 new residents would be added to the Planning area. When added to the 2021 population, the GPR/ZOU would increase unincorporated Fresno County's total population to an estimated 234,591 residents. To serve the additional 24,607 residents accounted for under the GPR/ZOU and meet national standard service ratios, FCSO would need to add an additional 141 officers, bringing the total number of officers to 470. Increased police staffing of this size may result in the need to construct new police facilities within the County. Additionally, the 2042 General Plan encourages the provision of adequate police services and facilities. For example, Goal PF-G of the 2042 General Plan promotes the protection of life and property by deterring crime and ensuring the prompt and efficient provision of law enforcement service and facility needs to meet the growing demand for police services associated with an increasing population. Policy PF-G.2 requires that the county maintain staffing ratio of two sworn officers serving unincorporated residents per 1,000 residents served. This is supported by Policies PF-G.3 through PF-G.6 which state that the County should establish and identify funds for acquisition of additional staff, require development to pay a fair share of costs for providing law enforcement facilities to the community, and call on the County to adequately maintain service standards within the County's budgetary constraints. Implementation of these goals and policies would ensure that all new development is adequately served by police protection. The policies listed also allow for the acquisition of funds through future development contributions that would provide for new police facilities to be built should projected population growth necessitate additional staff beyond the current facilities capacity.

Current facilities planning documents for Fresno County include approved plans for the construction of a new Fresno County Sheriff substation in the City of Fresno. However, given that the GPR/ZOU would accommodate development and associated population growth, demand would increase for police services and new or expanded police facilities could be required. However, these projects have independent utility, as they are already planned and would proceed whether or not the GPZ/ZOU goes forward. Furthermore, these new and expanded facilities would be located in already developed areas, such as the City of Fresno, consistent with the goals and policies of the General Plan, which include to directing growth to existing communities and protect the environment, including Policy LU-A.1 to protect agricultural land conservation, and goals and policies in the open space and conservation element to protect the natural environment. In addition, these facilities would be subject to project-level planning and environmental review, including project-specific CEQA documentation, if required.

Therefore, the GPR/ZOU would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, the construction of which could cause significant environmental impacts.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant.

**Threshold 1c:** Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?

**IMPACT PS-3 DEVELOPMENT UNDER THE GPR/ZOU WOULD FACILITATE DEVELOPMENT THAT WOULD ADD SCHOOL AGED CHILDREN TO THE COUNTY'S POPULATION. HOWEVER, FACILITIES HAVE ADEQUATE CAPACITY AND NEW DEVELOPMENT WOULD BE REQUIRED TO PAY IMPACT FEES WHICH WOULD RESULT IN LESS THAN SIGNIFICANT IMPACTS WITH REGARD TO THE PROVISION OF SCHOOL FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

As described in Section 2, *Project Description*, implementation of the GPR/ZOU would accommodate development and associated population growth in the County. The population of the unincorporated County would increase by approximately 24,607 people through 2042, as shown in Table 2-3 in Section 2, *Project Description*. Some of the residential growth in the County would be school-aged children, or adults who become parents and eventually have school-aged children. The increase in school-aged population and demographics in Fresno County would result in increased demand for public services such as schools. Fresno County maintains a high level of communication and cooperation with each school district within its jurisdiction; however, all school districts within the County maintain their own planning documents which anticipate future growth, which include policies to meet future service and facilities demands. In addition, the 2042 General Plan includes Policies PF-I.1 through PF-I.8, which require the County to cooperate with school districts to ensure adequate public educational facilities are available.

Population growth anticipated under the GPR/ZOU would be adequately served by existing facilities in addition to new and/or altered facilities. The provision of new or physically altered facilities would be necessary because of development under the GPR/ZOU. Mitigation of impacts would be achieved through payment of school impact fees. Pursuant to Section 65995 (3) (h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." With payment of mandatory school impact fees by developers in the County, impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 1d:** Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?

**IMPACT PS-4 DEVELOPMENT FACILITATED BY THE GPR/ZOU ALLOW FOR AN INCREASE IN THE COUNTY'S POPULATION AND INCREASED DEMAND FOR LIBRARY SERVICES, WHICH WOULD RESULT IN THE PROVISION OF NEW OR PHYSICALLY ALTERED LIBRARY FACILITIES. HOWEVER, NEW FACILITIES WOULD BE LOCATED IN DEVELOPED AREAS, AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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Growth forecasts under the 2042 General Plan would increase the demand for library services in the County. The Fresno County Public Library would be the responsible agency for the planning of new library facilities and anticipating demand to meet existing and future population needs. However, the potential impacts of such facilities would be identified during the facility planning process, and the County would have the authority and responsibility to plan, design, approve, or construct library facilities. In addition, the Public Facilities and Services Element of the 2042 General Plan includes Policy PF-1.9, which states that “the County shall promote provision of library services throughout the county and create new facilities as appropriate or expand existing facilities to meet additional demand from new growth.” The County anticipates the construction of future library facilities, and new or expanded facilities would be subject to review by the Cities of Reedley and Clovis.

However, these projects have independent utility, as they are already planned and would proceed whether or not the GPZ/ZOU goes forward. Furthermore, adherence to federal, state, and local building codes and regulations would minimize impacts from any future construction of such facilities. The construction of new or expanded facilities could have physical environmental impacts. However, these new and expanded facilities would be located in already developed areas (the Cities of Clovis and Reedley); consistent with the goals and policies of the General Plan Update to direct growth to existing communities.

Therefore, the GPR/ZOU would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant.

- Threshold 1e:** Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered parks and other public recreation facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?
- Threshold 2:** Would the GPR/ZOU increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Threshold 3:** Would the GPR/ZOU include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

**IMPACT PS-5 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD RESULT IN AN INCREASE IN THE COUNTY'S POPULATION. THIS WOULD INCREASE DEMAND FOR PARKS AND RECREATION FACILITIES AND POTENTIALLY CREATE THE NEED FOR NEW PARK AND RECREATION FACILITIES. ALTHOUGH COMPLIANCE WITH THE POLICIES IN THE 2042 GENERAL PLAN WOULD REDUCE IMPACTS TO PARKS AND RECREATION, IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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A principal philosophy of Fresno County and the GPR/ZOU is to manage growth and to preserve open space in and around the County. The County currently maintains a ratio of five to eight acres of park per 1,000 residents. The GPR/ZOU could accommodate an estimated 24,607 new residents, which could increase demand for parks and recreational facilities in Fresno County beyond existing levels.

To maintain the existing service ratio with the population growth anticipated in the GPR/ZOU, approximately 168 to 268 acres of park land would need to be added through the plan's horizon year of 2042. Thus, physical alteration of existing or provision of new park facilities would be necessary to accommodate growth in the GPR/ZOU. The establishment of new parks does not necessarily result in physical impacts. For example, dedicating land for a park result in no physical environmental impacts. However, construction of park facilities, such as parking lots, would result in physical environmental impacts. Additionally, by converting land into new park space, public access is increased. Increased public access can also result in physical environmental impacts, such as trampling of native vegetation cover and wildlife habitat. Increased population would also increase the use of existing parks and recreation facilities, which could result in a correlated deterioration of the facilities. However, continuation of routine maintenance and repair of facilities would prevent substantial deterioration.

New or expanded parks and recreation facilities would be required to comply with CEQA, typically, and park development would adhere to the goals and policies included in the 2042 General Plan. The 2042 General Plan goals and policies ensure responsible growth in Fresno County and adequate planning for the development of new or improved parks and recreational facilities. For example, Goal OS-H is aimed at designating land for and promoting the development and expansion of public and private recreational facilities to serve the needs of residents and visitors. To achieve this goal, policy OS-H.2 dictates that the County shall strive to maintain a standard of five to eight acres of County-owned improved parkland per 1,000 residents in the unincorporated area. One specific example of how this goal would be met is by planning for the further development of the Friant-

Millerton area as a recreation corridor for Fresno County, as per policy OS-H.9 in the 2042 General Plan.

The Open Space and Conservation Element of the 2042 General Plan also would encourage the development of parks near public facilities such as schools, community halls, transit stops, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible. This would be done in addition to encouraging development of private recreational facilities to reduce demands on public agencies. Adherence to the goals and policies included in the 2042 General Plan would reduce potential impacts of the GPR/ZOU on parks and other public facilities. While new parks would require construction of facilities, such as surface parking lots, and new construction could occur near natural resources given that the project site would be for a park, General Plan policies such as those contained in the Open Space and Conservation Element (including policies under Goal OS-D for wetland loss mitigation and habitat protection, as well as policies under Goal OS-E to avoid habitat loss, protect wildlife habitat, and maintain buffers between construction activities and wildlife resources) would reduce impacts to natural resources. In addition, future park facilities would be subject to project-level planning and environmental review, including project-specific CEQA documentation, if required. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant.

### **c. Cumulative Impacts**

Because the GPR/ZOU is comprised of a General Plan update cumulative impacts are treated somewhat differently than would be the case for a project-specific development. By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur within a county's plan area. Therefore, the analysis of project impacts also constitutes the cumulative analysis. Implementation of the GPR/ZOU would incrementally increase demands on public services within unincorporated areas of Fresno County; however, this increased demand would be addressed by policies and actions in the 2042 General Plan as well as existing regulations. Additionally, growth would be within Fresno County's projections. Nonetheless, increased population would generate demand for fire protection, police services, libraries, and parks and recreation facilities. New or expanded facilities could be required to serve the increased population and meet service standards. However, the number of new or expanded facilities would likely be limited, as a public service such as a fire department or a police station serves a large group of the total population. Accordingly, the cumulative impacts from construction of new or expanded public service facilities would be incremental and would be less than significant.

## 4.15 Transportation and Traffic Quality

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This section summarizes the existing circulation system in Fresno County in order to evaluate the potential impacts on the local and regional circulation system that would result from implementation of the Fresno County GPR/ZOU. This includes an analysis of the potential for the proposed Fresno County GPR/ZOU to increase local and regional traffic volumes, increase hazards due to a design feature, interfere with emergency access, or conflict with applicable alternative transportation programs. Analysis in this section is based in part on the VMT Analysis Technical Memorandum dated May 24, 2022, prepared by GHD and included as Appendix TIS to this EIR.

### 4.15.1 Setting

#### a. Roadway Network

Fresno County is served by an extensive network of freeways, arterials, and local roads. The network provides a high level of north-south connectivity with adjacent counties (i.e., Madera, Kings, Merced, and Tulare). There are currently no roadway connections to Inyo County or Mono County to the east and only limited roadway connectivity with San Benito County and Monterey County to the west. Internally, a radial pattern of major roadways serves the central city of Fresno, while roadways in the western part of the county provide access to local communities and Interstate 5 (I-5) (Google Earth Pro 2022).

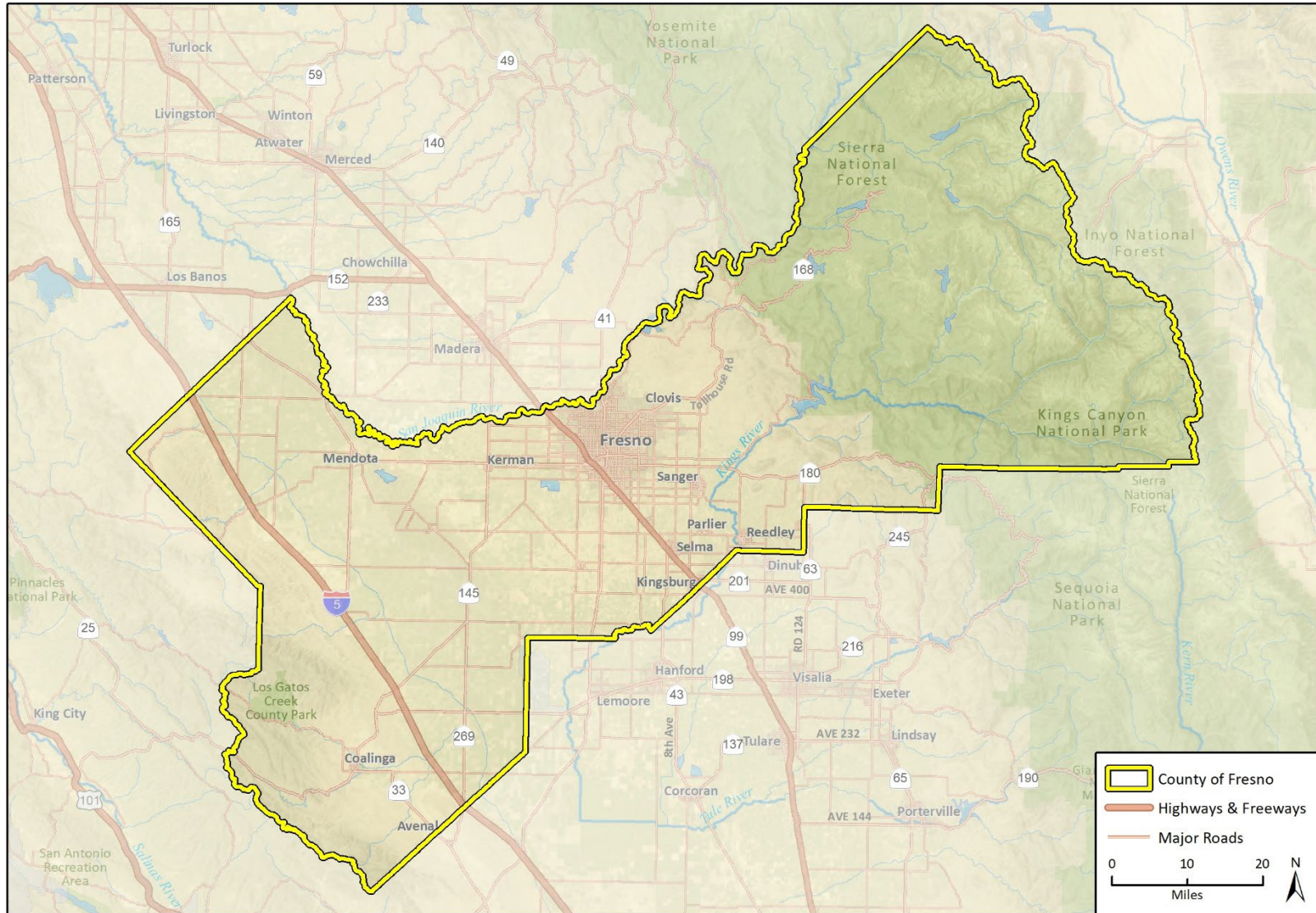
#### Freeways, Highways, and Arterials

Fresno County's regional road system is comprised of approximately 6,300 miles of roadways (Fresno Council of Government [FCOG] 2022). The most important interregional roadways in the county are the state highways, particularly I-5, State Route (SR) 99, and SR-41, all of which traverse the county from north to south. I-5 is the primary north-south route for interregional and interstate business, freight, tourist, and recreational travel, linking Southern California to Northern California and the Pacific Northwest. SR-99 performs a similar function on a regional level, connecting most of the cities in the San Joaquin Valley to Northern and Southern California. SR-41 links Fresno County to Yosemite National Park and the Sierra communities to the north and to Kings County and the central coast to the south. In addition to these three routes, Fresno County is also served by SR-33, SR-43, SR-63, SR-145, SR-168, SR-180, SR-198, SR-201, SR-256, and SR-269. Many county roads are used for commute, agricultural, recreational, and scenic purposes. As urbanization continues in the county, commuter and business trips will increase (FCOG 2022).

Fresno County also contains an arterial street network that provides connections between major traffic generators to the freeway, expressway, and arterial system. Arterials are classified as either urban or rural. Urban arterials are typically four-lane, divided roadways with moderate- to high-access control. Rural arterials are typically two-lane roadways or four-lane divided roadways with low- to moderate-access control.

Given that the state highway network forms the primary backbone of the Fresno County network, the state highway system in Fresno County is depicted in Figure 4.15-1.

Figure 4.15-1 Freeways and Highways in Fresno County



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Fig 4.14-1 Freeways and Highways in Fresno County

## Baseline Vehicle Miles Traveled

The basic measure of the amount of roadway transportation generated is VMT. One vehicle traveling 1 mile constitutes 1 VMT, regardless of the size of the vehicle or the number of passengers in the vehicle. Increases in VMT are associated with regional growth that would occur with or without implementation of the proposed GPR/ZOU. Thus, VMT data may not reflect deficient traffic operations, although VMT may have a strong correlation with congestion.

Baseline VMT data for Fresno County is shown in Table 4.15-1. The 2019 Base Year is used as the baseline for analysis in this EIR. An area’s VMT per capita is the average daily VMT per person in unincorporated Fresno County and is calculated by dividing the overall unincorporated county’s average daily VMT by the county’s population. Similarly, VMT per employee is the average daily VMT per employee in Fresno County and is calculated by dividing the overall county’s average daily VMT by the existing number of jobs in the County. The 2019 baseline VMT per capita and VMT per employee were estimated through the use of FCOG’s activity-based model (ABM), which is a travel demand model provided by FCOG.

**Table 4.15-1 Baseline VMT for Fresno County**

Base Year	VMT per Capita	VMT per Employee
2019	16.1	25.7

VMT = vehicle miles traveled

Source: Traffic Technical Memorandum, GHD 2022, Appendix T1S

## Movement of Goods

Goods movement in Fresno County is a key component of the economic vitality and growth of the region. Fresno County’s multimodal system facilitates the movement of goods throughout the region and state through the use of a designated truck network that consists mainly of state highways. Federal Surface Transportation Assistance Act of 1982 (STAA) National Network routes in Fresno County include I-5, SR-99, and SR-198. All or significant portions of each of the other state highways in Fresno County are designated as STAA Terminal Access Routes, which are routes where STAA trucks may exit the interstate and travel onto state and local routes.

### b. Active Transportation

#### Bicycle Facilities

Bikeways in Fresno County are planned to provide both regional and local service to most cities. The Fresno County Regional Active Transportation Plan (ATP) was adopted by FCOG in 2018 and acts as a comprehensive long-range vision for biking, walking, and other human-powered transportation in Fresno County. The plan identifies four classes of bikeways (FCOG 2018a):

- **Class I Bikeway.** Also called multiple purpose or shared-use paths/trails, Class I bikeways provide bicycle travel on a paved right-of-way completely separated from any street or highway. These bikeways typically follow existing streams and greenways and serve both commuter and recreational cyclists.
- **Class II Bikeway.** Also called bicycle lanes, Class II bikeways are established along streets and are typically one-way bikeways paired on opposite sides of the street to facilitate two-way travel. These bikeways are separated from vehicular travel by striped and stenciled lane markings.



- **Class III Bikeway.** Also called bicycle routes, Class III bikeways are established along streets with pavement markings and provide for shared use with pedestrian or motor vehicle traffic. These bikeways are identified only by signage.
- **Class IV Bikeway.** Also called separated bikeways, Class IV bikeways are physically separated bicycle facilities that are distinct from the sidewalk and designed for exclusive use by bicyclists. The key feature of a separated bikeway is a vertical element that provides further separation from motor vehicle traffic. Common vertical elements used for separation include a vertical curb, a painted buffer with flexible posts, parked cars, a landscaped area, large planters, or a fixed barrier.

While bicyclists are permitted on all roads, with the exception of access-controlled freeways, bikeway designations recognize that certain roadways provide more optimal routes for bicyclists. Fresno County also provides a variety of bicycle parking facilities, both short-term and long-term, throughout the county. Bicycle racks in front of stores and other destinations are a common form of short-term parking, while long-term bicycle parking is intended for employees, students, commuters, and residents to protect bicycles for longer periods (FCOG 2018a).

Unincorporated Fresno County’s total bicycle network includes approximately 145 miles of Class I and Class II bikeways. This is further broken down in Table 4.15-2. There are currently no Class III or Class IV bikeways in the unincorporated County.

**Table 4.15-2 Bikeways Within Fresno County**

Class	Number of Miles
I	5
II	140
III	0
IV	0
<b>Total</b>	<b>145</b>

Source: FCOG 2018a.

According to the 2019 American Community Survey 5-Year Estimates, less than 2 percent of Fresno’s population biked to work (US Census Bureau 2019). Due to the rural nature of Fresno County, a contiguous, regional system does not exist. However, the Fresno County Rural Transit Agency (FCRTA) and its partner city-owned transit services, including Fresno Area Express, all have exterior bike racks equipped on their buses to accommodate two bicycles.

### **Pedestrian Facilities**

The 2018 Fresno County ATP provides a vision for a complete, safe, and comfortable network of trails, sidewalks, and bikeways that serves all residents of Fresno County, including both bicyclists and pedestrians. The current network of pedestrian facilities in unincorporated Fresno County consists of 5 miles of trails (Class I bikeways), 76 miles of sidewalks, and both controlled and uncontrolled crosswalks (FCOG 2018a). Much of the pedestrian network in the county is non-contiguous with sidewalks and marked crossings concentrated in more densely populated areas and near schools. In addition to the unincorporated county pedestrian facilities, the adjacent incorporated cities in Fresno County also provide a network of sidewalks and marked pedestrian crossings in their core areas to allow safer and more comfortable pedestrian mobility (FCOG 2018a).

**c. Public Transit**

**Regional Transit**

FCRTA is the primary provider of public transit services in the rural areas of Fresno County. Rural public transit services are available in the spheres of influence for each of the 13 incorporated cities in the county. The cities are linked to the Fresno-Clovis Metropolitan Area by either privately operated common carriers or publicly operated wheelchair accessible service providers.

Table 4.15-3 shows several measures of productivity for the FCRTA. These productivity measures are comparable to similar rural systems in California, and the system-based performance metrics are reported as part of the Federal Transit Administration triennial reporting requirements.

**Table 4.15-3 FCRTA Productivity Statistics<sup>1</sup>**

<b>Performance Characteristic</b>	<b>System Average</b>
Passengers/hour	3.99
Passengers/mile	0.34
Cost/hour	\$83.61
Cost/mile	\$7.09
Cost/passenger	\$20.95
Farebox recovery	10.49%

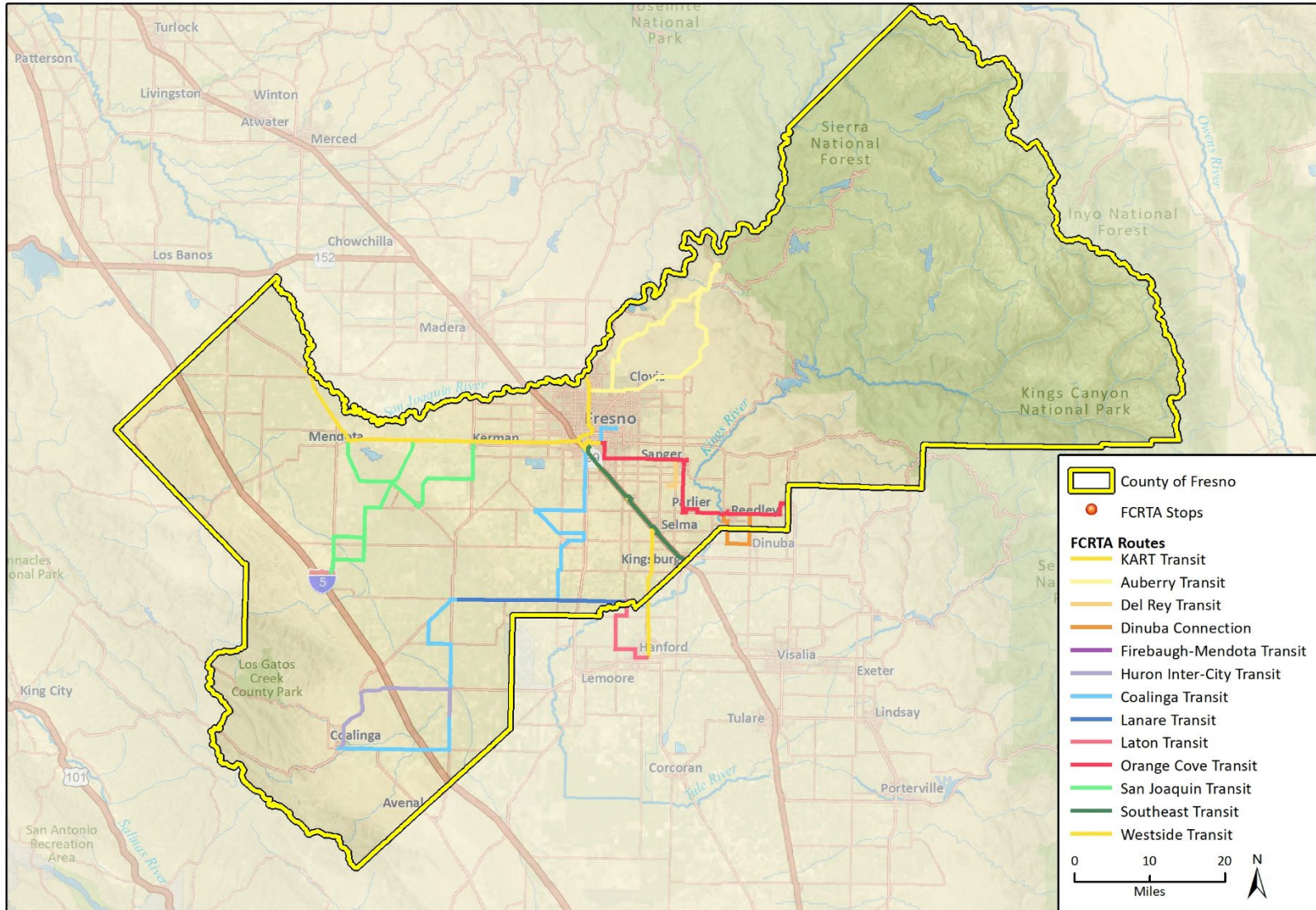
<sup>1</sup> Statistics based on FY 2020  
 Source: FCRTA 2021

According to the 2022-2026 Short Range Transit Plan for the Rural Fresno County Area, reduced fixed-route fares are available to the elderly (60+) and disabled patrons using the various inter-city services. FCRTA ridership consists of a high percentage of seniors (22.8 percent) and disabled (14.6 percent) (FCRTA 2021). The most recent survey of FCRTA’s riders was conducted in 2017 and revealed that 84.4 percent of FCRTA's riders have either no other way to make their trip or would have to walk. In addition, 58.9 percent of FCRTA's riders use the system 5 days a week and female ridership outnumbered male ridership, two-to-one. The ethnic cross-section of FCRTA ridership was also surveyed in 2017 and revealed the following ridership ethnicity statistics: 24.5 percent White, 73.3 percent Hispanic, 0.5 percent Black, 0.9 percent Asian, and 0.8 percent Native American (FCRTA 2017). Figure 4.15-2 shows FCRTA’s bus routes around Fresno County.

**Local Transit**

Although FCRTA is the primary transit provider in Fresno County, other local transit providers in the County include Fresno Area Express, Clovis Transit, Kings Area Rural Transit, and Dinuba Connection. According to the 2018 Fresno County ATP, Fresno Area Express serves the City of Fresno and adjacent communities; Clovis Transit serves Clovis and adjacent communities; Kings Area Rural Transit connects Hanford to the Fresno-Clovis Metropolitan Area with stops in Laton and Selma; and Dinuba Connection provides service to Reedley. These transit agencies provide fixed route and demand-responsive transit service throughout the local communities of Fresno County (FCOG 2018a).

Figure 4.15-2 FCRTA Bus Routes



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 Additional data provided by Fresno County, 2021.

Fig 4.14-2 FCRTA Bus Routes in Fresno County

## **Rail Service**

There are two main railroad lines that run north-south through Fresno. The first is owned by the Burlington Northern and Santa Fe Company. This connects Fresno County to Sacramento, the Bay Area to the north, and Bakersfield to the south via the town of Laton. The second, owned by Union Pacific Railways, runs parallel along the SR-99 corridor and connects the County northward to Sacramento and the Bay Area, and south towards Bakersfield via the town of Kingsburg. Both lines include service to the city of Fresno. Regional rail service is accessed at the downtown city of Fresno Amtrak station at the corner of Tulare and Santa Fe streets.

Active branch lines connect the city of Fresno to Sanger and Reedley in the east, and Kerman, Mendota, and Firebraugh in the west. Another branch line extends west from the mainline in the city of Hanford (Kings County) to provide services to Huron in the southwestern part of the county.

## **Taxi Service**

Fresno County is served by several taxicab companies. Taxis can be used as a principal source of commute or as a means of transfer between intermediate stops and destinations. They can be pre-booked by phone, internet, or text, or hired on the spot. Their multiple means of access make them versatile and convenient, but their high cost can make them impractical for use on a regular basis.

## **Long Distance Bus Service**

Greyhound Lines, Inc. is an intercity, long-distance bus service offering services to over 3,700 destinations in the United States, Canada, and Mexico. Greyhound has stations located in the city of Fresno and the city of Coalinga.

### **d. Aviation Facilities**

Fresno County is home to the twelfth busiest airport in California and the largest air hub in the Central Valley, Fresno Yosemite International Airport. As a passenger terminal, the Fresno Yosemite International Airport serves over 680,000 passengers per year, including visitors to the Sierra National Forest and heavily visited tourist sites in the Sierra Nevada Mountains. Fresno County is also served by eight additional publicly owned airports, three privately owned airports that allow public use, 21 privately owned facilities that have restricted or private use, and one military airfield that is not open to public use. Airports in nearby counties also provide services to Fresno County residents. While the County does not have direct ownership over any airport, County land use policies can have impacts on several privately-owned airports and heliports in unincorporated portions of Fresno County (FCOG 2021a).

### **e. Ridesharing**

Rideshare and carpool programs in Fresno County are limited to Valleyrides, a cooperative effort between FCOG, Tulare County Association of Governments, and California State University, Fresno to serve residents commuting to Fresno and Tulare counties. Valleyrides acts as a ridematching database to assist in forming or finding a carpool, vanpool or bikepool. Valleyrides provides contact information on air, rail, bus, taxi, and other transportation services as well as downloadable maps of nearby bicycling and walking trails (Fresno County 2021).

## 4.15.2 Regulatory Setting

### a. Federal Laws, Regulations, and Policies

The U.S. Department of Transportation provides a number of grant programs, primarily for the construction and upgrading of major highways and transit facilities. Many of these grants are administered by the state and regional governments.

### b. State

#### Caltrans Authority over the State Highway System

Caltrans is responsible for the planning, design, construction and maintenance of all interstate freeways and state routes. It builds, maintains, and operates the State Highway System in California with a goal to facilitate the safe and efficient use of the state transportation system for all users. Caltrans sets standards in its 2020 Transportation Impact Study Guide that focus on the VMT metric. This document is often used by local governments to uniformly review transportation analysis and assess the operational standards of Caltrans-maintained facilities. The document is intended to be a reference and informational document that aligns with the standards and thresholds established in the State's Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*. The 2020 document acts as a replacement for the 2002 *Guide for the Preparation of Traffic Impact Studies* but is only intended to be used with local land use projects and plans and not to be used for transportation projects on the State Highway System.

#### California Transportation Plan

The California Transportation Plan is prepared by the California State Transportation Agency every 5 years to provide a long-range policy framework to meet the State's future mobility needs and reduce greenhouse gas (GHG) emissions to goals set by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB 32], discussed in Section 4.8, *Greenhouse Gas Emissions/Climate Change*) and implementing legislation Senate Bill (SB) 375 (discussed below). The most recent California Transportation Plan was adopted in 2021 (Caltrans 2021). The California Transportation Plan defines goals, performance-based policies, and strategies to achieve the State's collective vision for California's future statewide, integrated, multimodal transportation system by envisioning a sustainable system that improves mobility and enhances quality of life. The California Transportation Plan is developed in collaboration with transportation stakeholders such as FCOG. Through ongoing engagement, the California Transportation Plan is intended to provide goals and visions to support a fully integrated, multimodal, sustainable transportation system that supports the quality of life, prosperous economy, human and environmental health, and social equity.

#### Statewide Transportation Improvement Plan

The Statewide Transportation Improvement Plan (STIP) is a capital improvement program that plans transportation projects related to state facilities in California for the next 5 years. The program is updated every 2 years with new construction projects as more funding is provided. The California Transportation Commission approves the fund estimate, and then Caltrans and regional planning agencies submit plans for transportation improvement projects. If the projects are programmed in the STIP, then relevant agencies can begin the implementation process.

## Senate Bill 743

SB 743, which was signed into law in 2013, tasked the OPR with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.” SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA by recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, Section 21099 [b][2]). In addition to new exemptions for projects that are consistent with specific plans, the draft SB 743 guidelines replace congestion-based metrics, such as auto delay and level of service, with VMT as the basis for determining significant impacts, unless the guidelines provide specific exceptions.

Statewide implementation of SB 743 is now required. Therefore, this EIR relies on VMT to evaluate transportation impacts.

## Fresno County SB 743 Implementation Regional Guidelines

In January 2021, FCOG published recommended thresholds for the purposes of evaluating VMT impacts of projects in Fresno County in the *Fresno County SB 743 Implementation Regional Guidelines*. The *Regional Guidelines* include descriptions of land use development and transportation projects with certain conditions allowing for an assumption that a project has a less-than-significant VMT impact, such as projects within 0.5-mile of a major transit stop along a high-quality transit areas and transit or active transportation projects known to generally reduce VMT (FCOG 2021b). The *Regional Guidelines* also include specific thresholds and guidelines for VMT analysis that should be used for land use development projects, transportation projects, and land use plans within each jurisdiction in Fresno County, including the unincorporated County (FCOG 2021b). Furthermore, the *Regional Guidelines* include a variety of potential mitigation measures for land use development projects, transportation projects, and community/general plans that could be incorporated into individual projects to reduce project-related increases in VMT.

## California's Complete Streets Act

The Complete Streets Act was signed into law as AB 1358 in 2008. It requires that cities and other public agencies incorporate “complete street” policies and principles into their general plans and updates within the circulation elements, so that the plan addresses the needs of all users, including bicyclists and pedestrians. Caltrans specifically adopted Deputy Directive 64, which addresses the needs of people of all ages and abilities concerning transportation planning. It also recognizes that transportation improvement projects are opportunities to improve safety, access, and mobility for motorists, bicyclists, pedestrians, and transit users. The Complete Streets Implementation Action Plan provides an overview of the program (Caltrans 2010).

### **c. Regional**

#### **Fresno Council of Governments 2018 – 2042 Regional Transportation Plan/ Sustainable Communities Strategy**

FCOG is the regional transportation agency for Fresno County. It is responsible for developing and adopting the region’s Regional Transportation Plan (RTP), a comprehensive assessment of all forms of transportation available in Fresno County and of the needs for travel and goods movement. The RTP also contains a Sustainable Communities Strategy (SCS), as required by California SB 375. Enacted in 2008, SB 375 requires that each Metropolitan Planning Organization include an SCS that provides an integrated land use and transportation plan for meeting greenhouse gas emission reduction targets set forth by the California Air Resources Board (CARB). The 2018-2042 RTP/SCS follows state and federal transportation requirements for urbanized counties with a long-term plan. Overall, the FCOG 2018-2042 RTP/SCS is a financially constrained multimodal plan that recognizes the faults in the regional transportation system and provides services to improve efficiency and accessibility throughout Fresno County and its incorporated cities. The 2018-2042 RTP/SCS contains four main elements (FCOG 2018b):

- The Policy Element, which outlines FCOG’s goals, objectives and policies for each transportation mode
- The SCS, which integrates land use and transportation planning efforts to meet County GHG emission reduction targets
- The Action Element, which introduces the multimodal system by transportation mode
- The Financial Element, which identifies both existing and anticipated revenue sources

#### **Fresno County Regional Active Transportation Plan**

FCOG adopted an Active Transportation Plan (ATP) in 2018 to enhance eligibility for funding in the county to create new trails, sidewalks, bike lanes, and other improvements for bicycling and walking. The plan supports applications for funding from the statewide Active Transportation Program and is used by FCOG to identify projects for the Fresno County Regional Transportation Plan. The ATP also supports the use of funds provided through sources such as the Fresno County Measure C program, described below. A variety of local, regional, state, and federal plans and other documents were reviewed during development of the ATP to ensure consistency in the goals and visions for active transportation across county, region, and state. The overall goals of the plan are as follows (FCOG 2018a):

- Create a network of safe and attractive trails, sidewalks, and bikeways that connect Fresno County residents to key destinations, especially local schools and parks
- Create a network of regional bikeways that allows bicyclists to safely ride between cities and other regional destinations
- Increase walking and bicycling trips in the region by creating user-friendly facilities
- Increase safety by creating bicycle facilities and improving crosswalks and sidewalks for pedestrians

#### **Fresno County Regional Trails Plan**

The 2021 Fresno County Regional Trails Plan was developed by FCOG to complement the Fresno County 2018 ATP. The Regional Trails Plan focuses on unpaved recreational trails and paved shared-

use paths in the unincorporated portions of Fresno County. Overall, the Regional Trails Plan includes recommendations for new trails and trail connections to create safe, comfortable, and enjoyable trails for walking/hiking, off-road biking, and horseback riding. The 2021 Regional Trails Plan aims to create expanded recreational trails opportunities and encourage residents and visitors to use trails to move around and between their communities and recreational areas (FCOG 2021c).

## **Measure C**

Fresno County Measure C was passed in 1986, creating a half-cent sales tax aimed at improving the quality of Fresno's transportation system. Within the first 20 years of its implementation, more than \$1 billion in improvements had been made to state highways and roadways. In 2006, voters passed a 20-year extension to the program, through the year 2027. The funding allocation specifically finances bicycle facilities through several programs. Additionally, Measure C requires that any new highway, expressway, super-arterial, arterial, or collector constructed or reconstructed with Measure C funds include accommodations for pedestrian and bicycle travel (FCOG 2018a).

## **Fresno County Operational Area Master Plan**

The Fresno County Office of Emergency Services coordinates, develops, and maintains the Fresno County Operational Area Master Plan, which serves as a guide for the County's response to emergencies/disasters in the unincorporated areas of the County and ensures effective and economical use of resources, material, and personnel for maximum benefit and protection of affected populations in an emergency/disaster (County of Fresno 2022). In the event of an emergency or disaster, Fresno County's roads and other transportation networks can determine the success or failure of the county during the emergency and in recovery.

### 4.15.3 Impact Analysis

#### **a. Methodology and Thresholds of Significance**

A variety of performance measures are used to assess transportation systems. Depending on the type of performance evaluation required, performance measures may be very specific and focus on intersections or roadway segments, or performance measures may be aggregated to evaluate the overall operation of a regional transportation system. A regional travel model typically only contains information on the number of lanes, posted speed and link capacity on roadway segments and lacks information detailed enough to calculate accurate intersection information.

Because of the programmatic nature of the proposed GPR/ZOU, the performance measures discussed herein are aggregated as a region to evaluate the overall performance of the Fresno County transportation system. Roadway transportation performance measures that address performance goals specific to the GPR/ZOU include VMT per capita and VMT per employee.

The criteria for determining whether the GPR/ZOU would have significant environmental impacts related to transportation and traffic were based in part on the environmental checklist in Appendix G of the *CEQA Guidelines* (14 CCR 15000 et seq.) and on significance thresholds recommended by FCOG in the *Fresno County SB 743 Implementation Regional Guidelines*. The thresholds recommended by FCOG in the 2021 *Fresno County SB 743 Implementation Regional Guidelines* were used for this analysis. Because they are already established for the project area, they are consistent with the thresholds recommended by OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, and because Fresno County has not adopted their own thresholds apart from those recommended in the *Regional Guidelines*. According to the *Fresno County Regional*



*Guidelines*, the recommended threshold for both VMT per capita and VMT per employee in unincorporated Fresno County is 13 percent below the baseline conditions (FCOG 2021b). Therefore, for the purposes of this EIR, implementation of the GPR/ZOU may have a significant adverse impact if it would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
2. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b):
  - a. Generate VMT per capita that exceeds 87 percent of the Countywide average rate of VMT per capita
  - b. Generate VMT per employee that exceeds 87 percent of the Countywide average rate of VMT per employee
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
4. Result in inadequate emergency access

Existing and projected VMT was estimated with FCOG’s ABM using a baseline year of 2019 and a horizon year of 2042. The ABM was prepared by FCOG and provided for use herein. The Traffic Technical Memorandum in Appendix TIS provides additional details on modeling methodologies.

The VMT analysis consists of two parts: evaluating the change in VMT per capita and evaluating the change in VMT per employee. The change in VMT per capita and the change in VMT per employee were evaluated for the proposed GPR/ZOU against both baseline 2019 conditions. This methodology is consistent with the OPR’s *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018), *CEQA Guidelines*, and the *Fresno County SB 743 Implementation Regional Guidelines* (FCOG 2021b).

## **b. Project Impacts and Mitigation Measures**

**Threshold 1:** Would the GPR/ZOU conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**IMPACT T-1 IMPLEMENTATION OF THE FRESNO COUNTY GPR/ZOU WOULD BE CONSISTENT WITH THE CALIFORNIA TRANSPORTATION PLAN, THE FCOG 2018-2042 RTP/SCS, THE FRESNO COUNTY 2018 ACTIVE TRANSPORTATION PLAN, AND THE FRESNO COUNTY 2021 REGIONAL TRAILS PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

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Several regionally adopted programs, plans, ordinances and policies apply to the GPR/ZOU, including the 2018-2024 RTP/SCS, the California Transportation Plan, the Fresno County 2018 ATP, and the Fresno County 2021 Regional Trails Plan. As discussed under Impact LU-2 in Section 4.10, *Land Use and Planning*, the proposed Fresno County GPR/ZOU would not conflict or be inconsistent with the FCOG 2018-2042 RTP/SCS. Furthermore, implementation of the proposed GPR/ZOU would result in a Fresno County 2042 General Plan Traffic and Circulation Element containing the following goals and policies that are consistent with 2018-2024 RTP/SCS, the California Transportation Plan, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan.

**Goal TR-A** To plan and provide a unified, multi-modal, coordinated, and cost-efficient countywide street and highway system that ensures the safe, orderly, and efficient movement of people and goods, including travel by walking, bicycle, or transit.

**Policy TR-A.7: Regional Transportation Plan Planning Coordination.** The County shall coordinate its transportation planning with the Fresno Council of Governments, Caltrans, cities within the county, and adjacent jurisdictions.

**Policy TR-A.8: Regional Transportation Plan Coordination.** The County shall continue to participate with the Fresno Council of Governments, Caltrans, and other agencies, to maintain a current Regional Transportation Plan, and to identify funding priorities and development expenditure plans for available regional transportation funds, in accordance with regional, State, and Federal transportation planning and programming procedures. Such regional programming may include improvements to State Routes, city streets, and County roadways

**Policy TR-A.14: Multi-modal Transportation Systems.** The County, where appropriate, shall coordinate the multi modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right of way Plan and Precise Plans of streets and highways.

**Policy TR-A.15: Bikeways and Trails.** The County shall develop and maintain a program to construct bikeways and recreation trails in accordance with the adopted Regional Bicycle and Recreational Trail Master Plan. The County shall seek funding for construction and maintenance of bicycle and trails.

**Policy TA-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;
- b. Minimizing curb cuts along non-local streets to improve safety and capacity;
- c. Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- d. Constructing sidewalks and bike lanes on both sides of streets, where feasible;
- e. Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- f. Coordinating with local jurisdictions and Fresno Council of Governments to ensure multimodal connections are established and maintained between jurisdictions; and
- g. Incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes.

**Policy TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- a. Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- b. Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- c. Coordinating with local jurisdictions and Fresno COG to ensure multimodal connections are established and maintained between jurisdictions.

**Goal TR-B** To promote a safe and efficient mass transit system that provides service to residents without access to automobiles and, in urban areas, helps to reduce congestion, improves the environment, and provides viable non-automotive means of transportation.

**Policy TR-B.2: Transit Service:** The County shall promote transit services in designated corridors and communities where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors and in communities in the rural area of the county.

**Policy TR-B.7: Safe Routes to Schools:** The County shall work with the school districts to plan transit routes to schools and to identify safe routes to encourage other modes of transportation such as biking to reduce vehicle trips to schools.

**Goal TR-C** To reduce travel demand on the County's roadway system and maximize the operating efficiency of transportation facilities so as to reduce the quantity of motor vehicle emissions and reduce the amount of investment required in new or expanded facilities.

**Goal TR-D** To plan and provide a safe, continuous, and easily accessible bikeway system that facilitates the use of the bicycle as a viable alternative transportation mode and as a form of recreation and exercise.

**Policy TR-D.1: Bicycle Routes.** The County shall implement a system of recreational, commuter, and inter-community bicycle routes in accordance with the Regional Bikeway Plan described in the Circulation Diagram and Standards section and depicted in Figure TR-2. The plan designates bikeways between cities and unincorporated communities, to and near major traffic generators such as recreational areas, parks of regional significance, and other major public facilities, and along recreational routes.

**Policy TR-D.4: Bikeway Improvements.** The County shall develop bikeways in conjunction with street improvement projects occurring along streets and roads designated on the Regional Bikeways Plan map.

**Policy TR-D.8: Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation.

**Goal TR-E** To plan for a safe, efficient, and environmentally-sound rail system to meet the needs of all Fresno County residents, industry, commerce, and agriculture.

**Policy TR-E.5: Multi-modal Rail Stations.** The County shall support multi-modal stations at appropriate locations to integrate rail transportation with other transportation modes.

Specifically, **Goal TR-C**, described above, is consistent with, and would help achieve, the California Transportation Plan's goal of reducing GHG emissions by reducing travel demand on the County's roadway system and by maximizing the operating efficiency of transportation facilities in order to reduce the quantity of motor vehicle emissions. Similarly, **Goals TR-A** and **TR-D** are consistent with, and would help achieve, the FCOG 2018-2042 RTP/SCS goals of ensuring an efficient, safe, integrated, multimodal transportation system and improved mobility and accessibility for all by planning and providing a multimodal countywide street and highway system that ensures the safe, orderly, and efficient movement of people and goods, and by planning and providing a safe, continuous, and easily accessible bikeway system that facilitates the use of the bicycle as a viable alternative transportation mode. **Goal TR-D** would also be consistent with, and would help achieve, the goals of both the Fresno County ATP and the Fresno County Regional Trails Plan by implementing policies that provide for bicycle routes and bicycle facility improvements. Furthermore, development resulting from the implementation of the proposed Fresno County GPR/ZOU would focus on infill and transit-oriented development, higher density development, improved pedestrian and bicycle opportunities, and reducing VMT, all of which would be consistent with the goals and visions of the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan.

As the proposed Fresno County GPR/ZOU would result in 2042 General Plan goals, policies, and future development that is consistent with the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan, implementation of the GPR/ZOU would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. This impact would be less than significant.

### Mitigation Measures

No mitigation measures are required.

<p><b>Threshold 2:</b> Would the GPR/ZOU conflict or be inconsistent with <i>CEQA Guidelines</i> section 15064.3, subdivision (b):</p> <ul style="list-style-type: none"><li>a. Generate VMT per capita that exceeds 87 percent of the countywide average rate of VMT per capita; or</li><li>b. Generate VMT per employee that exceeds 87 percent of the countywide average rate of VMT per employee?</li></ul>
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**IMPACT T-2 THE PROPOSED FRESNO COUNTY GPR/ZOU WOULD RESULT IN AN INCREASE IN VMT PER CAPITA AND AN INCREASE IN VMT PER EMPLOYEE ABOVE 87 PERCENT OF THE BASELINE 2019 COUNTYWIDE CONDITIONS. VMT PER CAPITA AND VMT PER EMPLOYEE IMPACTS FROM IMPLEMENTATION OF THE PROPOSED GPR/ZOU WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

As described in Section 4.14.3(a), *Methodology and Thresholds of Significance*, according to FCOG's adopted VMT thresholds, the proposed GPR/ZOU would be significant if implementation of the project would generate VMT per capita that exceeds 87 percent of the countywide average rate of VMT per capita, or if implementation would generate VMT per employee that exceeds 87 percent of the countywide average rate of VMT per employee (FCOG 2021b). As the countywide average rate of VMT per capita in the baseline year 2019 is 16.1, and the countywide average rate of VMT per employee in the baseline year 2019 is 25.7, VMT impacts would be considered significant if VMT attributable the GPR/ZOU exceeds 14.0 VMT per capita or 22.4 VMT per employee.

Table 4.15-4, below, compares the VMT per capita and VMT per employee for baseline conditions in 2019 and for anticipated 2042 conditions with implementation of the proposed GPR/ZOU on all roadways in Fresno County, based on the FCOG ABM.

**Table 4.15-4 VMT Results Summary**

Scenario	VMT per Capita	VMT per Employee
Baseline Condition (2019)	16.1	25.7
2042 Conditions with proposed GPR/ZOU	14.4	23.7
Threshold	14.0	22.4
Exceeds Threshold?	Yes	Yes

GPR/ZOU = General Plan Review and Zoning Ordinance Update; VMT = vehicle miles traveled  
 Source: Traffic Technical Memorandum, GHD 2022, Appendix T15

As shown in Table 4.15-4, the proposed GPR/ZOU is projected to decrease VMT per capita to 14.4 and VMT per employee to 23.7. Although the proposed GPR/ZOU would result in an overall decrease in VMT below baseline conditions, the resulting VMT per capita would exceed 87 percent of the countywide average rate of VMT per capita and the resulting VMT per employee would exceed 87 percent of the countywide average rate of VMT per employee.

It should be noted that implementation of the proposed GPR/ZOU would result in the adoption of the following goals and policies that encourage active transportation modes, such as walking and bicycling, and encourage both transit-oriented development and the use of public transit, thereby reducing VMT throughout Fresno County to the extent feasible.

**Policy ED-B.14: Tourist Transit Initiatives.** The County shall continue advocating public transit services to Yosemite National Park via Yosemite Area Regional Transportation Strategy (YARTS) and to Sequoia and Kings Canyon National Parks via Sequoia/Kings Canyon Shuttle and participate, when feasible, in future regional transportation initiatives providing public transportation to tourist destinations in the foothill and mountain areas.

**Policy LU-F.3: High-Density Housing.** The County shall promote development of higher-density housing in areas located along major transportation corridors and transit routes and served by the full range of urban services, including neighborhood commercial uses, community centers, and public services.

**Policy LU-F.8: Complete Streets Design Guidelines.** The County shall adopt Complete Streets design guidelines and incorporate them into community plans and specific plans. The County shall review development proposals for compliance with its Complete Streets design guidelines to identify design changes that can improve transit, bicycle, and pedestrian access.

**Policy TR-A.14: Multi-modal Transportation Systems.** The County, where appropriate, shall coordinate the multi-modal use of streets and highways to ensure their maximum efficiency and connectivity and shall consider the need for transit, bikeway, and recreational trail facilities when establishing the Ultimate Right-of-way Plan and Precise Plans of streets and highways.

**Policy TR-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users,

including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel.
- f. Coordinating with local jurisdictions and Fresno COG to ensure multimodal connections are established and maintained between jurisdictions.

**Policy TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators.

**Policy TR-B.1: Transit Service Coordination.** The County shall work with transit providers to provide transit services within the county that are responsive to existing and future transit demand and that can demonstrate cost effectiveness by meeting minimum farebox recovery levels required by State and Federal funding programs.

**Policy TR-B.2: Transit Service.** The County shall promote transit services in designated corridors and communities where population and employment densities are sufficient or could be increased to support those transit services, particularly within the spheres of influence of the cities and along existing transit corridors and in communities in the rural area of the county.

**Policy TR-B.3: Transit Supportive Development.** The County shall work with the cities of Fresno and Clovis and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors shown in Figure TR-3.

**Policy TR-B.4: Transit Service Funding.** The County shall work with the Fresno COG and transit service providers to pursue all available sources of funding for transit services when consistent with General Plan policies and long-term funding capabilities.

**Policy TR-B.5: Special Transit Needs.** The County shall consider the transit needs of senior, disabled, low-income, and transit dependent persons in making recommendations regarding transit services.

**Policy TR-B.6: Convenient Transit Transfers.** The County shall encourage the development of facilities for convenient transfers between different transportation systems (e.g., train-to bus, bus-to-bus).

**Policy TR-B.7: Safe Routes to Schools.** The County shall work with the school districts to plan transit routes to schools and to identify safe routes to encourage other modes of transportation such as biking to reduce vehicle trips to schools.

**Policy TR-C.3: Alternative Employee Transportation Modes.** The County shall work with the cities of Fresno and Clovis to encourage new urban development within the FCMA to provide appropriate on-site facilities that encourage employees to use alternative transportation modes as air quality and transportation mitigation measures. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.

**Policy TR-D.8: Bicycle and Transit Links.** The County shall support development of facilities that help link bicycling with other modes of transportation.

Implementation of the above 2042 General Plan policies would reduce vehicle trips in unincorporated Fresno County to the extent feasible. The 2042 General Plan policies, including those listed above, are intended to be consistent with VMT-reduction measures outlined in FCOG's 2021 *Fresno County SB 743 Implementation Regional Guidelines* and with typical policy recommendations for VMT reduction as required by SB 743. Nonetheless, the proposed GPR/ZOU would result in VMT per capita and VMT per employee that both exceed 87 percent of the countywide average rate. Therefore, this impact would be significant.

### **Mitigation Measures**

The proposed GPR/ZOU would result in a significant transportation impact related to VMT, as the project's resulting VMT per capita and VMT per employee would exceed 87 percent of the countywide average rate. There is currently no project-level mitigation available that could be feasibly implemented for each potential project that may occur as a result of the GPR/ZOU, and it would be speculative to identify a measure(s) when site specific analysis or project level details are not yet known. Nevertheless, the following mitigation measure recommends a new General Plan policy to ensure that future projects implemented under the GPR/ZOU individually would be required reduce project specific VMT to a level below the 87 percent threshold.

#### *T-1 VMT Policy*

On a regional level, the following Policy shall be added to the Fresno County General Plan to solidify the County's requirement for individual transportation and land use projects that would generate or attract more than 110 daily trips (pursuant to OPR's SB 743 technical advisory) under their jurisdiction to reduce project related VMT:

**Policy TR-A.25: VMT Threshold.** Projects that would generate or attract more than 110 daily vehicle trips shall be evaluated for a transportation VMT impact on an individual basis. The threshold of significance shall be 87 percent below the countywide average rate of VMT. Any individual project resulting in VMT that exceeds 87 percent below the countywide average shall be required to implement project-specific mitigation measures aimed at reducing VMT generated by the project.

The policy detailed above would be consistent with the recommended threshold identified for unincorporated Fresno County in the 2021 *Fresno County SB 743 Implementation Regional Guidelines*. Project specific mitigation may include, but is not limited to, the following regional- and project-level Transportation Demand Management (TDM) strategies that could further reduce project-level VMT resulting from future development under implementation of the proposed GPR/ZOU.

- **Expand Transit Service:** Consider opportunities to expand FCRTA fixed-route and shuttle-based transit service to serve locations of future growth, with consideration to anticipated increases in commute trips.
- **Public-Facing TDM Programs:** Promote existing TDM programs led by FCOG and other public agencies including ridesharing programs, carpool and vanpool programs, and demand-response services, such as:
  - Fresno COG "Valley Rides" Ridesharing

- Carpool Incentive Program
- Commuter Vanpool Program
- Agricultural Worker Vanpool Program
- Senior Taxi Scrip Program
- **Employer-Based TDM Programs:** Per San Joaquin Valley Air Pollution Control District, the employer-based trip reduction Rule 9410 (December 17, 2009) requires employers with at least 100 eligible employees at a worksite to implement programs to reduce VMT from private vehicles used by employees to commute to and from their worksites. Employers should promote the education, information, and promotion of the above mentioned TDM programs.
- **Mobility-As-A-Service:** Provide additional access and connectivity for underserved populations. Strategies to improve connectivity and access include on-demand shuttles to connect individuals to desired destinations.
- **Connectivity Enhancement:** The bicycle and pedestrian facilities presented in the Fresno County Regional ATP should connect to transit route stops where applicable, to accommodate “first mile” and “last mile” travel (travel between modes to a destination). In addition, existing and future bus stops should be improved to comply with ADA design standards to ensure ADA-accessible bus stops and comfortable bus shelters.
- **Land Use:** Modify land use plans for future proposed development projects to increase residential development in areas with low VMT/capita characteristics and/or decrease development in areas with high VMT/capita characteristics and modify land use plans to increase commercial development in areas with low VMT/employee characteristics and/or decrease development in areas with high VMT/employee characteristics.
- **Education and Promotion/Encouragement:** Voluntary travel behavior change program including promotions and marketing.
- **Commute Trip Reductions (smaller employers):** Implement or provide access to:
  - Voluntary commute trip reduction programs
  - Alternative work schedules and Telework Program
  - Employer-sponsored vanpools or shuttles
  - Rideshare Program - Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services
  - Provide car-sharing and bike-sharing programs
  - Provide partially or fully subsidized transit passes
  - Provide telework options
  - Provide employee transportation coordinators at employment sites
  - Provide a guaranteed ride home service to users of non-auto modes
- **Bicycle Infrastructure:** Implement on-street bicycle facilities, provide bicycle parking, and provide secure bicycle parking and showers.
- **Neighborhood Infrastructure:** Implement neighborhood improvements such as:
  - Traffic calming improvements
  - Pedestrian network improvements
  - Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle



**General Plan Review and Zoning Ordinance Update**

- Improve or increase access to transit
- Increase access to common goods and services, such as groceries, schools, and daycare
- Incorporate a neighborhood electric vehicle network
- Limit or eliminate parking supply

It should be noted that the above list of measures is not all inclusive; rather, this list includes potential recommendations to be considered if feasible for individual projects implemented under the GPR/ZOU, and alternate measures can and should be evaluated based on a specific project in response to site specific conditions.

**Significance After Mitigation**

Overall, the analysis in this EIR is focused on the programmatic and regional impacts of the proposed GPR/ZOU rather than individual impacts resulting from implementation of individual projects under the GPR/ZOU. Although the above mitigation measure would implement a new policy into the 2042 General Plan that would require projects to demonstrate a reduction of both VMT per capita and VMT per employee in unincorporated Fresno County to at least 13 percent below the baseline conditions countywide, the implementation of project-level VMT-reducing strategies may not be feasible for each project, and a reduction consistent with at least 13 percent below baseline conditions cannot be guaranteed on a project-by-project basis. Similarly, implementation of regional VMT-reducing strategies, such as extending transit services, may not be feasible as there are currently no procedures or policies in place to establish such actions. Therefore, it is speculative to assume every project would meet such a requirement, and this impact would remain significant and unavoidable. No additional mitigation measures to reduce this impact to a less-than-significant level are feasible.

**Threshold 3:** Would the GPR/ZOU substantially increase traffic-related hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**IMPACT T-3 IMPLEMENTATION OF THE FRESNO COUNTY GPR/ZOU WOULD NOT SUBSTANTIALLY INCREASE HAZARDS DUE TO GEOMETRIC DESIGN FEATURES OR INCOMPATIBLE USES. RATHER, THE PROPOSED GOALS AND POLICIES WOULD MAKE ROADWAYS SAFER. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

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The GPR/ZOU includes many growth management strategies that would: 1) direct new growth to areas within already existing or planned development, 2) encourage new development at infill sites, and 3) support development consistent with the County’s economic development strategies. The countywide growth that would result from implementation of the GPR/ZOU would not affect design level features of roadways, as there are no specific transportation projects identified in the GPR/ZOU. Any future projects would be subject to design guidelines established by the State or the local jurisdiction with authority over the project. Any construction activities resulting from projects associated with implementation of the proposed GPR/ZOU would be short term, intermittent, and geographically dispersed. At the county level, these disruptions would be localized, and impacts would be limited and would not represent a significant impact to the operations of the regional transportation system. At the local level, construction activities could increase travel on local roads and result in detours or increased congestion in certain locations. The actual construction details of potential future projects are not known. Construction impacts would be evaluated at the project level as details regarding the timing, design, scope, and construction program are available. Generally, construction activities would be required to be conducted in accordance with, and

subject to review by, all applicable State and/or local jurisdictions with authority over the project; thus, ensuring projects would be designed to minimize the potential for hazardous conditions and to ensure safe travel by all modes.

Furthermore, the proposed Traffic and Circulation Element contains goals and policies that better define roadway design standards, promote complete streets in both urban and rural areas, and advocate for safety and operational improvements in the circulation system. Such goals and policies include the following.

**Goal TR-A** To plan and provide a unified, multi-modal, coordinated, and cost-efficient countywide street and highway system that ensures the safe, orderly, and efficient movement of people and goods, including travel by walking, bicycle, or transit.

**Policy TR-A.1: Roadway Design Standards.** The County shall plan and construct County-maintained streets and roads according to the County's Roadway Design Standards. Roadway design standards for County-maintained roads shall be based on the American Association of State Highway and Transportation Officials (AASHTO) standards and supplemented by California Department of Transportation design standards and by County Department of Public Works & Planning Standards, including complete streets standards. County standards include typical cross sections by roadway classification, consistent with right-of-way widths. The County may deviate from the adopted standards in circumstances where conditions warrant special treatment of the roadway.

**Policy TR-A.4: Roadway Access.** The County shall require that new or modified access to property abutting a roadway and to intersecting roads conform to access specifications in the Circulation Diagram and Standards section. Exceptions to the access standards may be permitted in the manner and form prescribed in the Fresno County Zoning and Subdivision Ordinances, provided that the designed safety and operational characteristics of the existing and planned roadway facility will not be substantially diminished.

**Policy TR-A.6: Rights-of-Way Dedications.** The County shall require dedication of right-of-way or dedication and construction of planned road facilities as a condition of land development and require an analysis of impacts of traffic from all land development projects including impacts from truck traffic. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. The County may allow a project to fund a fair share of improvements that provide significant benefit to others through traffic impact fees.

**Policy TR-A.10: Roadway Improvements.** The County shall ensure that land development that affects roadway use or operation or requires roadway access to plan, dedicate, and construct required improvements consistent with the criteria in the Circulation Diagram and Standards section of this element.

**Policy TA-A.23: Urban Area Complete Streets.** The County shall require new streets within unincorporated urban areas to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- a. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;

**General Plan Review and Zoning Ordinance Update**

- b. Minimizing curb cuts along non-local streets to improve safety and capacity;
- c. Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- d. Constructing sidewalks and bike lanes on both sides of streets, where feasible;
- e. Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- f. Coordinating with local jurisdictions and Fresno COG to ensure multimodal connections are established and maintained between jurisdictions; and
- g. Incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes.

**Policy TR-A.24: Rural Area Complete Streets.** The County shall strive to serve all users on rural roadways in the county by designing and constructing rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- a. Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- b. Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- c. Coordinating with local jurisdictions and Fresno COG to ensure multi-modal connections are established and maintained between jurisdictions.

**Goal TR-B** To promote a safe and efficient mass transit system that provides service to residents without access to automobiles and, in urban areas, helps to reduce congestion, improves the environment, and provides viable non-automotive means of transportation.

**Policy TR-B.7: Safe Routes to School.** The County shall work with the school districts to plan transit routes to schools and to identify safe routes to encourage other modes of transportation such as biking to reduce vehicle trips to schools.

The proposed GPR/ZOU would not negatively impact the design of transportation facilities by increasing hazards. Rather, the GPR/ZOU would implement transportation design improvements to make roadways safer. Therefore, the proposed GPR/ZOU would not substantially increase hazards due to geometric design features or incompatible land uses.

Similarly, the proposed Fresno County GPR/ZOU does not include substantial land use or circulation changes that would adversely impact the compatible use of transportation facilities. Rather, the proposed Fresno County 2042 General Plan Transportation and Circulation Element would make roadways safer. The GPR/ZOU does not introduce new agricultural uses or other similar uses that would result in increased incompatible vehicle uses on roadways in the county, such as slow-moving farm equipment. In addition, any specific projects implemented as a result of the proposed GPR/ZOU would be subject to and follow the allowable uses established by the State or the local jurisdiction with authority over the project. Therefore, the proposed GPR/ZOU would not substantially increase hazards due to incompatible uses. This impact would be less than significant.

## Mitigation Measures

No mitigation measures are required.

<b>Threshold 4:</b> Would the GPR/ZOU result in inadequate emergency access?
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**IMPACT T-4 THE PROPOSED FRESNO COUNTY GPR/ZOU WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. RATHER, THE PROPOSED GOALS AND POLICIES WOULD IMPROVE EMERGENCY RESPONSE AND FACILITATE MORE EFFECTIVE EMERGENCY EVACUATION. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

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The proposed GPR/ZOU would not implement specific design features or specifications for new project-level development. The actual design details of potential projects resulting from implementation of the proposed GPR/ZOU are not known. However, Caltrans, CALFIRE, and local jurisdictions have design standards for new and existing development and roadways to ensure adequate passage of emergency vehicles. Any future transportation project associated with the GPR/ZOU would be subject to review with regard to emergency vehicle requirements by State and/or local jurisdictions with authority over the project, as well as responsible emergency service agencies; thus, ensuring projects would be designed to meet all applicable emergency design standards. Construction activities associated with potential projects resulting from implementation of the proposed GPR/ZOU could temporarily impair emergency vehicle access points. However, standard construction procedures for development of a construction management plan would address these conditions and would require provision of alternative emergency vehicle access points. Specifically, in accordance with Caltrans permitting requirements, a traffic control plan would be required during any construction activities that result in lane restrictions or closures in a work zone to minimize traffic delays and ensure worker safety (Caltrans 2015). The traffic control plan would adhere to the standards set forth in the *California Manual of Uniform Traffic Control Devices* (Caltrans 2014). In addition, while potential future projects could temporarily impede emergency access at project locations during construction periods, construction projects would conform to state, regional, and local regulations requiring maintenance of emergency access during construction.

Furthermore, implementation of the proposed GPR/ZOU would result in a Traffic and Circulation Element and Health and Safety Element containing the following goals and policies, in addition to those described under *Impact T-3*, above, related to emergency response, operations, and access.

**Goal TR-C** To reduce travel demand on the County's roadway system and maximize the operating efficiency of transportation facilities so as to reduce the quantity of motor vehicle emissions and reduce the amount of investment required in new or expanded facilities.

**Goal HS-A** To protect public health and safety by preparing for, responding to, and recovering from the effects of natural or technological disasters.

**Policy HS-A.1: Operational Area Master Emergency Service Plan.** The County shall, through the Fresno County Operational Area Master Emergency Services Plan and the Fresno County Multi-Hazard Mitigation Plan, maintain the capability to effectively respond to emergency incidents, including maintenance of an emergency operations center.

**Policy HS-A.2: Multi-Jurisdictional Hazard Mitigation Plan.** In coordination with cities, special districts, and other state and federal agencies, the County shall maintain the Fresno County Multi-Jurisdictional Hazard Mitigation Plan to identify and mitigate, to the extent feasible, natural and human-made hazards within the county.

**Policy HS-A.3: Emergency Services During Major Disasters.** The County shall, within its authority and to the best of its ability, ensure that emergency dispatch centers, emergency operations centers, communications systems, vital utilities, and other essential public facilities necessary for the continuity of government are designed in a manner that will allow them to remain operational during and following an earthquake or other disaster.

**Policy HS-A.8: Transportation Corridors and Evacuation Routes.** The County shall continue to improve community transportation corridors to allow for better evacuation routes for the public and better access for emergency responders.

**Policy HS-B.4: Foothill and Mountain Fire and Emergency Service Access.** The County shall require that foothill and mountain subdivisions of more than four (4) parcels provide for safe and ready access for fire and other emergency equipment, for routes of escape that will safely handle evacuations, and for roads and streets designed to be compatible with topography while meeting fire safety needs.

**Policy HS-B.5: Fire and Emergency Vehicle Access.** The County shall require development to have adequate access for fire and emergency vehicles and equipment. All major subdivisions shall have a minimum of two (2) points of ingress and egress.

The policies outlined above would maximize the operating efficiency of transportation facilities and result in the capability to effectively respond to emergency incidents; continued identification and mitigation of hazards within the County; adequately designed emergency operations facilities that would remain operational during disasters; improved community transportation corridors for better evacuation routes and better access for emergency responders; safe access for fire and other emergency equipment on routes of escape to safely handle evacuations; and, future development with adequate access for fire and emergency vehicles and equipment. Overall, the Traffic and Circulation Element and Health and Safety Element would improve circulation, emergency access, and resiliency in Fresno County, as well as improve emergency response and facilitate more effective emergency evacuation.

Based on the above analysis and in consideration of the goals and policies of the Fresno County 2042 General Plan Traffic and Circulation Element and Health and Safety Element, the impacts of the proposed GPR/ZOU on emergency vehicle access and on interference with an adopted emergency response plan or emergency evacuation plan would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

#### **4.15.4 Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative transportation impacts is generally the County of Fresno and the adjoining counties of Madera, Kings, Merced, and Tulare. This geographic scope is appropriate because, while the county limits represent the planning area for the County's GPR/ZOU, the transportation system provides direct access to Madera, Kings, Merced, and Tulare counties. There are currently no roadway connections to Inyo County and Mono County to the east,

and there is only limited roadway connectivity with San Benito County and Monterey County to the west.

The federal, state, and regional laws, regulations, and policies outlined in Section 4.12.2, *Regulatory Setting*, apply to surrounding counties in the same manner as they apply to projects within Fresno County, thereby avoiding the potential for cumulative conflict between transportation planning for Fresno County and the other surrounding counties. Therefore, the potential cumulative impact resulting from the implementation of the proposed Fresno County GPR/COU related to conflict with programs, plans, and ordinances or policies addressing the circulation system would be less than significant, and the proposed GPR/ZOU contribution would not be cumulatively considerable.

Development in the cumulative impact analysis area would result in significant and unavoidable increase in VMT per capita as well as VMT per employee from baseline (2019) conditions, partially due to commuters travelling to and from employment in the adjoining counties. One example is the City of Fresno, which attracts workers from the surrounding counties choosing to live in more rural and affordable regions in the Valley. Likewise, people residing outside of but close to Fresno County may commute into the County for outdoor recreation. For example, Kings Canyon National Park and Sierra National Forest are very popular recreational weekend destinations for residents throughout California and beyond. These trips contribute to VMT in the cumulative impact analysis area.

As previously described in Section 4.14.3(a), *Methodology and Thresholds of Significance*, and consistent with the recommended thresholds provided in the *Fresno County SB 743 Implementation Regional Guidelines*, impacts associated with the proposed GPR/ZOU would be considered significant if implementation of the project would generate VMT per capita that exceeds 87 percent of the countywide average, or if implementation would generate VMT per employee that exceeds 87 percent of the countywide average. As shown in Table 4.15-4, the proposed Fresno County GPR/ZOU would decrease VMT per capita by 1.7 compared to the baseline 2019 conditions, which would be approximately 89 percent of the countywide average. Similarly, the proposed Fresno County GPR/ZOU would decrease VMT per employee by 2 compared to the baseline 2019 conditions, which would be approximately 92 percent of the countywide average.

While the majority of the VMT would be expected to remain in Fresno County, some portion of the VMT would inevitably extend to areas in adjoining counties, such as Madera, Kings, Merced, and Tulare counties. The most reasonable assumption is that VMT to adjoining counties would be concentrated to the most heavily traveled roadways in the counties with the highest relative employment, such as I-5 into Merced and Kings Counties and SR-99 into Tulare and Madera Counties. The increased VMT in adjoining counties would be in addition to the VMT generated from the increased population growth of these counties into the future. Per capita and per employee VMT in the cumulative impact area would be unlikely to reach 87 percent of the countywide average by 2042 due to increased travel in the region even without implementation of the proposed Fresno County GPR/ZOU. The implementation of project-level VMT-reducing strategies, such as providing bicycle services or eliminating parking supply, may not be feasible and cannot be guaranteed on a project-by-project basis. Regional VMT-reduction programs, such as extending transit services, may also not be feasible as there are currently no procedures or policies in place to establish such actions. Mitigation Measures T-1 would implement a new specific policy in the County General Plan as mitigation to ensure individual transportation and land use projects implemented under the GPR/ZOU reduce project related VMT to a level that is below 87 percent of the countywide average rate of VMT. However, it is speculative to assume every project would meet such a requirement. Thus, cumulative impacts on VMT would be significant, the proposed GPR/ZOU

contribution to cumulative VMT impacts would be cumulatively considerable, and this contribution would remain cumulatively considerable even with the incorporation of feasible mitigation.

Some types of transportation impacts are related to site- and project-specific characteristics and conditions and would not be significantly affected by other development outside of Fresno County. As discussed in Impacts T-3 and T-4, there are existing federal, state, and local regulations that govern transportation hazards and emergency access associated with development and infrastructure projects. Regulations and oversight, as outlined in the impact analysis above, would effectively reduce the potential for individual projects to create a transportation hazards or emergency access impact within Fresno County and surrounding counties. Furthermore, implementation of the proposed GPR/ZOU would result in a Fresno County 2042 General Plan Traffic and Circulation Element, as well as a Health and Safety Element containing goals and policies that would better define roadway design standards, promote complete streets in both urban and rural areas, advocate for safety and operational improvements in the circulation system, maximize the operating efficiency of transportation facilities, result in the capability to effectively respond to emergency incidents, provide safe access for fire and other emergency equipment on routes of escape to safely handle evacuations, and, require adequate access for fire and emergency vehicles and equipment. Thus, cumulative impacts related to transportation hazards and emergency access would not be significant and the proposed GPR/ZOU contribution would not be cumulatively considerable.

## 4.16 Tribal Cultural Resources

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This section evaluates potential impacts on tribal cultural resources related to implementation of the proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU).

### 4.16.1 Tribal Cultural Setting

#### **a. Ethnographic Context**

##### **Ethnographic Setting**

Fresno County overlaps with six traditional ethnographic territories, comprising multiple tribes and moieties (Smithsonian Institution and Heizer 1978). The ethnographic territories are: Northern Valley Yokuts (Central Valley, Wallace 1978b), Southern Valley Yokuts (Central Valley, Wallace 1978a), Foothill Yokuts (Central Valley, Spier 1978b), Mono (Sierra Nevada, Spier 1978a), Owens Valley Paiute (Sierra Nevada, Spier 1978a), and Salinan (Central Coast, Smithsonian Institution and Heizer 1978).

##### *Yokuts*

Three Yokut tribes traditionally occupied Fresno County: the Northern Valley, Southern Valley, and Foothill Yokuts (Wallace 1978a). The distinction between the three Yokut tribes is based primarily on language dialect but also ecological factors related to subsistence and local innovations (Mithun 2001; Silverstein 1978; Wallace 1978a, 1978b).

The Yokuts established permanent villages. Residential structures were most often of two types: single family dwellings and larger communal residences that housed 10 families or more. Villages frequently included mat-covered granaries and a sweathouse (Mithun 2001).

Yokuts subsistence was based on a mixed economy focused on fishing, collecting, and hunting small game. Fishermen employed tule rafts and caught fish with nets, spears, basket traps, and bows and arrows. Yokuts often gathered mussels and hunted turtles in lakes, rivers, and streams. Wild seeds and roots contributed a large portion to the Yokuts diet. Tule roots were gathered, dried, and pounded into flour to be prepared as a mush. Tule seeds and grass and flowering herb seeds were prepared in the same way. Leaves and stems of certain plants, such as clover and fiddle-neck, were also collected. Acorns, a staple of most California Native Americans, were not readily available in the Yokuts ethnographic territory. Some Yokuts tribes journeyed to neighboring groups to trade for acorns. Waterfowl was frequently hunted with snares, nets, and bows and arrows. Land mammals and birds contributed a smaller part to the Yokuts diet. Small game was occasionally taken in snares or traps or shot with bows and arrows (Spier 1978b; Wallace 1978a, 1978b).

The basic economic unit among the Yokuts was the nuclear family. Totemic lineages were based on patrilineal descent. Totem symbols were passed from father to offspring, and families sharing the same totem formed an exogamous lineage. Totems were associated with one of two moieties (social or ritual groups), a division which played a role during ceremonies and other social events (Wallace 1978a).

Yokuts were split into self-governing local groups, most often including several villages. Each group had a chief who directed ceremonies, mediated disputes, handled punishment of those doing wrong, hosted visitors, and provided aid to the impoverished. In certain cases, settlements had two



chiefs, one for each moiety. Other political positions included the chief's messenger and the spokesman (Wallace 1978b). Shamans were also an important part of Yokuts village life. Shamans were able to gain their power through a dream or vision. If after this vision, the man accepted the role as shaman, he would pray, fast, and acquire talismans to aid him in his future work. Shamans had the ability to heal the sick and served the primary role in religious life (Wallace 1978b).

Yokuts technology depended primarily on tule. Stems of the plant served as the raw material for baskets, cradles, boats, housing, and many other items. Tools such as knives, projectile points, and scraping tools were made from imported lithic materials, as stone was not readily available in the Central Valley. Marine shells secured through trade with coastal peoples were used in the manufacture of shell money and personal adornment items (Wallace 1978a).

### *Monache or Mono*

The Monache or Mono were not a single group but comprised at least six tribal groups united by language (Spier 1978a). They shared a distinct Numic language with the Owens Valley Paiute (discussed below). The social and cultural identity of the Mono tribes was based primarily on language and location, although they all inhabited a relatively small, mountainous region to the east of the Yokuts (Hester 1978).

Mono settlements were typically small and loosely organized, with huts or hamlets arranged in proximity instead of a central village area (Spier 1978a). Lineages were the main kinship unit among the Mono, although at least one tribe, the Northfork, possessed moieties (Spier 1978a). Each lineage had a totemic creature (e.g., Eagle or Roadrunner) that partially signified tribal duties (Gayton 1948). For example, the Eagle lineage provided chiefs, while the Roadrunner or the Dove lineage provided the chief's messengers. It was not uncommon for more than one chief to be in office simultaneously in settlements that were too small might not even have one (Spier 1978a).

The Mono subsisted primarily on hunting, fishing, and gathering wild plants. This system required the Mono to move seasonally, shifting to higher or lower elevations as temperatures varied (Spier 1978a). Deer was a main staple, but pine nuts were also prized and were either gathered directly or acquired by trade. Other food items included bear, ground squirrels, rabbits, pigeons, fish, acorns, manzanita berries, insects and grubs, and yucca.

Obsidian was most often used for knives, scrapers, and arrow points (Spier 1978a). One major source area was near the present Devil's Postpile National Monument (just north of Fresno County) in the northern Mono area. Laurel and juniper wood bows were usually sinew-backed and different arrow types were used depending on the size of intended game (e.g., birds or deer). The Mono were also skilled basket-makers of cooking baskets and baby cradles among other forms (Spier 1978a).

### *Owens Valley Paiute*

The Owens Valley Paiute territory was located on the eastern side of the high Sierra and into the eastern portion of Fresno County and were speakers of Numic, which belongs to the Uto-Aztecan language family (Moratto 1984).

Unlike other Great Basin tribes who were not sedentary, the Owens Valley Paiute were subdivided into sedentary land-owning groups who occupied the territory year-round in permanent villages (Bettinger and Baumhoff 1982). Short-term temporary camps were also established by the Owens Valley Paiute for resource procurement. Leadership among the Owens Valley Paiute was hereditary, with headmen being responsible for organizing communal work and festivals during which goods were redistributed amongst the tribe (Basgall 1983, Bettinger and King 1971, Hall 1983).

The Owens Valley Paiute are considered to have had a relatively complex socio-political culture, largely because of their elaborate redistribution system for goods and exchange network (Bettinger and King 1971). Ethnographic evidence suggest that the Owens Valley Paiute engaged in the trade of salt, pinyon pine nuts, obsidian, sinew-backed bows, rabbit blankets, moccasins, mountain sheepskins, baskets, sealed water bottles in exchange for shell money beads, acorns and acorn meal, cane for arrows, manzanita berries, and well-made Yokuts baskets (Hall 1983).

### *Salinan*

The primary Salinan territory was the middle and upper Salinas Valley and the Coast Ranges as far south as San Luis Obispo (Hester 1978, Shipley 1978). Salinan territory extended inland as far east as the western edge of Fresno County where it bordered the territory of the Yokuts (Hester 1978). The Salinan language was of Hokan stock and included at least two mutually intelligible dialects, with possibly a third observed along the coast that went extinct before it could be recorded (Hester 1978, Kroeber 1925).

Twenty-one possible villages have been associated with Salinan tradition including the major Migueleños village, *tšolám* or *Cholami*. Although no permanent sites have been identified in the coastal ranges, logistical foraging and hunting camps in these areas are likely. Houses were dome-shaped, and use of communal structures and subterranean sweathouses has been recorded (Hester 1978).

Little has survived of Salinan material culture. However, some baskets of varying shapes and sizes have been collected and represent Salinan basketry. Bone and stone tools were manufactured and have been recovered in limited amounts. The Salinan tool kit is similar to many groups in this region and includes projectile points, scrapers, stone bowl mortars, arrowshaft straighteners, and bone awls.

## 4.16.2 Regulatory Setting

This regulatory framework section identifies the state and local laws, statutes, guidelines, and regulations that govern the identification and treatment of Tribal cultural resources, as well as the analysis of potential impacts to Tribal cultural resources. The lead agency must consider the provisions and requirements of this regulatory framework when rendering decisions on projects that have the potential to affect Tribal cultural resources.

### **a. State Regulations**

#### *Assembly Bill 52*

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands CEQA by defining a new resource category: “tribal cultural resources” (TCR). AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a TCR, when feasible (PRC Section 21084.3).

PRC Section 21074(a)(1)(A) and (B) defines TCRs as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and requires that they meet either of the following criteria:

**General Plan Review and Zoning Ordinance Update**

- 1) Listed or eligible for listing in the CRHR, or in a local register of historical resources, as defined in PRC Section 5020.1(k).
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding TCRs. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes that have requested notice of projects proposed in the jurisdiction of the lead agency are to be included in the process.

*Senate Bill 18*

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s *Tribal Consultation Guidelines* (2005), “The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decision sat an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

*Codes Governing Human Remains*

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 and falls in the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the Coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify the most likely descendant (MLD) of the remains to inspect the burial site and make recommendations for treatment of the remains and associated grave goods.

*California Public Resources Code Section 5097.98*

Section 5097.98 of the California Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant or “MLD”) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

## **b. Local Regulations**

### *Fresno County General Plan (2000)*

The Fresno County General Plan Open Space and Conservation Element contains several objectives and policies relevant to the protection of cultural resources on the project site and in the surrounding area. The Historical, Cultural, and Geological Resources section of the Open Space and Conservation Element provides policies directing the protection of Native American and archeological resources in the County.

**Goal OS-J** To identify, protect, and enhance Fresno County’s important historical, archeological, paleontological, geological, and cultural sites and their contributing environment.

**Policy OS-J.1:** The County shall require that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Project-level mitigation shall include accurate site surveys, consideration of project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.

**Policy OS-J.2:** The County shall, within the limits of its authority and responsibility, maintain confidentiality regarding the locations of archeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**Policy OS-J.3:** The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or sites of cultural importance.

### 4.16.3 AB 52 and SB 18 Tribal Consultation

On December 3, 2021, the County, pursuant to Public Resources 21080.3.1 and AB 52, sent via certified mail notification letters to 13 California Native American tribes that are traditionally and culturally affiliated with the project area. The letters were sent to representatives of the Big Sandy Rancheria of Western Mono Indians, Cold Spring Rancheria, the Dumna Wo-Wah Tribal Government, the Dunlap Band of Mono Indians, the Kings River Choinumni Farm Tribe, the North Fork Mono Tribe, the Santa Rosa Rancheria Tachi Yokut Tribe, Tablet Mountain Rancheria, the Traditional Choinumni Tribe, and the Wuksache Indian Tribe/Eshom Valley Band.

On January 27, 2022, the Santa Rosa Rancheria Tachi Yokut Tribe responded to the County, via email, stating that the Tribe has no comment and defers to Table Mountain Rancheria for the project. The County did not receive any other responses, including from Table Mountain Rancheria. The consultation window for AB 52 closed on January 3, 2022, and the consultation window for SB 18 closed on March 3, 2022.

## 4.16.4 Impact Analysis

### a. Methodology and Significance Thresholds

#### Methodology

Consistent with the *CEQA Guidelines*, impacts related to TCRs would be considered potentially significant if implementation of the project would:

- 1) Cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
  - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

### b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1?

#### **IMPACT TCR-1 IMPLEMENTATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO IMPACT TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

Effects on TCRs are only knowable once a specific project has been proposed as the effects are highly dependent on both the individual project site conditions and the characteristics of the proposed activity. New TCRs may be identified or established over the course of implementation of this GPR/ZOU, which is expected to occur over several years. Therefore, during the environmental review phase, tribes who have requested notification of projects shall be notified in accordance with AB 52. Tribes who respond to initial notification and request formal consultation under AB 52 shall enter into formal government to government consultation where TCRs, should they exist in the project vicinity, will be formally identified. If TCRs are identified, impacts to TCRs would be potentially significant and mitigation required. The 2042 General Plan contains goals and policies that relate to tribal cultural resources. Policy OS-J.1 encourages the preservation cultural resources. Policy OS-J.2 Policy OS-J.3 requires the evaluation of and minimization of impacts to known historical resources. Policy OS-J.4 requires that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Policy OS-J.5 requires that the location of archaeological resources, for preservation and protection from vandalism, be kept confidential. Policy OS-J.6 requires that the County solicit the local Native American community where development may result in the disturbance of sites containing Native American cultural materials. Project-level mitigation shall comply with future AB 52 notification and consultation (if necessary) for each individual project, as

facilitated by the GPR/ZOU. Such project-level mitigation may include accurate site surveys, consideration of project alternatives to preserve archaeological and historical resources, and provision for resource recovery and preservation when displacement is unavoidable.

All projects facilitated by this GPR/ZOU are also required to adhere to regulations regarding the unanticipated discovery of human remains, including Health and Safety Code Section 7050.5 and PRC Section 5097.94 and 5097.98. Policies relating to TCRs in the 2042 General Plan and adherence to regulations relating TCRs may reduce impacts but it is not known if all impacts will be reduced, therefore this impact would be significant and unavoidable.

### **Mitigation Measures**

Impacts to tribal cultural resources associated with the construction or operation of individual projects to be implemented under the GPR/ZOU may be significant, but the impacts to these resources or the location of the impacts cannot be determined at this time. Impacts associated with GPR/ZOU are therefore significant and unavoidable, and there is no feasible mitigation to reduce this impact.

#### 4.16.5 Cumulative Impacts

Cumulative development in the County of Fresno, in combination with development proposed under the proposed GPR/ZOU, may contribute to impacts on TCRs as growth occurs in the region. The increase in growth from cumulative development may impact existing and previously undisturbed and undiscovered TCRs. Similar to the analysis above under Impact TCR-1, proposed policies to reduce and avoid tribal cultural impacts and existing regulations may reduce cumulative impacts but it is not known if all impacts can be reduced to TCRs, therefore cumulative impacts are significant and avoidable.

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## 4.17 Utilities and Service Systems

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This section evaluates potential effects associated with implementation of the proposed General Plan Review and Zoning Ordinance Update (GPR/ZOU) on utilities by identifying anticipated demands and existing and planned service availability. It describes the physical and regulatory setting, the criteria used to evaluate the significance of potential impacts, the methods used to evaluate these impacts, and the results of the impact analysis. Utility systems analyzed in this section consist of: (1) water supply, (2) wastewater, and (3) solid waste (4) electric power; (5) natural gas and (6) telecommunications infrastructure.

### 4.17.1 Setting

The following section describes the existing setting in Fresno County with respect to water, wastewater, stormwater drainage, electric power, natural gas, telecommunications, and solid waste facilities and infrastructure. Unless otherwise cited, this section relies on the *Fresno County General Plan Background Report* (Fresno County 2022).

#### a. Water Supply

The water supply in Fresno County is sourced from imported surface water resources through the federal Central Valley Project (CVP), as well as locally produced groundwater resources from one or more of the local subbasins to the San Joaquin Valley Groundwater Basin. Water service throughout the county is managed by 21 separate and distinct water purveyors, represented by 16 County Service Areas (CSAs) and five County Waterworks Districts (WWDs). There are also various other purveyors throughout the sprawling county, including private water districts, irrigation districts, and individual parties. These water supply sources are discussed further below.

##### *Imported Surface Water*

Surface water features in Fresno County include the Kings River, which is tributary to the San Joaquin River and conveys snowmelt from the Sierra Nevada mountains, as well as the Delta-Mendota Canal and the California Aqueduct, which convey developed surface water supply from the federal CVP. The CVP is a water supply project undertaken by the U.S. Bureau of Reclamation (“Reclamation”), and comprises a network of dams, reservoirs, canals, hydroelectric powerplants, and other facilities. The CVP was designed to provide flood control and water supply to the Central Valley and San Joaquin Valley. The CVP includes facilities to the north and south of the Sacramento-San Joaquin Delta (Delta), to convey water supply from Lake Shasta in northern California to Bakersfield in the southern San Joaquin Valley. Below is an overview of the water deliveries provided by the CVP during an average year (CRS 2017):

- Five million acre-feet of system-wide water deliveries to farms for agricultural (irrigation) uses
- 600,000 acre-feet to municipal and industrial (M&I) users
- 410,000 acre-feet to wildlife refuges (statutory requirements with agencies)
- 800,000 acre-feet for other fish and wildlife needs (statutory requirements with agencies)

The quantities above reflect deliveries for the CVP system as a whole, including for contractors located both north and south of the Delta. This is an important distinction, as major groups of CVP contractors include water rights contractors (i.e., senior water rights holders such as the Sacramento River Settlement and San Joaquin River Exchange Contractors), North and South of



Delta water service contractors, and Central Valley refuge water contractors. Sacramento River Settlement Contractors include the contractors (both individuals and districts) that diverted natural flows from the Sacramento River prior to the CVP's construction and executed a settlement agreement with Reclamation that provided for negotiated allocation of water rights. San Joaquin River Exchange Contractors are the irrigation districts that agreed to "exchange" exercising their water rights to divert water on the San Joaquin and Kings Rivers for guaranteed water deliveries from the CVP, typically in the form of deliveries from the Delta-Mendota Canal and waters north of the Delta (CRS 2022).

Fresno County is part of the Cross Valley Canal Water Supply Unit (WSU), which also includes the Hills Valley Irrigation District, the Kern-Tulare Water District, the Lower Tule River Irrigation District, the Pixley Irrigation District, the Tri-Valley Water District, and the County of Tulare. A total of 128,300 acre-feet per year (AFY) of water is allocated to contractors in the Cross Valley Canal WSU. Of this total, approximately 99.3 percent (127,406 AFY) is dedicated for agricultural uses, leaving approximately 0.7 percent (894 AFY) for non-agricultural uses (Reclamation 2016).

### *Local Groundwater*

Fresno County overlies four subbasins of the San Joaquin Valley Groundwater Basin, including the Kings, Delta-Mendota, Westside, and Pleasant Valley Subbasins. The San Joaquin Valley is a structural trough up to 200 miles long and 70 miles wide that is filled with up to 32,000 feet of marine and continental sediments (Fresno County 2022). Groundwater recharge throughout the San Joaquin Valley occurs through the infiltration of surface water in the Kings River and San Joaquin River, as well as deep percolation of irrigation water (on the fields and in unlined canals), and intentional recharge through groundwater management projects.

Groundwater management throughout the state is directed by the requirements of the Sustainable Groundwater Management Act (SGMA) under the authority of the California Department of Water Resources (DWR). Groundwater basins that have been identified by DWR as Medium or High Priority are required to be managed by a designated Groundwater Sustainability Agency (GSA) through implementation of a basin-specific Groundwater Sustainability Plan (GSP). GSAs are commonly formed as joint powers authorities through the collaboration of multiple agencies relying upon a common groundwater resource. The GSP(s) developed by each GSA is required to identify sustainability goals for the respective basin and establish management actions and requirements to meet those sustainability goals. GSPs are designed to ensure that groundwater is not produced from the basin in excess of its sustainable yield, thereby facilitating recovery from overdraft conditions and avoiding future overdraft conditions as well as other undesirable results.

Within Fresno County, DWR has designated the Kings, Delta-Mendota, and Westside subbasins as high-priority basins, which are also subject to a condition of critical overdraft as identified in DWR's Bulletin 118. GSAs and GSPs have been developed for those three basins as well as the Pleasant Valley Subbasin, as discussed in Section 4.6, *Hydrology and Water Quality*. Below is an overview of the management of these subbasin, as relevant to correcting overdraft and achieving sustainable supply conditions while accounting for planned growth in the area.

- **Kings Subbasin** is managed by seven distinct parties, or GSA groups, including: McMullin Area GSA, North Fork Kings GSA, Kings River East GSA, North Kings GSA, James GSA, South Kings GSA, and Central Kings GSA. These parties operate under a coordination agreement which is designed to provide a coordinated management system and ensure multiple GSAs use the same data and methodologies for assumptions. The DWR allows that SGMA compliance for a single basin may be achieved through the development and implementation of multiple GSPs that collectively

cover the entire subbasin, if done so under a formal coordination agreement. Therefore, the Kings Subbasin will ultimately be managed by seven GSPs, each of which is subject to DWR review and approval, and each of which is implemented by a respective GSA. The Kings Subbasin is currently affected by an overdraft of approximately 122,000 AFY; in order to correct this overdraft and achieve sustainable conditions, each of the seven Kings Subbasin GSAs has agreed to an overdraft responsibility amount, which total 122,000 AFY (North Fork Kings GSA 2022).

- **Delta-Mendota Subbasin** is managed by a GSA comprised of six distinct parties, or GSA groups, including: the Aliso Water District GSA, Farmers Water District GSA, Fresno County GSA, Grassland GSA, Northern & Central Delta-Mendota Region GSA, and San Joaquin River Exchange Contractors GSA. As with management of the Kings Subbasin, each of these GSA groups is developing and implementing a GSP for its respective management area, such that the entirety of the Delta-Mendota Subbasin will be managed towards the common goal of achieving sustainable conditions by year 2040. As with other GSPs, is anticipated that projects and management actions identified within the Delta-Mendota Subbasin GSPs will change during the implementation process as more information is learned about the basin reacts to implemented projects and management actions, which will be re-evaluated based on data collection efforts through 2025, and based upon the SGMA-required Five-Year Plan updates to ensure sustainability is achieved by 2040 (Northern and Central Delta-Mendota Regions 2019).
- **Westside Subbasin** comprises the western portion of the larger San Joaquin Valley Groundwater Basin, and is the largest of the four subbasins underlying Fresno County. Westlands Water District (WWD) is the primary GSA responsible for the development of the GSP for the Westside Subbasin; WWD has entered into a Memorandum of Understanding (MOU) with the County of Fresno to adopt and implement the GSP for the portions of the subbasin on unincorporated County lands outside of WWD's jurisdiction. Through this MOU with the County, WWD has developed one comprehensive GSP for the entirety of the Westside Subbasin. The Westside Subbasin GSP describes the existing hydrogeologic conditions and current management practices, and contains the steps that will be taken to achieve and maintain sustainability over the planning and implementation horizon. Measurable objectives and minimum thresholds developed and described in the GSP for each sustainability indicator are based on projected hydrologic conditions, and are implemented to provide sustainable groundwater management and preservation of groundwater resources for maximum benefit by all beneficial users of groundwater in the Westside Subbasin (WWD 2020).
- **Pleasant Valley Subbasin** is neither High Priority nor critically overdrafted, and is managed by a GSA comprised of three GSA groups, including the Pleasant Valley Water District, the City of Coalinga, and the County of Fresno; the majority of the subbasin is within the Pleasant Valley Water District's jurisdiction, while the City of Coalinga manages the portion within the City, and the County managed the portion within unincorporated county areas that are not served by Pleasant Valley Water District. The City of Coalinga imports CVP water under contract with Reclamation, for potable water uses within the city (Pleasant Valley GSA 2021).

A GSP does not alter or affect common law water rights of landowners; rather, it facilitates the maximum use of groundwater of common law right holders under a controlled management plan that provides opportunities, benefits, and protections not otherwise available (WWD 2020). The excerpt below is from the Westside Subbasin GSP and describes the purpose of a GSP (WWD 2020):

As mandated under GSP Regulation 354.24, the GSA has established a "sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable

statutory deadline.” Specifically, the sustainability goal establishes that the Westside Subbasin will be operated within its sustainable yield by 2040 and maintain sustainability through the entire planning and implementation horizon through 2070. The GSP sets forth active management strategies that may be pursued by the GSA and stakeholders as authorized, as well as enforceable commitments to ensure its efficacy. These strategies include firming up access to more reliable surface water deliveries, conjunctive use, demand management through the adoption of an allocation system, improved efficiencies by transfer/trading, and surface water substitution within subsidence prone areas.

In accordance with description above, and as demonstrated by each of the four subbasins within Fresno County being actively managed under a basin-specific GSP by a DWR-approved GSA (or joint powers authority comprised of multiple GSA groups operating in coordination), groundwater resources throughout Fresno County are actively managed towards the key goal of attaining and maintaining sustainable groundwater conditions.

## **b. Wastewater**

Most of the wastewater collection systems within unincorporated Fresno County serve small communities. Wastewater service within the county is generally provided by special districts, including waterworks districts, community services districts, county service areas, a county sanitation district, and County water districts.

Incorporated areas within Fresno County are served by municipal wastewater collection and treatment systems, with the exception of Fowler, Kingsburg, and Selma, which are served by a joint Selma-Kingsburg-Fowler County Sanitation District. Unincorporated areas within the county are served by small special districts, although many rural areas of the county rely on individual or community septic systems.

## **c. Stormwater Drainage**

Most of the storm drainage systems within the unincorporated areas of Fresno County are managed by the Fresno Metropolitan Flood Control District. District facilities include drainage facilities, flood control water courses, and retention basins. The Fresno Metropolitan Flood Control District services the Fresno and Clovis areas including unincorporated areas stretching east into the Foothills. A small number of individual communities have storm drainage systems serviced by special districts. Drainage services in these areas center on the creation and maintenance of retention basins to collect stormwater.

## **d. Electric Power, Natural Gas, and Telecommunications**

### *Electric Power*

Pacific Gas & Electric (PG&E) provides electrical service to the majority of Fresno County, including all incorporated areas. The Southern California Edison Company serves the northeast area of Fresno County in the communities of Shaver Lake and Big Creek where the company has generating facilities. PG&E’s power system is one of the nation’s largest electric and gas utilities and maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2022).

### *Natural Gas*

PG&E provides all natural gas services within Fresno County. Fresno County has several transmission pipelines for natural gas (National Pipeline Mapping System 2022). The main lines run near State Route (SR) 99, SR 41, and SR 180 with pipelines reaching each of the incorporated cities and into the foothills north and east of Clovis.

### *Telecommunications*

AT&T is the largest telecommunications provider in the United States and provides wired telephone service to the majority of Fresno County residents. AT&T services include all telecommunications services, including local phone service, long distance telephone service, and high-speed Internet. The Ponderosa Telephone Company serves the northern areas of Fresno County including the towns of Auberry, Shaver, Big Creek, Huntington, and the southern half of Friant. The Sebastian Corporation provides wired telephone services to the City of Kerman. Wireless telephone service is available from many national and local providers, including Verizon Wireless, AT&T, Sprint, and T-Mobile.

Telecommunication services require antenna structures that are typically accompanied by equipment buildings or boxes. Cellular and ESMR equipment buildings are generally less than 12 feet by 24 feet. PCS equipment facilities are self-contained weatherproof cabinets about the size of a vending machine. Some providers propose an integration of antennas with light poles, while others attach their antennas to buildings or other structures. Building mounted antennas are unnoticeable if they are hidden from view on the roof or painted to match the color and texture of the building. Lattice towers are the least common type of antenna, range from 60 to 200 feet in height, and generally accommodate a variety of uses. They are found where great height is needed and where multiple microwave antennas are required. Although they can accommodate many users, they pose serious visual impacts.

County residents in most urbanized areas are eligible for Digital Subscriber Line (DSL) high-speed internet access through internet providers including AT&T, Comcast, and Earthlink. Internet access in rural areas is generally limited to dial-up service or satellite connections.

Cable television services are offered by numerous providers, including Comcast, DirectTV, and various satellite companies.

## **e. Solid Waste**

The California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS) lists 48 solid waste disposal/landfill sites within Fresno County. Of these 48 sites, only two sites are active solid waste landfills, the American Avenue Landfill and the Clovis Landfill.

Fresno County operates the American Avenue Landfill, which serves 6,000 square miles and more than 900,000 residents. Portions of the unincorporated areas of the county also use the Clovis Landfill; however, this site primarily serves the city of Clovis. The Clovis Landfill is anticipated to reach capacity in 2047 (CalRecycle 2019).

The American Avenue Landfill is located at 18950 West American Avenue, in Kerman. It is a Class III landfill and will only accept standard municipal waste. The landfill has a total capacity of 21.7 million cubic yards and handles on average 2,200 tons per day. As of January 2022, the landfill had a

remaining capacity of 17.97 million cubic yards. It is estimated that the landfill will reach capacity in 2043.

## 4.17.2 Regulatory Setting

### **a. Water Supply**

#### *Federal Laws and Regulations*

##### **CLEAN WATER ACT**

The primary goals of the Federal Clean Water Act, 33 USC §§ 1251, *et seq.* (CWA) are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA sets forth a number of objectives in order to achieve the above-mentioned goals. The CWA objectives include regulating pollutant and toxic pollutant discharges; providing for water quality which protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources pollution.

##### **INFRASTRUCTURE INVESTMENT AND JOBS ACT**

The Infrastructure Investment and Jobs Act, enacted by the Federal Government in 2021, is intended to fund infrastructure improvements throughout the United States. Part of the purpose of the Act is to eliminate the nation's lead service lines and pipes. Under the Infrastructure Improvement Act, California is expected to receive \$3.5 billion dollars over five years to improve water infrastructure across the state to ensure safe drinking water is available in all communities (Whitehouse Infrastructure Fact Sheet 2021).

##### **SAFE DRINKING WATER ACT**

The Safe Drinking Water Act (SDWA), administered by the United States Environmental Protection Agency (USEPA) in coordination with the California Department of Public Health California Department of Public Health (CDPH), is the main Federal law that ensures the quality of Americans' drinking water. Under SDWA, USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. In 1996 Congress amended the Safe Drinking Water Act to emphasize sound science and risk-based standard setting, small water supply system flexibility and technical assistance, community-empowered source water assessment and protection, public right-to-know, and water system infrastructure assistance through a multi-billion-dollar state revolving loan fund.

##### **U.S. ENVIRONMENTAL PROTECTION AGENCY**

The USEPA is responsible for developing and enforcing regulations that implement environmental laws enacted by Congress. USEPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance.

Arsenic is an example of a groundwater contaminant that is regulated by the USEPA. Arsenic is a naturally occurring element and its presence can be traced back to geologic deposits. These natural deposits of arsenic can be found throughout the United States and are prevalent in New England

and the Southwest. Groundwater that flows over these deposits may be contaminated with arsenic, which then makes its way into public and private drinking water wells. In 2001 the USEPA lowered the existing 50 ppb standard to 10 ppb; all water systems must comply with this standard by January 2006. The California CDPH must adopt a new arsenic standard that is equal to or more stringent than the USEPA standard and set as close as economically feasible to the Public Health Goal (PHG). A PHG is the level of arsenic in drinking water that would not pose a significant health threat if consumed over a lifetime. The CDPH adopted the 10-ppb standard for arsenic on November 28, 2008.

### *State Laws and Regulations*

#### **CALIFORNIA WATER CODE**

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California. Domestic water service in the unincorporated areas of San Joaquin County is generally provided by special districts. These agencies operate in accordance with the California Water Code.

In 2001, California adopted Senate Bill (SB) 610, which amended California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water availability and land use planning by ensuring greater communication between water providers and local planning agencies and ensuring that land use decisions for large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. In accordance with SB 610, certain types of development projects are required to provide detailed analysis of water supply availability and reliability, in the form of a Water Supply Assessment (WSA). Project applicants provide the WSA to planning agencies as part of the project review and consideration for approval process, thereby incorporating water supply availability into the planning process.

The primary question to be answered in a WSA is:

Will the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection meet the projected water demand of the proposed project, in addition to existing and planned future uses of the identified water supplies, including agricultural and manufacturing uses?

California Water Code, as amended by SB 610, requires that any proposed project which is subject to CEQA and would demand more than 75 AFY of water, or an amount of water equivalent to, or greater than, the amount of water required by a residential development with 500 or more dwelling units, is subject to the requirements of SB 610 to prepare a WSA. A WSA, when triggered, is used to inform the CEQA analysis for its respective project and is required to address the following:

- Is there a public water system that will service the proposed project?
- Is there a current Urban Water Management Plan (UWMP) that accounts for the project demand?
- Is groundwater a component of the supplies for the project?
- Are there sufficient supplies to serve the project over the next twenty years?

The proposed GPR/ZOU itself does not trigger the preparation of a WSA, because it does not propose any specific development projects. However, individual projects designed to accommodate

the anticipated growth, and facilitated by approval of the GPR/ZOU, would be subject to California Water Code including for the preparation of a WSA, as applicable.

### **URBAN WATER MANAGEMENT PLANNING ACT**

In 1983 the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610 to 10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in its water service is sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt and submit an urban water management plan at least once every five years to the Department of Water Resources. Non-compliant urban water suppliers are ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the State until the UWMP is submitted pursuant to the Urban Water Management Planning Act.

As with a WSA (discussed above), an UWMP is required to assess, among other metrics, the reliability of the supplier's water sources over a 20-year period, and including with consideration to normal water-year, single-dry water-year (periodic drought), and multiple-dry water-year (sustained drought) scenarios. All UWMPs must be updated and submitted to the California DWR every five years for review and approval and are publicly available for review.

### **CORTESE-KNOX-HERTZBERG GOVERNMENTAL REORGANIZATION ACT OF 2000**

The Cortese-Knox-Hertzberg Governmental Reorganization Act of 2000 requires California Local Agency Formation Commission's (LAFCO) to conduct municipal service reviews for specified public agencies under their jurisdiction.

One aspect of municipal service review is to evaluate an agency's ability to provide public services within its ultimate service area. A municipal service review is required before an agency can update its sphere of influence.

### **SENATE BILLS (SB) 610 AND SB 221**

SB 610 and SB 221 amended State law, effective January 1, 2002, to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to the City and County decision-makers prior to approval of specified large (greater than 500 dwelling units) development projects. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the City or County on such projects. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA). Under SB 221, approval by a City or County of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

### **SUSTAINABLE GROUNDWATER MANAGEMENT ACT**

Signed into law on September 16, 2014, the Sustainable Groundwater Management Act (SGMA) is a comprehensive legislation for the management of groundwater throughout the State. The SGMA was created through a combination of Senate Bills 1168 and 1319 and Assembly Bill 1739. It

established a new structure for managing California’s groundwater resources at a local level by local agencies. SGMA requires, by June 30, 2017, the formation of locally- controlled groundwater sustainability agencies (GSAs) in California’s high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated in its sustainable yield, without causing undesirable results. DWR is required to develop and adopt emergency regulations for evaluating GSPs, the implementation of GSPs, and coordination of agreements by June 1, 2016. A GSP may be any of the following (Water Code § 10727(b)):

- A single plan covering the entire basin developed and implemented by one GSA
- A single plan covering the entire basin developed and implemented by multiple GSAs
- Multiple plans implemented by multiple GSAs and coordinated pursuant to a single coordination agreement that covers the entire basin and which is subject to Water Code Section 10727.6

The legislative intent of SGMA was to recognize and preserve the authority of cities and counties to manage groundwater pursuant to their existing powers. As such, local governments play an important land use and water management role in California and should be involved in GSA formation and GSP implementation. GSPs are required to take into account the most recent planning assumptions stated in local general plans of jurisdictions overlying the basin. (Water Code §10726.9)

- In the event that there is an area in a high- or medium-priority basin that is not in the management area of a GSA, the county in which that unmanaged area lies would be presumed to be the GSA for that area. (Water Code § 10724(a))
- A county shall provide notification to DWR of its intent to manage the unmanaged area pursuant to Water Code §10723.8 unless the county notifies DWR in writing that it would not be the GSA for the area. (Water Code § 10724(b))
- An “unmanaged area” as used in Water Code §10724(a) is an area of a basin that has not yet had (or does not have) a local agency file a GSA formation notice with DWR.
- Water Code §10724 does not give the county exclusive authority to be the GSA in a basin if other local agencies have also declared their intent to manage groundwater but have not yet resolved their service area overlap.

There are numerous GSPs in Fresno County, which collectively guide the management approach and objectives for the groundwater resources underlying the county, including within the Kings, Delta-Mendota, Westside, and Pleasant Valley Subbasins of the San Joaquin Valley Groundwater Basin. As discussed in Section 4.16.1(a), under “Local Groundwater,” there are also numerous GSAs involved in the development and implementation of these GSPs. In accordance with SGMA and DWR requirements, in all instances where more than one GSA is involved in a GSP, the roles of each party are defined in agreements filed with and approved by DWR.

### **STATE WATER RESOURCES CONTROL BOARD**

The State Water Resources Control Board (SWRCB) regulates public water systems. Regulatory responsibilities include the enforcement of Federal and State Safe Drinking Water Acts, the regulatory oversight of approximately 8,700 public water systems, the oversight of water recycling projects, issuance of water treatment permits, and certification of drinking water treatment and distribution operators. Other functions include supporting and promoting water systems security, providing support for small water systems, and improving technical, managerial, and financial (TMF)



capacity, and for providing subsidized funding for water system improvements under the State Revolving Fund (SRF) and Proposition 50.

### **CALIFORNIA DEPARTMENT OF WATER RESOURCES**

The California Department of Water Resources is responsible for preparing and updating the California Water Plan, which is a policy document that guides the development and management of the State's water resources. The plan is updated every five years to reflect changes in resources and urban, agricultural, and environmental water demands. The California Water Plan suggests ways of managing demand and augmenting supply to balance water supply with demand.

#### **b. Wastewater**

##### *Federal Laws and Regulations*

#### **U.S. ENVIRONMENTAL PROTECTION AGENCY**

The USEPA Office of Wastewater Management (OWM) supports the Federal Water Pollution Control Act (Clean Water Act) by promoting effective and responsible water use, treatment, disposal and management, and by encouraging the protection and restoration of watersheds. The OWM is responsible for directing the National Pollutant Discharge Elimination System (NPDES) permit, pretreatment, and municipal bio-solids management (including beneficial use) programs under the Clean Water Act. The OWM is also home to the Clean Water State Revolving Fund, the largest water quality funding source, focused on funding wastewater treatment systems, non-point source projects, and estuary protection.

#### **CLEAN WATER ACT (CWA)**

The CWA is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Section 303 of the CWA requires states to adopt water quality standards for all surface water of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. The SWRCB and the RWQCB are responsible for ensuring implementation and compliance with the provisions of the Federal CWA.

##### *State Laws and Regulations*

#### **STATE WATER RESOURCES CONTROL BOARD (SWRCB)**

The SWRCB, in coordination with nine Regional Water Quality Control Boards (RWQCB), performs functions related to water quality, including issuance of wastewater discharge permits (NPDES and WDR) and other programs on stormwater runoff, and underground and above ground storage tanks.

### **CORTESE-KNOX-HERTZBERG GOVERNMENTAL REORGANIZATION ACT OF 2000**

The Cortese-Knox-Hertzberg Governmental Reorganization Act of 2000 requires California Local Agency Formation Commission's (LAFCO) to conduct municipal service reviews for specified public agencies under their jurisdiction.

One aspect of municipal service review is to evaluate an agency's ability to provide public services within its ultimate service area. A municipal service review is required before an agency can update its sphere of influence.

### **SMALL COMMUNITY WASTEWATER GRANT PROGRAM**

The small community wastewater grant program (SCWG), funded by Propositions 40 and 50, provides grant assistance for the construction of publicly owned wastewater treatment and collection facilities. Grants are available for small communities with financial hardships. Communities must comply with population restrictions (maximum population of 20,000 people) and annual median household income provisions (maximum income of \$37,994) to qualify for funding under the SCWG Program.

### **TITLE 22 OF CALIFORNIA CODE OF REGULATIONS**

Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Disinfected secondary treatment may be used for food crops where the edible portion is produced above ground and will not come into contact with the secondary effluent. Lesser levels of treatment are required for other types of crops, such as orchards, vineyards, and fiber crops. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping and other non-agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and CDPH.

### **c. Stormwater Drainage**

#### *Federal Laws and Regulations*

#### **CLEAN WATER ACT**

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges, including discharges associated with construction activities, under the NPDES program.

#### **U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)**

In 1990 EPA published final regulations that establish stormwater permit application requirements. The regulations, also known as Phase I of the NPDES program, provide that discharges of stormwater to waters of the United States from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge complies with an NPDES permit. Phase II of the NPDES program expands the requirements by requiring operators of small MS4s in urbanized areas and small construction sites to be covered under an NPDES permit, and to implement programs and practices to control polluted stormwater runoff

### *State Laws and Regulations*

State Water Resources Control Board (SWRCB). In California, the NPDES stormwater permitting program is administered by the SWRCB. The SWRCB has established a construction General Permit that can be applied to most construction activities in the State. Construction permittees may choose to obtain individual NPDES permits instead of obtaining coverage under the General Permit, but this can be an expensive and complicated process, and its use is generally limited to very large construction projects that discharge to critical receiving waters. In California, owners of construction projects may obtain NPDES permit coverage by filing a Notice of Intent (NOI) to be covered under the SWRCB Order No. 99-08- DWQ, NPDES General Permit No. CAS00002, WDRs for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit) and subsequent adopted modification.

## **d. Electric Power, Natural Gas, and Telecommunications**

### *Federal Laws and Regulations*

#### **FEDERAL ENERGY REGULATORY COMMISSION (FERC)**

FERC is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines, as well as licensing hydropower projects. Licensing of hydroelectric facilities under the authority of FERC includes input from State and Federal energy, environmental protection, fish and wildlife, and water quality agencies. The California Energy Commission's Systems Assessment and Facilities Siting Division provides coordination with FERC to ensure that needed energy facilities are authorized in an expeditious, safe, and environmentally acceptable manner.

### *State Laws and Regulations*

#### **CALIFORNIA ENERGY COMMISSION (CEC)**

The CEC is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: 1) forecasting future energy needs and keeping historical energy data; 2) licensing thermal power plants 50 MW or larger; 3) promoting energy efficiency through appliance and building standards; 4) developing energy technologies and supporting renewable energy; and 5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.

#### **CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)**

The CPUC is a State agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the

physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas (CPUC Decision 95-08-038).

### **CALIFORNIA CODE OF REGULATIONS (CCR)**

Title 20, Public Utilities and Energy, contains the regulations related to power plant siting certification. CCR Title 24, California Building Standards, contains the energy efficiency standards related to residential and nonresidential buildings. Title 24 standards are based, in part, on a State-mandate to reduce California's energy demand. The CPUC regulates rates and charges for basic telecommunication services, such as how much a customer pays for the ability to make and receive calls.

### **INDEPENDENT SYSTEM OPERATOR (ISO)**

The Independent System Operator (ISO), whose governing board is appointed by the Governor, manages most of California's transmission system. The ISO's primary function is to balance electricity supply with demand and maintain adequate reserves to meet the needs of California homes and businesses. FERC regulates the ISO. The California Electricity Oversight Board monitors and reports on the activities of the ISO.

## **e. Solid Waste**

### *State Laws and Regulations*

#### **CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT**

The California Integrated Waste Management Act of 1989 (AB 939), set a requirement for cities and counties throughout the State to divert 50 percent of all solid waste from landfills by January 1, 2000 through source reduction, recycling, and composting. To help achieve this, the Act required that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity.

In 2007, SB 1016 subsequently amended AB 939, now requiring 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate (CalRecycle 2022).

In 2011, AB 341 was passed setting a State policy goal of not less than 75 percent of solid waste that is generated to be source reduced, recycled, or composted by the year 2020.

In 2017, SB 1383 was passed, requiring the state to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires CalRecycle to establish an integrated waste management program that requires each county to prepare and submit a countywide integrated waste management plan specifying targets to reduce organic waste in landfills. Counties and cities are required to report on their progress annually to CalRecycle.

## **CALGREEN BUILDING CODE**

In 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as “CALGreen”) was adopted as part of the California Building Standards Code. Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The Code requires the applicant to have a waste management plan for on-site sorting or construction debris.

### *Local Laws and Regulations*

## **FRESNO COUNTY DEPARTMENT OF PUBLIC HEALTH**

In accordance with the California Code of Regulations (CCR) Title 27, Sections 21600 through 21900, all solid waste disposal sites are jointly regulated under California Code of Regulations (CCR), Title 27, Division 2, Chapters 1 through 8, Section 20005 through 23014; the California Regional Water Quality Control Board (RWQCB); and CalRecycle Solid waste transfer stations and compost sites are regulated under CCR, Title 14, Division 7, Chapters 3 and 4, Sections 17200 through 17870. Transfer stations and compost sites are primarily regulated by CalRecycle. The RWQCB has recently begun to regulate compost sites and has a limited authority regarding transfer stations. The Fresno County Department of Public Health, Environmental Health Division is the Local Enforcement Agency (LEA) for CalRecycle.

### 4.17.3 Impact Analysis

#### **a. Methodology and Significance Thresholds**

Assessment of impacts is based on review of publicly available information, existing conditions relevant to utilities, analysis provided in the Background Report (Fresno County 2021), and County information regarding utility-related issues including water supply and facilities, wastewater facilities, solid waste, and telecommunication infrastructure. According to Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the GPR/ZOU would result in one or more of the following circumstances:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the GPR/ZOU require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**IMPACT UTL-1 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD REQUIRE NEW CONNECTIONS TO EXISTING UTILITIES, AND MAY REQUIRE NEW OR EXPANDED UTILITY INFRASTRUCTURE TO ACCOMMODATE FUTURE GROWTH, PARTICULARLY FOR THE PROVISION OF WATER SUPPLY AND WASTEWATER TREATMENT. IMPROVEMENTS WOULD ALSO BE REQUIRED FOR STORMWATER DRAINAGE, ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS, WHICH MAY REQUIRE THE CONSTRUCTION OF NEW FACILITIES. FUTURE DEVELOPMENT WOULD BE CONSISTENT WITH GOALS AND POLICIES IN THE 2042 GENERAL PLAN WHICH HELP TO REDUCE IMPACTS. HOWEVER, IT IS NOT KNOWN WHERE OR HOW EXTENSIVE NEW FACILITIES WOULD BE REQUIRED; THEREFORE POTENTIAL IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

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Future development facilitated by the GPR/ZOU would require project-specific connections to existing service facilities, and may require construction of new or expanded utility infrastructure and facilities, including for the provision of water, wastewater, stormwater, electricity, natural gas, and telecommunications. Project-specific connections would be planned and implemented as part of individual projects, and would consist of features such as water supply service connections to existing water main lines, or new electrical wires connected to existing distribution network wires. However, the increased population of up to 24,607 individuals would introduce substantial new water demands (addressed under Impact UTIL-2, below,) and would generate wastewater requiring treatment and disposal (addressed under Impact UTIL-3); these services are generally constrained by the availability of existing resources and facilities.

The anticipated population growth would likely require substantial facility improvements for the provision of water and wastewater, among other utility services, and the construction of such improvements would have potential to result in significant environmental impacts. It is not currently known where and to what extent utility facilities would need to be developed or improved; therefore, as discussed below, potential environmental impacts associated with constructing such facilities would be significant and unavoidable. The service areas are addressed below, in addition to the other service areas identified by this threshold, each under respective headings.

### **WATER SUPPLY FACILITIES**

As discussed in Section 4.16.1(a), *Water Supply*, water supply in Fresno County is sourced from imported surface water supplies through contracts with Reclamation for federal CVP water, and from locally produced groundwater pumped from one of the four local subbasins to the San Joaquin Valley Groundwater Basin, each of which is managed under a GSP implemented by a DWR-approved GSA. The City of Fresno also purchases water developed from the Kings River from FID, as well as some recycled water.

The existing water supplies in Fresno County are directly equivalent to the existing water demands in Fresno County, including those associated with correcting existing groundwater overdraft conditions in the local subbasins. These supplies do not currently account for the water demands of up to approximately 24,607 new individuals. Therefore, it is assumed that new facilities would be required. These facilities would be located where needed to accommodate population growth, and could consist of new groundwater wells to produce supply from the local subbasins, new water

main lines or conveyance connections to divert additional imported water supplies, if possible, and new water treatment facilities, potentially for the production of new recycled water supplies to meet anticipated demand.

As shown in Table 4.17-1, the 2042 General Plan contains goals and policies that address water supply infrastructure, and which future development would be required to comply with.

**Table 4.17-1 General Plan Goals and Policies - Water Supply Facilities**

Goal or Policy	Effects Related to Water Supply Facilities
<p><b>Goal PF-A:</b> To ensure the timely development of public facilities and to maintain an adequate level of service to meet the needs of existing and future development.</p>	<p>Encourages the provision of public facilities which meet the needs of all development.</p>
<p><b>Policy PF-A.1: Infrastructure Plans.</b> The County shall ensure that an infrastructure plan or area facility plan is prepared in conjunction with preparation of a new or update of an existing community plan or specific plan to address the technical, managerial, and financial capacity of special districts to serve the proposed and/or potential developments. Such plans shall include phasing and facility improvement timelines.</p>	<p>Requires that plans are developed to address necessary infrastructure improvements prior to the approval of new or updated community plans and specific plans.</p>
<p><b>Policy PF-A.2: Facilities and Services.</b> The County shall ensure through the development review process that public facilities and services will be developed, operational, and available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).</p>	<p>Ensures that public facilities and services are available or planned prior to approval of development.</p>
<p><b>Policy PF-A.3: Industrial Infrastructure.</b> The County shall require new industrial development to be served by community sewer, stormwater, and water systems where such systems are available or can feasibly be provided.</p>	<p>Ensures that new industrial development will be served by sewer, stormwater, and water systems, when feasible, prior to approval.</p>
<p><b>Policy PF-A.4: Sewer, Stormwater, and Water Systems.</b> The County shall require new urban commercial and urban-density residential development to be served by community sewer, stormwater, and water systems.</p>	<p>Ensures that new urban commercial and urban-density residential development will be served sewer, stormwater, and water systems prior to approval.</p>
<p><b>Policy PF-A.5: Underground Utilities.</b> The County shall encourage the placement of irrigation canals and utility lines underground as urban residential, commercial, and industrial development takes place.</p>	<p>Encourages placement of underground utilities when development takes place.</p>
<p><b>Goal PF-B:</b> To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.</p>	<p>Encourages fair practices related to the funding of facilities and services.</p>
<p><b>Policy PF-B.1: Facilities and Services Funding.</b> The County shall require that new development pays its fair share of the cost of developing new facilities and services and upgrading existing public facilities and services. Exceptions may be made when new development generates significant public benefits (e.g., low income housing) and when alternative sources of funding can be identified to offset foregone revenues.</p>	<p>Requires that new development pays its fair share of the cost for utilities facilities and services, and that they are available or planned, prior to the approval of new development.</p>

Goal or Policy	Effects Related to Water Supply Facilities
<p><b>Policy PF-B.3: Mitigating Facility Impacts.</b> The County shall require that new development pays the costs of mitigating impacts on existing County facilities to the extent capacity is provided through existing infrastructure networks.</p>	<p>Ensures new development is responsible for funding the costs of mitigation related to impacts on existing County utilities facilities.</p>
<p><b>Policy PF-B.4: Public Financing Plan.</b> The County shall require a public financing plan be in place prior to the start of construction of new development to ensure that all required public improvements are adequately funded and provided in a timely manner.</p>	<p>Requires preparation of a public financing plan prior to construction of new development, which would ensure that necessary public improvements are funded and provided in a timely manner.</p>

The policy analysis provided in Table 4.17-1 demonstrates that with the goals and policies of the 2042 General Plan, water supply infrastructure needs associated with future development under the GPR/ZOU would be appropriately planned for and accommodated. However, because the water demands associated with an additional 24,607 individuals were not accounted for in the design and implementation of existing water supply facilities, including those associated with delivering imported surface water supplies, locally produced groundwater supplies, and developed recycled water supplies, it is anticipated that new and expanded water supply facilities will need to be constructed. It is not known exactly where or to what extent such facilities would be required; therefore, despite compliance with goals and policies above, potential impacts associated with constructing new facilities would be significant and unavailable.

### WASTEWATER TREATMENT FACILITIES

Most of the wastewater collection systems within unincorporated Fresno County serve small communities, and wastewater service is generally provided by special districts, including waterworks districts, community services districts, county service areas, a county sanitation district, and County water districts. Many rural areas of the county rely on individual or community septic systems. These systems are existing and do not account for the wastewater disposal needs associated with up to approximately 24,607 new individuals in the unincorporated County. As shown in Table 4.17-2, the 2042 General Plan contains goals and policies related to wastewater infrastructure, and future development under the GPR/ZOU would occur in compliance with these goals and policies.

**Table 4.17-2 General Plan Goals and Policies - Wastewater Treatment Facilities**

Goal or Policy	Effects Related to Wastewater Treatment Facilities
<p><b>Policy PF-A.4: Sewer, Stormwater, and Water Systems.</b> The County shall require new urban commercial and urban-density residential development to be served by community sewer, stormwater, and water systems.</p>	<p>Ensures that new urban commercial and urban-density residential development will be served sewer, stormwater, and water systems prior to approval.</p>
<p><b>Goal PF-D:</b> To ensure adequate wastewater collection and treatment and the safe disposal of wastewater.</p>	<p>Encourages the provision of sufficient wastewater collection and treatment, as well as the safe disposal of wastewater.</p>
<p><b>Policy PF-D.1: Public Water Treatment Facilities.</b> The County shall encourage the installation of public wastewater treatment facilities in existing communities that are experiencing repeated septic system failures and lack sufficient area for septic system repair or replacement and/or are posing a potential threat to groundwater.</p>	<p>Confirms the County’s support for installation of public wastewater facilities in areas that are experiencing septic system failures.</p>



Goal or Policy	Effects Related to Wastewater Treatment Facilities
<p><b>Policy PF-D.2: Wastewater Treatment Facility Operation.</b>                      The County shall require that any new community sewer and wastewater treatment facilities serving residential subdivisions be owned and maintained by a County Service Area or other public entity or entity governed by the California Public Utilities Commission and approved by the County.</p>	<p>Ensures that new wastewater treatment facilities serving residential subdivisions are owned and maintained by an entity governed by the California Public Utilities Commission and approved by the County.</p>
<p><b>Policy PF-D.4: Available Wastewater Treatment Capacity.</b>                      The County shall limit the expansion of unincorporated, urban density communities to areas where community wastewater treatment facilities can be provided.</p>	<p>Limits the expansion of unincorporated, urban density communities where existing or planned wastewater treatment infrastructure and facilities are not available or feasible.</p>
<p><b>Policy PF-D.5: Reduced Wastewater System Demand.</b> The County shall promote efficient water use and reduced wastewater system demand by:</p> <ul style="list-style-type: none"> <li>a. Requiring water conserving design and equipment in new construction;</li> <li>b. Encouraging retrofitting with water conserving devices; and</li> <li>c. Designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible.</li> </ul>	<p>Supports efficient water use and reduced wastewater system demand by encouraging retrofitting and effective design.</p>
<p><b>Policy PF-D.6: On-site Sewage Disposal Systems.</b> The County shall permit individual on-site sewage disposal systems on parcels that have the area, soils, and other characteristics that permit installation of such disposal facilities without threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be provided.</p>	<p>Allows for on-site sewage disposal systems where such facilities would not threaten surface or groundwater quality or pose health hazards, and where community sewer service is not available and cannot be provided.</p>
<p><b>Policy PF-D.7: Sewer Master Plans.</b> The County shall require preparation of sewer master plans for wastewater treatment facilities for areas experiencing urban growth.</p>	<p>Requires preparation of sewer master plans for wastewater treatment facilities specifically in areas experiencing growth.</p>

The policy analysis in Table 4.17-2 demonstrates that with the goals and policies of the 2042 General Plan, wastewater infrastructure associated with future development under the GPR/ZOU would be appropriately planned for and accommodated. However, as discussed above this table, wastewater treatment needs associated with currently projected population growth were not accounted for in the size and capacity of existing facilities, particularly the community-based systems throughout unincorporated Fresno County. Therefore, depending upon the location of future population growth, substantial new or expanded wastewater treatment facilities may be required, and potential environmental impacts would be significant and unavoidable.

**STORMWATER DRAINAGE FACILITIES**

Stormwater drainage facilities within the unincorporated areas of Fresno County are managed by the Fresno Metropolitan Flood Control District, and generally consist of channels and control features to guide the flow of stormwater runoff, stormwater detention basins to slow flow velocity and control discharge, and related facilities to guide surface flows through and around development areas, to avoid or minimize potentially adverse impacts. Some small communities in unincorporated Fresno County have stormwater drainage systems serviced by special districts. These systems are typically designed and developed on an as-needed basis, and are tied to specific land uses and land use cover types. As such, stormwater drainage facilities associated with future growth would be

designed and implemented as development occurs. If development occurs where there are existing stormwater drainage facilities, the new development would consider the existing conveyance capacity and develop new facilities as needed, which would be subject to CEQA review and appropriate environmental mitigation. Such facilities would be installed during individual project construction and within the disturbance area of such projects or the rights-of-way of previously disturbed roadways; therefore, the construction of these infrastructure improvements would not substantially increase the project’s disturbance area or otherwise cause significant environmental effects beyond those identified throughout this EIR.

As shown in Table 4.17-3, the 2042 General Plan also contains goals and policies related to stormwater drainage system infrastructure, and future development under the GPR/ZOU would occur in compliance with these goals and policies.

**Table 4.17-3 General Plan Goals and Policies - Stormwater Drainage Facilities**

Goal or Policy	Effects Related to Stormwater Drainage
<p><b>Goal PF-E:</b> To provide efficient, cost-effective, and environmentally-sound storm drainage and flood control facilities that protect both life and property and to divert and retain stormwater runoff for groundwater replenishment.</p>	<p>Supports the provision of storm drainage and flood control facilities for the protection of life and property, as well as the diversion and retention of runoff for groundwater replenishment.</p>
<p><b>Policy PF-E.1: Flood Control Coordination.</b> The County shall coordinate with the agencies responsible for flood control or storm drainage to assure that construction and acquisition of flood control and drainage facilities are adequate for future urban growth authorized by the County General Plan and city general plans.</p>	<p>Commits the County to coordination with the agencies responsible for flood control or storm drainage to ensure that associated facilities are adequate for planned urban growth.</p>
<p><b>Policy PF-E.4: Storm Drainage System Capacity.</b> The County shall encourage the local agencies responsible for flood control or storm drainage to require that storm drainage systems be developed and expanded to meet the needs of existing and planned development.</p>	<p>Commits the County to promote the provision and expansion of storm drainage facilities to meet the needs of current and future development.</p>
<p><b>Policy PF-E.6: Drainage Facility Construction.</b> The County shall require that drainage facilities be installed concurrently with and as a condition of development activity to ensure the protection of the new improvements as well as existing development that might exist within the watershed.</p>	<p>Requires that drainage facilities be installed concurrently with new development in order to protect the new infrastructure and existing development that may be located within the watershed.</p>
<p><b>Policy PF-E.7: Fair-share of Costs.</b> The County shall require new development to pay its fair share of the costs of Fresno County storm drainage and flood control improvements within unincorporated areas.</p>	<p>Requires that new development pay its fair share of costs related to stormwater drainage and flood control improvements with the County.</p>
<p><b>Policy PF-E.8: Locating Drainage Facilities.</b> The County shall encourage the local agencies responsible for flood control or storm drainage to precisely locate drainage facilities well in advance of anticipated construction, thereby facilitating timely installation and encouraging multiple construction projects to be combined, reducing the incidence of disruption of existing facilities.</p>	<p>Commits the County to support the agencies responsible for flood control or storm drainage to locate drainage facilities in advance of construction so that disruption to existing facilities is avoided.</p>

The policy analysis in Table 4.17-3 demonstrates that with the goals and policies of the 2042 General Plan, stormwater drainage systems associated with future development under the GPR/ZOU would be appropriately planned for and accommodated. Population growth that could

occur under the GPR/ZOU is not anticipated to require the relocation of existing stormwater drainage systems, and any new stormwater drainage facilities associated with future development would be subject to CEQA review and associated mitigation measures on a project-specific basis.

**ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS FACILITIES**

PG&E provides electrical service to the majority of Fresno County, including all incorporated areas, as well as natural gas services to the entire County. AT&T provides telecommunications services, including local phone service, long distance telephone service, and high-speed Internet. Wireless telephone service is available from many national and local providers, including Verizon Wireless, AT&T, Sprint, and T-Mobile. County residents in most urbanized areas are eligible for DSL high-speed internet access through internet providers including AT&T, Comcast, and Earthlink. Internet access in rural areas is generally limited to dial-up service or satellite connections. Cable television services are offered by numerous providers, including Comcast, DirectTV, and various satellite companies. As shown in Table 4.17-4, the 2042 General Plan contains goals and policies related to electric power, natural gas, and telecommunications infrastructure, and future development under the GPR/ZOU would occur in compliance with these goals and policies.

**Table 4.17-4 General Plan Goals and Policies - Electric Power, Natural Gas, and Telecommunications Facilities**

Goal or Policy	Effects Related to Electric Power, Natural Gas, and Telecommunications
<b>Goal PF-J:</b> To provide efficient and cost-effective utilities that serve the existing and future needs of people in the unincorporated areas of the county.	Encourages the provision of utilities to serve existing and future demand in the County.
<b>Policy PF-J.1: Existing and Future Utility Demands.</b> The County shall encourage the provision of adequate gas and electric, communications, and telecommunications service and facilities to serve existing and future needs.	Commits the County’s support for the provision adequate gas, electric, and telecommunications services and facilities to serve existing and future demand.
<b>Policy PF-J.2: Gas and Electric Systems.</b> The County shall work with local gas and electric utility companies to design and locate appropriate expansion of gas and electric systems, while minimizing impacts to agriculture and minimizing noise, electromagnetic, visual, and other impacts on existing and future residents.	Commits the County’s coordination with utility companies to appropriately design and locate expansion of gas and electric systems while also minimizing environmental impacts on existing and future residents.
<b>Policy PF-J.3: On-site Underground Utility Lines.</b> The County shall require all new residential development along with new urban commercial and industrial development to underground utility lines on-site.	Requires that new residential, urban commercial, and industrial development underground utility lines on-site.
<b>Policy PF-J.4: Wireless Communications Guidelines.</b> The County shall require compliance with the Wireless Communications Guidelines for siting of communication towers in unincorporated areas of the county.	Requires compliance with the Wireless Communications Guidelines when locating communication towers in unincorporated portions of the County.

The policy analysis in Table 4.17-4 demonstrates that with the goals and policies of the 2042 General Plan, electric power, natural gas, and telecommunications infrastructure associated with future development under the GPR/ZOU would be appropriately planned for and accommodated. Population growth that could occur under the GPR/ZOU is not anticipated to require the relocation of existing facilities for electric power, natural gas, or telecommunications, and any new such facilities associated with future development would be subject to CEQA review and associated mitigation measures on a project-specific basis.

## Mitigation Measures

The substantial increase to the County's population would result the need for new or expanded water and wastewater infrastructure; however, the location of such infrastructure is unknown at this time, and it is not known where or how extensive such new facilities would be. Additionally, the only way to avoid or reduce this impact would be to cap population growth in the County or prohibit new uses that would require water or wastewater infrastructure; however, such restrictions would be unenforceable. Therefore no feasible mitigation exists.

## Significance After Mitigation

Impacts would be significant and unavoidable.

<b>Threshold 2:</b> Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
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**IMPACT UTL-2 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD RESULT IN INCREMENTALLY INCREASED WATER DEMANDS TIED TO POPULATION GROWTH. ALTHOUGH FUTURE DEVELOPMENT WOULD BE CONSISTENT WITH GOALS AND POLICIES IN THE 2042 GENERAL PLAN, INCLUDING FOR WATER SUPPLY AVAILABILITY AND RELIABILITY, IT CANNOT BE DETERMINED WHETHER SUFFICIENT WATER SUPPLIES ARE AVAILABLE TO ACCOMMODATE THIS GROWTH. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

As with existing conditions, water supply sources for Fresno County will continue to consist of imported surface water supplies from the federal CVP under contract with Reclamation, and locally produced groundwater supplies, developed from local subbasins to the San Joaquin Valley Groundwater Basin. Surface water supply developed from Kings River water is also provided by Fresno Irrigation District (FID) to individual customers including the City of Fresno. In addition, the City of Fresno owns and operates several surface water treatment facilities (SWTF) that provide potable water within the City's service area (City of Fresno 2021).

The anticipated population growth throughout Fresno County, which is the driving factor behind development of the GPR/ZOU, represents a net increase of approximately 24,607 individuals to the county's population overall. It is assumed the population growth would occur generally within the spheres of influences of incorporated cities and that water supply would be provided by the water service purveyor respective to the location where the growth occurs. However, the exact location and distribution of that growth is not known at this time; in addition, there is no comprehensive UWMP for the county as a whole, due to water service being provided by 21 distinct water purveyors, only five of which currently have more than 3,000 service connections and maintain a current UWMP. Therefore, for the purposes of this analysis, per capita water demands associated with each of the available UWMPs are identified in the table below, to consider the overall scale of water demands associated with the anticipated population growth.

**Table 4.17-5 Per Capita Water Demands and Projections**

<b>UWMP / water purveyor</b>	<b>Daily water demand- existing (2020 gallons per capita per day)</b>	<b>Annual water demand- increase (AFY for 24,607 individuals)</b>
City of Fresno	198	5,458
City of Sanger	219	6,036
City of Reedley	173	4,768
CalWater Selma District	157	4,327
City of Coalinga	214	5,899

The sources used for this table include five UWMPs in Fresno County, each of which addresses its own service territory: City of Fresno 2021; City of Sanger 2021; City of Reedley 2021; CalWater Selma District 2021; City of Coalinga 2022

This table shows that per capita water demand varies by location, with the lowest rates south of the City of Fresno, in the cities of Selma and Reedley. Realistically, the projected population increase of 24,607 individuals would be distributed throughout the county, concentrated in or near cities and communities; it would not occur in any one of the locations identified in Table 4.17-5. However, to consider the potential scale of water demands associated with the total anticipated population growth, this table also presents the total annual water demand associated with up to 24,607 individuals, for each of the per capita demand rates shown. These calculations indicate that the total increase in water demand could vary between roughly 4,000 and 6,000 AFY, which is in addition to existing water demands (baseline conditions).

Water supply sources for Fresno County are actively and extensively managed, including CVP water which is managed under a complex system of legislation and contracts with Reclamation, and locally produced groundwater, which is managed through the implementation of DWR-approved GSPs in cooperation between GSAs. The CVP contracts with Reclamation provide up to five million AFY for irrigation and 600,000 AFY for municipal and industrial (M&I) uses, as well as 410 AFY for wildlife refuges and 800,000 AFY for other fish and wildlife needs, as specified in statutory requirements of resource agencies (CRS 2017). Reclamation’s management of CVP water supplies and distribution amounts for its existing customers accounts for varying climatic (drought) conditions represented by normal, dry, and multiple dry year conditions; these projections do not necessarily account for the population growth driving development of the GPR/ZOU.

In addition, although local groundwater basins are subject to the management direction and authority of the DWR-approved GSAs through implementation of basin-specific GSPs, and those GSPs specifically provide for sustainable groundwater conditions by 2040, similarly to the CVP contracts, the GSPs do not necessarily account for the population growth addressed herein. Furthermore, some areas of the county are affected by groundwater overdraft conditions, and the GSPs are focused on correcting overdraft as the top priority. Correcting overdraft is generally accomplished through reduced pumping schedules and increased conservation efforts; it generally does not accommodate new or expanded uses of the groundwater. Therefore, without knowing the specific location and distribution of the anticipated population growth and associated water demands throughout the county, the sufficiency of water supplies available to meet increased demands cannot be determined. However, due to regional overdraft issues and ongoing management efforts to correct those issues, it is reasonably anticipated that sufficient water supply of up to 4,000 to 6,000 AFY is not currently available to meet the demands of potential growth.

The GPR/ZOU does propose a variety of goals and policies that aim to ensure that adequate water supply is available to accommodate potential growth in unincorporated Fresno County. Table 4.17-

6, below, identifies the 2042 General Plan goals and policies related to water supply, which future development facilitated by the GPR/ZOU would be required to comply with.

**Table 4.17-6 General Plan Goals and Policies – Water Supply**

Goal or Policy	Effects Related to Water Supply
<p><b>Goal OS-A:</b> To protect and enhance the water quality and quantity in Fresno County’s streams, creeks, and groundwater basins.</p>	<p>Encourages protection and enhancement of water quality and quantity in the County.</p>
<p><b>Policy OS-A.1: Water Resources Management Leadership.</b> The County shall provide active leadership in the regional coordination of water resource management efforts affecting Fresno County and shall continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater, and water quality.</p>	<p>Commits the County’s engaged participation in regional coordination related to water resource management efforts affecting the County.</p>
<p><b>Policy OS-A.2: Groundwater Management Leadership.</b> The County shall provide active leadership in efforts to protect, enhance, monitor, and manage groundwater resources within its boundaries.</p>	<p>Commits the County’s engaged participation in coordination related to groundwater resources in the County.</p>
<p><b>Policy OS-A.3: Water Storage.</b> The County shall support efforts to create additional water storage that benefits Fresno County, and is economically, environmentally, and technically feasible.</p>	<p>Explicitly states the County’s support in efforts to create additional water storage that benefits the County.</p>
<p><b>Policy OS-A.4 Water Conservation and Quality Awareness.</b> The County shall support public education programs in coordination with local and regional water providers designed to increase public participation in water conservation and water quality awareness for all residents in the county.</p>	<p>Commits the County to development and implementation of public education programs designed to increase public participation in water conservation and improve water quality awareness.</p>
<p><b>Policy OS-A.9 Water Banking.</b> The County shall support and/or engage in water banking (i.e., recharge and subsequent extraction for direct and/or indirect use on lands away from the recharge area) based on the following criteria:</p> <ol style="list-style-type: none"> <li>a. The amount of extracted water will never exceed the amount recharged;</li> <li>b. The water banking program will result in no net loss of water resources within Fresno County;</li> <li>c. The water banking program will not have a negative impact on other water users within Fresno County;</li> <li>d. The water banking program will not create, increase, or spread groundwater contamination; and</li> <li>e. The water banking program includes sponsorship, monitoring, and reporting by a local public agency;</li> <li>f. The groundwater banking program will not cause or increase land subsidence;</li> <li>g. The water banking program will not have a negative impact on agriculture within Fresno County; and</li> </ol> <p>The water banking program will provide a net benefit to Fresno County.</p>	<p>Explicitly states the County’s support and/or engagement in efforts to create water banking opportunities in the County.</p>

Goal or Policy	Effects Related to Water Supply
<p><b>Policy OS-A.10 Sustainable Groundwater Management.</b>                      The County shall coordinate with the relevant Groundwater Sustainability Agency(ies) concerning their Groundwater Sustainability Plan(s) and refer any substantial proposed General Plan amendment to the agency for review and comment prior to adoption. The County shall give consideration to the adopted groundwater sustainability plan when determining the adequacy of water supply.</p>	<p>Commits the County to coordination efforts with Groundwater Sustainability Agencies concerning Groundwater Sustainability Plans, as well as consideration of those plans when evaluating the water supply.</p>

The policy analysis in Table 4.17-6 demonstrates that with the goals and policies of the 2042 General Plan, future development under the GPR/ZOU would be required to plan for anticipated water demands and the sufficiency of available sources, and incorporate water conservation efforts to the maximum extent feasible. However, as discussed above this table, at this time it cannot be determined with certainty whether sufficient water supply sources may be available and sufficient to accommodate the demands of anticipated growth, which is assumed to be up to approximately 6,000 to 8,000 AFY, based on per capita water demand rates reported in five UWMPs throughout the county. Therefore, because it cannot be determined whether sufficient water supply will be available for this anticipated growth, potential impacts associated with water demands would be significant and unavoidable.

### Mitigation Measures

While development within the Plan Area would adhere to the 2042 General Plan policies described above, the substantial increase to the County’s population would result in water demand that exceeds projected supply. The only way to avoid or reduce this impact would be to cap population growth in the County or prohibit new uses that would demand water; however, such restrictions would be unenforceable. Therefore no feasible mitigation exists.

### Significance After Mitigation

Significant and unavoidable.

**Threshold 3:** Would the GPR/ZOU result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

**IMPACT UTL-3 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD INCREASE WASTEWATER PRODUCTION, AND SUFFICIENT TREATMENT CAPACITY IS AVAILABLE AT THE EXISTING FRESNO-CLOVIS RWRP TO ACCOMMODATE THIS INCREASE. HOWEVER, BECAUSE THE LOCATION OF FUTURE GROWTH IS NOT KNOWN, IT CANNOT BE DETERMINED WHETHER ALL NEW WASTEWATER WOULD BE DIVERTED TO THE FRESNO-CLOVIS RWRP, OR IF NEW WASTEWATER TREATMENT FACILITIES WOULD BE REQUIRED. THEREFORE, ALTHOUGH FUTURE DEVELOPMENT WOULD BE CONSISTENT WITH GOALS AND POLICIES IN THE 2042 GENERAL PLAN TO MINIMIZE IMPACTS, IF NEW WASTEWATER TREATMENT FACILITIES WOULD BE NECESSARY TO ACCOMMODATE GROWTH LOCATIONS, IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

Wastewater collection and treatment in unincorporated Fresno County is largely decentralized, meaning that most wastewater collection and treatment systems are specific to the small

communities they serve. Wastewater service is generally provided by special districts including County service and waterworks districts, which own and maintain small wastewater collection systems, and use small-capacity treatment plants to treat and discharge the wastewater. In addition, many rural areas rely on individual or community septic systems.

Incorporated areas within Fresno County are served by municipal wastewater collection and treatment systems, with the exception of Fowler, Kingsburg, and Selma, which are served by a joint Selma-Kingsburg-Fowler County Sanitation District. Most wastewater generated in Fresno County is treated at the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF), which primarily serves the cities of Fresno and Clovis as well as some unincorporated areas of Fresno County including those areas served by the Pinedale County Water District. The Fresno-Clovis RWRF has a treatment capacity of 88 million gallons per day (mgd) and treats an average of approximately 68 mgd (USEPA 2016; City of Fresno 2022). As such, the Fresno-Clovis RWRF currently has an available treatment capacity of approximately 20 mgd.

As discussed under Impact UTIL-2, above, the anticipated population growth of up to approximately 24,607 individuals would have an estimated water demand (based upon existing per capita uses) of between approximately 4,000 and 6,000 AFY. In general, wastewater production equates to approximately 80 percent of total urban water consumption; using this factor, it can be estimated that wastewater generated by 24,607 individuals would be up to 3,200 to 4,800 AFY, which equates to approximately 8.8 to 13.1 acre-feet per day, or approximately 2.9 to 4.3 mgd. As stated above, the Fresno-Clovis RWRF currently has an available treatment capacity of approximately 20 mgd. As such, the anticipated increase in wastewater requiring treatment would represent approximately 14.5 to 21.5 percent of the existing available treatment capacity at the Fresno-Clovis RWRF, and sufficient treatment capacity is available to support the anticipated population growth.

However, also as discussed above, the unincorporated areas of Fresno County are supported by small community-based wastewater treatment systems, or even septic systems attached to site-specific land uses. The location of anticipated population growth in the county is generally anticipated to be in the SOI areas as described in Section 2.0, *Project Description*. However, the distribution of growth to individual SOI areas is not yet fully known and thus potential impacts of growth in accordance with the GPR/ZOU on existing wastewater treatment systems cannot be reasonably defined. If all growth occurs within the service area of the Fresno-Clovis RWRF, then based on existing conditions, sufficient capacity would be available to accommodate the wastewater treatment needs of population growth. However, growth is anticipated to occur in various SOI areas, not just those SOI areas served by the Fresno-Clovis RWRF. Therefore existing wastewater collection and treatment facilities may not be capable of accommodating the increased production rates and new treatment facilities may be necessary; such facilities could consist of an entirely new wastewater treatment plant, or extensive conveyance infrastructure to convey wastewater from its production areas to treatment location(s) with sufficient capacity. Such improvements may have the potential to result in significant environmental impacts and it would be speculative at this time to determine project specific impacts and/or mitigation measures that could reduce those impacts to a less than significant level.

As described above in Threshold 1, wastewater goals and policies included in the 2042 General Plan provide that wastewater infrastructure, including treatment facilities, associated with future development under the GPR/ZOU would be appropriately planned for and accommodated, which would minimize potential impacts of growth associated with wastewater treatment. However, because it is not known with certainty where the anticipated population growth would be located and how it would be distributed throughout the county, it is not known whether existing



wastewater treatment facilities are sufficient or new facilities would be required. Therefore, based on currently available information, potential impacts to wastewater treatment would be significant and unavoidable.

### **Mitigation Measures**

The increase to County’s population would result in wastewater generation that could exceed capacity of existing treatment facilities. The only way to avoid or reduce this impact would be to cap population growth in the County or prohibit new uses that would generate wastewater; however, such restrictions would be unenforceable. No feasible mitigation is available.

### **Significance After Mitigation**

Impacts would be significant and unavoidable.

<p><b>Threshold 4:</b> Would the GPR/ZOU generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</p> <p><b>Threshold 5:</b> Would the GPR/ZOU comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</p>
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**IMPACT UTL-4 DEVELOPMENT FACILITATED BY THE GPR/ZOU WOULD INCREASE SOLID WASTE GENERATION IN THE COUNTY. FUTURE DEVELOPMENT WOULD BE REQUIRED TO COMPLY WITH STATE AND LOCAL REGULATIONS RELATED TO SOLID WASTE, AS WELL AS APPLICABLE GOALS AND POLICIES IN THE 2042 GENERAL PLAN. HOWEVER, THE EXISTING LANDFILL WHICH ACCOMMODATES MOST SOLID WASTE DISPOSAL IN THE COUNTY WILL REACH CAPACITY IN 2031, AND ALTERNATE DISPOSAL LOCATION(S) HAVE NOT YET BEEN IDENTIFIED OR DEVELOPED. THEREFORE, SUFFICIENT SOLID WASTE DISPOSAL CAPACITY IS NOT CURRENTLY AVAILABLE TO ACCOMMODATE ANTICIPATED GROWTH. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

There are two active landfills in Fresno County – the American Avenue Landfill, which serves most of the solid waste disposal needs for unincorporated Fresno County, and the Clovis Landfill, which serves a small portion of the unincorporated county’s solid waste disposal needs. The American Avenue Landfill has a total capacity of 21.7 million cubic yards and handles on average 2,200 tons per day. As of July 2005, the American Avenue Landfill had a remaining capacity of 29.4 million cubic yards. It is estimated that the American Avenue Landfill will reach capacity in 2031, and no longer be available to provide for solid waste disposal (Fresno County 2022).

The handling of all debris and waste generated during construction of future development facilitated by the GPR/ZOU would be subject to 2019 CalGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity. Compliance with these requirements would ensure that solid waste generated from future development would be minimized the extent practical, and that diversion rates would increase into the future, as development facilitated by the GPR/ZOU is built out. Similarly, operations of future development facilitated by the GPR/ZOU would be required to comply with federal, State, and local statutes and regulations related to solid waste. Non-diverted waste generated by future development facilitated by the GPR/ZOU would require disposal in local landfills. For operational waste, AB 939 requires all cities and counties to divert a minimum of 50 percent of all solid waste from landfills.

In addition, all development within Fresno County, including that associated with the anticipated growth, would be required to comply with solid waste reduction goals, and regulations related to solid waste. The GPR/ZOU also proposes a variety of goals and policies that aim to reduce solid waste generation, as presented below in Table 4.17-7. However, as discussed following this table, there remains an existing need for additional solid waste disposal capacity in the county.

**Table 4.17-7 General Plan Goals and Policies – Solid Waste**

Goal or Policy	Effects Related to Solid Waste
<p><b>Goal PF-F:</b> To ensure the safe and efficient disposal or recycling of solid waste generated in the county in an effort to protect the public health and safety.</p>	<p>States the overall goal for the County to make sure that solid waste disposal and recycling are safe and efficient.</p>
<p><b>Policy PF-F.1: Solid Waste Source Reduction.</b> The County shall continue to promote maximum use of solid waste source reduction, reuse, recycling, composting, and environmentally-safe transformation of wastes.</p>	<p>With County support of waste reduction, recycling, and composting efforts, waste volumes going to the landfills can be reduced and the longevity of the landfills can be expanded.</p>
<p><b>Policy PF-F.2: Onsite Recycling Storage and Collection.</b> The County shall require new commercial, industrial, and multi-family residential uses to provide adequate areas on-site to accommodate the collection and storage of recyclable materials.</p>	<p>With County support of recycling collection, waste volumes going to the landfills can be reduced and the longevity of the landfills can be expanded.</p>
<p><b>Policy PF-F.3: Solid Waste Facility Siting.</b> The County shall locate all new solid waste facilities including disposal sites, resource recovery facilities, transfer facilities, processing facilities, composting facilities, and other similar facilities in areas where potential environmental impacts can be mitigated and the facilities are compatible with surrounding land uses. Site selection for solid waste facilities shall be guided by the following criteria:</p> <ul style="list-style-type: none"> <li>a. Solid waste facility sites shall not be located within the conical surface, as defined by Federal Aviation Regulations, Part 77, of a public use airport, except for enclosed facilities;</li> <li>b. Solid waste facilities shall not be sited on productive agricultural land if less productive lands are available in general proximity based on service needs and operations;</li> <li>c. Solid waste facilities should not be located in high residential density areas. It is preferred that solid waste facilities be located in commercial/industrial areas. ;</li> <li>d. Solid waste facilities should be located along or close to major road systems. It is preferable that the roadways used for solid waste transfer conform to approved truck routes.</li> </ul> <p>Solid waste facilities shall not be located adjacent to rivers, reservoirs, canals, lakes, or other waterways.</p>	<p>Ensures proper siting and design of future solid waste facilities to accommodate waste disposal needs and limit potential adverse environmental impacts.</p>
<p><b>Policy PF-F.4: Solid Waste Facility Encroachment.</b> The County shall protect existing or planned solid waste facilities from encroachment by incompatible land uses that may be allowed through discretionary land use permits or changes in land use or zoning designations.</p>	<p>Protects continued operation and potential expansion of existing solid waste facilities and planned facilities by ensuring incompatible land uses don't encroach on the land immediately surrounding the landfills.</p>
<p><b>Policy PF-F.5: County Integrated Waste Management Plan.</b> The County shall ensure that all new development complies with applicable provisions of the County Integrated Waste Management Plan.</p>	<p>Ensures compliance of future development project with regulation related to solid waste.</p>

Goal or Policy	Effects Related to Solid Waste
<p><b>Policy PF-F.6: Private Landfills.</b> The County shall not allow the siting of new landfills. The County shall phase out privately-owned landfills, except for inert disposal sites. The County shall not permit existing privately-owned landfills to expand beyond the current capacities, which are defined in their solid waste facility permits.</p>	<p>Ensures that any future landfills would comply with federal, State, and local regulations related to solid waste disposal.</p>
<p><b>Policy PF-F.9: Property Acquisition Near Landfills.</b> The County should acquire properties, when feasible, near the regional landfill to protect the landfill from incompatible uses and to provide a buffer for the landfill.</p>	<p>Protects continued operation and potential expansion of existing solid waste facilities by ensuring incompatible land uses don't encroach on the land immediately surrounding the landfills.</p>
<p><b>Policy PF-F.10: Waste Transfer Stations.</b> The County shall support the development of accessible waste transfer stations for county residents, and require the following siting criteria for transfer/processing stations:</p> <ul style="list-style-type: none"> <li>a. Sites shall be of adequate size to accommodate proposed transfer/ processing station operations and vehicle storage and should be of adequate size to provide for expansion to accommodate future shifts in resource recovery technology;</li> <li>b. Transfer stations shall be located within designated commercial or industrial areas except where commercial and industrial lands are only limitedly available within the Sierra North and Sierra South Regional Plans. Landfills closed under appropriate closure regulations may be considered for transfer station sites; and</li> </ul> <p>Transfer station sites with direct access to or in transportation corridors are preferable.</p>	<p>Ensures proper siting and design of future waste transfer stations to accommodate waste disposal needs and limit potential adverse environmental impacts.</p>
<p><b>Policy PF-F.11: Resource Recovery Facilities Requirements.</b> The County shall require the following siting criteria for resource recovery facilities:</p> <ul style="list-style-type: none"> <li>a. Sites shall be of adequate size to accommodate the proposed plant and facilities anticipated for future shifts in resource recovery and pollution control technology;</li> <li>b. Sites should provide opportunities for steam use or development of steam users or otherwise maximize energy use;</li> <li>c. Sites with existing or planned urban residential land uses downwind should be avoided; and</li> </ul> <p>Resource recovery sites with direct access to or in transportation corridors are preferable.</p>	<p>Ensures proper siting and design of future resource recovery facilities to maximize operations and limit potential adverse environmental impacts.</p>
<p><b>Policy PF-F.12: Waste Disposal Site Requirements.</b> The County shall require the following siting criteria for inert waste disposal sites:</p> <ul style="list-style-type: none"> <li>a. Sites shall be of adequate size to accommodate proposed waste disposal operations;</li> <li>b. Operation of disposal sites should not increase the site elevation above elevations of adjacent properties and should not preclude reasonable future use of the property; and</li> <li>c. Permanent site improvements associated with inert waste disposal should be discouraged, as the inert disposal operation is a temporary operation.</li> </ul>	<p>Ensures proper siting and design of future waste disposal sites to accommodate waste disposal needs and limit potential adverse environmental impacts.</p>

In addition to the goals and policies from the 2042 General Plan, future development facilitated by the GPR/ZOU would also be required to comply with State and local regulations related to solid waste. However, although compliance with these goals, policies, and applicable regulations would reduce potential impacts associated with solid waste generation and disposal, there are currently insufficient solid waste disposal capacity available to accommodate existing needs within Fresno County, following closure of the American Avenue Landfill in 2043.

The County needs to identify or develop new solid waste disposal location(s) or expand existing solid waste disposal locations to provide continued solid waste disposal services for Fresno County, and this need exists regardless of the anticipated growth of up to approximately 24,607 individuals, which prompted the need for the proposed GPR/ZOU assessed herein. Therefore, the additional population would exacerbate the existing need for new or expanded solid waste disposal facilities to accommodate Fresno County overall. Potential impacts of increasing solid waste disposal needs would be significant and unavoidable.

### **Mitigation Measures**

The increase to County's population would result in increased solid waste generation that could exceed capacity of existing landfill facilities. The only way to avoid or reduce this impact would be to cap population growth in the County or prohibit new uses that would generate solid waste; however, such restrictions would be unenforceable. As such, no feasible mitigation is available.

### **Significance After Mitigation**

Impacts would be significant and unavoidable.

#### **4.17.4 Cumulative Impacts**

By its nature, the 2042 General Plan considers cumulative impacts insofar as it considers cumulative development that could occur within the county's plan area. As such, the analysis of GPR/ZOU impacts also constitutes the cumulative analysis. As discussed in UTL-1, development facilitated by the GPR/ZOU would require new or expanded facilities for water, wastewater, stormwater, electricity, natural gas, or telecommunications, the construction of which could result in significant unavoidable impacts. As discussed under Impacts UTL-2 and UTL-3, development facilitated by the GPR/ZOU would result in increased demand for water supply and need for expanded wastewater treatment facilities, both of which could result in significant unavoidable impacts. As discussed under Impact UTL-4 there is already a lack of sufficient solid waste disposal area in Fresno County, and the anticipated population increase would exacerbate this existing needed, resulting in potentially significant impacts.

Future development facilitated by the GPR/ZOU would be consistent with goals and policies related to utilities in the 2042 General Plan, and they would also be required to comply with existing regulations related to utilities, which would help minimize impacts. However, potential impacts would remain significant and unavoidable, and the GPR/ZOU would therefore cumulatively increase impacts to utilities. Cumulative impacts related to utilities would be significant and unavoidable.

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## 4.18 Wildfire

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This section addresses the potential for the General Plan Review and Zoning Ordinance Update (GPR/ZOU) to exacerbate wildfire risks. Potential impacts related to exposure to wildfire, including smoke and subsequent flooding and runoff, are also assessed in this section.

### 4.18.1 Setting

#### **a. Overview of Wildfire**

A wildfire is an uncontrolled fire in an area of combustible vegetation that is generally extensive in size. Wildfires differ from other fires in that they take place outdoors in areas of grassland, woodlands, brush land, scrubland, peatland, and other wooded areas that act as a source of fuel, or combustible material. Buildings may become involved if a wildfire spreads to adjacent communities or development. The four primary causes of Local Responsibility Area (LRA) and State Responsibility Area (SRA) wildfires in 2020, the most recent year with complete data, remained similar to that of years past, with the defined categories being arson (111), debris burning (62), vehicle (52), and undetermined (77), according to the 2020 Prefire Management Plan for CalFire's Fresno-Kings Unit (CALFIRE 2020a). The primary factors that increase an area's susceptibility to wildfire include slope and topography, vegetation type and condition, and weather and atmospheric conditions. These factors, as they exist and occur relative to Fresno County are described below.

#### **Slope and Aspect**

According to the California Department of Forestry and Fire Protection (CAL FIRE), sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes (CAL FIRE 2007). This is because as a fire burns, it is heating and drying the fuels above or uphill of the flames, effectively preheating the fuels upslope of the fire. Additionally, steep slopes may hinder firefighting efforts. Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will receive the most solar radiation. As a result, this slope is warmer and the vegetation drier than on slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread (CAL FIRE 2007).

The County's topography is characterized by broad, flat valley floors that generally slope from southeast to northwest; foothills and moderately high mountains (Coast Ranges) in the west; and foothills and high mountains (Sierra Nevada) in the east. Approximately 55 percent of the County is mountainous, and 45 percent is valley land. Elevations range from approximately 100 to 400 feet on the valley floor to approximately 4,000 feet in the Coast Ranges and more than 14,000 feet in the Sierra Nevada. There are two major rivers in Fresno County, San Joaquin River and Kings River (Fresno 2018).

#### **Vegetation**

Vegetation is "fuel" to a wildfire, and it changes over time. The relationship between vegetation and wildfire is complex, but generally some vegetation is naturally fire resistant, while other types are flammable. For example, cured grass present in much of California during the dry season or dry months is much more flammable than standing trees during the same season or months (CAL FIRE

2017). Grass is considered an open fuel, which means oxygen has free access to promote the spread of fire. Additionally, weather and climate conditions, such as drought, can lead to increasing dry vegetation with low moisture content, increasing its flammability. Vegetation cover within Fresno County outside of the Sierra Nevada region is mostly limited to grass which is considered a light fuel that burns rapidly with a short period of intense maximum heat output (Fresno 2017).

## **Weather and Atmospheric Conditions**

Wind, temperature, and relative humidity are influential weather elements in fire behavior and susceptibility (CAL FIRE 2016). Fire moves faster under hot, dry, and windy conditions compared with cool, wet, calm conditions. Wind may also blow burning embers ahead of a fire into vegetation, causing its spread. Drought conditions also lead to extended periods of excessively dry vegetation, increasing the fuel load and ignition potential.

The climate varies among the County's three regions. Summers are long, hot, and dry in the valley; moderate to hot in the Coast Ranges; and relatively cool in the high elevations of the Sierra Nevada. There is little to no precipitation in the County during the summer. Winters in the valley and Coast Ranges are short and mild with light rain in the valley and moderate rainfall in the Coast Ranges. In the Sierra Nevada, winters vary from short and mild with frequent rain and some snow to moderately severe with frequent snow. Most of the seasonal precipitation occurs between October and April (Fresno 2018). According to the National Weather Service, the average annual precipitation of Fresno is 11.5 inches (NOAA 2021). May through September is the driest parts of the year and coincide with what has traditionally been considered the fire season in California. However, increasingly persistent drought and climatic changes in California have resulted in drier winters and fires during the autumn, winter, and spring months are become more common. For example the "Creek Fire," which occurred partially in Fresno County, ignited in September and was not contained until late December 2020 (Cal FIRE 2020b).

Prevailing winds in the County generally blow southeast (NOAA 2020), the presence of the nearby eastern slopes of the Sierra Nevada Mountains, a wildfire in the eastern part of the County could potentially be carried up slopes and away from the more central, urban areas of the County.

## **Wildfire Hazards**

In California, responsibility for wildfire prevention and suppression is shared by federal, state and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas, such as some land in the National Forest System managed by the USFS. The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas (SRA), which are managed by CAL FIRE. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRA).

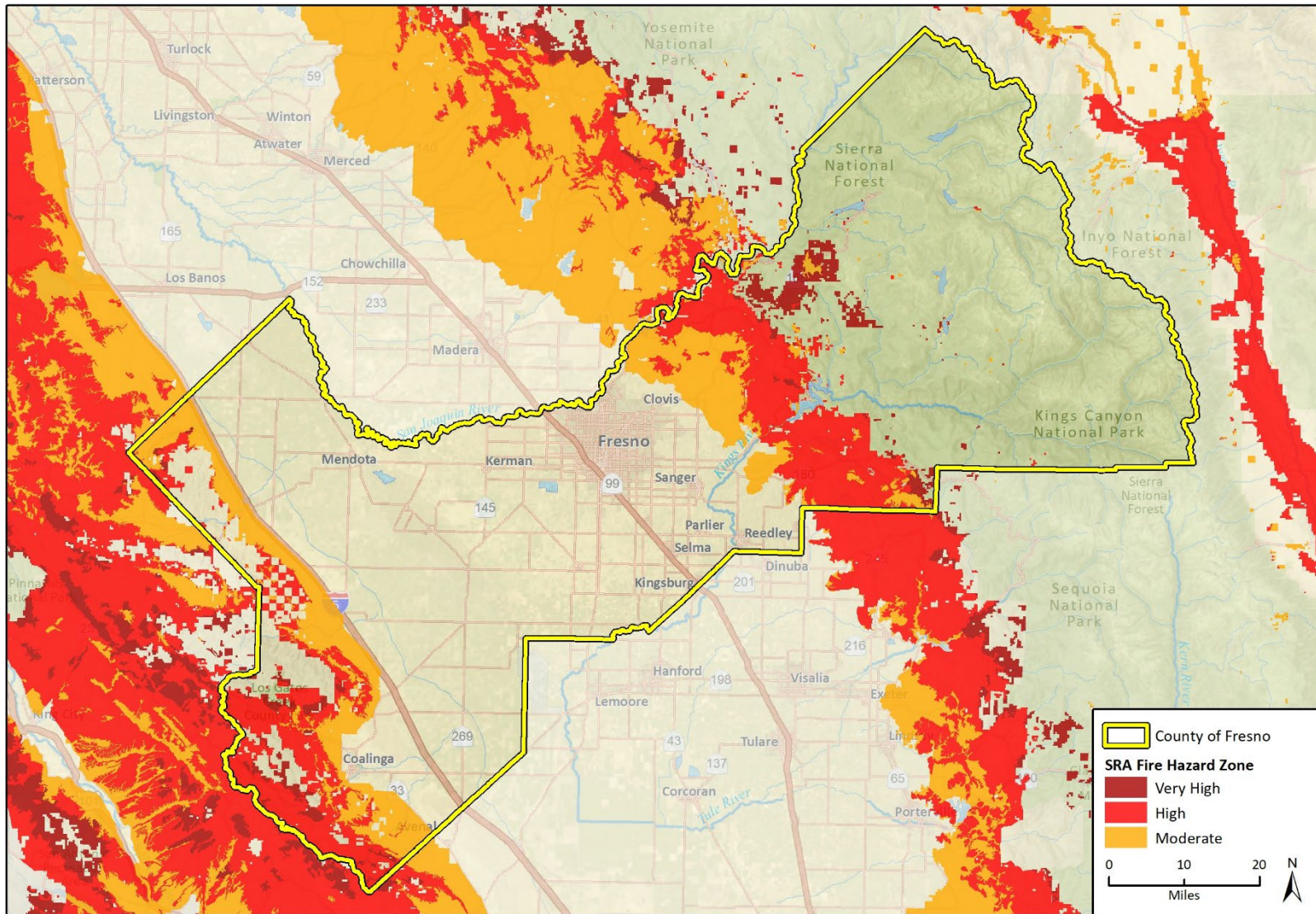
While much of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather and other relevant factors (Public Resources Code [PRC] 4201-4204 and California Government Code 51175-89). As described earlier in the section, the primary factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as Fire Hazard Severity Zones. CAL FIRE maps three zones on SRA: 1) Moderate Fire Hazard Severity Zones; 2) High Fire Hazard Severity Zones; and 3) Very High Fire Hazard Severity Zones. Only the Very High Fire Hazard Severity Zones are mapped on for LRA. Each of the zones influence how

people construct buildings and protect property to reduce risk associated with wildland fires. Under state regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life.

According to CAL FIRE's Fire Hazard Severity Zone map, areas along the Sierra Nevada foothills east of Highway 99 are designated as Moderate to Very High Fire Hazard Severity Zones (CAL FIRE 2020c). Additionally, areas directly to the west of Interstate 5 and the City of Coalinga are also designated as Moderate to High Fire Severity Zones, as shown in Figure 4.18-1.



Figure 4.18-1 SRA Fire Hazard Severity Zones



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Additional data provided by CalFire 2020.

Fig 4.18-1 SRA and LRA Fire Hazard Severity Zones

## 4.18.2 Regulatory Setting

### **Federal**

#### *The Disaster Mitigation Act of 2000*

The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance. There are two different levels of State disaster plans: “Standard” and “Enhanced.” States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act has also established new requirements for local mitigation plans.

#### *National Fire Plan*

The National Fire Plan was developed under Executive Order 11246 in August 2000, following a historic wildland fire season. Its intent is to establish plans for active response to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

### **State**

#### *The California Fire Plan*

The Strategic Fire Plan for California is the State’s road map for reducing the risk of wildfire. The most recent version of the Plan was finalized in August 2018 and directs each CAL FIRE Unit to prepare a locally specific Fire Management Plan (CAL FIRE 2018). In compliance with the California Fire Plan, individual CAL FIRE units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation within each of the 21 CAL FIRE units and six contract counties. The plans include stakeholder contributions and priorities, and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

#### *California Office of Emergency Services*

The California Office of Emergency Services (OES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Disaster Mitigation Act of 2000 in order for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

#### *Wildland Urban Interface Building Standard*

On September 20, 2007 the Building Standards Commission approved the Office of the State Fire Marshal emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the 2007 California Building Code (CBC). These codes include provisions for ignition-resistant construction standards in the wildland urban interface.

### *California Code of Regulations Title 24 (California Building Code)*

Updated every three years through a rigorous stakeholder process, Title 24 of the California Code of Regulations requires California homes and businesses to meet strong fire and safety measures. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California. (Health and Safety Code Sections 17950 and 18938(b).)

The regulations receive input from members of industry, as well as the public, with the goal of "[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy." (Pub. Res. Code Section 25402.) These regulations are scrutinized and analyzed for technological and economic feasibility (Pub. Res. Code Section 25402(d)) and cost effectiveness (Pub. Res. Code Section 25402(b)(2) and (b)(3)).

#### **PART 2 – CALIFORNIA BUILDING CODE: FIRE SAFETY REQUIREMENTS**

The State of California provided a minimum standard for building design through the 2022 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2022 CBC is based on the 2021 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

#### **PART 2 – CALIFORNIA BUILDING CODE: WILDLAND-URBAN INTERFACE BUILDING STANDARDS**

On September 20, 2005, the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the CCR Title 24, Part 2, known as the 2007 CBC. These codes include provisions for ignition-resistant construction standards in the Wildland Urban Interface (WUI).

Interface zones are areas with dense housing adjacent to vegetation that can burn and meeting the following criteria:

1. Housing density class 2 (one house per 20 acres to one house per 5 acres), 3 (more than one house per 5 acres to one house per acre), or 4 (more than one house per acre)
2. In Moderate, High, or Very High Fire Hazard Severity Zone
3. Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer, or shrub)
4. Spatially contiguous groups of 30-meter cells<sup>1</sup> that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

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<sup>1</sup> "30-meter cells" refers to satellite mapping or Geographic Information Systems (GIS) data, and indicates data is presented as 30-meter by 30-meter squares in the source maps used to determine zone types.

1. Not interface
2. Housing density class 2
3. Housing density class 3 or 4, dominated by wildland vegetation
4. In Moderate, High, or Very High Fire Hazard Severity Zone
5. Improved parcels only
6. Spatially contiguous groups of 30-meter cells 25 acres and larger

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone.<sup>2</sup>

While the 2007 CBC creates WUI definitions for interface, intermix and influence zones in order to apply required construction standards, many local and regional entities use their own definitions of WUI areas for other purposes, ranging from simple resident awareness and public outreach to further municipal-level standards.

### **PART 9 – CALIFORNIA FIRE CODE**

The 2022 California Fire Code is Part 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. The provisions of this Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in CCR Title 24. Title 24, part 9, Chapter 7 addresses fire-resistances-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in FHSZs within SRAs and WUI Fire Areas. This code includes provisions for ignition-resistant construction standards for new buildings.

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<sup>2</sup> CAL FIRE. 2019. Wildland Urban Interface (WUI) [map]. Available: [https://frap.fire.ca.gov/media/10300/wui\\_19\\_ada.pdf](https://frap.fire.ca.gov/media/10300/wui_19_ada.pdf) (accessed April 2022)

*Assembly Bill 747 and Senate Bill 99*

Assembly Bill (AB) 747 (2019) requires that the safety element be reviewed and updated to identify emergency evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. This will be a requirement for all safety elements or updates to hazard mitigation plans completed after January of 2022.

SB 99 (2019) requires review and update of the safety element to include information to identify residential developments in hazard areas that do not have at least two emergency evacuation routes. In essence, this legislation assists in identifying neighborhoods and households within a hazard area that have limited accessibility. This is intended to assist the County with identifying opportunities to improve connectivity and evacuation capacity (generally).

*California Code of Regulations Title 14 – Fire Safe Roads*

The Board of Forestry maintains fire safe road regulations, as part of CCR Title 14. This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

*California Senate Bill 1241*

California Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and Very High FHSZs in the safety element of their general plans. The bill also amended CEQA to direct amendments to the *CEQA Guidelines* Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs. In adopting these Guidelines amendments, the Governor’s Office of Planning and Research recognized that generally, low-density, leapfrog development may create higher wildfire risks than high-density, infill development.<sup>3</sup> In general, new development that will be contemplated within the General Plan area would not be considered leapfrog development sites, as they are located near existing development.

*California Public Resources Code*

The California Public Resources Code (PRC) includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

- These regulations include the following: Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427); and

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<sup>3</sup> “Leapfrog development” describes the construction of new development at a distance from existing developed areas, with undeveloped land between the existing and new development.

- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

### *California Public Utilities Commission General Order 166*

General Order 166 Standard 1.E requires that investor-owned utilities (IOU) develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that IOUs outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by IOUs are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission (CPUC) regarding compliance with General Order 166.<sup>4</sup>

## **Regional and Local**

### *Fresno County Multi-Jurisdictional Hazard Mitigation Plan*

In May 2018, the County of Fresno and participating jurisdictions prepared a multi-jurisdictional hazard mitigation plan (HMP) pursuant to the requirements of the Disaster Mitigation Act of 2000. The HMP aims to reduce risks for those who live in, work in, and visit the County of Fresno and surrounding areas and provides a planning framework for all foreseeable natural hazards. The HMP's goals and recommendations intend to lay the groundwork for the development and implementation of local mitigation activities and partnerships for long-term benefits, including the following (Fresno 2018):

- Provide protection for people's lives from hazards
- Improve all communities' resilience and capabilities to mitigate hazards and reduce exposure to hazard-related losses
- Improve community and agency awareness about hazards and associated vulnerabilities that threaten Fresno County planning area communities
- Provide protection for critical facilities, utilities, and services from hazard impacts,
- Maintain coordination of disaster planning
- Maintain/provide for FEMA eligibility and work to position jurisdictions for grant funding

### *Fresno County Fire Strategic Plan*

The Fresno County Fire Protection Plan was developed by the Fresno County Fire Protection District in 2022 and is meant as a guiding document to shape the District's three-year future. The Fresno County Fire Protection District covers approximately 2,655 square miles, or roughly 50% of the County. The District operates its fire engine companies with a minimum of 37 firefighters on duty every day providing fire suppression, emergency medical service, rescue, and fire prevention and education to approximately 220,000 people and covering approximately 2,655 square miles (FCFPD 2022). The Fresno County Fire Strategic Plan documents an assessment of wildfire hazards in the Santa Clara Unit and identifies strategic targets to minimize fire risks, such as fire prevention and vegetation management.

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<sup>4</sup> CPUC. 2017. General Order Number 165. December 2017. Available: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf> (accessed April 2022)

### 4.18.3 Impact Analysis

#### a. Methodology and Thresholds of Significance

##### Methodology

Cal FIRE Hazard Severity Maps were consulted in determining Fresno County's proximity to SRAs or lands classified as very high fire hazard severity zones. Impacts related to wildfire hazards and risks were evaluated using FHSZ mapping for Fresno County, aerial imagery, and topographic mapping. Additionally, weather patterns related to prevailing winds and precipitation trends were evaluated as they relate to the spread and magnitude of wildfire. It was assessed whether the proposed plan would risk exacerbating those existing environmental conditions or causing new direct, indirect, or cumulative impacts to other aspects of the environment.

California Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act restates the CEQA requirement that an EIR analyze "any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected," including by locating development in wildfire risk areas. As such, this evaluation assesses whether projects located in or near State responsibility areas or lands classified as very high fire hazard severity zones would exacerbate wildfire risks, and thereby expose people or structures to significant risks during or post wildfire event; require the installation of emergency-related infrastructure; or result in temporary or ongoing impacts to the environment.

In addition, pursuant to California Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act, this evaluation assesses whether projects located in or near State responsibility areas or lands classified as very high fire hazard severity zones would substantially impair an adopted emergency response plan or emergency evacuation plan.

##### Significance Thresholds

The following thresholds of significance are based on Appendix G to the CEQA Guidelines. For purposes of this EIR, implementation of the GPR/ZOU would have a significant adverse impact if it would do any of the following if located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes; or
5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the GPR/ZOU substantially impair an adopted emergency response plan or emergency evacuation plan?

**IMPACT WFR-1 THE PROPOSED 2042 GENERAL PLAN POLICIES ENSURE ADEQUATE EMERGENCY ACCESS, RESPONSE, AND PREPARATION. FURTHERMORE, FRESNO COUNTY WORKS CLOSELY WITH LOCAL FIRE DISTRICTS TO ENSURE EMERGENCY ACCESS AND FIRE PROTECTION SERVICES MEET STANDARDS. THEREFORE, THE GPR/ZOU WOULD NOT IMPAIR AN EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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As mentioned above under *Wildfire Hazards* and as shown in CAL FIRE's Fire Hazard Severity Zone map in Figure 4.17-1, areas along the Sierra Nevada foothills east of Highway 99 are designated as State Responsibility Area (SRA) Moderate to Very High Fire Hazard Severity Zones and areas directly to the west of Interstate 5 and the City of Coalinga are designated as SRA Moderate to High Fire Severity Zones (CAL FIRE 2020c). The GPR/ZOU does not envision substantial development in SRA Very High Fire Hazard Severity Zones (the Sierra Nevada or the Coast Range areas of the County), but rather facilitates development in urbanized areas where wildfire risk is low. The Health and Safety Element of the 2042 General Plan directs the County to accommodate safety needs when planning and designing, while increasing the resiliency of the County's residents and businesses to respond to and be prepared for potential emergencies and disasters. This would include emergency vehicle access and location of emergency response facilities. Goal HS-A and related policies and Goal HS-B and related policies in the Safety Element of the 2042 General Plan, listed below, would ensure adequate emergency response within Fresno County.

**Goal HS-A** To protect public health and safety by preparing for, responding to, and recovering from the effects of natural or technological disasters.

**Policy HS-A.1: Operational Area Master Emergency Service Plan.** The County shall, through the Fresno County Operational Area Master Emergency Services Plan and the Fresno County Multi-Hazard Mitigation Plan, maintain the capability to effectively respond to emergency incidents, including maintenance of an emergency operations center. *(PSP/SO)*

**Policy HS-A.2: Multi Jurisdictional Hazard Mitigation Plan.** In coordination with cities, special districts, and other State and Federal agencies, the County shall maintain the Fresno County Multi-Jurisdictional Hazard Mitigation Plan to identify and mitigate, to the extent feasible, natural and human-made hazards within the county. *(PSP)*

**Policy HS-A.3: Emergency Services During Major Disasters.** The County shall, within its authority and to the best of its ability, ensure that emergency dispatch centers, emergency operations centers, communications systems, vital utilities, and other essential public facilities necessary for the continuity of government are designed in a manner that will allow them to remain operational during and following an earthquake or other disaster. *(PSP/SO)*

**Policy HS-A.4: Critical Emergency Response Facility Siting.** The County shall ensure that the siting of critical emergency response facilities such as hospitals, fire stations, sheriff's offices and substations, dispatch centers, emergency operations centers, and other emergency service facilities and utilities are sited and designed to minimize their



exposure and susceptibility to flooding, seismic and geological effects, fire, avalanche, and explosions as required by State regulations. This includes locating new essential public facilities outside of Very High Fire Hazard Severity Zones, if feasible. Exception to this policy shall be allowed on the condition that the only alternative location would be so distant as to jeopardize the safety of the community, given that precautions are taken to protect the facility. *(PSP)*

**Policy HS-A.5: Disaster Response Coordination.** The County shall maintain coordination with other local, State, and Federal agencies to provide coordinated disaster response. *(IGC)*

**Policy HS-A.6: Emergency Preparedness Public Awareness Programs.** The County shall support local fire agencies through distribution of information during the permit process, through links on County websites, and by providing assistance at public meetings, in promoting the education of County residents concerning emergency preparedness, defensible space, and safety, as described in the Fresno-King Unit Fire-Plan information and public education outreach programs, focusing on the most vulnerable at-risk communities such as those in the Very High Fire Hazard Severity Zone. *(PSP/PI)*

**Policy HS-A.7: Building Design.** The County shall review the design of all buildings and structures in the Very High Fire Hazard Severity Zones and State Responsibility Areas to ensure they are designed and constructed to State and local regulations and standards as part of the building permit plan check process. *(RDR)*

**Policy HS-A.8: Transportation Corridors and Evacuation Routes.** The County shall continue to improve community transportation corridors to allow for better evacuation routes for the public and better access for emergency responders. *(PSP/SP/PI)*

**Policy HS-A.9: Vector-Borne Disease Control.** The County shall prevent and control the spread of vector-borne diseases through best practice vector control techniques on County properties and will encourage use of these practices on other properties. *(PSP/SO/IGC/PI)*

**Policy HS-A.10: Retrofit Existing Critical Facilities and Related Infrastructure.** The County, as part of its five-year Capital Improvement Plan, shall conduct an evaluation of all first-responder and County facilities to determine retrofits that may be needed for long-term resilience to climate change hazards including wildfire and drought. *(PSP/SO/IGC)*

**Policy HS-A.11: Improve Resilience in Critical Facilities.** The County shall invest in sustainable backup power sources as funding becomes available to provide redundancy and continued services for critical facilities in the event of a power outage triggered by a climate event. *(FB/SO)*

**Policy HS-A.12: Access/Evacuation Routes.** Establish minimum standards for evacuation, including in the Very High Fire Hazard Severity areas, in the Emergency Operations Plan and continuously reassess access and evacuation route capacity and put mitigation measures and improvement plans in place if needed.

**Policy HS-A.13: Future Emergency Service Needs.** The County shall periodically evaluate the ability of County facilities to function after a major disaster as well as project and assess future emergency needs.

**Goal HS-B** To minimize the risk of loss of life, injury, and damage to property and natural resources resulting from fire hazards.

**Policy HS-B.6: Foothill and Mountain Fire and Emergency Service Access.** The County shall require that new foothill and mountain subdivisions and residential areas in Very High Fire Hazard Severity Zones provide for safe and ready access for fire and other emergency equipment, for routes of escape that will safely handle evacuations, and for roads and streets designed to be compatible with topography while meeting fire safety needs. (RDR)

**Policy HS-B.7: Fire and Emergency Vehicle Access.** The County shall require development new discretionary development projects consisting of major residential subdivisions and large commercial projects to have adequate access for fire and emergency vehicles and equipment. All major subdivisions shall have a minimum of two (2) points of ingress and egress. The County shall implement feasible recommendations in AB2911 Office of the State Fire Marshall Subdivision Survey Reports, which survey subdivisions without a secondary means of egress routes for evacuation and other fire safety factors (RDR)

**Policy HS-B.8: Fire Risk Management Coordination.** The County shall work with local fire protection agencies, local wildfire mitigation groups, the California Department of Forestry and Fire Protection, and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression and in managing wildland fire hazards. (RDR/PSP/IGC)

**Policy HS-B.9: Community Fire Breaks Coordination.** The County shall require that community fire breaks be coordinated with overall fire break plans developed by CalFire and local foothill and mountain fire agencies for Very High Fire Hazard Severity Zones and State Responsibility Areas. Firebreak easements in subdivisions of more than four parcels or in built-up areas shall include access for firefighting personnel and motorized equipment. Easements shall be dedicated for this purpose. (RDR/PSP/IGC)

**Policy HS-B.19: Site Specific Fire Management Plans.** The County shall require all new discretionary development consisting of major residential subdivisions and large commercial projects in the Very High Fire Hazard Severity Zone to develop site-specific fire management plans to maintain adequate access for emergency vehicles, including two points of access for subdivisions and multifamily developments, address fuel modification and/or incorporation of open space or other defensible space areas, maintain vegetation clearance on public and private roads, and include disclosure requirements to future property owners or residents as required by state law. Require ongoing maintenance and upkeep to be codified incorporated or recorded as part of building covenants or homeowner covenants, conditions, and restrictions.

**Policy HS-B.20: Route Capacity, Safety and Visibility.** As part of the next update to the Fresno County Multi-Hazard Mitigation Plan, the County, working with emergency service agencies, shall evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios to facilitate fire, law enforcement, and ambulance access and resident egress, consistent with the existing goals and objective of the Fresno County Multi-Hazard Mitigation Plan.

**Policy HS-B.24: Emergency Vehicle Access.** The County shall require all new discretionary development consisting of major residential subdivisions and large

commercial projects to provide, and existing development to maintain, adequate access for emergency vehicles, including two points of access for subdivisions and multifamily developments.

**Policy HS-B.26: Master Emergency Services Plan.** The County shall maintain and update its Master Emergency Services Plan, as necessary, to include an assessment of current emergency service and projected emergency service needs, and goals or standards for emergency service training for County staff and volunteers.

**Policy HS-B.30: Hazard Mitigation Plan.** The County shall, if necessary, revise the Health and Safety Element upon each revision of the Housing Element or Fresno County Multi-Hazard Mitigation Plan, but not less than once every eight years, to identify new information relating to flood and fire hazards and climate adaptation and resiliency strategies applicable to the county.

**Policy HS-B.31: Restrict Parking.** The County shall work with relevant agencies such as CAL FIRE, Fresno County Sheriff's Office, Caltrans, Fresno County Public Works and Planning, and private Home Owners Associations, to restrict parking periodically (e.g., on red flag days) along critical evacuation routes.

In addition, the county works with local fire protection districts to ensure that emergency access and fire protection services meet the standards of each respective local fire protection district. The State has also enacted legislation requiring local jurisdictions with SRAs to adopt minimum recommended standards pertaining to road standards for fire equipment access, standards for identifying streets, roads, and buildings, minimum private water supply reserves for emergency fire use, and fuel breaks and greenbelts to achieve fuel reductions (County of Fresno 2021). Furthermore, compliance with AB 747 and SB 99 as part of the County's next Multi-Jurisdictional Hazard Mitigation Plan would identify evacuation routes in the event of wildfires. Implementation of 2042 General Plan policies and actions associated with emergency planning and response, along with the cooperation of local fire protection districts, would ensure that potential impacts from implementation of the GPR/ZOU on emergency response and evacuation would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

<p><b>Threshold 2:</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the GPR/ZOU, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</p> <p><b>Threshold 5:</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the GPR/ZOU expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</p>
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**IMPACT WFR-2 THE GPR/ZOU WOULD NOT FACILITATE URBAN DEVELOPMENT IN AREAS MOST SUSCEPTIBLE TO WILDFIRE. PREVAILING WIND AND SLOPES WOULD GENERALLY SPREAD FIRE AWAY FROM AREAS WHERE URBAN DEVELOPMENT IS ENVISIONED. HOWEVER, THERE REMAINS A POSSIBILITY THAT DEVELOPMENT UNDER THE GPR/ZOU WOULD OCCUR IN AREAS IN PROXIMITY TO MFHSZ, HFHSZ, AND VHFHSZ THAT COULD LEAD TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDLAND FIRES. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

As mentioned under Impact WFR-1, areas along the Sierra Nevada foothills east of Highway 99 are designated as State Responsibility Area (SRA) Moderate to Very High Fire Hazard Severity Zones and areas directly to the west of Interstate 5 and the City of Coalinga are designated as SRA Moderate to High Fire Severity Zones (CAL FIRE 2020c). A majority of the County is not considered at high risk of wildfire. Wildfire risk in Fresno County is most prevalent surrounding the Sierra Nevada Mountain range to the east as well as the Coast Range area of the County, generally west of Interstate 5. These areas are undeveloped and contains large tracts of vegetation cover that can act as fire fuel. The GPR/ZOU does not envision development in the Sierra Nevada range. The majority of the Sierra Nevada range in the County is federal land and not subject to the GPR/ZOU. Additionally, the GPR/ZOU envisions most development within proximity to incorporated cities in the County, which are generally outside of the Sierra Nevada range and the Coast Range areas of the County. The developed or urbanized areas also have fewer wildland fuels because flammable vegetation has been displaced by structures, roadways, parking lots, landscaped areas, and other similar features. However, although most development would be located outside of the Moderate to Very High Fire Hazard Severity Zones, there remains a possibility that development would occur in proximity to those areas which could potentially exacerbate wildfire risks.

As described above, prevailing winds in the County generally blow southeast (NOAA 2020). With the presence of the nearby eastern slopes of the Sierra Nevada Mountains, a wildfire could potentially be carried up slopes and away from the central, urban areas of the County. If a wildfire were to occur along the western slopes of the Coast Range, it could potentially carry the fire, as well as smoke and air pollutants, east towards the more urbanized areas of the County. However, areas bordering the west of Interstate 5 are used primarily for agriculture which creates a buffer for wildfire spread because agriculture land is often irrigated or plowed and have no vegetation. Although development exists along the western side of Interstate 5, such as development in and near Coalinga, Policy HS-B.4 of the Health and Safety Element of the 2042 General Plan, listed below, is intended to reduce the risks of fire hazard areas.

**Policy HS-B.4: Fire Risk Management.** The County shall require that new discretionary development including residential subdivisions and large commercial proposals in high-fire-hazard areas have fire-resistant vegetation, cleared fire breaks separating communities or clusters of structures from native vegetation, or a long-term comprehensive vegetation and fuel management program. Fire hazard reduction

measures shall be incorporated into the design of development projects in fire hazard areas. *(RDR/PSP)*

The policy includes measures such as landscaping with fire resistant plants and placement of firebreaks to separate residential and open space areas. This measure would reduce the potential for uncontrolled spread of wildfire. Policy HS-B.6, listed below, would ensure adequate fire and emergency service access in foothill and mountainous areas.

**Policy HS-B.6: Foothill and Mountain Fire and Emergency Service Access.** The County shall require that new foothill and mountain subdivisions and residential areas in Very High Fire Hazard Severity Zones of more than four (4) parcels provide for safe and ready access for fire and other emergency equipment, for routes of escape that will safely handle evacuations, and for roads and streets designed to be compatible with topography while meeting fire safety needs. *(RDR)*

Additional policies under Goal HS-B would further reduce wildfire impacts through coordination with other agencies and adequate management of wildfire precursors and risks, which are listed under Impact WFR-1, previously within this impact, below:

**Goal HS-B** To minimize the risk of loss of life, injury, and damage to property and natural resources resulting from fire hazards.

**Policy HS-B.1: Fire Hazards Review.** The County shall review project proposals to identify potential fire hazards and to evaluate the effectiveness of preventive measures to reduce the risk to life and property. *(RDR)*

**Policy HS-B.2: Minimize Fire Hazard Risk Design.** The County shall ensure that development in high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards by increasing resistance of structures to heat, flames, and embers. Review The County shall review current building code standards and other applicable statutes, regulations, requirements, and guidelines regarding construction, and specifically the use and maintenance of non-flammable materials (both residential and commercial) and consider adopting amendments to Title 15 of the County Ordinance Code (Building and Construction) to implement stronger appropriate standards. Special consideration shall be given to the use of fire-resistant construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas of steep slopes. *(RDR)*

**Policy HS-B.3: Telecommunications.** The County shall coordinate with telecommunication service entities to fire-harden communications.

**Policy HS-B.5: Landscape Features.** In consultation with the local fire agency and CalFire, the County shall ~~site~~ require structures to be sited to maximize low-flammability landscape features to buffer against wildfire spread. Consultation with the local fire agency will be necessary to make this determination.

**Policy HS-B.10: Fire Agency Review of Development Proposals.** The County shall refer development proposals in the Very High Fire Hazard Severity Zones and State Responsibility Areas of the unincorporated county to the appropriate local fire agencies for review of compliance with fire safety standards. If dual responsibility exists, both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall apply. *(RDR/IGC)*

**Policy HS-B.11: Foothill and Mountain Year-round Fire Protection.** The County shall work with Cal Fire and local fire agencies to require that provisions for establishing development requirements for year-round fire protection in foothill and mountain areas are developed where having existing or proposed population concentrations of population are such that need structural fire protection is needed, as well as and for agricultural land uses located in and bordering fire hazard zones. (RDR/PSP).

**Policy HS-B.12: Public Assembly Building Fire Safety Measures.** The County shall work to design new and modify existing County buildings of public assembly to incorporate adequate fire protection measures to reduce potential loss of life and property in accordance with State and local codes and ordinances and include consideration for filtration systems that improve air quality. (RDR)

**Policy HS-B.13: Water Storage.** The County shall permit development only within areas that have adequate water pressure, onsite water storage, or fire flows.

**Policy HS-B.14: Minimum Fire Flow Water Systems.** The County shall require new discretionary development to have water systems that meet fire flow requirements as determined by applicable California Fire Code requirements and/or National Fire Protection Association (NFPA) standards under the authority of the Chief Fire Code Official and as referenced in County Ordinance Code. Where minimum fire flow is not available to meet County standards, alternate fire protection measures, including sprinkler systems, shall be identified, and may be incorporated into development if approved by the appropriate fire protection agency. The County shall require that all public water provides maintain the long-term integrity of adequate water supplies and flow to meet fire suppression needs. (RDR)

**Policy HS-B.17: Smoke Detectors.** The County shall promote installation and maintenance of smoke detectors in existing residences and commercial facilities that were constructed prior to the requirement for their installation. (PSP)

**Policy HS-B.18: High-visibility Fire Prevention Programs.** The County shall work with local fire agencies to develop high-visibility fire prevention programs, including education programs and voluntary home inspections. (PSP/IGC)

**Policy HS-B.21: Fuel Loads on Federal Lands.** The County shall collaborate with federal agencies to better manage fuel loads and hazards that could impact County owned/operated infrastructure on federally owned or managed lands.

**Policy HS-B.22: Defensible Space.** The County shall make available and promote educational materials for defensible space standards, or vegetation “clear zones,” and vegetation compliance for all existing and new structures in areas that are designated by the California Department of Forestry and Fire Protection and Local Ordinance 15.60 as State Responsibility Areas or Very High Fire Hazard Severity Zones.

**Policy HS-B.18: Non-conforming Developments.** The County, working with applicable fire agencies, shall make reasonable effort to minimize the risk to existing developments in Very High Fire Hazard Severity Zones by educating property owners and responsible entities of the benefits of improving such developments to contemporary fire safe standards, in terms of road standards and vegetative hazard, and require all development to meet or exceed the County’s Title 15 – Building and

Construction, Chapter 15.60 State Responsibility Area Fire Safe Regulations of the County under the County's Code of Ordinances and applicable updates.

**Policy HS-B.25: State Responsibility Areas Fire Safe Regulation.** Require development to adhere to standards that meet or exceed Title 14, CCR, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5 (commencing with Section 1299.01) (Fire Hazard Reduction Around Buildings and Structures Regulations) for State Responsibility Areas and/or Very High Fire Hazard Severity Zones.

**Policy HS-B.27: Post Fire Re-development.** In the event of a large fire, the County shall evaluate re-development within the impacted fire zone to conform to contemporary fire safe standards and require all development to meet or exceed the County's Title 15 - Building and Construction, Chapter 15.60 State Responsibility Area Fire Safe Regulations of the County under the County's Code of Ordinances and applicable updates.

**Policy HS-B.27: State and Federal Regulations.** The County shall maintain and update its Master Emergency Services Plan, as necessary, to include an assessment of current emergency service and projected emergency service needs, and goals or standards for emergency service training for County staff and volunteers.

**Policy HS-B.28: Street Addressing Fire Safe New Construction and Re-Construction.** The County shall coordinate with local and state fire agencies to ensure that all new developments and applicable re-constructions (as defined by state law) in the very high fire hazard severity zone and State Responsibility Areas, comply with defensible space regulations, home and street addressing and signage, the latest fire-safe standards, Board of Forestry and Fire Protection fire safe regulations and the most current version of the California Building Code and California Fire Code.

**Policy HS-B.29: Underground Power Lines.** Coordinate with Southern California Edison and Pacific Gas and Electric Company to implement an electrical undergrounding plan with a focus on critical evacuation roadways and areas with highest wildfire risk.

Moreover, new construction would be subject to the California Fire Code, which include safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Construction would also be required to meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards.

In summary, the GPR/ZOU does not envision development in the areas of the County most susceptible to fire, such as the Sierra Nevada range and Coast Range. The GPR/ZOU envisions new development in or near urban areas, such as incorporated cities. However, there remains a possibility that development under the GPR/ZOU would occur in areas in proximity to MFHSZ, HFHSZ, and VHFHSZ. Adherence to existing requirements and to Goal HS-B and Policies HS-B.1 through HS-B.31 of the Fresno County General Plan Safety Element would reduce impacts related to wildfire risks to the extent feasible. However, development in or near MFHSZ, HFHSZ, and VHFHSZs

that may occur in accordance with the GPR/ZOU could potentially exacerbate existing wildfire risks, and impacts would be significant and unavoidable.

## **Mitigation Measures**

Because wildfire hazards and risk are determined based on site specific conditions and proposed project design, there are no feasible mitigation measures that would further reduce impacts to wildfire beyond implementation of the proposed 2042 General Plan policies at this time. However, in accordance with Policy HS-B.1: Fire Hazards Review and Policy HS-B.2: Minimize Fire Hazard Risk Design, once specific project applications are proposed and reviewed by County staff, there may be new feasible mitigation that would reduce impacts on a project level basis. Those site-specific and project-specific actions may include some of, but are not limited to, the following measures, which are in accordance with the California Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act:

- Increasing housing density and consolidated design, relying on higher density infill developments as much as possible
- Avoidance and minimization of low-density exurban development patterns or leapfrog-type developments (i.e., those with undeveloped wildland between developed areas)
- Decreasing the extent and amount of “edge,” or interface area, where development is adjacent to undeveloped wildlands
- Creation of buffer zones and defensible space within and adjacent to the development, with particular attention to ensuring that vegetation will not touch structures or overhang roofs. It is also important that legal obligations are structured so that defensible space measures are retained over time
- Siting projects to maximize the role of low-flammability landscape features that may buffer the development from fire spread
- Undergrounding power lines
- Limiting development along steep slopes and amidst rugged terrain, so as to decrease exposure to rapid fire spread and increase accessibility for fire-fighting
- Placement of development close to existing or planned ingress/egress and designated evacuation routes to efficiently evacuate the project population and the existing community population, consistent with evacuation plans, while simultaneously allowing emergency access
- Placement of projects close to adequate emergency services
- Construction of additional points of ingress and egress and modification of evacuation routes to minimize or avoid increasing evacuation times or emergency access response times
- Fire hardening structures and homes—upgrading the building materials and installation techniques to increase the structure’s resistance to heat, flames, and embers—beyond what is required in applicable building codes, both for new structures and existing structures in proximity to the new development
- Requiring fire-hardened communication to the project site including high-speed internet service
- Enhanced communication to the project population about emergency evacuation plans and evacuation zones
- Parking limitations to ensure access roads are not clogged with parked vehicles
- On-site water supply/storage to augment ordinary supplies that may be lost during a wildfire



## Significance After Mitigation

With implementation of 2042 General Plan policies, the risk of loss of structures and the risk of injury or death due to wildfires would be reduced. Project-specific impacts regarding wildfire risk would be addressed prior to project implementation during the planning and design process. As noted above, project-specific measures would be required in accordance with Policies HS-B.1 through HS-B.31, and where warranted and feasible, the measures listed above in accordance with the Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act may be required on an individual basis.

Compliance with local, State, and federal rules and regulations and local General Plan policies would minimize the potential for adverse wildfire impacts to result from buildout of the proposed GPR/ZOU. Furthermore, reasonably foreseeable development facilitated by the GPR/ZOU would be required to implement additional mitigation if project-specific analysis identifies the potential for wildfire impacts. However, even with mitigation, it is not possible to prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires. Therefore, the 2040 General Plan operational impact related to wildfire exposure and exacerbation risk would be significant and unavoidable.

**Threshold 3:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the GPR/ZOU require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**IMPACT WFR-3 THE GPR/ZOU FACILITATES GROWTH PRIMARILY AS INFILL AND REDEVELOPMENT WITHIN URBANIZED AREAS OF THE COUNTY WHERE INFRASTRUCTURE AND ROADS CURRENTLY EXIST. THE PROPOSED GENERAL PLAN POLICIES REQUIRE NEW DEVELOPMENT TO HAVE ADEQUATE FIRE AND EMERGENCY ACCESS, WHICH WOULD REDUCE THE POTENTIAL FOR FIRE RISK. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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The GPR/ZOU would facilitate growth in Fresno County, including 11,275 new housing units through 2042. This growth would occur primarily as infill and redevelopment within and near the urbanized areas of Fresno County, such as areas adjacent to the City of Fresno. Therefore, the majority of roads and utility infrastructure required for growth facilitated by the GPR/ZOU would be existing or would occur in currently developed areas, resulting in negligible temporary or ongoing environmental impacts. Because most development envisioned in the GPR/ZOU would occur in urbanized areas of Fresno County, where large tracts of vegetation cover are not present, the risk of wildfire would not be exacerbated.

As mentioned under Impact WFR-1, areas along the Sierra Nevada foothills east of Highway 99 are designated as State Responsibility Area (SRA) Moderate to Very High Fire Hazard Severity Zones and areas directly to the west of Interstate 5 and the City of Coalinga are designated as SRA Moderate to High Fire Severity Zones (CAL FIRE 2020c). Wildfire risk is higher in these areas since large areas of vegetation cover exists as fuel for fires. The GPR/ZOU does not envision substantial development in the Sierra Nevada or the Coast Range areas of the County. Therefore, the GPR/ZOU would not increase the need for fuel breaks or emergency water sources in the areas of the County most susceptible to wildfire.

The Health and Safety Element of 2042 General Plan includes Policy HS-B.7, listed below, which requires that new development provide adequate fire and emergency vehicle access throughout the County.

**Policy HS-B.7: Fire and Emergency Vehicle Access.** The County shall require new discretionary development projects to have adequate access for fire and emergency vehicles and equipment. All major subdivisions shall have a minimum of two (2) points of ingress and egress. The County shall implement feasible recommendations in AB2911 Office of the State Fire Marshall Subdivision Survey Reports, which survey subdivisions without a secondary means of egress routes for evacuation and other fire safety factors (*RDR*).

Policy HS-B.7 of the 2042 General Plan, while requiring emergency access routes, pertains to access within development where other roads and structures and infrastructure exist or would exist from buildout of the GPR/ZOU. Additionally, Policies HS-A.12 and HS-B.31, listed under Impact WFR-1 would reduce impacts to emergency access through establishing access/evacuation routes and evacuation modeling and planning. Therefore, the access required by Policy HS-B.5 and evacuation planning required by Policies HS-A.12 and HS-B.31 would not result in new significant environmental impacts. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 4:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the GPR/ZOU expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**IMPACT WFR-4 MOST OF THE DEVELOPMENT UNDER THE GPR/ZOU WOULD OCCUR IN GENERALLY FLAT AND URBANIZED AREAS WHICH WOULD NOT POSE AS A RISK FOR FLOODING OR LANDSLIDES. IN ADDITION, DEVELOPMENT ENVISIONED UNDER THE GPR/ZOU WOULD COMPLY WITH 2042 GENERAL PLAN POLICIES AS WELL AS STATE REGULATIONS PERTAINING TO BUILDING MATERIAL AND WILDFIRE DEVELOPMENT STANDARDS WHICH WOULD REDUCE THE POTENTIAL OF WILDFIRE AND PREVENT EXPOSURE OF PEOPLE AND STRUCTURES TO A SIGNIFICANT RISK AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Severe wildfires damage the forest or shrub canopy, the plants below, as well as the soil. This can result in increased runoff after intense rainfall, which can put homes and other structures below a burned area at risk of localized floods and landslides. As mentioned under Impact WFR-1, areas along the Sierra Nevada foothills east of Highway 99 are designated as State Responsibility Area (SRA) Moderate to Very High Fire Hazard Severity Zones and areas directly to the west of Interstate 5 and the City of Coalinga are designated as SRA Moderate to High Fire Severity Zones (CAL FIRE 2020c). However, the GPR/ZOU does not envision substantial development in the Sierra Nevada or the Coast Range areas of the County, and would focus development in urbanized and developed areas in Fresno County that are generally flat and devoid of flammable vegetation. Therefore, the

GPR/ZOU would not substantially expose people or structures to downslope or downstream flooding or landslides, or a significant risk of loss, injury or death involving wildland fires.

As mentioned in Impact WRF-2, Policy HS-B.4 in the Health and Safety Element of the 2042 General Plan would reduce the risk of wildfire by requiring fire-resistant vegetation, cleared fire breaks, and a long-term comprehensive vegetation and fuel management program for high fire hazard areas. Furthermore, Policy HS-B.6 would ensure adequate fire and emergency service access in foothill and mountainous areas to reduce the potential for severe wildfire and damages. Moreover, new construction would be subject to the California Fire Code, which include safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Construction would also be required to meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards. As a result, the potential risk for structures and people to be exposed to flooding or landslides would be further reduced. Impacts of the GPR/ZOU would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

## **4.18.4 Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative wildfire impacts is all of Fresno County. This geographic scope is appropriate for wildfire because wildfires can cause impacts to large areas. Adjacent development that is considered part of the cumulative analysis includes buildout of General Plans for cities within Fresno County as well as the GPR/ZOU, and buildout of areas adjacent to the development under the General Plans.

As shown in Figure 4.17-1, most of Fresno County is not considered as high risk for wildfires. Only areas in and along the Sierra Nevada foothills east of Highway 99 and areas of the Coast Range directly to the west of Interstate 5 and the City of Coalinga are designated as Moderate Fire Hazard Severity Zones (MFHSZ) to Very High Fire Hazard Severity Zones (VHFHSZ), and MFHSZ to High Fire Hazard Severity Zones (HFHSZ), respectively. Within the geographic scope for this cumulative analysis (all of Fresno County), wildfire-related impacts could be significant if development is in mountainous or HFHSZ and VHFHSZ that could exacerbate risks. Cumulative development throughout Fresno County would increase the density of development in urban areas and within designated urban service areas, which could exacerbate wildfire risks. All new development and infrastructure would be subject to statewide standards for fire safety in the California Fire Code, as described in Impact WRF-2, as well as policies in the 2042 General Plan. As discussed in the impact analyses above, compliance with the California Fire Code and 2042 General Plan policies would

reduce the risk of wildfire and would ensure adequate fire and emergency services in the mountainous areas of the County most at risk for fire. Additionally, most of the incorporated cities in the County are not in or adjacent to the mountainous areas. However, even with mitigation, it is not possible to prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires. Therefore, cumulative development throughout Fresno County would result in a significant cumulative wildfire impact. The GPR/ZOU would have a considerable contribution to a cumulative impact.

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## 4.19 Effects Found Not to Be Significant

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This section discusses issues for which impacts were determined to be less than significant and thus do not require a full environmental impact analysis. Environmental issues discussed in this section include Mineral Resources.

### 4.19.1 Mineral Resources

Historically, Fresno County is known for being mineral rich with an abundance of aggregate resources and high value commodities such as granite and marble, oil, coal, and gold, silver, copper, mercury, and asbestos. Overall, Fresno County has 623 total records of mineral resource sites including extraction mines, processing facilities, and known mineral deposit occurrences overall (Fresno County 2021). Due to Fresno's mineral rich history and rapid rates of extraction, the county was a leading producer of mineral and aggregate resources, which resulted in a disproportionate balance between local supply and the demand for materials. According to the California Geological Survey Department of Conservation's Aggregate Sustainability in California (2012), the Fresno region has 10 or fewer years remaining to meet demand with existing aggregate resources. Two areas have been identified as target aggregate resource areas in the county. The San Joaquin River Resource Area (which extends generally from just southwest of the Friant Dam to Herndon) and the Kings River Resource Area (which extends to the east and northeast of Sanger). The 50-year demand was estimated at 435 million tons of aggregate. Only 46 million tons were permitted for extraction, leaving 389 million tons of unmet demand for aggregate in Fresno County. The county is one of four regions in California faced with limited permitted aggregate reserves.

Aggregate resources and chromium are the two most plentiful mineral resources. Demand for tungsten is on the rise because of its durability and wide range of uses including carbide in cemented carbides, metal working, mining and construction industries, lighting and electronic application, high-density weights, turbine blades, and as a substitute for lead in bullets.

The California Geological Survey has mapped land along the San Joaquin River and Kings River as Mineral Resource Zone 2 (MRZ-2), which means mineral resources are present and available in this area. While both areas contain MRZ-2 deposits, the San Joaquin River Resource Area also contains MRZ-1 deposits primarily surveyed in the western side of Fresno County. All remaining areas surveyed were classified as MRZ-3.

The Open Space and Conservation Element of the proposed General Plan contains Policies OS-1 through OS-11 intended to ensure that land uses adjacent to mineral areas or operations are compatible such that impacts to the mineral resource or impacts associated with mineral resource recovery to adjacent land uses is minimized. The San Joaquin River Parkways Master Plan contains several mineral resource goals and objectives that support the regional management plan for the San Joaquin River. Additionally, the County's Ordinance Code (Section 834.4.220) includes regulations for surface mining and reclamation in all districts in the county to ensure that mineral resources are recovered efficiently and safely, with minimal disruption to surrounding land uses and environmental values, and that sites are reclaimed to a usable condition which is readily adaptable for alternative land use. With adherence to these local policies and goals, impacts to mineral resources would be less than significant.

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## 5 Other CEQA Required Discussions

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This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the proposed project.

### 5.1 Growth Inducement

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth-inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas. The purpose of the project is to plan for the anticipated growth of Fresno County by adopting the Fresno County GPR/ZOU. The potential impacts associated with this growth would be mitigated through the goals and policies included in the 2042 General Plan that provide for orderly and planned growth in the county. This planned growth in existing urbanized areas would assist in reducing growth elsewhere in the more rural and agricultural sections of the county. Analysis of project-related growth is analyzed through this EIR for individual environmental issue areas in Sections 4.1 through 4.18.

#### 5.1.1 Population and Employment Growth

As discussed in Section 4.12, *Population and Housing*, development associated with the GPR/ZOU could accommodate an estimated 24,607 new residents, 20,745 new jobs and 11,275 new households in the county. With the estimated growth as part of the proposed project, the county of Fresno would have a 2042 population of approximately 243,591, along with 120,019 total jobs and 83,106 households. This would not exceed FCOG growth projections for 2042. Employment in the county is projected to increase by approximately 6 percent per year by 2042. Therefore, the project would not directly or indirectly induce significant population growth in the county beyond that already anticipated.

#### 5.1.2 Removal of Obstacles to Growth

The GPR/ZOU's focus is on controlled development in the existing urbanized portions of the county. State and regional demographic trends are anticipated to limit countywide growth to within the forecast amounts. Because no exceedance of the population forecast is anticipated, the GPR/ZOU would not induce substantial population growth. One of the fundamental purposes of the GPR/ZOU is to direct future development in such a way as to minimize the impacts of growth by emphasizing the intensification and reuse of already developed areas, thus minimizing pressure to develop on the remaining open space and agricultural land. Specific goals and policies in the Land Use and Housing Elements of the 2042 General Plan direct the County to emphasize this pattern of development, to ensure that the GPR/ZOU does not result in substantial unplanned growth. Therefore, although development of vacant lands would require new infrastructure and expansion of services, new development would occur primarily where existing roads, water, and sewer are in place and in a manner that minimizes the impact of development on existing facilities and services. In addition, the goals, policies, and programs of the Land Use and Housing Elements would limit



development in the county of Fresno, thereby controlling, rather than removing, obstacles to growth. These policies would support growth management in order to protect and/or enhance whenever feasible the environment, maintain the existing infrastructure in the county, discourage development that “leapfrogs” over vacant and unused land, and encourage development around employment centers to provide local residents with opportunities to live and work in the same community (Policies LU-A.2 to LU-H.16).

## 5.2 Irreversible Environmental Effects

The *CEQA Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the development that would be facilitated by implementation of the proposed project.

Construction activity associated with planned development that would be accommodated under the GPR/ZOU would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to Fresno County or the proposed GPR/ZOU. The addition of new residential and non-residential development in the county through 2042 would irreversibly increase local demand for non-renewable energy resources such as petroleum and natural gas. However, increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in the 2042 General Plan, are expected to offset the demand to some degree. It is not anticipated that growth accommodated under the GPR/ZOU would significantly affect local or regional energy supplies.

Growth facilitated by the GPR/ZOU would also require an irreversible commitment of County services, water supply, and wastewater treatment. As discussed in Section 4.16, *Utilities and Service Systems*, development of utility infrastructure would be consistent with the goals and policies of the 2042 General Plan. However, because it is not known where new facilities would be required and it cannot be determined whether sufficient water supplies are available to accommodate growth, impacts would be significant and unavoidable.

The additional vehicle trips associated with growth from implementation of GPR/ZOU would increase local traffic, noise levels, and regional air pollutant and GHG emissions. As discussed in Section 4.3, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*, implementation of the 2042 General Plan policies, and regional air pollution programs, and mitigation measures would reduce the air pollutant and GHG emissions associated with individual future development projects. Implementation of the GPR/ZOU would conflict with or obstruct implementation of an AQMP, and contribute to a cumulatively considerable increase in criteria pollutants; therefore, impacts would be significant and unavoidable. Furthermore, GHG emissions would not be reduced to below significance thresholds and would result in a significant, unavoidable impact. As discussed in Section 4.11, *Noise*, implementation of proposed policies and mitigation measures would reduce the noise impacts associated with future growth to less than significant. As discussed in Section 4.16, *Transportation and Traffic*, the 2042 General Plan policies and mitigation measures would mitigate traffic and VMT to the extent feasible. However, population growth facilitated by the GPR/ZOU and

the region would result in additional vehicle trips on area roadways, resulting in significant and unavoidable VMT impacts.

### 5.3 Significant and Unavoidable Impacts

The environmental effects of the proposed project, along with recommended mitigation measures, are discussed in detail in Section 4, *Environmental Impact Analysis*, of this EIR and summarized in the Executive Summary. The following environmental issues were determined to be less than significant, or can be reduced to less than significant with the incorporation of mitigation measures:

- Aesthetics
- Biological Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Tribal Cultural Resources
- Wildfire

Section 15126.2(b) of the *CEQA Guidelines* requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels, as a result of implementation of the project. The following environmental issues were determined to result in potential significant and unavoidable impacts:

- Agricultural and Forestry Resources: conversion of Farmland to a non-agricultural use
- Air Quality: conflict with or obstruct implementation of a regional air quality management plan; result in a cumulatively considerable net increase of any criteria pollutant; expose sensitive receptors to substantial pollutant concentrations
- Cultural Resources: substantial adverse change in the significance of a historical resource
- Geology and Soils: potential to destroy paleontological resources or unique geologic features
- Greenhouse Gas Emissions: increase in GHG emissions beyond local threshold
- Transportation and Traffic: increase in VMT impacts beyond County threshold
- Utilities and Service Systems: relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities; insufficient water supply to serve the project and reasonably foreseeable future development; inadequate wastewater treatment capacity; generation of solid waste in excess of standards or capacity of local infrastructure; consistency with federal, state, and local solid waste management and reduction statutes and regulations
- Wildfire: development could occur in or near Fire Hazard Severity Zones leading to risk of loss, injury, or death involving wildland fires

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## 6 Alternatives

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As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed GPR/ZOU that could feasibly achieve similar objectives. The General Plan Vision Statement is as follows:

This General Plan sets out a vision reflected in goals, policies, programs, and diagrams for Fresno County through the plan horizon year of 2042 and beyond. This plan carries forward major policies that have been in place since the mid-1970s, but expands and strengthens them to meet the challenges of the 21<sup>st</sup> century.

The County sees its primary role to be the protector of prime agricultural lands, open space, recreational opportunities, and environmental quality, and the coordinator of countywide efforts to promote economic development.

As noted in Section 2.6, *Project Objectives*, this General Plan Review and Zoning Ordinance Update does not designate/expand new growth areas or new development, with the exception of those sites within urbanized areas to be identified for additional housing as required to meet the State mandated Regional Housing Needs Assessment (RHNA) for the sixth (6th) Cycle Housing Element.

The General Plan provides the following guiding themes:

- **Economic Development**
  - The plan seeks to promote job growth and reduce unemployment through the enhancement and expansion of its agricultural economic basis, plus facilitate business parks that include manufacturing, processing, and distribution.
- **Agricultural Land Protection**
  - The plan seeks to protect its productive agricultural land as the county's most valuable natural resource and the historic basis of its economy through directing new urban growth to cities and existing unincorporated communities and by limiting the encroachment of incompatible development upon agricultural lands.
- **Growth Accommodation**
  - The plan is designed to accommodate population growth through the year 2042 consistent with the forecasted projection of 234,591 people in the unincorporated county by 2042. This represents an additional population of approximately 33,607.
- **Urban-Centered Growth**
  - The plan promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities, where public facilities and infrastructure are available or can be provided consistent with the adopted General Plan or Community Plan to accommodate such growth. Accordingly, this plan prohibits designation of new areas as Planned Rural Community and restricts the designation of new areas for rural residential development, while allowing for the orderly development of existing rural residential areas.

- **Efficient and Functional Land Use Patterns**
  - The plan promotes compact, mixed-use, and pedestrian- and transit-oriented development within city spheres, as well as in the county's unincorporated communities.
- **Service Efficiency**
  - The plan provides for the orderly and efficient extension of infrastructure such as roadways, water, wastewater, drainage, and expansion services to support the county's economic development goals and to facilitate compact growth patterns. The plan supports development of a multimodal transportation system that meets community economic and freight mobility needs, improves air quality, and shifts travel away from single-occupant automobiles to less-polluting transportation modes.
- **Recreational Development**
  - The plan supports the expansion of existing recreational opportunities and the development of new opportunities, particularly along the San Joaquin and Kings Rivers, in the foothills, and in the Sierras, for the employment of county residents and to increase tourism as part of the county's diversified economic base.
- **Resource Protection**
  - The plan seeks to protect and promote careful management of the county's natural resources, such as its soils, water, air quality, minerals, and wildlife and its habitat, to support the county's economic goals and to maintain the county's environmental quality.
- **Health and Safety Protection**
  - The plan seeks to protect county residents and visitors through mitigation of hazards and nuisances such as geological and seismic hazards, flooding, wildland fires, transportation hazards, hazardous materials, noise, and air pollution.
- **Health and Well-Being**
  - The plan seeks to promote the health and well-being of its residents, recognizing that the built environment affects patterns of living that influence health. The plan seeks to ensure long-term conservation of agricultural lands and environmentally sensitive landscapes, encourage walking and biking and provide linked transit systems, promote greater access to healthy foods and produce, particularly fresh locally-grown produce, and create community centers that provide access to employment, education, business, and recreation.
- **Enhanced Quality of Life**
  - The plan strives throughout all its elements to improve the attractiveness of the county to existing residents, new residents, and visitors through increased prosperity, attractive forms of new development, protection of open space and view corridors, promotion of cultural facilities and activities, efficient delivery of services, and expansion of recreational opportunities.
- **Affordable Housing**
  - The plan seeks to assure the opportunity for adequate and affordable housing for all residents in Fresno County. While directing most new growth to cities, the plan also seeks to provide for the maintenance of existing housing and for new construction in designated areas in the unincorporated area of the county.

- **Environmental Justice**
  - The plan is designed to create opportunities for every resident to live in healthy and safe communities regardless of race, color, national origin or income, and to create opportunities for meaningful community involvement in the development of laws and regulations that affect every community's natural surroundings, and the places people live, work, play and learn.

The analysis of alternatives focuses on various land use scenarios that incorporate different assumptions regarding the combinations of future land uses and associated infrastructure improvements. Alternatives provided are intended to reduce or avoid significant and unavoidable impacts. As discussed in Section 4, *Environmental Impact Analysis*, the proposed GPR/ZOU would have significant and unavoidable impacts related to aesthetics, agricultural and forestry resources, biological resources, cultural resources, public services and recreation, traffic and transportation, utilities and service systems, and wildfire. An alternative location for the project as a whole is not possible. However, in Fresno County, the alternatives below consider different patterns of land use and infrastructure to accommodate forecasted future growth and regional housing needs.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project (Continuation of the 2000 General Plan)
- Alternative 2: Increased Development Near City of Fresno
- Alternative 3: Increased Development Near City of Fresno and Clovis and in Community Plan Areas

## 6.1 Alternative 1: No Project Alternative (2000 General Plan)

### 6.1.1 Description

The No Project Alternative would involve continued implementation of the 2000 General Plan. This alternative is comprised of a land use pattern that reflects the land use identified in the existing Fresno County General Plan. Under this alternative, the proposed GPR/ZOU would not be adopted and the existing General Plan, including the land use map and all the General Plan goals and policies, would remain in place through the horizon year of 2042. Thus, any new development in unincorporated Fresno County would occur consistent with the existing land use designations and the allowed uses in each designation. Similarly, any new infrastructure would occur as envisioned in the 2000 General Plan.

Overall growth forecasted for the unincorporated county through the year 2042 would still occur consistent with FCOG population projections. However, one of the fundamental purposes of the proposed GPR/ZOU is to continue those 2000 General Plan policies that minimize pressure to develop on open space and agricultural land while modernizing policies and programs to bring the document into compliance with current state law and local organization changes. Under the No Project Alternative, those land use policies that would continue to ensure the conservation of agricultural land, wildlife habitat, and direction of development to the cities and established unincorporated communities would be jeopardized. The No Project Alternative would fail to meet requirements established by California General Plan law and other legislation passed since the

adoption of the 2000 General Plan. Alternative 1 would less effectively fulfill project objectives listed above and in Section 2, *Project Description*.

The proposed GPR/ZOU would involve revisions to the Health and Safety Element to incorporate a climate change and resiliency vulnerability assessment, as required by SB 379, and to identify residential developments in hazardous areas, as required by SB 99. Furthermore, to more clearly address requirements established by SB 1000, the proposed GPR/ZOU would involve revisions to the General Plan's Environmental Justice Element. Because the No Project Alternative would not involve revisions to the existing General Plan, continued implementation of the 2000 General Plan would not comply with state General Plan law, SB 379, SB 99, and SB 1000.

## 6.1.2 Impact Analysis

Growth and development would occur in Fresno County regardless of implementation of the proposed GPR/ZOU. Therefore, the overall projected population growth and increased development in Fresno County would occur under this alternative as it would under the proposed GPR/ZOU. However, without implementation of new or revised policies and programs included in the proposed GPR/ZOU that increase compliance with state law and address local policy and organizational changes which have occurred since 2000, existing objectives to conserve natural resources and focus development to areas already designated in the cities and established unincorporated communities, environmental impacts of the No Project Alternative would generally be greater than those of the proposed GPR/ZOU.

As an example, the No Project Alternative would lack revisions to existing policies and programs and the addition of new policies which could result in increased impacts to agricultural and forestry resources, biological resources, and transportation. Therefore, increased conversion of agricultural land could occur under Alternative 1. While impacts to agricultural land would be significant and unavoidable under the proposed GPR/ZOU, impacts could increase under this alternative and would remain significant and unavoidable. Furthermore, the No Project Alternative would not promote compact growth and would not direct new urban development to existing unincorporated urban communities in a manner consistent with revisions to state law since 2000 in comparison to the proposed GPR/ZOU; thus, this alternative could generate increased VMT compared to the proposed GPR/ZOU. Impacts would be greater and would continue to be significant and unavoidable.

Because growth and development would continue to occur regardless of implementation of the proposed GPR/ZOU, environmental impacts identified throughout this EIR would generally be greater under the No Project Alternative as this alternative would not introduce new policies and plans to avoid and minimize environmental impacts. As demonstrated with agricultural resources and transportation above, this alternative would not effectively guide growth in Fresno County and would result in increased environmental impacts. Furthermore, this alternative would not comply with General Plan law and legislation that requires revisions to the County's General Plan.

## 6.2 Alternative 2: Increased Development near City of Fresno

### 6.2.1 Description

Alternative 2, the Increased Density near City of Fresno Alternative, would consist of the same policies and land use designations as the proposed GPR/ZOU; however, in unincorporated areas within the sphere of influence (SOI) of the City of Fresno, it would align the proposed County land

use designations and zoning with the City of Fresno's land use designations and zoning, where current City of Fresno land use designation and zoning allow for more development than the County's current designations and zoning. Under this alternative, the SOI area would eventually be planned for annexation into the City of Fresno. Under this alternative, the density of development in the SOI area would be increased. The purpose of this change is to allow more of the growth projected through 2042 to occur near existing urban development within and adjacent to the City of Fresno rather than in other more rural areas of the county. This would be expected to reduce VMT per capita.

## 6.2.2 Impact Analysis

### a. Aesthetics

Alternative 2 would consist of generally the same policies and land use designations as the proposed GPR/ZOU and would involve the same policies and design standards to reduce impacts to scenic vistas, scenic corridors, and zoning and regulations governing scenic quality. Because this alternative would include moderately increased density of rural residential lands within the SOI of the City of Fresno, more residential growth would occur near existing urban development rather than in more rural, undeveloped areas of the county. This would result in reduced impacts to visual character or quality of rural lands, as increased and more concentrated residential development near existing urban centers would be visually consistent with existing residential and urban development. Less residential development would occur in undeveloped, rural portions of the county, which would maintain the existing visual character of those areas. Furthermore, increased residential development in the City of Fresno's SOI would increase sources of light and glare in areas with existing light and glare. Moderately denser rural residential lands would only slightly increase light and glare in rural residential areas near the city of Fresno's urban center, and increased development in this area would reduce sources of light and glare in rural parts of the county where no sources currently exist. Accordingly, impacts related to aesthetics would be slightly reduced under this alternative, and impacts would remain less than significant.

### b. Agricultural and Forestry Resources

Alternative 2 would involve generally the same land use policies as the proposed GPR/ZOU that would intend to conserve and protect agricultural and forestry lands and uses. Similar to the proposed GPR/ZOU, this alternative would promote compact growth by directing new urban development to the City of Fresno SOI. The moderately increased density of rural residential lands in this area would further promote compact growth near existing urban development. As a result, less land designated or zoned for agricultural or forestry use, would be converted to non-agricultural or non-forestry use. Furthermore, with increased residential development in areas already designated for such development, buildout under Alternative 2 would result in less conflict with existing zoning for agricultural use and Williamson Act contracts. Impacts related to agricultural and forestry resources would be reduced under this alternative. However, some rural residential development may still occur away from existing urban development, which could conflict with agricultural zoning or existing Williamson Act contracts. Although impacts would be reduced, impacts would remain significant and unavoidable.



### **c. Air Quality**

Alternative 2 would generally consist of the same policies and land use designations as the proposed GPR/ZOU and would facilitate development similar to the proposed GPR/ZOU. However, the increased density of lands within the City of Fresno's SOI under this alternative would facilitate increased residential development near existing urban development, where rural residential lands typically occur. As a result, air quality impacts related to residential construction and operation, including air quality impacts associated with mobile sources, would be shifted toward existing urban centers in the county. Similar to the proposed GPR/ZOU, implementation of San Joaquin Valley Air Pollution Control District (SJVAPCD) construction mitigation measures would reduce impacts related to construction emissions, but impacts would remain significant and unavoidable. Furthermore, the same overall growth and development would occur under Alternative 2; therefore, similar to the proposed GPR/ZOU, this alternative would result in significant and unavoidable impacts related to increases in criteria pollutants. Alternative 2, as with the proposed GPR/ZOU, would not exceed the rate of projected population growth associated with the General Plan. Accordingly, this alternative would be consistent with the SJVAPCD's ozone and particulate matter attainment plans. As buildout under this alternative would be similar to buildout guided by the proposed GPR/ZOU, Alternative 2 would result in an increase in toxic air emissions when compared to existing conditions. Finally, similar to the proposed GPR/ZOU, Alternative 2 would not generate odors affecting a substantial amount of people. Overall, air quality impacts under Alternative 2 would be similar to those of the proposed GPR/ZOU.

### **d. Biological Resources**

Alternative 2 would facilitate overall growth and development similar to the proposed GPR/ZOU and would include the same policies related to the protection of special-status species, riparian and wetland habitats, wildlife movement corridors, and other natural resources. The proposed GPR/ZOU would promote compact growth near existing urbanized areas, and Alternative 2 would further promote compact growth by increasing the density of existing lands within the SOI of the City of Fresno. Under the proposed GPR/ZOU, some development that occurs outside of urban areas would potentially impact special-status species and other biologically sensitive resources. While similar development would occur under Alternative 2, this alternative would further facilitate residential development near the City of Fresno, in areas that are already heavily disturbed and would shift development away from undisturbed, existing open space in the county. Accordingly, impacts to biological resources would be reduced under this alternative and would remain less than significant with implementation of mitigation measures and goals and policies of the General Plan.

### **e. Cultural Resources**

Except for increased density within the SOI of the City of Fresno, Alternative 2 would facilitate development similar to the proposed GPR/ZOU. This alternative would also include General Plan policies that would encourage the identification and designation of, and reduction of impacts to, historical and archaeological resources in Fresno County. However, Alternative 2 would involve increasing the density of lands near the City of Fresno, involving more compact growth near existing urban areas. As a result, less land would be disturbed under Alternative 2, which would reduce impacts related to archaeological resources. However, increased development in the City of Fresno SOI could impact existing historical resources in those areas, and development facilitated by Alternative 2 could affect known and potential historical resources. Therefore, while impacts to

archaeological resources would be reduced, impacts to historical resources would be similar to the proposed GPR/ZOU and impacts would remain significant and unavoidable.

#### **f. Energy**

Alternative 2 would involve increased density of development in rural residential areas, which primarily occur near existing cities and urban centers in Fresno County. Buildout and operation of Alternative 2 would consume energy similar to the proposed GPR/ZOU, and energy conservation and efficiency requirements established by CALGreen, the California Energy Code, and General Plan policies would continue to apply under this alternative. Because Alternative 2 would increase density near the City of Fresno, new rural residential development would likely be able to connect to existing energy infrastructure. Because new rural residential development facilitated by this alternative would likely be served by existing energy systems, energy would be distributed more efficiently, and less new energy consumption would be required. As a result, energy resources would be conserved compared to the proposed GPR/ZOU. Impacts would be reduced and would remain less than significant. Furthermore, as development facilitated by Alternative 2 would generally be similar to the overall development facilitated by the proposed GPR/ZOU, construction and operation of Alternative 2 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Similar to the proposed GPR/ZOU, no impact would occur.

#### **g. Geology and Soils**

Except for increased density within the City of Fresno SOI, Alternative 2 would facilitate development similar to the proposed GPR/ZOU. While the increased density within the City of Fresno's SOI would occur in an existing urban area, development throughout the unincorporated county has the potential to be located on an unstable geologic unit or unstable soils. However, development facilitated by Alternative 2 would also comply with building standards established by the California Building Code and policies of the 2042 General Plan that would minimize the potential of loss, injury, or death following a seismic event, as well as potential of on- or off-site ground failure. Additionally, similar to the proposed GPR/ZOU, buildout under Alternative 2 would comply with applicable regulations, including the Clean Water Act and 2042 General Plan policies, to ensure that impacts related to erosion and the loss of topsoil would be less than significant. Similar to the proposed GPR/ZOU, development facilitated by Alternative 2 would be required to connect to public sewer systems where available and comply with 2042 General Plan policies in areas where they are not. Since this alternative would result in increased development within the SOI of the City of Fresno, this alternative would likely involve less use of septic tanks and impacts would be reduced. Finally, development facilitated by this alternative would have significant and unavoidable impacts to paleontological resources, similar to the GPR/ZOU. Overall, impacts related to geology and soils would be reduced under Alternative 2 and impacts would remain significant and unavoidable.

#### **h. Greenhouse Gas Emissions**

Similar to the proposed GPR/ZOU, this alternative would generate temporary, short-term GHG emissions during construction and a long-term increase in GHG emissions through 2042. Mitigation Measure GHG-1 would apply under Alternative 2; however, GHG emissions would likely still exceed the locally applicable, project-specific efficiency thresholds. Because Alternative 2 would facilitate overall development similar to the proposed GPR/ZOU, the only difference being an increase in density within the SOI of the City of Fresno, impacts related to overall GHG emissions would be

similar and would remain significant and unavoidable. In terms of per capita GHG emissions, this alternative is expected to generate less VMT per capita as more residential development would occur near the City of Fresno, which is an existing urban area. As a result, GHG per capita under Alternative 2 would be reduced compared to the proposed GPR/ZOU. Impacts would be reduced, but would remain significant and unavoidable.

### **i. Hazards and Hazardous Materials**

Similar to the proposed GPR/ZOU, Alternative 2 would result in an incremental increase in the overall routine transport, use, storage, and disposal of hazardous materials in the county. Development facilitated by this alternative would also comply with applicable regulations related to the handling and storage of hazardous materials, in addition to 2042 General Plan policies that would minimize the risk of spills and public exposure to hazardous materials. Similar to the proposed GPR/ZOU, development facilitated by this alternative could result in an increase in hazardous emissions and handling of hazardous wastes within 0.25 mile of an existing or proposed school. Compliance with the California Education Code, the California Fire Code, and the California Health and Safety Code would minimize hazardous emissions near schools and impacts would be less than significant, similar to the proposed GPR/ZOU. While development facilitated by Alternative 2 could be located on hazardous materials sites, compliance with applicable regulations and 2042 General Plan policies would minimize impacts related to this development to a less-than-significant level, just as under the proposed GPR/ZOU. Alternative 2 would involve increased density near the existing City of Fresno; while this may increase development in an airport land use plan or within 2 miles of an existing airport, implementation of 2042 General Plan policies would minimize hazardous impacts related to people working and residing in these areas, similar to the proposed GPR/ZOU. This alternative, similar to the proposed GPR/ZOU, would involve a Health and Safety Element that contains policies related to emergency access and evacuation plans. Impacts related to emergency response plans would remain less than significant. Additionally, Alternative 2 would result in increased density of development near an existing city, which typically experience lower fire risk than rural areas. Accordingly, impacts related to the spread of wildland fires would be less than significant, similar to the proposed GPR/ZOU. Overall, impacts related to hazards and hazardous materials of Alternative 2 would be similar to the proposed GPR/ZOU, and impacts would remain less than significant.

### **j. Hydrology and Water Quality**

Alternative 2, similar to the proposed GPR/ZOU, would facilitate development that could result in discharge of pollutants to surface waters or contamination of shallow groundwater. While this alternative would involve denser development near an existing urban area, soil disturbance associated with construction could result in erosion, discharge of contaminated wastewater or stormwater, or accidental spills of hazardous materials. Similar to the proposed GPR/ZOU, compliance with applicable laws and regulations, in addition to goals and policies of the 2042 General Plan, would minimize the potential of water quality degradation and impacts would be less than significant. Alternative 2 would accommodate the same projected growth in Fresno County as under the proposed GPR/ZOU; accordingly, impacts related to groundwater management and implementation of water quality control plans would be similar and would remain less than significant. Development facilitated by Alternative 2 could alter existing drainage patterns of future development sites. Because this alternative would involve increased residential development near an existing urban area, Alternative 2 would involve increased runoff in SOI of incorporated cities and existing unincorporated communities. Increased runoff could result in increased on- or off-site

flooding and could contribute to exceeding the capacity of stormwater drainage systems. However, similar to the proposed GPR/ZOU, compliance with applicable regulations (e.g., the Clean Water Act) and implementation of 2042 General Plan policies would minimize the potential for increased runoff and flooding. Impacts would be similar to the proposed GPR/ZOU and would remain less than significant.

### **k. Land Use and Planning**

Alternative 2 would involve the same general land use pattern as the proposed GPR/ZOU but would increase the density within the City of Fresno SOI in accordance with City of Fresno land use designations and zoning. As a result, development would increase near the City of Fresno. This alternative, similar to the proposed GPR/ZOU, would not include substantial land use or circulation changes that would physically divide an established community. The 2042 General Plan would include policies and growth management strategies that would direct new growth to areas in already existing or planned development; Alternative 2 would also involve these policies, and impacts related to the division of established communities would be less than significant. Because this alternative would involve the same policies as the proposed GPR/ZOU, Alternative 2 would be generally consistent with applicable land use plans, policies, or regulations adopted to avoid or mitigate environmental effects, such as FCOG's RTP 2018-2042 or the SJVAPCD Air Quality Management plans. Impacts related to land use and planning would be similar to the proposed GPR/ZOU, and impacts would remain less than significant.

### **l. Noise**

Alternative 2 would involve denser development within the City of Fresno SOI compared to the proposed GPR/ZOU. As a result, construction of development facilitated by this alternative would temporarily generate an increased amount of noise nearby existing cities and urban areas, potentially affecting nearby noise-sensitive land uses. However, similar to the proposed GPR/ZOU, Alternative 2 would comply with standards of the Fresno County Ordinance Code and policies of the 2042 General Plan that limit construction related noise disturbance, and impacts would be less than significant. Similarly, development facilitated by this alternative would contribute new stationary noise sources associated with residential uses; due to denser residential development near existing urban centers, Alternative 2 would result in an increase of ambient noise. Compliance with the County's Noise Control Ordinance and implementation of General Plan policies would ensure that fixed noise sources do not exceed established noise level standards, and impacts would remain less than significant. Denser residential development would also contribute to an increased level of traffic noise within the City of Fresno SOI. However, the area surrounding the existing urban center already experiences elevated levels of traffic volumes and traffic noise, and increased development under this alternative would be unlikely to substantially increase existing traffic noise. Additionally, development facilitated by this alternative could temporarily generate groundborne vibration and impact nearby land uses; similar to the proposed GPR/ZOU, implementation of Mitigation Measures N-1(a) and N-1(b) would ensure that impacts are less than significant. As discussed in *Hazards and Hazardous Materials* above, Alternative 2 would increase the density of development in within the City of Fresno SOI, and there are multiple airports within or near the City of Fresno. However, similar to the proposed project, implementation of 2042 General Plan policies and compliance with federal and state regulations would minimize disturbance to people residing or working within proximity to airports. Overall, noise impacts under this alternative would be similar to the proposed GPR/ZOU and would remain less than significant.

### **m. Population and Housing**

Alternative 2 would accommodate the same growth anticipated under the proposed GPR/ZOU and would allow increased density the City of Fresno SOI. However, one of the primary purposes of the GPR/ZOU and thus this alternative, is to plan for growth for future growth in the county and plan for growth it would facilitate. Furthermore, this alternative would further minimize pressure to develop on open space and agricultural land as denser housing development could occur within the City of Fresno's SOI. Accordingly, implementation of Alternative 2 would not indirectly induce growth in the county, and impacts would remain less than significant. Additionally, Alternative 2 would further direct new growth and urban development near an existing community. While there is potential for displacement to occur, allowing higher-density residential development would facilitate the replacement of displaced residences. Implementation of 2042 General Plan policies and the County's 2015-2023 Housing Element policies would ensure impacts associated with displacement of people and/or housing would be less than significant. Overall, impacts related to population and housing would be similar to the proposed GPR/ZOU, and impacts would remain less than significant.

### **n. Public Services and Recreation**

Similar to the proposed GPR/ZOU, buildout of Alternative 2 would facilitate the addition of new residents in the county. This alternative would accommodate the same growth anticipated under the proposed GPR/ZOU and would allow higher-density developments in within the existing SOI of an incorporated city. Thus, while the same population growth is anticipated, demand for public services, such as fire and police protection, public school services, libraries, and parks and recreation facilities, would increase in this specific area. Similar to the proposed GPR/ZOU, policies from the Fresno County Fire Department's Strategic Plan and the 2042 General Plan would ensure that the County does not approve new development in unincorporated areas until adequate fire and police protection services are provided. Furthermore, Alternative 2 would further facilitate compact growth in the SOI, an area already served by existing fire and police services. Accordingly, impacts related to the provision of fire and police services under Alternative 2 would be reduced compared to the proposed GPR/ZOU and impacts would remain less than significant. Similar to the proposed GPR/ZOU, development facilitated by Alternative 2 would be served by existing school facilities; the denser growth facilitated by Alternative 2 would locate more future residential development in an area already served by existing schools compared to the proposed GPR/ZOU. Furthermore, mitigation of potential impacts to schools would be achieved through payment of school impact fees pursuant to Section 65995(3)(h) of the California Government Code. Impacts related to schools would be similar to the proposed GPR/ZOU, and impacts would remain less than significant.

Under Alternative 2, development would be denser in rural residential areas, which would result in increased demand for library services. Similar to the proposed GPR/ZOU, Alternative 2 would facilitate the addition of new residents in the County, which would increase demand for library services. Under the proposed GPR/ZOU, it is anticipated that future library facilities would be constructed in developed areas; because Alternative 2 would further focus growth in already developed areas, it is also anticipated that library facilities would be constructed in existing developed areas of the county. Furthermore, construction of new library facilities would be subject to review by the County and would be required to adhere to federal, state, and local building codes, which would minimize impacts of construction. Due to the limited size of these facilities and construction in previously developed areas, expanded and new facilities would not result in a significant impact. Impacts related to library facilities under Alternative 2 would remain less than significant.

Finally, the increase in population facilitated by Alternative 2 would result in an increased demand for parks and recreation facilities and would potentially create the need for new parks and recreation facilities. Construction of these facilities would be guided by policies of the 2042 General Plan that protect the environment. Similar to the proposed GPR/ZOU, impacts to parks and recreational facilities would be less than significant under this alternative. Overall, impacts to fire and police protection services would be reduced, and impacts to schools, libraries, and parks and recreational facilities would be similar compared to the proposed GPR/ZOU.

#### **o. Transportation**

Alternative 2 would involve increasing density within the SOI of the City of Fresno. Denser growth near existing urban centers would increase Alternative 2's consistency with the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan as transit service and connectivity would be improved under a denser land use pattern. Therefore, Alternative 2 would be consistent with applicable programs, plans, ordinances, and policies addressing the circulation system, and impacts would be reduced compared to the proposed GPR/ZOU.

Because Alternative 2 would facilitate denser residential growth, VMT per capita is expected to decrease as residents would be located closer to existing transit and services. Under the proposed GPR/ZOU, estimated 2042 VMT per capita would be approximately 14.4, just above the significance threshold of 14.0. Alternative 2 would increase the allowable density within the City of Fresno SOI, which would locate residents closer to existing services, reducing overall trip lengths compared to more rural areas of the county, and thus would reduce VMT per capita; accordingly, VMT per capita would likely be reduced below the significance threshold, and impacts would not be significant and unavoidable under this alternative. Impacts would be less than significant and reduced under Alternative 2.

Similar to the proposed GPR/ZOU, Alternative 2 would include goals and policies that would aim to make roadways safer and to increase emergency access and efficient emergency evacuation. Impacts related to these factors would remain less than significant. Overall, transportation impacts would be reduced under Alternative 2 compared to the proposed GPR/ZOU.

#### **p. Tribal Cultural Resources**

Because Alternative 2 would result in denser development near an existing incorporated city, development facilitated by this alternative would likely occur in previously disturbed areas. Therefore, Alternative 2 has less potential to disturb previously undisturbed tribal cultural resources, and impacts would be reduced. However, there is always potential for disturbance to occur; compliance with existing regulations and implementation of 2042 General Plan policies would reduce impacts to unanticipated discovery of human remains but impacts would remain significant and unavoidable.

#### **q. Utilities and Service Systems**

Similar to the proposed GPR/ZOU, Alternative 2 would facilitate population growth in Fresno County, which would result in increased demand for water, wastewater collection and treatment, electric power and natural gas, and telecommunications facilities. Depending on the timing of development facilitated by this alternative, it may become necessary to construct new or expanded utility facilities, which could result in significant impacts to the environment. However, development facilitated by Alternative 2 would comply with applicable 2042 General Plan policies to ensure that

adequate infrastructure is available to serve future development, similar to the proposed GPR/ZOU. Because Alternative 2 would facilitate increased development in a city SOI area, future development would be served by existing water, wastewater, electric power and natural gas, and telecommunications facilities; therefore, the need for new or expanded facilities would be reduced and impacts would be reduced compared to the proposed GPR/ZOU. However, similar to the proposed GPR/ZOU, Alternative 2 would result in a significant increase in water demand that may not be adequately served by Fresno County's projected and reasonably available water supplies. While development facilitated by this alternative would likely be served by existing water infrastructure, water demand would still increase, and impacts would remain significant and unavoidable.

Finally, similar to the GPR/ZOU, development facilitated by this alternative would result in an increased amount of wastewater and solid waste compared to existing and projected baseline conditions. This alternative would facilitate the same growth anticipated under the proposed GPR/ZOU and would further direct development toward existing an urban unincorporated community. Similar to the proposed project, existing wastewater treatment facilities are sufficient to accommodate planned development, and landfills serving Fresno County have adequate capacity to accept additional waste. Compliance with 2042 General Plan policies and solid waste reduction legislations would reduce the amount of additional waste generated. Therefore, impacts related to solid waste would remain less than significant. Overall, impacts related to existing utility facilities would be reduced, and impacts related to water demand and solid waste would be similar compared to the proposed GPR/ZOU.

#### **r. Wildfire**

The proposed GPR/ZOU would direct growth toward urban areas where wildfire risk is low and does not envision substantial development in Very High Fire Hazard Severity Zones located in State Responsibility Areas, as designated by CAL FIRE. Alternative 2 would further facilitate development near an existing urban community by allowing increased density in the City of Fresno SOI. In addition to implementation of 2042 General Plan policies, Alternative 2 would result in reduced impacts related to emergency response plans. Most development facilitated by the proposed GPR/ZOU and this alternative would be located outside of Moderate to Very High Fire Hazard Severity Zones, and with mitigation to address the potential to exacerbate wildfire risks, impacts would be less than significant. Alternative 2 would further facilitate growth in areas already served by existing infrastructure, roads, and fire protection facilities. As a result, impacts related to the installation or maintenance of associated infrastructure would be reduced compared to the proposed GPR/ZOU, and impacts would remain less than significant. Finally, Alternative 2 would involve denser development in generally flat, developed areas within the City of Fresno, where risk of flooding or landslides is lower than undeveloped areas. As a result, impacts would be reduced compared to the proposed GPR/ZOU and impacts related to post-fire slope instability would remain less than significant. Overall, impacts would be reduced compared to the proposed GPR/ZOU, but impacts would remain significant and unavoidable.

## 6.3 Alternative 3: Increased Development near Cities of Fresno and Clovis and in Community Plan Areas

### 6.3.1 Description

Alternative 3, the Increased Density near the Cities of Fresno and Clovis and in Community Plan Areas Alternative, would consist of the same policies and land use designations as the proposed GPR/ZOU; however, in unincorporated areas within the SOIs of the Cities of Fresno and Clovis, it would align the County's land use designations and zoning with the respective city's designations and zoning, where the city's designations and zoning currently allow for more development than the County's current designations and zoning. This alternative would also increase the allowable density at key underutilized or vacant parcels within existing Community Plan areas to provide additional housing opportunities that would help the County meet the Regional Housing Needs Allocation (RHNA) as required by the State in accordance with Housing Element requirements. Under this alternative, the SOI areas would eventually be planned for annexation into the respective city. And in both the SOI areas for Fresno and Clovis and in the Community Plan Areas, the density of development would be increased compared to the proposed GPR/ZOU. The purpose of this change is to allow more of the growth projected through 2042 to occur near existing urban development within and adjacent to the Cities of Fresno and Clovis and in the existing Community Plan areas rather than in other more rural areas of the county. This would be expected to reduce VMT per capita.

### 6.3.2 Impact Analysis

#### a. Aesthetics

Alternative 3 would consist of generally the same policies and land use designations as the proposed GPR/ZOU, and would involve the same policies and design standards to reduce impacts to scenic vistas, scenic corridors, and zoning and regulations governing scenic quality. This alternative would substantially increase density within the SOI areas of Fresno and Clovis and in the Community Plan Areas. As a result, residential growth under this alternative would occur near existing urban development rather than in more rural, undeveloped areas of the county. Accordingly, impacts to visual character and scenic quality would be reduced in undeveloped, rural lands. Furthermore, because increased and more concentrated residential development near existing urban centers would likely be visually similar to existing development, impacts to visual character and scenic quality of existing cities and urban centers would be less than significant. Substantially denser residential development near urban areas would also focus residential development in areas that already have sources of light and glare, rather than in more rural areas of the county that do not have such sources. Altogether, impacts related to aesthetics would be reduced under this alternative, and impacts would remain less than significant.

#### b. Agricultural and Forestry Resources

Alternative 3 would involve generally the same land use policies as the proposed GPR/ZOU that intend to conserve and protect agricultural and forestry lands and uses. The proposed GPR/ZOU would include goals and policies that would direct growth toward existing incorporated cities and unincorporated urban communities; this alternative would further those goals and policies by promoting growth within the SOIs of Fresno and Clovis and in the Community Plan Areas. As a



result, less land designated or zoned for agricultural or forestry use would be converted to non-agricultural or non-forestry use. Furthermore, with substantially increased residential development in areas already designated for such development, buildout under Alternative 3 would result in less conflict with existing zoning for agricultural use and Williamson Act contracts. Impacts related to agricultural and forestry resources would be reduced under this alternative. However, some rural residential development may still occur away from existing urban development, which could conflict with agricultural zoning or existing Williamson Act contracts. Although impacts would be reduced, impacts would remain significant and unavoidable under Alternative 3.

### **c. Air Quality**

Alternative 3 would generally involve the same policies and land use designations as the proposed GPR/ZOU and would facilitate development similar to the proposed GPR/ZOU. However, the increased density of lands within the SOIs of Fresno and Clovis and in the Community Plan Areas under this alternative would facilitate substantially increased residential development near existing cities and urban development, where rural residential lands typically occur. As a result, air quality impacts related to residential construction and operation, including air quality impacts associated with mobile sources, would be shifted toward existing urban centers in the county. Similar to the proposed GPR/ZOU, implementation of SJVAPCD construction mitigation measures would reduce impacts related to construction emissions, but impacts would remain significant and unavoidable. Furthermore, the same overall growth and development anticipated under the proposed GPR/ZOU would occur under Alternative 3. Accordingly, this alternative would be consistent with the SJVAPCD's ozone and particulate matter attainment plans. Alternative 3, as with the proposed GPR/ZOU, would not exceed the rate of projected population growth associated with the General Plan. As buildout under this alternative would be generally similar to buildout guided by the proposed GPR/ZOU, Alternative 3 would result in an increase in toxic air emissions when compared to existing conditions. Finally, Alternative 3 would not generate odors affecting a substantial amount of people. Overall, air quality impacts under Alternative 3 would be similar to those of the proposed GPR/ZOU and would remain significant and unavoidable.

### **d. Biological Resources**

Alternative 3 would facilitate overall growth and development similar to the proposed GPR/ZOU, and would include the same policies related to the protection of special-status species, riparian and wetland habitats, wildlife movement corridors, and other natural resources. The proposed GPR/ZOU would promote compact growth near existing urbanized areas, and Alternative 3 would further promote compact growth by substantially increasing the density of lands within the SOIs of Fresno and Clovis and in the Community Plan Areas. Under the proposed GPR/ZOU, some development that occurs outside of urban areas would potentially impact special-status species and other biologically sensitive resources. While similar development would occur under Alternative 3, this alternative would further facilitate compact residential development in areas that are already heavily disturbed and would shift development away from undisturbed, existing open space in the county. Accordingly, impacts to biological resources would be reduced under this alternative and would remain less than significant with implementation of mitigation measures and goals and policies of the General Plan.

### **e. Cultural Resources**

Buildout of Alternative 3 would facilitate development similar to the proposed GPR/ZOU, except for denser development in the SOIs of Fresno and Clovis and in the Community Plan Areas. This alternative would also include General Plan policies that would encourage the identification and designation of, and reduction of impacts to, historical and archaeological resources within Fresno County. This alternative would involve more compact growth near existing urban areas. As a result, less previously undisturbed land would be disturbed under Alternative 3, which would reduce impacts related to archaeological resources. However, increased development near urban areas could impact existing historical resources in those areas, and development facilitated by Alternative 3 could affect known and potential historical resources. Therefore, while impacts to archaeological resources would be reduced, impacts to historical resources would be similar to the proposed GPR/ZOU and impacts would remain significant and unavoidable.

### **f. Energy**

Alternative 3 would involve substantially increased density of development within the SOIs of Fresno and Clovis and in the Community Plan Areas. Buildout and operation of Alternative 3 would consume energy similar to the proposed GPR/ZOU as the same population increase is expected to occur, and energy conservation and efficiency requirements established by CALGreen, the California Energy Code, and General Plan policies would continue to apply under this alternative. Because Alternative 3 would greatly increase density of rural residential development near existing urban areas, new rural residential development would likely be able to connect to existing energy infrastructure within an urban area of a city's sphere of influence. Because new residential development facilitated by this alternative would likely be served by existing energy systems, energy would be distributed more efficiently and less new energy consumption would be required. As a result, energy resources would be conserved compared to the proposed GPR/ZOU. Impacts would be reduced and would remain less than significant. Furthermore, as development facilitated by Alternative 3 would generally be similar to overall development facilitated by the proposed GPR/ZOU, construction and operation of Alternative 3 would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Similar to the proposed GPR/ZOU, no impact would occur.

### **g. Geology and Soils**

Except for increased density within the Fresno and Clovis SOIs and in the Community Plan Areas, Alternative 3 would facilitate development similar to the proposed GPR/ZOU. While increased density in the SOIs and in the Community Plan Areas would primarily increase residential density in existing urban areas, development throughout the unincorporated county has the potential to be located on an unstable geologic unit or unstable soils. However, development facilitated by Alternative 3 would also comply with building standards established by the California Building Code and policies of the 2042 General Plan that would minimize the potential of loss, injury, or death following a seismic event, as well as potential of on- or off-site ground failure. Additionally, similar to the proposed GPR/ZOU, buildout under Alternative 3 would comply with applicable regulations, including the Clean Water Act and 2042 General Plan policies, to ensure that impacts related to erosion and the loss of topsoil would be less than significant. Similar to the proposed GPR/ZOU, development facilitated by Alternative 3 would be required to connect to public sewer systems where available and comply with 2042 General Plan policies in areas where they are not. Since this alternative would result in substantially increased development near existing cities and urban areas,

this alternative would likely involve less use of septic tanks and impacts would be reduced. Finally, development facilitated by this alternative would have significant and unavoidable impacts to paleontological resources, similar to the GPR/ZOU. Overall, impacts related to geology and soils would be reduced under Alternative 3 and impacts would remain significant and unavoidable.

#### **h. Greenhouse Gas Emissions**

Similar to the proposed GPR/ZOU, this alternative would generate temporary, short-term GHG emissions during construction and a long-term increase in GHG emissions through 2042. Mitigation Measure GHG-1 would apply under Alternative 3 and would reduce impacts related to GHG emissions from off-road construction equipment. However, because Alternative 3 would facilitate overall development similar to the proposed GPR/ZOU, the only difference being an increase in allowed density in the SOI areas of Fresno and Clovis and in the Community Plan Areas, impacts related to overall GHG emissions would be similar and would remain significant and unavoidable. In terms of per capita GHG emissions, this alternative is expected to generate less VMT per capita as substantially more residential development would occur near existing cities and urban areas. As a result, GHG per capita under Alternative 3 would be reduced compared to the proposed GPR/ZOU. Impacts would be reduced, but would remain significant and unavoidable.

#### **i. Hazards and Hazardous Materials**

Similar to the proposed GPR/ZOU, Alternative 3 would result in an incremental increase in the overall routine transport, use, storage, and disposal of hazardous materials within the county. Development facilitated by this alternative would also comply with applicable regulations related to the handling and storage of hazardous materials, in addition to 2042 General Plan policies that would minimize the risk of spills and public exposure to hazardous materials. Similar to the proposed GPR/ZOU, development facilitated by this alternative could result in an increase in hazardous emissions and handling of hazardous wastes within 0.25 mile of an existing or proposed school. Compliance with the California Education Code, the California Fire Code, and the California Health and Safety Code would minimize hazardous emissions near schools and impacts would be less than significant, similar to the proposed GPR/ZOU. While development facilitated by Alternative 3 could be located on hazardous materials sites, compliance with applicable regulations and 2042 General Plan policies would minimize impacts related to this development to a less than significant level, just as under the proposed GPR/ZOU. Alternative 3 would involve increased density of development in the SOI areas of Fresno and Clovis and in the Community Plan Areas; while this may increase development within an airport land use plan or within two miles of an existing airport, implementation of 2042 General Plan policies would minimize hazardous impacts of people working and residing within these areas, similar to the proposed GPR/ZOU. This alternative, similar to the proposed GPR/ZOU, would involve a Health and Safety Element that contains policies related to emergency access and evacuation plans. Impacts related to emergency response plans would remain less than significant. Additionally, Alternative 3 would result in increased density of rural residential development near existing cities, which typically experience lower fire risk than rural areas. Accordingly, impacts related to the spread of wildland fires would be less than significant, similar to the proposed GPR/ZOU. Overall, impacts related to hazards and hazardous materials of Alternative 3 would be similar to the proposed GPR/ZOU, and impacts would remain less than significant.

## **j. Hydrology and Water Quality**

Similar to the proposed GPR/ZOU, Alternative 3 would facilitate development that could result in discharge of pollutants to surface waters or contamination of shallow groundwater. While this alternative would involve denser development within the SOIs of Fresno and Clovis and in the Community Plan Areas, soil disturbance associated with construction could result in erosion, discharge of contaminated wastewater or stormwater, or accidental spills of hazardous materials. Similar to the proposed GPR/ZOU, compliance with applicable laws and regulations, in addition to goals and policies of the 2042 General Plan, would minimize the potential of water quality degradation and impacts would be less than significant. Alternative 3 would accommodate the same projected growth in Fresno County as under the proposed GPR/ZOU; accordingly, impacts related to groundwater management and implementation of water quality control plans would be similar and would remain less than significant. Development facilitated by Alternative 3 could alter existing drainage patterns of future development sites as sites could accommodate a greater amount of housing units. Because this alternative would involve increased residential development near existing urban areas, Alternative 3 would involve increased runoff in SOI areas of incorporated cities and existing unincorporated communities. Increased runoff could result in increased on- or off-site flooding and could contribute to exceeding the capacity of stormwater drainage systems. However, similar to the proposed GPR/ZOU, compliance with applicable regulations (e.g., the Clean Water Act) and implementation of 2042 General Plan policies would minimize the potential for increased runoff and flooding. Impacts would be similar to the proposed GPR/ZOU and would remain less than significant.

## **k. Land Use and Planning**

Alternative 3 would generally involve the same land use pattern as the proposed GPR/ZOU and would increase the allowed density of development in SOI areas of Fresno and Clovis and in the Community Plan Areas. As a result, residential development would increase near existing cities and urban centers where rural residential areas primarily occur. This alternative, similar to the proposed GPR/ZOU, would not include substantial land use or circulation changes that would physically divide an established community. The 2042 General Plan would include policies and growth management strategies that would direct new growth to areas within already existing or planned development; Alternative 3 would also involve these policies, and impacts related to the division of established communities would be less than significant. Because this alternative would involve the same policies as the proposed GPR/ZOU, Alternative 3 would be generally consistent with applicable land use plans, policies, or regulations adopted to avoid or mitigate environmental effects, such as FCOG's Regional Transportation Plan 2018-2042 or the SJVAPCD Air Quality Management Plans. Impacts related to land use and planning would be similar to the proposed GPR/ZOU and impacts would remain less than significant.

## **l. Noise**

Alternative 3 would involve denser development compared to the proposed GPR/ZOU. As a result, construction of development facilitated by this alternative would temporarily generate an increased amount of noise nearby existing cities and urban areas, potentially affecting nearby noise-sensitive land uses. However, similar to the proposed GPR/ZOU, Alternative 3 would comply with standards of the Fresno County Ordinance Code and policies of the 2042 General Plan that limit construction related noise disturbance, and impacts would be less than significant. Similarly, development facilitated by this alternative would contribute new stationary noise sources associated with

residential uses; due to denser residential development near existing urban centers, Alternative 3 would result in an increase of ambient noise. Compliance with the County's Noise Control Ordinance and implementation of General Plan policies would ensure that fixed noise sources do not exceed established noise level standards, and impacts would remain less than significant. Denser development would also contribute to an increased level of traffic noise in these areas. However, the areas surrounding existing cities and urban centers already experience elevated levels of traffic volumes and traffic noise, and increased development under this alternative would be unlikely to substantially increase existing traffic noise. Additionally, development facilitated by this alternative could temporarily generate groundborne vibration and impact nearby land uses; similar to the proposed GPR/ZOU, implementation of Mitigation Measures N-1(a) and N-1(b) would ensure that impacts are less than significant. As discussed in *Hazards and Hazardous Materials* above, Alternative 3 would increase the density of development in the SOIs of Fresno and Clovis and in the Community Plan Areas, which contain airports. However, similar to the proposed project, implementation of 2042 General Plan policies and compliance with federal and State regulations would minimize disturbance to people residing or working within proximity to airports. Overall, noise impacts under this alternative would be similar to the proposed GPR/ZOU and would remain less than significant.

### **m. Population and Housing**

Alternative 3 would accommodate the same growth anticipated under the proposed GPR/ZOU and would allow increased density within the SOIs of Fresno and Clovis and in the Community Plan Areas. However, one of the primary purposes of the GPR/ZOU and thus this alternative is to plan for growth for future growth in the county and plan for growth it would facilitate. Furthermore, this alternative would further minimize pressure to develop on open space and agricultural land as denser housing development could occur in rural residential areas. Accordingly, implementation of Alternative 3 would not indirectly induce growth in the county, and impacts would remain less than significant. Additionally, Alternative 3 would further direct new growth and urban development near incorporated cities and existing communities. While there is potential for displacement to occur, allowing substantially higher-density residential development would facilitate the replacement of displaced residences. Implementation of 2042 General Plan policies and the County's 2015-2023 Housing Element policies would ensure impacts associated with displacement of people and/or housing would be less than significant. Overall, impacts related to population and housing would be similar to the proposed GPR/ZOU and impacts would remain less than significant.

### **n. Public Services**

Similar to the proposed GPR/ZOU, buildout of Alternative 3 would facilitate the addition of new residents in the County. This alternative would accommodate the same growth anticipated under the proposed GPR/ZOU, and would allow substantially higher-density developments in existing within the SOIs of Fresno and Clovis and in the Community Plan Areas. Thus, while the same population growth is anticipated, demand for public services such as fire and police protection, public school services, libraries, and parks and recreation facilities would increase in these areas. Similar to the proposed GPR/ZOU, policies from the Fresno County Fire Department's Strategic Plan and the 2042 General Plan would ensure that the County does not approve new development in unincorporated areas until adequate fire and police protection services are provided. Furthermore, Alternative 3 would further facilitate denser compact growth in already developed areas which are served by existing fire and police services. Accordingly, impacts related to the provision of fire and police services under Alternative 3 would be reduced compared to the proposed GPR/ZOU and

impacts would remain less than significant. Similar to the proposed GPR/ZOU, development facilitated by Alternative 3 would be served by existing school facilities; the denser growth facilitated by Alternative 3 would locate more future residential development within areas already served by existing schools compared to the proposed GPR/ZOU. Furthermore, mitigation of potential impacts to schools would be achieved through payment of school impact fees pursuant to Section 65995(3)(h) of the California Government Code. Impacts related to schools would be similar to the proposed GPR/ZOU and impacts would remain less than significant.

Under Alternative 3, development would be denser in the SOIs of Fresno and Clovis and in the Community Plan Areas, which would result in increased demand for library services. Similar to the proposed GPR/ZOU, Alternative 3 would facilitate the addition of new residents in the County, which would increase demand for library services. Under the proposed GPR/ZOU, it is anticipated that future library facilities would be constructed in developed areas; because Alternative 3 would further focus increased and higher-density growth in already developed areas, it is also anticipated that library facilities would also be constructed in existing developed areas of the county. Furthermore, construction of new library facilities would be subject to review by the County and would be required to adhere to federal, State, and local building codes, which would minimize impacts of construction. Due to the limited size of these facilities and construction in previously developed areas, expanded and new facilities would not result in a significant impact. Impacts related to library facilities under Alternative 2 would remain less than significant.. Therefore, impacts to library services would remain less than significant under this alternative.

Finally, the increase in population facilitated by Alternative 3 would result in an increased demand for parks and recreation facilities and would potentially create the need for new parks and recreation facilities. Construction of these facilities would be guided by policies of the 2042 General Plan that protect the environment. Similar to the proposed GPR/ZOU, impacts to parks and recreational facilities would be less than significant under this alternative. Overall, impacts to fire and police protection services would be reduced and impacts to schools, libraries, and parks and recreational facilities would be similar compared to the proposed GPR/ZOU.

### **o. Transportation**

Alternative 3 would increase density within the Fresno and Clovis SOIs and in the Community Plan Areas. Denser growth near these existing urban centers would increase Alternative 3's consistency with the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan as transit service and connectivity would be improved under a denser land use pattern. Therefore, Alternative 3 would be consistent with applicable, programs, plans, ordinances, and policies addressing the circulation system, and impacts would be reduced compared to the proposed GPR/ZOU.

Denser residential growth is expected to reduce VMT per capita as residents would be located closer to existing transit and services and would have reduced trip lengths. Under the proposed GPR/ZOU, estimated 2042 VMT per capita would be approximately 14.4, just above the significance threshold of 14.0. Alternative 3 would substantially increase the allowable density of rural residential land in the SOI areas of Fresno and Clovis and in the Community Plan Areas, which would locate residents closer to existing services and thus reduce VMT per capita; accordingly, VMT per capita would likely be reduced below the significance threshold, and impacts would not be significant and unavoidable under this alternative. Impacts would be less than significant and reduced under Alternative 3.

Similar to the proposed GPR/ZOU, Alternative 3 would include goals and policies that would aim to make roadways safer and to increase emergency access and efficient emergency evacuation. Impacts related to these factors would remain less than significant. Overall, transportation impacts would be reduced under Alternative 3 compared to the proposed GPR/ZOU and would be less than significant.

#### **p. Tribal Cultural Resources**

Because Alternative 3 would result in substantially denser rural residential development near existing incorporated cities of Fresno and Clovis and in the Community Plan Areas, development facilitated by this alternative would likely occur in previously disturbed areas. Therefore, Alternative 3 has less potential to disturb previously undisturbed tribal cultural resources, and impacts would be reduced. However, there is always potential for disturbance to occur; compliance with existing regulations and implementation of 2042 General Plan policies would reduce impacts to unanticipated discovery of human remains, but impacts would remain significant and unavoidable.

#### **q. Utilities and Service Systems**

Similar to the proposed GPR/ZOU, Alternative 3 would facilitate population growth in Fresno County, which would result in increased demand for water, wastewater collection and treatment, electric power and natural gas, and telecommunications facilities. Depending on the timing of development facilitated by this alternative, it may become necessary to construct new or expanded utility facilities, which could result in significant impacts to the environment. However, development facilitated by Alternative 3 would comply with applicable 2042 General Plan policies to ensure that adequate infrastructure is available to serve future development, similar to the proposed GPR/ZOU. Because Alternative 3 would facilitate increased development in r areas within the SOIs of Fresno and Clovis and in the Community Plan Areas , future development in these areas would be served by existing water, wastewater, electric power and natural gas, and telecommunications facilities; therefore, the need for new or expanded facilities would be reduced and impacts would be reduced compared to the proposed GPR/ZOU. However, similar to the proposed GPR/ZOU, Alternative 3 would result in a significant increase in water demand that may not be adequately served by Fresno County's projected and reasonably available water supplies. While development facilitated by this alternative would likely be served by existing water infrastructure, water demand would still increase and impacts would remain significant and unavoidable.

Finally, similar to the GPR/ZOU, development facilitated by this alternative would increase the amount of solid waste sent to area landfills and the amount of wastewater directed toward existing wastewater treatment facilities. Landfills serving Fresno County have adequate capacity to accept additional waste, and compliance with 2042 General Plan policies and solid waste reduction legislations would reduce the amount of additional waste generated. Wastewater treatment facilities have sufficient capacity to accommodate planned development. Therefore, impacts related to solid waste would remain less than significant. Overall, impacts related to existing utility facilities would be reduced and impacts related to water demand and solid waste would be similar compared to the proposed GPR/ZOU.

#### **r. Wildfire**

The proposed GPR/ZOU would direct growth toward urban areas where wildfire risk is low, and does not envision substantial development in Very High Fire Hazard Severity Zones located in State Responsibility Areas, as designated by CAL FIRE. Alternative 3 would further facilitate development

near the existing cities of Fresno and Clovis and in the Community Plan Areas . In addition to implementation of 2042 General Plan policies, Alternative 3 would result in reduced impacts related to emergency response plans. Although most development facilitated by the proposed GPR/ZOU and this alternative would be located outside of Moderate to Very High Fire Hazard Severity Zones (as the SOIs for Fresno and Clovis are outside of these zones), there remains a possibility that development would occur in proximity to those areas which could potentially exacerbate wildfire risks. Therefore, impacts would remain significant and unavoidable. However, because Alternative 3 would further facilitate dense growth near already developed areas, development facilitated by this alternative would occur in areas already served by existing infrastructure, roads, and fire protection facilities. As a result, impacts related to the installation or maintenance of associated infrastructure would be reduced compared to the proposed GPR/ZOU and impacts would remain less than significant. Finally, Alternative 3 would involve denser development in generally flat, developed areas near existing cities, which typically experience lower risk of flooding or landslides compared to undeveloped land. As a result, impacts would be reduced compared to the proposed GPR/ZOU and impacts related to post-fire slope instability would remain less than significant. Overall, impacts would be reduced compared to the proposed GPR/ZOU, but impacts would remain significant and unavoidable.

## 6.4 Environmentally Superior Alternative

CEQA requires that an EIR identify the Environmentally Superior Alternative and discuss the facts that support that selection, as well as whether it would accomplish the project objectives or be infeasible (Public Resources Section 21081.5; *CEQA Guidelines* Sections 15091, 15126.6). Table 6-1 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied.

Based on the alternatives analysis provided above, Alternative 2 would be the environmentally superior alternative as it would result in reduced impacts compared to the proposed GPR/ZOU. While Alternative 3 would also reduce impacts, Alternative 2 would further reduce these impacts with a more compact residential growth pattern. Alternative 2 would meet project objectives and would accomplish the same goals as the proposed GPR/ZOU. However, the County doesn't control the annexation process, and projects within these areas would likely be dependent on urban services from the cities of Fresno and Clovis; therefore, Alternative 2 may be infeasible.



**Table 6-1 Impact Comparison of Alternatives**

<b>Issue</b>	<b>Proposed Project Impact Classification</b>	<b>Alternative 1: No Project</b>	<b>Alternative 2: Increased Development Near City of Fresno</b>	<b>Alternative 3: Increased Development Near Cities of Fresno and Clovis and in Community Plan Areas</b>
Aesthetics	Less than Significant	-	=/+	=/+
Agricultural and Forestry Resources	Significant and Unavoidable	-	=/+	=/+
Air Quality	Significant and Unavoidable	-	=	=
Biological Resources	Less than Significant with Mitigation incorporated	-	=/+	=/+
Cultural Resources	Significant and Unavoidable	-	=/+	=/+
Energy	Less than Significant	-	=/+	=/+
Geology and Soils	Significant and unavoidable	-	=/+	=/+
Greenhouse Gas Emissions	Significant and Unavoidable	-	=/+	=/+
Hazards and Hazardous Materials	Less than Significant	-	=	=
Hydrology and Water Quality	Less than Significant	-	=	=
Land Use and Planning	Less than Significant	-	=	=
Noise	Less than Significant	-	=	=
Population and Housing	Less than Significant	-	=	=
Public Services and Recreation	Less than Significant	-	=/+	=/+
Traffic and Transportation	Significant and Unavoidable	-	+	+
Tribal Cultural Resources	Significant and Unavoidable	-	=/+	=/+
Utilities and Service Systems	Significant and Unavoidable	-	=/+	=/+
Wildfire	Significant and Unavoidable	-	=/+	=/+

+ Superior to the proposed project (reduced level of impact)  
 - Inferior to the proposed project (increased level of impact)  
 = Similar level of impact to the proposed project  
 =/+ Similar level of impact to the proposed project with reduced impacts

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## **Effects Found Not to Be Significant**

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<https://www.co.fresno.ca.us/home/showpublisheddocument/57279/637629152201330000> (accessed May 2022)

## 7.2 List of Preparers

This EIR was prepared by the City of Novato, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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# Appendix AQ

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California Emissions Estimator Model Inputs and Results

**Fresno Co GPR/ZOU Update  
Assumptions**

**CalEEMod Inputs that are not modeling defaults:**

Project Location County  
Fresno - SJVAPCD

Climate Zone 3

Operational Year (Buildout) 2042

Construction Year 2022

Utility Company Pacific Gas & Electric

**Project Comparison**

		Existing	Growth	Total
Residential	- AC	-	AC	AC
	Single-Family	59,619	9,359	68,978 units
	Low-Rise Multi	3,951	620	4,571 units
	Mobile Home	8,332	1,308	9,640 units
	<b>Total</b>	<b>71,902 units</b>	<b>11,287 units</b>	<b>83,189 units</b>
<b>Growth</b>				
Non-Residential	CalEEMod Land Use:			Converted to ksf:
	Agriculture		* sf	
	Mfg./Mining Manufacturing		2,752,540 sf	2,753
	Other Industrial Industrial Park		5,153,595 sf	5,154
	Retail Strip Mall		915,625 sf	916
	Office Gen Office Bld		1,133,883 sf	1,134
	Education High School		4,435,362 sf	4,435
	Health Services Med Office Bld		2,045,995 sf	2,046
	Hospitality Motel		5,318,762 sf	5,319
	Government Gov Office Bld		2,066,042 sf	2,066
	<b>Total</b>		<b>23,821,804 sf</b>	<b>23,822</b>

Notes

\*Agricultural land use is anticipated to decrease

2. - Non-residential land use square footages calculated by dividing total employment by the share of workers in each industry per FCOG's employment growth projections. Number of employees in each industry was then multiplied by square footage per employee by sector data provided by U.S. EIA.

**Fresno Co GPR/ZOU Update  
Assumptions**

***Project Details***

	Existing	Proposed	Growth
Population	209,984	234,591	24,607
Employment	99,274	120,019	20,745
Service Population	309,258	354,610	45,352

***Source: PD***



**Fresno Co GPR/ZOU Update  
Assumptions**

**Construction Assumptions**

General Plan buildout is assumed over approximately 20 years. Modeling conservatively assumes 15 years of construction to complete the Project Demand. Therefore, all land uses are divided by 15 to estimate the average annual construction activities given a conservative construction schedule. Construction assumed to start in January 2022 to conservatively estimate construction emissions. As construction years move further into the future, equipment will be more efficient and have lower emission rates, therefore analyzing 2022 represents a conservative estimate of annual construction emissions. Lot acreage for all land uses and square feet for residential based on CalEEMod defaults for the land use size.

**Annual Construction:**

Residential

Single-Family	624	
Low-Rise Multi	42	
Mobile Home	88	
<b>Total</b>	<b>753 units</b>	<b>1 project</b>

Non-Residential

	1,588,124 sf	1 project
Mfg./Mining	183,503 sf	1 project
Other Industrial	343,573 sf	1 project
Retail	61,042 sf	1 project
Office	75,593 sf	1 project
Education	295,691 sf	1 project
Health Services	136,400 sf	1 project
Hospitality	354,585 sf	1 project
Government	137,737 sf	1 project

**Construction Schedule:**

	Single-Family		Low-Rise Multi	
	# Days (Default)	# Days	# Days (Default)	# Days
Demolition:	20	16	20	19
Site Preparation:	10	8	3	3
Grading:	20	16	6	6
Building Construction:	230	187	220	213
Paving:	20	16	10	10
Architectural Coating:	20	16	10	10
	320	260	269	260

	Mobile Home		Mfg/Mining	
	# Days (Default)	# Days	# Days (Default)	# Days
Demolition:	20	13	20	17

**Fresno Co GPR/ZOU Update  
Assumptions**

Site Preparation:	10	7	5	4
Grading:	30	20	8	7
Building Construction:	300	195	230	200
Paving:	20	13	18	16
Architectural Coating:	20	13	18	16
	400	260	299	260

**Other Industrial**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	16
Site Preparation:	10	8
Grading:	20	16
Building Construction:	230	187
Paving:	20	16
Architectural Coating:	20	16
	320	260

**Retail**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	21
Site Preparation:	2	2
Grading:	4	4
Building Construction:	200	211
Paving:	10	10
Architectural Coating:	10	10
	246	260

**Office**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	21
Site Preparation:	2	2
Grading:	4	4
Building Construction:	200	211
Paving:	10	11
Architectural Coating:	10	11
	246	260

**Education**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	16
Site Preparation:	10	8
Grading:	20	16
Building Construction:	230	187
Paving:	20	16
Architectural Coating:	20	16
	320	260

**Health Services**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	17
Site Preparation:	5	4
Grading:	8	7
Building Construction:	230	200
Paving:	18	16
Architectural Coating:	18	16
	299	260

**Hospitality**

	<b># Days (Default)</b>	<b># Days</b>
Demolition:	20	16
Site Preparation:	10	8
Grading:	20	16
Building Construction:	230	187
Paving:	20	16
Architectural Coating:	20	16
	320	260

**Government**

	<b># Days (Default)</b>	<b># Days</b>
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**Fresno Co GPR/ZOU Update  
Assumptions**

Demolition:	20	17
Site Preparation:	5	4
Grading:	8	7
Building Construction:	230	200
Paving:	18	16
Architectural Coating:	18	16
	299	260

***Defaults use for all other construction sources.***

**Fresno Co GPR/ZOU Update  
Assumptions**

**Operational Assumptions**  
**Transportation**

Project Traffic impact analysis does not provide trip rates. However, the TIA indicates the following Daily VMT Rates:

	<b>VMT (Daily)</b>	<b>VMT (Annual)</b>	<b>Default</b>	<b>VMT % Default</b>
Growth	248,599	90,738,489	737,568,223.00	0.12302386

*CalEEMod Default Trip lengths were adjusted to result in VMT consistent with the TIA.*

Revisions

	<b>Default Miles</b>			<b>Revised</b>		
	<b>H-W</b>	<b>H-S</b>	<b>H-O</b>	<b>H-W</b>	<b>H-S</b>	<b>H-O</b>
<b>Growth</b>						
Residential	10.8	7.3	7.5	1.32865768	0.9	0.923
Non-Residential	9.5	7.3	7.3	1.16872666	0.9	0.898

Fresno Co GPR/ZOU Update  
Assumption Calculations

Parameter	2021	2042	Net Change from 2021 to 2042
Population	209,984	234,591	33,607
Housing (units)	71,830	83,106	11,275
Employment (jobs)	99,274	120,019	20,745

Source: PD (GHD VMT memo)

Housing Unit Breakdown	2021	2042
Single Family	83.0%	59,619
Low-Rise Multi	5.5%	3,951
Mobile Home	11.6%	8,332
	100.1%	68,978

\*Percentage of housing types assumed to be same as existing percentages.

Fresno County Year 2019 Baseline VMT

Jurisdiction	Population	Households	Employment	Total VMT per Resident	Total VMT per Employee
Unincorporated	107,938	34,363	73,975	31.6	38.3
<b>Fresno County Jurisdiction</b>	<b>180,823</b>	<b>56,594</b>	<b>83,082</b>	<b>26.3</b>	<b>38.4</b>
All Cities + County (Countywide)	1,010,385	326,303	404,136	16.1	25.7

Source: GHD 2022

Fresno County Year 2042 Baseline VMT

Jurisdiction	Population	Households	Employment	Total VMT per Resident	Total VMT per Employee
<b>Fresno County Jurisdiction</b>	<b>208,307</b>	<b>66,191</b>	<b>93,527</b>	<b>23.4</b>	<b>35.5</b>
All Cities + County	1,286,053	407,370	473,263	14.6	23.9

Source: GHD 2022

Total VMT Calculation	2019	Growth	2042
Residential VMT	4,755,645		4,874,384
Employee VMT	3,190,349		3,320,209
<b>Total VMT</b>	<b>7,945,994</b>	<b>248,599</b>	<b>8,194,592</b>

Annual VMT 90,738,489

Fresno Co GPR/ZOU Update  
Assumption Calculations

COMMERCIAL BUILDINGS ENERGY CONSUMPTION SURVEY (CBECS)	
Median sf per worker	
All buildings	1,029
Education	1,033
Food sales	1,033
Food service	567
Health care	556
Lodging	2,541
Mercantile	1,200
Office	600
Public assembly	1,800
Public order and safety	750
Religious worship	2,700
Service	1,200
Warehouse and storage	1,500
Other	1,500
Vacant	4,800

Source: <https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php>

\* Warehouse and Storage building type assumed to represent Mfg./Mining/Other Industrial sectors.

Employment Growth Calculations

FCOG 2042 Projection (Excl. SOIs)	Share of Workers	Calculated Actual (Uninc. plus SOIs)			
		SOIs	Emp/sf	Total sf	
Mfg./Mining	3,695	8.85%	1,835	1,500	2,752,540
Other Industrial	6,918	16.56%	3,436	1,500	5,153,595
Retail	1,536	3.68%	763	1,200	915,625
Office	3,805	9.11%	1,890	600	1,133,883
Education	8,645	20.70%	4,294	1,033	4,435,362
Health Services	7,409	17.74%	3,680	556	2,045,995
Hospitality	4,215	10.09%	2,093	2,541	5,318,762
Government	5,547	13.28%	2,755	750	2,066,042
<b>Total*</b>	<b>41,771</b>	<b>100.00%</b>	<b>20,745</b>		<b>23,821,804</b>

\*Total excludes agriculture

Source: FCOG Growth Projections

Fresno Unincorporated Data for General Plan EIR - with growth rates

**Fresno Co GPR/ZOU Update  
Unmitigated Construction Summary**

**Unmitigated Regional Annual Construction Emissions**

Emissions Source	Estimated Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Single Family	2.3	2.5	2.5	0.0	0.4	0.2
Low Rise Multi	0.6	2.3	2.4	0.0	0.1	0.1
Mobile Home	1.2	2.3	2.4	0.0	0.4	0.2
Education	2.3	2.3	2.4	0.0	0.4	0.2
Government	1.2	2.1	2.2	0.0	0.2	0.1
Health Services	1.2	2.1	2.2	0.0	0.2	0.1
Hospitality	2.7	2.4	2.5	0.0	0.4	0.2
Industrial	2.7	2.4	2.5	0.0	0.4	0.2
Manufacturing	1.5	2.2	2.3	0.0	0.3	0.2
Office	0.7	1.7	1.7	0.0	0.1	0.1
Retail	0.6	1.6	1.6	0.0	0.1	0.1
<b>Total</b>	<b>17.2</b>	<b>24.0</b>	<b>24.5</b>	<b>0.05</b>	<b>3.0</b>	<b>1.8</b>
<i>SJVAPCD Thresholds</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Fresno Co GPR/ZOU Update  
Mitigated Construction Summary**

**Mitigated Regional Annual Construction Emissions**

Emissions Source	Estimated Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Single Family	2.2	0.5	2.7	0.0	0.2	0.1
Low Rise Multi	0.6	1.9	1.9	0.0	0.1	0.1
Mobile Home	1.0	0.3	2.6	0.0	0.1	0.1
Education	2.1	0.5	2.6	0.0	0.2	0.1
Government	1.0	0.4	2.3	0.0	0.1	0.0
Health Services	1.0	0.4	2.3	0.0	0.1	0.0
Hospitality	2.6	0.6	2.7	0.0	0.2	0.1
Industrial	2.5	0.6	2.6	0.0	0.2	0.1
Manufacturing	1.4	0.4	2.4	0.0	0.1	0.0
Office	0.6	0.5	1.7	0.0	0.0	0.0
Retail	0.5	0.5	1.7	0.0	0.0	0.0
<b>Total</b>	<b>15.4</b>	<b>6.6</b>	<b>25.5</b>	<b>0.0</b>	<b>1.5</b>	<b>0.6</b>
<i>SJVAPCD Thresholds</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Fresno Co GPR/ZOU Update  
Unmitigated Construction Compiled by Project Type

Total Annual

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Single Family										
Onsite	2.28826	2.2084	2.1289	0.00366	0.139	0.11028	0.24928	0.0682	0.1033	0.1715
Offsite	0.05036	0.27007	0.38453	0.0018	0.12756	0.0031	0.13067	0.03452	0.00294	0.03757
Total	<b>2.33862</b>	<b>2.47847</b>	<b>2.51343</b>	<b>0.00546</b>	<b>0.26656</b>	<b>0.11338</b>	<b>0.37995</b>	<b>0.10272</b>	<b>0.10624</b>	<b>0.20907</b>
Low Rise Multi										
Onsite	0.61965	1.83604	1.76476	0.00308	0.02369	0.08845	0.11214	0.01056	0.0844	0.09496
Offsite	0.01256	0.03092	0.09583	0.00033	0.03041	0.00039	0.03086	0.00816	0.00036	0.00853
Total	<b>0.63221</b>	<b>1.86696</b>	<b>1.86059</b>	<b>0.00341</b>	<b>0.0541</b>	<b>0.08884</b>	<b>0.143</b>	<b>0.01872</b>	<b>0.08476</b>	<b>0.10349</b>
Mobile Home										
Onsite	1.1543	2.27465	2.1943	0.0038	0.1791	0.1132	0.2923	0.0739	0.10579	0.17969
Offsite	0.02431	0.06262	0.18606	0.00066	0.0592	0.00077	0.06004	0.01592	0.00073	0.01663
Total	<b>1.17861</b>	<b>2.33727</b>	<b>2.38036</b>	<b>0.00446</b>	<b>0.2383</b>	<b>0.11397</b>	<b>0.35234</b>	<b>0.08982</b>	<b>0.10652</b>	<b>0.19632</b>
Education										
Onsite	2.27126	2.0267	1.996	0.00336	0.139	0.10285	0.24185	0.0682	0.09639	0.16459
Offsite	0.05036	0.27007	0.38453	0.0018	0.12756	0.0031	0.13067	0.03452	0.00294	0.03757
Total	<b>2.32162</b>	<b>2.29677</b>	<b>2.38053</b>	<b>0.00516</b>	<b>0.26656</b>	<b>0.10595</b>	<b>0.37252</b>	<b>0.10272</b>	<b>0.09933</b>	<b>0.20216</b>
Government										
Onsite	1.17263	2.0001	2.0163	0.00337	0.0654	0.10208	0.16748	0.0323	0.09571	0.12801
Offsite	0.02099	0.13505	0.15987	0.00081	0.05409	0.00154	0.0556	0.01471	0.00146	0.01618
Total	<b>1.19362</b>	<b>2.13515</b>	<b>2.17617</b>	<b>0.00418</b>	<b>0.11949</b>	<b>0.10362</b>	<b>0.22308</b>	<b>0.04701</b>	<b>0.09717</b>	<b>0.14419</b>
Health Services										
Onsite	1.16333	2.0001	2.0163	0.00337	0.0654	0.10208	0.16748	0.0323	0.09571	0.12801
Offsite	0.02078	0.12965	0.15837	0.00079	0.05339	0.00148	0.0549	0.01451	0.0014	0.01594
Total	<b>1.18411</b>	<b>2.12975</b>	<b>2.17467</b>	<b>0.00416</b>	<b>0.11879</b>	<b>0.10356</b>	<b>0.22238</b>	<b>0.04681</b>	<b>0.09711</b>	<b>0.14395</b>
Hospitality										
Onsite	2.68466	2.0653	2.0269	0.00342	0.139	0.10471	0.24371	0.0682	0.09812	0.16632
Offsite	0.06035	0.32596	0.46026	0.00218	0.15278	0.00373	0.15649	0.04141	0.00355	0.04496
Total	<b>2.74501</b>	<b>2.39126</b>	<b>2.48716</b>	<b>0.0056</b>	<b>0.29178</b>	<b>0.10844</b>	<b>0.4002</b>	<b>0.10961</b>	<b>0.10167</b>	<b>0.21128</b>
Industrial										
Onsite	2.60739	2.0569	2.027	0.00342	0.139	0.10417	0.24317	0.0682	0.09762	0.16582
Offsite	0.05823	0.31474	0.44439	0.0021	0.14761	0.0036	0.15132	0.03999	0.00343	0.04344
Total	<b>2.66562</b>	<b>2.37164</b>	<b>2.47139</b>	<b>0.00552</b>	<b>0.28661</b>	<b>0.10777</b>	<b>0.39449</b>	<b>0.10819</b>	<b>0.10105</b>	<b>0.20926</b>
Manufacturing										
Onsite	1.49141	2.0069	2.0164	0.00337	0.0654	0.10257	0.16797	0.0323	0.09617	0.12847
Offsite	0.03375	0.18064	0.25763	0.0012	0.08547	0.00208	0.08748	0.0232	0.00197	0.02519
Total	<b>1.52516</b>	<b>2.18754</b>	<b>2.27403</b>	<b>0.00457</b>	<b>0.15087</b>	<b>0.10465</b>	<b>0.25545</b>	<b>0.0555</b>	<b>0.09814</b>	<b>0.15366</b>
Office										
Onsite	0.72649	1.58725	1.57306	0.00273	0.02047	0.07536	0.09583	0.00985	0.07237	0.08222
Offsite	0.01202	0.07471	0.09162	0.00046	0.03069	0.00085	0.03164	0.00836	0.00081	0.00918
Total	<b>0.73851</b>	<b>1.66196</b>	<b>1.66468</b>	<b>0.00319</b>	<b>0.05116</b>	<b>0.07621</b>	<b>0.12747</b>	<b>0.01821</b>	<b>0.07318</b>	<b>0.0914</b>
Retail										
Onsite	0.62455	1.58314	1.56776	0.00272	0.02047	0.07515	0.09562	0.00985	0.07217	0.08202
Offsite	0.01012	0.06232	0.07706	0.00038	0.02588	0.00071	0.02661	0.00703	0.00068	0.00771
Total	<b>0.63467</b>	<b>1.64546</b>	<b>1.64482</b>	<b>0.0031</b>	<b>0.04635</b>	<b>0.07586</b>	<b>0.12223</b>	<b>0.01688</b>	<b>0.07285</b>	<b>0.08973</b>

Fresno Co GPR/ZOU Update  
Mitigated Construction Compiled by Project Type

Total Annual

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Single Family										
Onsite	2.10E+00	2.69E-01	2.31E+00	3.66E-03	6.26E-02	5.67E-03	6.83E-02	3.07E-02	5.67E-03	3.64E-02
Offsite	5.04E-02	2.70E-01	3.85E-01	1.80E-03	1.28E-01	3.10E-03	1.31E-01	3.45E-02	2.94E-03	3.76E-02
Total	<b>2.15079</b>	<b>0.53929</b>	<b>2.69123</b>	<b>0.00546</b>	<b>0.19016</b>	<b>0.00877</b>	<b>0.19894</b>	<b>0.06522</b>	<b>0.00861</b>	<b>0.07394</b>
Low Rise Multi										
Onsite	6.20E-01	1.84E+00	1.76E+00	3.08E-03	1.06E-02	8.85E-02	9.91E-02	4.74E-03	8.44E-02	8.91E-02
Offsite	1.26E-02	3.09E-02	9.58E-02	3.30E-04	3.04E-02	3.90E-04	3.09E-02	8.16E-03	3.60E-04	8.53E-03
Total	<b>0.63221</b>	<b>1.86696</b>	<b>1.86059</b>	<b>0.00341</b>	<b>0.04104</b>	<b>0.08884</b>	<b>0.12994</b>	<b>0.0129</b>	<b>0.08476</b>	<b>0.09767</b>
Mobile Home										
Onsite	9.61E-01	2.80E-01	2.38E+00	3.80E-03	8.06E-02	5.88E-03	8.65E-02	3.32E-02	5.88E-03	3.91E-02
Offsite	2.43E-02	6.29E-02	1.86E-01	6.80E-04	5.92E-02	7.70E-04	6.00E-02	1.59E-02	7.30E-04	1.66E-02
Total	<b>0.98546</b>	<b>0.34225</b>	<b>2.56616</b>	<b>0.00446</b>	<b>0.1398</b>	<b>0.00665</b>	<b>0.14652</b>	<b>0.04912</b>	<b>0.00661</b>	<b>0.05571</b>
Education										
Onsite	2.10E+00	2.56E-01	2.20E+00	3.42E-03	6.26E-02	5.27E-03	6.79E-02	3.07E-02	5.27E-03	3.60E-02
Offsite	5.04E-02	2.70E-01	3.85E-01	1.80E-03	1.28E-01	3.10E-03	1.31E-01	3.45E-02	2.94E-03	3.76E-02
Total	<b>2.14781</b>	<b>0.52639</b>	<b>2.58183</b>	<b>0.00522</b>	<b>0.19016</b>	<b>0.00837</b>	<b>0.19854</b>	<b>0.06522</b>	<b>0.00821</b>	<b>0.07354</b>
Government										
Onsite	9.99E-01	2.59E-01	2.17E+00	3.37E-03	2.95E-02	5.15E-03	3.47E-02	1.46E-02	5.15E-03	1.97E-02
Offsite	2.10E-02	1.35E-01	1.60E-01	8.10E-04	5.41E-02	1.84E-03	5.96E-02	1.47E-02	1.46E-03	1.62E-02
Total	<b>1.01952</b>	<b>0.39373</b>	<b>2.33057</b>	<b>0.00418</b>	<b>0.08359</b>	<b>0.00669</b>	<b>0.09025</b>	<b>0.02926</b>	<b>0.00661</b>	<b>0.03588</b>
Health Services										
Onsite	9.89E-01	2.59E-01	2.17E+00	3.37E-03	2.95E-02	5.15E-03	3.47E-02	1.46E-02	5.15E-03	1.97E-02
Offsite	2.08E-02	1.30E-01	1.58E-01	7.90E-04	5.34E-02	1.48E-03	5.49E-02	1.45E-02	1.40E-03	1.59E-02
Total	<b>1.01001</b>	<b>0.38833</b>	<b>2.32907</b>	<b>0.00416</b>	<b>0.08289</b>	<b>0.00663</b>	<b>0.08955</b>	<b>0.02906</b>	<b>0.00655</b>	<b>0.03564</b>
Hospitality										
Onsite	2.51E+00	2.56E-01	2.20E+00	3.42E-03	6.26E-02	5.27E-03	6.79E-02	3.07E-02	5.27E-03	3.60E-02
Offsite	6.04E-02	3.29E-01	4.60E-01	2.18E-03	1.53E-01	3.78E-03	1.56E-01	4.14E-02	3.55E-03	4.50E-02
Total	<b>2.5673</b>	<b>0.58228</b>	<b>2.66756</b>	<b>0.0056</b>	<b>0.21538</b>	<b>0.009</b>	<b>0.22436</b>	<b>0.07211</b>	<b>0.00882</b>	<b>0.08093</b>
Industrial										
Onsite	2.43E+00	2.56E-01	2.20E+00	3.42E-03	6.26E-02	5.27E-03	6.79E-02	3.07E-02	5.27E-03	3.60E-02
Offsite	5.82E-02	3.15E-01	4.44E-01	2.10E-03	1.48E-01	3.60E-03	1.51E-01	4.00E-02	3.43E-03	4.34E-02
Total	<b>2.48558</b>	<b>0.57106</b>	<b>2.64169</b>	<b>0.00552</b>	<b>0.21021</b>	<b>0.00887</b>	<b>0.21919</b>	<b>0.07069</b>	<b>0.0087</b>	<b>0.07941</b>
Manufacturing										
Onsite	1.32E+00	2.59E-01	2.17E+00	3.37E-03	2.95E-02	5.15E-03	3.47E-02	1.46E-02	5.15E-03	1.97E-02
Offsite	3.38E-02	1.81E-01	2.58E-01	1.20E-03	8.55E-02	2.08E-03	8.75E-02	2.32E-02	1.97E-03	2.52E-02
Total	<b>1.35048</b>	<b>0.43932</b>	<b>2.42833</b>	<b>0.00457</b>	<b>0.11497</b>	<b>0.00723</b>	<b>0.12213</b>	<b>0.03775</b>	<b>0.00712</b>	<b>0.04489</b>
Office										
Onsite	5.61E-01	4.12E-01	1.63E+00	2.73E-03	9.19E-03	3.83E-03	1.30E-02	4.43E-03	3.83E-03	8.26E-03
Offsite	1.20E-02	7.47E-02	9.16E-02	4.60E-04	3.07E-02	8.50E-04	3.18E-02	8.36E-03	8.10E-04	9.18E-03
Total	<b>0.57322</b>	<b>0.48673</b>	<b>1.72549</b>	<b>0.00319</b>	<b>0.03988</b>	<b>0.00468</b>	<b>0.04466</b>	<b>0.01279</b>	<b>0.00464</b>	<b>0.01744</b>
Retail										
Onsite	4.60E-01	4.12E-01	1.63E+00	2.72E-03	9.19E-03	3.82E-03	1.30E-02	4.43E-03	3.82E-03	8.25E-03
Offsite	1.01E-02	6.29E-02	7.71E-02	3.80E-04	2.69E-02	7.10E-04	2.69E-02	7.03E-03	6.80E-04	7.71E-03
Total	<b>0.46973</b>	<b>0.47392</b>	<b>1.70509</b>	<b>0.0031</b>	<b>0.03507</b>	<b>0.00453</b>	<b>0.03962</b>	<b>0.01146</b>	<b>0.0045</b>	<b>0.01596</b>

Fresno Co GPR/ZOU Update  
Unmitigated Single Family  
Annual

Fresno Co GPR/ZOU Update  
Mitigated Single Family  
Annual

Unmitigated Single Family

Total Annual		Annual									
Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.2115	0.2008	0.1679	0.0032	0.0096	0.0094	0.0109	0.0025	0.0024	0.0049	
Onsite	0.0211	0.2058	0.1648	0.0031	0	0.0094	0.0094	0	0.0024	0.0048	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Site Prep	0.01294	0.13247	0.08066	0.0016	0.0873	0.0045	0.08723	0.04075	0.00593	0.04669	
Onsite	0.0127	0.1323	0.0788	0.0015	0.082	0.0045	0.08655	0.0406	0.00593	0.04653	
Offsite	0.00024	0.00017	0.00186	0.0001	0.0058	0	0.0058	0.00015	0	0.00016	
Grading	0.0291	0.31918	0.2273	0.0049	0.05976	0.0131	0.07286	0.02785	0.0121	0.03996	
Onsite	0.0287	0.3099	0.2242	0.0048	0.0598	0.0131	0.0719	0.0276	0.0121	0.0397	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Building Const	0.20775	1.7287	1.8962	0.0427	0.1225	0.07889	0.2012	0.0352	0.07413	0.1074	
Onsite	0.1595	1.4601	1.53	0.0323	0	0.0756	0.0756	0	0.0712	0.0712	
Offsite	0.04825	0.2686	0.3662	0.01037	0.1225	0.03039	0.1256	0.0332	0.02293	0.0362	
Paving	0.00922	0.08928	0.1197	0.0019	0.00919	0.00454	0.0095	0.00205	0.00418	0.00444	
Onsite	8.82E-03	8.80E-02	1.17E-01	1.80E-04	0.00E+00	4.54E-03	4.54E-03	0.00E+00	4.18E-03	4.18E-03	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Architectural Coat	2.55811	0.01176	0.01967	0.0003	0.0016	0.0006	0.00226	0.00042	0.00066	0.00108	
Onsite	2.57444	0.0113	0.0145	0.0002	0	0.00065	0.00065	0	0.00065	0.00065	
Offsite	0.00067	0.00046	0.00517	0.0001	0.0016	0.0001	0.00161	0.00042	0.0001	0.00043	
Total Annual (Tons/year)											
Onsite	2.29E+00	2.21E+00	2.13E+00	3.88E-03	1.38E-01	1.19E+01	2.48E-01	8.83E-02	1.03E-01	1.72E-01	
Offsite	0.05936	0.27037	0.28453	0.0018	0.12756	0.0201	0.12687	0.03462	0.02284	0.03757	
Total Annual	2.34	2.48	2.41	0.01	0.27	0.11	0.38	0.10	0.11	0.21	

Mitigated Single Family

Total Annual		Annual									
Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.0041	0.01623	0.1893	0.0032	0.0096	0.0094	0.0149	0.0025	0.0049	0.0074	
Onsite	0.0037	0.016	0.1882	0.0031	0	0.0094	0.0094	0	0.0049	0.0049	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Site Prep	0.0021	0.00824	0.00536	0.00016	0.00668	0.00025	0.00693	0.01845	0.00025	0.01871	
Onsite	0.00186	0.00807	0.00535	0.00015	0.0061	0.00025	0.00635	0.0183	0.00025	0.01855	
Offsite	0.00024	0.00017	0.00186	0.00001	0.00568	0	0.00568	0.00015	0	0.00016	
Grading	0.00529	0.02578	0.2545	0.0049	0.02746	0.00079	0.02825	0.01265	0.00079	0.01345	
Onsite	0.00585	0.0255	0.2514	0.0048	0.0265	0.00079	0.02729	0.0124	0.00079	0.01319	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Building Const	0.01665	0.4775	2.007	0.0427	0.1225	0.089	0.2012	0.0369	0.07413	0.0491	
Onsite	0.007	0.289	1.6325	0.0252	0	0.0381	0.0381	0	0.0381	0.0381	
Offsite	0.04825	0.2686	0.3662	0.01037	0.1225	0.03039	0.1256	0.0332	0.02293	0.0362	
Paving	0.00034	0.01	0.1415	0.00019	0.00906	0.0003	0.00936	0.00025	0.0003	0.00056	
Onsite	2.24E-03	9.72E-03	1.38E-01	1.80E-04	0.00E+00	3.00E-04	3.00E-04	0.00E+00	3.00E-04	3.00E-04	
Offsite	0.0004	0.0028	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026	
Architectural Coat	2.55811	0.0149	0.01967	0.0003	0.0016	0.0004	0.00164	0.00042	0.0004	0.0004	
Onsite	2.5584	0.0103	0.0147	0.0002	0	0.0003	0.0003	0	0.0003	0.0003	
Offsite	0.00067	0.0046	0.00517	0.0001	0.0016	0.0001	0.00161	0.00042	0.0001	0.00043	
Total Annual (Tons/year)											
Onsite	2.10E+00	2.08E-01	2.31E+00	0.00E-03	0.94E-02	9.87E-03	8.83E-02	3.07E-02	5.87E-03	3.44E-02	
Offsite	0.05936	0.27037	0.28453	0.0018	0.12756	0.0201	0.12687	0.03462	0.02284	0.03757	
Total Annual	2.15	0.54	2.69	0.01	0.10	0.01	0.20	0.07	0.01	0.07	

Demolition

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.0211	0.2058	0.1648	3.10E-04	0	9.94E-03	9.94E-03	9.24E-03	9.24E-03	9.24E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-03	9.90E-04	0	9.80E-04	2.90E-04	0	2.90E-04
Total	2.18E-02	2.86E-01	1.88E-01	3.20E-04	9.90E-04	9.94E-03	1.09E-02	3.90E-04	9.24E-03	9.96E-03

Demolition

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	3.70E-03	0.016	0.1892	3.10E-04	0	4.90E-04	4.90E-04	4.90E-04	4.90E-04	4.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-03	9.80E-04	0	9.80E-04	2.90E-04	0	2.90E-04
Total	4.10E-03	1.83E-02	1.89E-01	3.20E-04	9.80E-04	4.90E-04	1.48E-03	2.90E-04	4.90E-04	7.90E-04

Site Preparation

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0802	0	0.0802	0.0406	0	0.0406
Off-Road	0.0127	0.1323	0.0788	1.50E-04	6.45E-03	6.45E-03	6.45E-03	5.93E-03	5.93E-03	5.93E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.40E-04	1.70E-04	1.80E-03	5.80E-04	0	5.80E-04	1.00E-04	0	1.80E-04	0.0001
Total	0.01294	0.13247	0.08066	0.00016	0.08073	0.0045	0.08073	0.04075	0.00593	0.04669

Site Preparation

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0361	0	0.0361	0.0183	0	0.0183
Off-Road	1.80E-03	8.07E-03	0.0835	1.50E-04	2.50E-04	2.50E-04	2.50E-04	2.50E-04	2.50E-04	2.50E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.40E-04	1.70E-04	1.80E-03	1.00E-03	5.80E-04	0	5.80E-04	1.00E-04	0	1.00E-04
Total	0.0021	0.00824	0.00536	0.00016	0.00668	0.00025	0.00693	0.01845	0.00025	0.01871

Grading

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0588	0	0.0588	0.0276	0	0.0276
Off-Road	0.0287	0.3099	0.2242	4.80E-04	0.0131	0.0131	0.0131	0.0121	0.0121	0.0121
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-03	9.90E-04	0	9.80E-04	2.90E-04	0	2.90E-04
Total	0.0291	0.31918	0.2273	0.0049	0.05976	0.0131	0.07286	0.02785	0.0121	0.03996

Grading

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0265	0	0.0265	0.0124	0	0.0124
Off-Road	5.89E-03	0.0255	0.2514	4.80E-04	7.90E-04	7.90E-04	7.90E-04	7.90E-04	7.90E-04	7.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-03	9.80E-04	0	9.80E-04	2.90E-04	0	2.90E-04
Total	0.00629	0.02578	0.2545	0.0049	0.02746	0.00079	0.02825	0.01265	0.00079	0.01345

Building Construction

Category	RDG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.1595	1.4601	1.53	2.52E-03	0.0756	0.0756	0.0712	0.0712	0.0712	0.0712
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	9.25E-03	0.242	0.0885	9.30E-04	0.028	2.61E-03	0.0324	8.60E-03	2.46E-03	0.0111
Worker	0.039	0.0266	0.2997	8.20E-04	0.0027	4.80E-04	0.			



Fresno Co GPR/ZOU Update  
Unmitigated Low-Rise Multi  
Annual

Unmitigated Low-Rise Multi

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Demolition											
Demolition	0.01642	0.15818	0.13579	0.00024	0.00099	0.00737	0.00895	0.00028	0.00744	0.00771	
Onsite	0.016	0.1579	0.1326	0.00023	0	0.00796	0.00796	0	0.00744	0.00744	
Offsite	0.00042	0.00028	0.00319	0.00001	0.00099	0.00001	0.00099	0.00028	0	0.00027	
Site Prep											
Site Prep	0.00211	0.02353	0.01541	0.00004	0.00049	0.00089	0.00038	0.00029	0.00082	0.00111	
Onsite	0.00207	0.0235	0.0151	0.00004	0.00039	0.00089	0.00038	0.00026	0.00082	0.00108	
Offsite	0.00004	0.00003	0.00031	0	0.0001	0	0.0001	0.00003	0	0.00003	
Grading											
Grading	0.00472	0.05107	0.02848	0.00006	0.02154	0.00223	0.02377	0.01036	0.00205	0.01241	
Onsite	0.00462	0.051	0.0277	0.00006	0.0213	0.00223	0.02353	0.0103	0.00205	0.01235	
Offsite	0.0001	0.00007	0.00078	0	0.00024	0	0.00024	0.00006	0	0.00006	
Building Const											
Building Const	0.20283	1.88663	1.61771	0.00298	0.02832	0.07518	0.10357	0.00761	0.07206	0.07966	
Onsite	0.1976	1.5553	1.5286	0.00286	0	0.0748	0.0748	0	0.0717	0.0717	
Offsite	0.01168	0.03333	0.08911	0.00012	0.00332	0.00039	0.00039	0.00038	0.00027	0.00038	
Paving											
Paving	0.00447	0.04215	0.05434	0.00008	0.00054	0.0022	0.00274	0.00014	0.00202	0.00217	
Onsite	0.00443	0.04202	0.05422	0.00008	0.00054	0.00203	0.00203	0.00014	0.00203	0.00203	
Offsite	0.00003	0.00015	0.00014	0	0.00004	0	0.00004	0	0	0.00015	
Architectural Coat											
Architectural Coat	0.39521	0.0064	0.00886	0.00001	0.00022	0.00037	0.00059	0.00006	0.00037	0.00043	
Onsite	0.39512	0.00634	0.00816	0.00001	0	0.00037	0.00037	0	0.00037	0.00037	
Offsite	0.00009	0.00006	0.0007	0	0.00022	0.00006	0.00006	0	0.00006	0.00006	
Total Annual (Tons/year)											
Onsite	6.20E-01	1.84E+00	1.78E+00	3.08E-03	2.37E-02	8.85E-02	1.12E-01	1.06E-02	8.44E-02	9.50E-02	
Offsite	0.01256	0.03392	0.05883	0.00003	0.00341	0.00039	0.00086	0.00016	0.00036	0.00083	
<b>Total Annual</b>	<b>0.63</b>	<b>1.87</b>	<b>1.86</b>	<b>0.00</b>	<b>0.05</b>	<b>0.09</b>	<b>0.14</b>	<b>0.02</b>	<b>0.08</b>	<b>0.10</b>	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	1.60E-02	0.1579	0.1326	2.30E-04	0	7.96E-03	7.96E-03	7.44E-03	7.44E-03	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	4.20E-04	2.80E-04	3.19E-03	1.00E-05	9.90E-04	1.00E-05	9.90E-04	2.60E-04	2.70E-04	
<b>Total</b>	<b>1.64E-02</b>	<b>1.88E-01</b>	<b>1.38E-01</b>	<b>2.40E-04</b>	<b>9.90E-04</b>	<b>7.97E-03</b>	<b>8.95E-03</b>	<b>2.89E-04</b>	<b>7.44E-03</b>	<b>7.71E-03</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	2.07E-03	0.02353	0.01511	4.00E-05	2.39E-03	0	2.39E-03	2.60E-04	0	2.60E-04
Fugitive Dust	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-05	3.00E-05	3.10E-04	0.00E+00	1.00E-04	0	1.00E-04	3.00E-05	0	3.00E-05
<b>Total</b>	<b>0.00211</b>	<b>0.02353</b>	<b>0.01541</b>	<b>0.00004</b>	<b>0.00249</b>	<b>0.00089</b>	<b>0.00338</b>	<b>0.00029</b>	<b>0.00082</b>	<b>0.00111</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust	0	0	0	0	0.0213	0	0.0213	0.0103	0	0.0103
Off-Road	4.62E-03	0.051	0.0277	6.00E-05	0	2.28E-03	2.28E-03	2.08E-03	2.08E-03	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	1.00E-04	7.00E-05	7.80E-04	0.00E+00	2.40E-04	0	2.40E-04	6.00E-05	0	6.00E-05
<b>Total</b>	<b>0.00472</b>	<b>0.05107</b>	<b>0.02848</b>	<b>0.00006</b>	<b>0.02154</b>	<b>0.00223</b>	<b>0.02377</b>	<b>0.01036</b>	<b>0.00205</b>	<b>0.01241</b>

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.1976	1.5553	1.5286	2.66E-03	0	0.0748	0.0748	0.0717	0.0717	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	8.80E-04	0.023	6.51E-03	9.00E-05	2.83E-03	2.50E-04	3.07E-03	8.20E-04	2.40E-04	1.06E-03
Worker	0.0108	7.38E-03	0.0206	2.30E-04	0.0257	1.30E-04	0.0257	0.79E-03	1.20E-04	6.91E-03
<b>Total</b>	<b>0.20928</b>	<b>1.58663</b>	<b>1.61771</b>	<b>0.00298</b>	<b>0.02832</b>	<b>0.07518</b>	<b>0.10357</b>	<b>0.00761</b>	<b>0.07206</b>	<b>0.07966</b>

Paving

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	4.24E-03	0.042	0.0526	8.00E-05	2.20E-03	2.20E-03	2.20E-03	2.02E-03	2.02E-03	
Paving	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	2.30E-04	1.50E-04	1.74E-03	0.00E+00	5.40E-04	0	5.40E-04	1.40E-04	0	1.50E-04
<b>Total</b>	<b>4.47E-03</b>	<b>4.22E-02</b>	<b>5.43E-02</b>	<b>8.00E-05</b>	<b>2.20E-03</b>	<b>2.24E-03</b>	<b>2.24E-03</b>	<b>2.02E-03</b>	<b>2.02E-03</b>	

Architectural Coating

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Archit. Coating	0.3942	0.0064	0.00886	0.00001	0	0	0	0	0	0
Off-Road	9.20E-04	6.34E-03	8.16E-03	1.00E-05	3.72E-04	3.72E-04	3.72E-04	3.72E-04	3.72E-04	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	9.00E-05	6.00E-05	7.00E-04	0.00E+00	2.20E-04	0.00E+00	2.20E-04	6.00E-05	0.00E+00	6.00E-05
<b>Total</b>	<b>1.39E-01</b>	<b>6.40E-03</b>	<b>8.86E-03</b>	<b>1.00E-05</b>	<b>2.20E-04</b>	<b>3.72E-04</b>	<b>3.90E-04</b>	<b>6.00E-05</b>	<b>3.72E-04</b>	<b>4.30E-04</b>

Fresno Co GPR/ZOU Update  
Mitigated Low-Rise Multi  
Annual

Mitigated Low-Rise Multi

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Demolition											
Demolition	0.01642	0.15818	0.13579	0.00024	0.00099	0.00737	0.00895	0.00028	0.00744	0.00771	
Onsite	0.016	0.1579	0.1326	0.00023	0	0.00796	0.00796	0	0.00744	0.00744	
Offsite	0.00042	0.00028	0.00319	0.00001	0.00099	0.00001	0.00099	0.00028	0	0.00027	
Site Prep											
Site Prep	0.00211	0.02353	0.01541	0.00004	0.00049	0.00089	0.00038	0.00029	0.00082	0.00111	
Onsite	0.00207	0.0235	0.0151	0.00004	0.00039	0.00089	0.00038	0.00026	0.00082	0.00108	
Offsite	0.00004	0.00003	0.00031	0	0.0001	0	0.0001	0.00003	0	0.00003	
Grading											
Grading	0.00472	0.05107	0.02848	0.00006	0.02154	0.00223	0.02377	0.01036	0.00205	0.01241	
Onsite	0.00462	0.051	0.0277	0.00006	0.0213	0.00223	0.02353	0.0103	0.00205	0.01235	
Offsite	0.0001	0.00007	0.00078	0	0.00024	0	0.00024	0	0.00006	0.00006	
Building Const											
Building Const	0.20283	1.88663	1.61771	0.00298	0.02832	0.07518	0.10357	0.00761	0.07206	0.07966	
Onsite	0.1976	1.5553	1.5286	0.00286	0	0.0748	0.0748	0	0.0717	0.0717	
Offsite	0.01168	0.03333	0.08911	0.00012	0.00332	0.00039	0.00039	0.00038	0.00027	0.00038	
Paving											
Paving	0.00447	0.04215	0.05434	0.00008	0.00054	0.0022	0.00274	0.00014	0.00202	0.00217	
Onsite	0.00443	0.04202	0.05422	0.00008	0.00054	0.00203	0.00203	0.00014	0.00203	0.00203	
Offsite	0.00003	0.00015	0.00014	0	0.00004	0	0.00004	0	0	0.00015	
Architectural Coat											
Architectural Coat	0.39521	0.0064	0.00886	0.00001	0.00022	0.00037	0.00059	0.00006	0.00037	0.00043	
Onsite	0.39512	0.00634	0.00816	0.00001	0	0.00037	0.00037	0	0.00037	0.00037	
Offsite	0.00009	0.00006	0.0007	0	0.00022	0.00006	0.00006	0	0.00006	0.00006	
Total Annual (Tons/year)											
Onsite	6.20E-01	1.84E+00	1.78E+00	3.08E-03	2.37E-02	8.85E-02	1.12E-01	1.06E-02	8.44E-02	9.50E-02	
Offsite	0.01256	0.03392	0.05883	0.00003	0.00341	0.00039	0.00086	0.00016	0.00036	0.00083	
<b>Total Annual</b>	<b>0.63</b>	<b>1.87</b>	<b>1.86</b>	<b>0.00</b>	<b>0.04</b>	<b>0.09</b>	<b>0.13</b>	<b>0.01</b>	<b>0.08</b>	<b>0.10</b>	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	1.60E-									

Fresno Co GPR/ZOU Update  
Unmitigated Mobile Home  
Annual

Unmitigated Mobile Home

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.01753	0.16742	0.13342	0.00298	0.00078	0.00068	0.00866	0.00021	0.00751	0.00772	
Onsite	0.0172	0.1672	0.1338	0.00252	0	0.00808	0.00808	0	0.00751	0.00751	
Offsite	0.00033	0.00022	0.00052	0.00041	0.00078	0	0.00078	0.00021	0	0.00021	
Site Prep	0.01131	0.11584	0.07053	0.00013	0.0717	0.00564	0.07735	0.03073	0.00519	0.04093	
Onsite	0.0111	0.1158	0.0689	0.00013	0.0712	0.00564	0.07684	0.0356	0.00519	0.04079	
Offsite	0.00021	0.00014	0.00163	0	0.0005	0	0.00051	0.00013	0	0.00014	
Grading	0.03697	0.3886	0.2957	0.00063	0.1095	0.01641	0.12591	0.03872	0.01501	0.05373	
Onsite	0.0363	0.3884	0.2904	0.00062	0.1079	0.0164	0.1243	0.0383	0.015	0.0533	
Offsite	0.00067	0.00046	0.00517	0.00001	0.0161	0.00001	0.0161	0.00042	0.00001	0.00043	
Building Const	0.18891	1.5839	1.7676	0.00325	0.05492	0.07969	0.13463	0.01478	0.07492	0.08967	
Onsite	0.1884	1.5225	1.5954	0.00325	0	0.0789	0.0789	0	0.0742	0.0742	
Offsite	0.00251	0.0614	0.1722	0.00002	0.05492	0.00078	0.05573	0.01478	0.00072	0.01547	
Paving	0.0075	0.07252	0.07273	0.00016	0.00078	0.00089	0.00047	0.00021	0.0004	0.00061	
Onsite	0.0075	0.07252	0.07273	0.00016	0.00078	0.00089	0.00047	0.00021	0.0004	0.00061	
Offsite	0.00003	0.00002	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	
Architectural Coat	0.01439	0.00983	0.01292	0.00003	0.00062	0.00049	0.00112	0.00017	0.00049	0.00066	
Onsite	0.01439	0.00983	0.01292	0.00003	0.00062	0.00049	0.00112	0.00017	0.00049	0.00066	
Offsite	0.00026	0.00018	0.00022	0.00001	0.00002	0.00002	0.00002	0.00017	0	0.00017	
Total Annual (Tons/year)											
Onsite	1.15E+00	2.27E+00	2.19E+00	3.80E-03	1.79E-01	1.13E-01	2.92E-01	7.39E-02	1.06E-01	1.80E-01	
Offsite	0.02431	0.06262	0.18906	0.00066	0.05922	0.00077	0.09004	0.01592	0.00073	0.01963	
Total Annual	1.18	2.34	2.38	0.00	0.24	0.11	0.35	0.09	0.11	0.20	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	1.72E-02	0.1672	0.1339	2.90E-04		8.08E-03	8.08E-03		7.51E-03	7.51E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	3.30E-04	2.20E-04	2.52E-03	1.00E-05	7.80E-04	0.00E+00	7.80E-04	2.10E-04	0	2.10E-04
Total	1.76E-02	1.67E-01	1.36E-01	2.90E-04		8.88E-03	8.88E-03		7.51E-03	7.72E-03

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					7.12E-02	0	7.12E-02	3.96E-02	0	3.96E-02
Off-Road	1.11E-02	0.1158	0.0689	1.30E-04		5.64E-03	5.64E-03		5.19E-03	5.19E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.10E-04	1.40E-04	1.63E-03	0.00E+00	5.00E-04	0	5.10E-04	1.30E-04	0	1.40E-04
Total	0.01131	0.11584	0.07053	0.00013	0.0717	0.00564	0.07735	0.03073	0.00519	0.04093

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					0.1079	0	0.1079	0.0383	0	0.0383
Off-Road	3.63E-02	0.3886	0.2957	0.00048		1.64E-02	1.64E-02		1.50E-02	1.50E-02
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	6.70E-04	4.60E-04	5.17E-03	1.00E-05	1.60E-03	1.00E-05	1.61E-03	4.20E-04	1.00E-05	4.30E-04
Total	0.03697	0.3886	0.2957	0.00063	0.1095	0.01641	0.12591	0.03872	0.01501	0.05373

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.1884	1.5225	1.5954	2.63E-03		0.0789	0.0789		0.0742	0.0742
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	1.81E-03	0.0473	1.34E-02	1.80E-04	5.82E-03	5.10E-04	6.33E-03	1.69E-03	4.90E-04	2.17E-03
Worker	0.0207	1.41E-02	0.1698	4.40E-04	0.0491	2.50E-04	0.0494	1.31E-02	2.30E-04	1.33E-02
Total	0.18891	1.5839	1.7676	0.00325	0.05492	0.07969	0.13463	0.01478	0.07492	0.08967

Paving

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	7.17E-03	0.0723	0.0948	1.90E-04		3.69E-03	3.69E-03		3.46E-03	3.46E-03
Paving	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	3.30E-04	2.20E-04	2.52E-03	1.00E-05	7.80E-04	0	7.80E-04	2.10E-04	0	2.10E-04
Total	7.50E-03	7.25E-02	9.73E-02	1.90E-04		3.69E-03	3.69E-03		3.46E-03	3.46E-03

Architectural Coating

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Archl. Coating	0.0149				0	0	0	0	0	0
Off-Road	1.29E-03	8.45E-03	1.09E-02	2.00E-05		4.92E-04	4.92E-04		4.92E-04	4.92E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.60E-04	1.80E-04	2.02E-03	6.20E-05	0.00E+00	6.30E-04	1.70E-04	0.00E+00	1.70E-04	1.70E-04
Total	0.01661	0.00983	0.01292	0.00003	0.00062	0.00049	0.00112	0.00017	0.00049	0.00066

Fresno Co GPR/ZOU Update  
Mitigated Mobile Home  
Annual

Mitigated Mobile Home

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.00333	0.01322	0.15382	0.00026	0.00078	0	0.00078	0.0004	0.00118	0.00021	
Onsite	0.003	0.013	0.153	0.00025	0	0.00078	0.00078	0	0.0004	0.0004	
Offsite	0.00033	0.00022	0.00252	0.00001	0.00078	0	0.00078	0	0.00021	0.00021	
Site Prep	0.00184	0.0072	0.07463	0.00013	0.0325	0.00022	0.03273	0.01613	0.00022	0.01636	
Onsite	0.00163	0.00706	0.073	0.00013	0.032	0.00022	0.03222	0.016	0.00022	0.01622	
Offsite	0.00021	0.00014	0.00163	0	0.0005	0	0.00051	0.00013	0	0.00014	
Grading	0.00829	0.0346	0.03517	0.00063	0.0502	0.00103	0.05123	0.01762	0.00103	0.01865	
Onsite	0.00762	0.033	0.33	0.00062	0.0486	0.00102	0.04962	0.0172	0.00102	0.01822	
Offsite	0.00067	0.00046	0.00517	0.00001	0.0016	0.00001	0.00161	0.00042	0.00001	0.00043	
Building Const	0.05451	0.2793	1.8746	0.00325	0.05492	0.07474	0.05971	0.01478	0.00474	0.01945	
Onsite	0.032	0.2179	1.7024	0.00325	0	0.07398	0.07398	0	0.07398	0.07398	
Offsite	0.02251	0.0614	0.1722	0.00002	0.05492	0.00078	0.05573	0.01478	0.00072	0.01547	
Paving	0.00215	0.00912	0.11462	0.00016	0.00078	0.00024	0.00102	0.00021	0.00024	0.00045	
Onsite	1.82E-03	7.90E-03	1.12E-01	1.90E-04	0.00E+00	2.40E-04	2.40E-04	0.00E+00	2.40E-04	2.40E-04	
Offsite	0.00003	0.00002	0.00002	0.00001	0.00078	0	0.00078	0	0.00021	0.00021	
Architectural Coat	0.01534	0.0096	0.01302	0.00003	0.00062	0.00002	0.00064	0.00002	0.00002	0.00004	
Onsite	0.01508	0.00777	0.011	0.00002	0	0.00002	0.00002	0	0.00002	0.00002	
Offsite	0.00026	0.00018	0.00022	0.00001	0.00062	0	0.00062	0.00002	0	0.00017	
Total Annual (Tons/year)											
Onsite	9.61E-01	2.80E-01	2.38E+00	3.80E-03	8.06E-02	5.80E-03	6.85E-02	3.32E-02	5.88E-03	3.91E-02	
Offsite	0.02431	0.06262	0.18906	0.00066	0.05922	0.00077	0.06004	0.01592	0.00073	0.01963	
Total Annual	0.99	0.34	2.57	0.00	0.14	0.01	0.15	0.05	0.01	0.06	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	3.00E-03	0.013	0.153	2.90E-04		4.00E-04	4.00E-04		4.00E-04	4.00E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	3.30E-04	2.20E-								

Fresno Co GPR/ZOU Update  
Unmitigated Education  
Annual

Fresno Co GPR/ZOU Update  
Mitigated Education  
Annual

Unmitigated Education

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/yr											
Demolition	0.0176	0.16748	0.137	0.00298	0.00096	0.00008	0.00004	0.00025	0.00071	0.00077	
Onsite	0.0172	0.1872	0.1338	0.00225	0	0.00008	0.00008	0	0.00071	0.00071	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
Site Prep	0.01294	0.13247	0.08066	0.00016	0.00078	0.00045	0.00723	0.04075	0.00593	0.04669	
Onsite	0.0127	0.1323	0.0788	0.00015	0.0002	0.00045	0.00665	0.0406	0.00593	0.04686	
Offsite	0.00024	0.00017	0.00186	0.00001	0.00058	0	0.00058	0.00015	0	0.00016	
Grading	0.016	0.16708	0.1253	0.00025	0.00078	0.00723	0.02785	0.00692	0.00478	0.03478	
Onsite	0.0156	0.1668	0.1222	0.00024	0.0008	0.00733	0.02633	0.0276	0.00692	0.03452	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
Building Const	0.20775	1.7287	1.8982	0.00427	0.1225	0.07869	0.2012	0.0332	0.07413	0.1074	
Onsite	0.1995	1.6011	1.53	0.00252	0	0.0756	0.0756	0	0.0712	0.0712	
Offsite	0.00825	0.2096	0.3682	0.00175	0.1225	0.00309	0.1256	0.0332	0.00291	0.0362	
Paving	0.00922	0.08028	0.1187	0.00019	0.00096	0.00454	0.0055	0.00025	0.00418	0.00444	
Onsite	0.00203	0.0002	0.0011	0.00004	0.00096	0	0.00096	0.00025	0	0.00026	
Offsite	0.00719	0.08008	0.1176	0.00015	0.00004	0.00454	0.00454	0.00000	0.00418	0.00418	
Architectural Coat	2.05811	0.01176	0.01967	0.00003	0.0016	0.00096	0.00226	0.00042	0.00096	0.00108	
Onsite	2.05744	0.0113	0.0145	0.00002	0	0.00096	0.00096	0	0.00096	0.00096	
Offsite	0.00067	0.00046	0.00517	0.00001	0.0016	0.00001	0.0013	0.00042	0.00001	0.00043	
Total Annual (Tons/year)											
Onsite	2.27E+00	2.03E+00	2.00E+00	3.30E-03	1.39E-01	1.03E-01	2.42E-01	6.82E-02	9.64E-02	1.63E-01	
Offsite	0.05036	0.27007	0.38453	0.0018	0.12756	0.0031	0.13067	0.03452	0.00204	0.03757	
Total Annual	2.32	2.30	2.38	0.01	0.27	0.11	0.37	0.10	0.10	0.20	

Mitigated Education

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/yr											
Demolition	0.0041	0.01623	0.1893	0.00032	0.00096	0.00049	0.00145	0.00025	0.00049	0.00074	
Onsite	0.0037	0.016	0.1882	0.00031	0	0.00049	0.00049	0	0.00049	0.00049	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
Site Prep	0.0021	0.00824	0.05836	0.00016	0.00068	0.00025	0.00993	0.00025	0.00025	0.00171	
Onsite	0.00186	0.00807	0.05835	0.00015	0.00061	0.00025	0.00935	0.00025	0.00025	0.01855	
Offsite	0.00024	0.00017	0.00186	0.00001	0.00068	0	0.00068	0.00001	0	0.00016	
Grading	0.00331	0.01288	0.1451	0.00025	0.00246	0.00039	0.02785	0.01285	0.00039	0.01395	
Onsite	0.00291	0.0126	0.142	0.00024	0.00246	0.00039	0.02699	0.01269	0.00039	0.01279	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
Building Const	0.07895	0.4775	2.0007	0.00427	0.1225	0.0699	0.1241	0.0332	0.0699	0.04001	
Onsite	0.0307	0.2089	1.6325	0.00252	0	0.0381	0.0381	0	0.0381	0.0381	
Offsite	0.04825	0.2686	0.3682	0.00175	0.1225	0.0309	0.156	0.0332	0.00291	0.0362	
Paving	0.00264	0.01	0.1415	0.00019	0.00096	0.0003	0.00138	0.00025	0.0003	0.00056	
Onsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
Offsite	0.0022	0.00972	0.1384	0.00018	0.00004	0.00454	0.00454	0.00000	0.00418	0.00418	
Architectural Coat	2.05671	0.01049	0.01987	0.00003	0.0016	0.00096	0.00246	0.00042	0.00096	0.00046	
Onsite	2.05604	0.01013	0.0147	0.00002	0	0.00096	0.00096	0	0.00096	0.00096	
Offsite	0.00067	0.00046	0.00517	0.00001	0.0016	0.00001	0.0013	0.00042	0.00001	0.00043	
Total Annual (Tons/year)											
Onsite	2.10E+00	2.06E-01	2.02E+00	3.42E-03	6.26E-02	5.27E-03	6.79E-02	3.07E-02	5.27E-03	3.60E-02	
Offsite	0.05036	0.27007	0.38453	0.0018	0.12756	0.0031	0.13067	0.03452	0.00204	0.03757	
Total Annual	2.15	0.63	2.58	0.01	0.19	0.01	0.20	0.07	0.01	0.07	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	1.72E-02	0.1672	0.1339	2.90E-04		8.00E-03	8.00E-03		7.51E-03	7.51E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.00E-04	0.00E+00	9.00E-04	2.50E-04	0	2.60E-04
Total	1.76E-02	1.67E-01	1.37E-01	2.90E-04	9.00E-04	8.00E-03	8.00E-03	2.50E-04	7.51E-03	7.77E-03

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	3.70E-03	0.016	0.1882	3.10E-04				4.90E-04	4.90E-04	4.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.00E-04	0.00E+00	9.00E-04	2.50E-04	0	2.60E-04
Total	4.10E-03	1.83E-02	1.89E-01	3.20E-04	9.00E-04	1.46E-03	1.46E-03	4.90E-04	4.90E-04	4.90E-04

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					8.02E-02	0	8.02E-02	4.06E-02	0	4.06E-02
Off-Road	1.27E-02	0.1323	0.0788	1.80E-04		6.45E-03	6.45E-03	5.93E-03	5.93E-03	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	2.40E-04	1.70E-04	1.86E-03	1.00E-05	5.80E-04	0	5.80E-04	1.50E-04	0	1.60E-04
Total	0.01294	0.13247	0.08066	0.00016	0.08078	0.00645	0.08723	0.04075	0.00593	0.04669

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					3.81E-02	0	3.81E-02	1.83E-02	0	1.83E-02
Off-Road	1.86E-03	0.0703	0.0835	1.50E-04				2.90E-04	2.90E-04	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	2.40E-04	1.70E-04	1.86E-03	1.00E-05	5.80E-04	0	5.80E-04	1.50E-04	0	1.60E-04
Total	0.0021	0.00824	0.05836	0.00016	0.00068	0.00025	0.00093	0.00025	0.00025	0.00171

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					0.0588	0	0.0588	0.0276	0	0.0276
Off-Road	1.58E-02	0.1668	0.1222	2.40E-04		7.53E-03	7.53E-03	6.92E-03	6.92E-03	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.00E-04	0.00E+00	9.00E-04	2.50E-04	0.00E+00	2.60E-04
Total	0.016	0.16708	0.1253	0.00025	0.05978	0.00723	0.06729	0.02785	0.00692	0.03478

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					2.69E-02	0	2.69E-02	1.24E-02	0	1.24E-02
Off-Road	2.91E-03	0.0126	0.142	2.40E-04				3.90E-04	3.90E-04	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.00E-04	0.00E+00	9.00E-04	2.50E-04	0.00E+00	2.60E-04
Total	0.00331	0.01288	0.1451	0.00025	0.02746	0.00039	0.02785	0.01285	0.00039	0.01395

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.1995	1.6011	1.53	2.52E-03		0.0756	0.0756	0.0712	0.0712	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0.25E-03	0.242	0.89E-02	9.30E-04	2.98E-02	2.81E-03	3.24E-02	8.60E-03	2.49E-03	1.11E-02
Worker	0.039	2.66E-02	0.2997	8.20E-04	0.0007	4.80E-04	0.0007	2.46E-02	4.40E-04	2.51E-02



Fresno Co GPR/ZOU Update  
Unmitigated Health Services  
Annual

Fresno Co GPR/ZOU Update  
Mitigated Health Services  
Annual

Unmitigated Health Services

Total Annual		Annual										
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total		
Tons/year												
Demolition	0.02283	0.21889	0.1784	0.00034	0.00102	0.01501	0.21162	0.00027	0.00082	0.01011		
Onsite	0.0224	0.2186	0.1751	0.00033	0	0.0156	0.0104	0	0.0082	0.0082		
Offsite	0.00043	0.00029	0.0033	0.00001	0.00102	0.00001	0.00102	0.00027	0	0.00289		
Site Prep	0.00646	0.06628	0.04033	0.00008	0.04039	0.00323	0.04362	0.02038	0.00207	0.02335		
Onsite	0.00634	0.0662	0.0394	0.00008	0.0401	0.00323	0.04333	0.0203	0.00207	0.02237		
Offsite	0.00012	0.00008	0.00093	0	0.00029	0	0.00029	0.00008	0	0.00098		
Grading	0.007	0.07312	0.05486	0.0001	0.02572	0.00329	0.02901	0.01211	0.00303	0.01514		
Onsite	0.00682	0.073	0.0535	0.0001	0.0253	0.00329	0.02859	0.012	0.00303	0.01503		
Offsite	0.00018	0.00012	0.00136	0	0.00042	0	0.00042	0.00011	0	0.00011		
Building Const	0.18993	1.6903	1.7836	0.00346	0.0498	0.08236	0.1322	0.01356	0.07749	0.09106		
Onsite	0.1726	1.5516	1.6363	0.00295	0	0.0809	0.0809	0	0.0761	0.0761		
Offsite	0.01633	0.1387	0.1473	0.00051	0.0498	0.00146	0.0513	0.01356	0.00139	0.01466		
Paving	0.00784	0.07362	0.10128	0.00016	0.01238	0.0035	0.00478	0.00034	0.00233	0.00367		
Onsite	7.34E-03	7.08E-02	9.78E-02	1.95E-04	0.00E+00	3.49E-03	3.49E-03	0.00E+00	3.22E-03	3.22E-03		
Offsite	0.0005	0.00032	0.00378	0.00001	0.00128	0.00001	0.00129	0.00034	0.00001	0.00035		
Architectural Coat	0.95005	0.01054	0.0162	0.00002	0.00058	0.00057	0.00115	0.00015	0.00057	0.00073		
Onsite	0.94883	0.0104	0.0145	0.00002	0	0.00057	0.00057	0	0.00057	0.00057		
Offsite	0.00022	0.00014	0.0017	0	0.00058	0	0.00058	0.00015	0	0.00016		
<b>Total Annual (Tons/year)</b>												
Onsite	1.16E+00	2.00E+00	2.02E+00	3.37E-03	6.54E-02	1.02E-01	1.67E-01	3.23E-02	9.57E-02	1.28E-01		
Offsite	0.02078	0.12965	0.15837	0.00079	0.00339	0.00148	0.0549	0.01451	0.0014	0.01594		
<b>Total Annual</b>	<b>1.18</b>	<b>2.13</b>	<b>2.17</b>	<b>0.00</b>	<b>0.12</b>	<b>0.10</b>	<b>0.22</b>	<b>0.05</b>	<b>0.10</b>	<b>0.14</b>		

Mitigated Health Services

Total Annual		Annual										
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total		
Tons/year												
Demolition	0.00436	0.01129	0.2012	0.00034	0.00102	0.00003	0.00003	0.00003	0.00003	0.00006		
Onsite	0.00393	0.011	0.199	0.00033	0	0.00003	0	0.00003	0.00003	0.00006		
Offsite	0.00043	0.00029	0.0033	0.00001	0.00102	0.00001	0.00102	0.00001	0.00001	0.00007		
Site Prep	0.00105	0.00411	0.04263	0.00008	0.01839	0.00012	0.01851	0.00012	0.00012	0.00012		
Onsite	0.00093	0.00403	0.0417	0.00008	0.01839	0.00012	0.01851	0.00012	0.00012	0.00012		
Offsite	0.00012	0.00008	0.00093	0	0.00029	0	0.00029	0	0.00001	0.00001		
Grading	0.00145	0.00563	0.06346	0.00001	0.01182	0.00017	0.01199	0.00017	0.00017	0.00017		
Onsite	0.00127	0.00551	0.0621	0.00001	0.0114	0.00017	0.01157	0.00017	0.00017	0.00017		
Offsite	0.00018	0.00012	0.00136	0	0.00042	0	0.00042	0.00001	0	0.00011		
Building Const	0.05213	0.3522	1.8933	0.00346	0.0498	0.00346	0.00346	0.00346	0.00346	0.00346		
Onsite	0.0328	0.2235	1.746	0.00299	0	0.0408	0.0408	0	0.0408	0.0408		
Offsite	0.01933	0.1287	0.1473	0.00047	0.0498	0.00146	0.0513	0.00139	0.00139	0.01466		
Paving	0.00278	0.00793	0.11308	0.00016	0.01238	0.00034	0.00233	0.00034	0.00034	0.00034		
Onsite	1.76E-03	7.61E-03	1.08E-01	1.95E-04	0.00E+00	3.22E-03	3.22E-03	0.00E+00	3.22E-03	3.22E-03		
Offsite	0.0005	0.00032	0.00378	0.00001	0.00128	0.00001	0.00129	0.00034	0.00001	0.00035		
Architectural Coat	0.94876	0.01017	0.0164	0.00002	0.00058	0.00003	0.00003	0.00001	0.00001	0.00001		
Onsite	0.94854	0.01003	0.0147	0.00002	0	0.00003	0.00003	0.00001	0	0.00003		
Offsite	0.00022	0.00014	0.0017	0	0.00058	0	0.00058	0.00001	0	0.00016		
<b>Total Annual (Tons/year)</b>												
Onsite	9.89E-01	2.09E-01	2.17E+00	3.37E-03	2.95E-02	5.10E-03	3.47E-02	1.48E-02	5.10E-03	1.97E-02		
Offsite	0.02078	0.12965	0.15837	0.00079	0.00339	0.00148	0.0549	0.01451	0.0014	0.01594		
<b>Total Annual</b>	<b>1.01</b>	<b>0.39</b>	<b>2.33</b>	<b>0.00</b>	<b>0.08</b>	<b>0.01</b>	<b>0.09</b>	<b>0.03</b>	<b>0.01</b>	<b>0.04</b>		

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	2.24E-02	0.2186	0.1751	3.30E-04	1.06E-02	1.06E-02	1.06E-02	9.82E-03	9.82E-03	9.82E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.30E-04	2.90E-04	3.30E-03	1.00E-05	1.02E-03	1.02E-03	2.70E-04	0	2.80E-04	2.80E-04
<b>Total</b>	<b>2.28E-02</b>	<b>2.19E-01</b>	<b>1.78E-01</b>	<b>3.40E-04</b>	<b>1.08E-02</b>	<b>1.06E-02</b>	<b>1.16E-02</b>	<b>9.82E-03</b>	<b>9.82E-03</b>	<b>1.01E-02</b>

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	3.98E-03	0.017	0.199	3.30E-04	1.06E-02	1.06E-02	1.06E-02	5.20E-04	5.20E-04	5.20E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.30E-04	2.90E-04	3.30E-03	1.00E-05	1.02E-03	1.02E-03	2.70E-04	0	2.80E-04	2.80E-04
<b>Total</b>	<b>4.36E-03</b>	<b>1.73E-02</b>	<b>2.01E-01</b>	<b>3.40E-04</b>	<b>1.08E-02</b>	<b>1.06E-02</b>	<b>1.16E-02</b>	<b>5.20E-04</b>	<b>5.20E-04</b>	<b>5.20E-04</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					4.01E-02	0	4.01E-02	2.03E-02	0	2.03E-02
Off-Road	8.34E-03	0.0962	0.0394	8.00E-05	3.22E-03	3.22E-03	3.22E-03	2.97E-03	2.97E-03	2.97E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.20E-04	8.00E-05	9.30E-04	0.00E+00	2.90E-04	2.90E-04	8.00E-05	0	8.00E-05	8.00E-05
<b>Total</b>	<b>0.00646</b>	<b>0.06628</b>	<b>0.04033</b>	<b>0.00008</b>	<b>0.04039</b>	<b>0.00323</b>	<b>0.04362</b>	<b>0.02038</b>	<b>0.00207</b>	<b>0.02335</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					4.01E-02	0	4.01E-02	2.03E-02	0	2.03E-02
Off-Road	9.30E-04	4.03E-03	0.0417	8.00E-05	0.0181	0	0.0181	9.13E-03	0	9.13E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.20E-04	8.00E-05	9.30E-04	0.00E+00	2.90E-04	2.90E-04	8.00E-05	0	8.00E-05	8.00E-05
<b>Total</b>	<b>0.00105</b>	<b>0.00411</b>	<b>0.04263</b>	<b>0.00008</b>	<b>0.01839</b>	<b>0.00012</b>	<b>0.01851</b>	<b>0.00012</b>	<b>0.00012</b>	<b>0.00012</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0253	0	0.0253	0.012	0	0.012
Off-Road	6.82E-03	0.073	0.0535	1.00E-04	3.22E-03	3.22E-03	3.22E-03	3.03E-03	3.03E-03	3.03E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.80E-04	1.20E-04	1.38E-03	0	4.20E-04	4.20E-04	1.10E-04	0	1.10E-04	1.10E-04
<b>Total</b>	<b>0.007</b>	<b>0.07312</b>	<b>0.05486</b>	<b>0.0001</b>	<b>0.02572</b>	<b>0.00329</b>	<b>0.02901</b>	<b>0.01211</b>	<b>0.00303</b>	<b>0.01514</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0114	0	0.0114	5.42E-03	0	5.42E-03
Off-Road	1.27E-03	5.61E-03	0.0621	1.00E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.80E-04	1.20E-04	1.38E-03	0	4.20E-04	4.20E-04	1.10E-04	0		

Fresno Co GPR/ZOU Update  
Unmitigated Hospitality  
Annual

Unmitigated Hospitality

Total Annual		Annual								
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
<b>Demolition</b>										
Demolition	0.0215	0.2068	0.1679	0.0033	0.0096	0.0094	0.0109	0.0025	0.0024	0.0099
Onsite	0.0211	0.2058	0.1648	0.0031	0	0.0094	0.0094	0	0.0024	0.0094
Offsite	0.0004	0.0008	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026
<b>Site Prep</b>										
Site Prep	0.01294	0.13247	0.04666	0.0016	0.0078	0.0045	0.00723	0.04075	0.00593	0.04669
Onsite	0.0127	0.1323	0.0788	0.0015	0.0082	0.0045	0.00865	0.0406	0.00593	0.04658
Offsite	0.00024	0.00017	0.00186	0.0001	0	0.00005	0.00015	0	0	0.00016
<b>Grading</b>										
Grading	0.0196	0.16708	0.1253	0.00025	0.00576	0.00753	0.00729	0.02785	0.00692	0.03478
Onsite	0.0196	0.1668	0.1222	0.00024	0.0058	0.00753	0.00633	0.0276	0.00692	0.03452
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026
<b>Building Const</b>										
Building Const	0.2176	1.7845	1.9729	0.00464	0.1474	0.07932	0.2267	0.04	0.07474	0.1147
Onsite	0.1995	1.4901	1.53	0.00252	0	0.0796	0.0756	0	0.0712	0.0712
Offsite	0.0081	0.3244	0.4429	0.00212	0.1474	0.00172	0.1511	0.04	0.00364	0.0435
<b>Paving</b>										
Paving	0.00922	0.08028	0.1197	0.00019	0.0096	0.00454	0.0055	0.00025	0.00418	0.00444
Onsite	0.0092	0.0802	0.1178	0.0001	0.0096	0	0.0096	0.00025	0	0.00985
Offsite	0.0004	0.00008	0.0031	0.00019	0.00096	0	0.00096	0.00025	0	0.00026
<b>Architectural Coat</b>										
Architectural Coat	2.46775	0.01185	0.0007	0.00004	0.00192	0.00066	0.00258	0.00051	0.00066	0.00117
Onsite	2.46604	0.0113	0.0145	0.00002	0	0.00065	0.00065	0	0.00065	0.00065
Offsite	0.00081	0.00055	0.00062	0.00002	0.00192	0.00001	0.00193	0.00051	0.00001	0.00052
<b>Total Annual (Tons/year)</b>										
Onsite	2.68E+00	2.07E+00	2.03E+00	3.42E-03	1.39E-01	1.05E-01	2.44E-01	6.82E-02	9.81E-02	1.66E-01
Offsite	0.08035	0.32096	0.46026	0.00218	0.15278	0.00373	0.15649	0.04141	0.00355	0.04496
<b>Total Annual</b>	<b>2.76</b>	<b>2.39</b>	<b>2.49</b>	<b>0.01</b>	<b>0.29</b>	<b>0.11</b>	<b>0.40</b>	<b>0.11</b>	<b>0.10</b>	<b>0.21</b>

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.0211	0.2058	0.1648	3.10E-04		9.94E-03	9.94E-03		9.24E-03	9.24E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
<b>Total</b>	<b>2.19E-02</b>	<b>2.86E-01</b>	<b>1.88E-01</b>	<b>3.20E-04</b>	<b>9.69E-04</b>	<b>9.94E-03</b>	<b>1.09E-02</b>	<b>9.24E-03</b>	<b>2.50E-04</b>	<b>9.69E-03</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.0127	0.1323	0.0788	1.90E-04	0.002	0	0.002	0.0406	0	0.0406
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.40E-04	1.70E-04	1.86E-03	1.00E-05	5.80E-04	0	5.80E-04	1.50E-04	0	1.60E-04
<b>Total</b>	<b>0.01294</b>	<b>0.13247</b>	<b>0.04666</b>	<b>0.00016</b>	<b>0.0078</b>	<b>0.0045</b>	<b>0.00723</b>	<b>0.04075</b>	<b>0.00593</b>	<b>0.04669</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Fugitive Dust					0.0098	0	0.0098	0.0276	0	0.0276
Off-Road	0.0196	0.1668	0.1222	2.40E-04		7.50E-03	7.50E-03	6.92E-03	6.92E-03	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
<b>Total</b>	<b>0.016</b>	<b>0.16708</b>	<b>0.1253</b>	<b>0.00025</b>	<b>0.00976</b>	<b>0.00753</b>	<b>0.00729</b>	<b>0.02785</b>	<b>0.00692</b>	<b>0.03478</b>

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.1995	1.4901	1.53	2.52E-03		0.0756	0.0756	0.0712	0.0712	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0.0112	0.2904	0.0808	1.10E-03	0.006	3.19E-03	0.0091	0.0104	3.01E-03	0.0134
Worker	0.0469	0.323	0.3601	9.90E-04	0.114	1.70E-04	0.112	0.0296	5.30E-04	0.0291
<b>Total</b>	<b>0.2176</b>	<b>1.7845</b>	<b>1.9729</b>	<b>0.00464</b>	<b>0.1474</b>	<b>0.07932</b>	<b>0.2267</b>	<b>0.04</b>	<b>0.07474</b>	<b>0.1147</b>

Paving

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	0.0092	0.089	0.1166	1.80E-04		4.54E-03	4.54E-03	4.18E-03	4.18E-03	
Paving	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
<b>Total</b>	<b>0.00922</b>	<b>0.08028</b>	<b>0.1197</b>	<b>1.90E-04</b>	<b>0.0096</b>	<b>4.54E-03</b>	<b>5.50E-03</b>	<b>4.18E-03</b>	<b>4.48E-03</b>	

Architectural Coating

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Acrl. Coating	2.4653	0.0113	0.0145	2.00E-05		0	0	0	0	0
Off-Road	1.64E-03	0.0113	0.0145	2.00E-05	6.92E-04	6.90E-04	6.92E-04	6.92E-04	6.92E-04	
Hauling	0	0	0	0	0	0	0	0	0	
Vendor	0	0	0	0	0	0	0	0	0	
Worker	8.10E-04	5.90E-04	6.20E-03	1.00E-05	1.90E-03	1.00E-05	5.10E-04	1.00E-05	5.20E-04	
<b>Total</b>	<b>2.47E+00</b>	<b>1.19E-02</b>	<b>2.07E-02</b>	<b>4.00E-05</b>	<b>1.92E-03</b>	<b>6.80E-04</b>	<b>2.88E-03</b>	<b>5.10E-04</b>	<b>6.60E-04</b>	<b>1.17E-03</b>

Fresno Co GPR/ZOU Update  
Mitigated Hospitality  
Annual

Mitigated Hospitality

Total Annual		Annual								
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
<b>Demolition</b>										
Demolition	0.0041	0.01629	0.1993	0.00032	0.00996	0.00949	0.01045	0.0025	0.00949	0.00775
Onsite	0.0037	0.016	0.1982	0.00031	0	0.00949	0.00949	0	0.00949	0.00949
Offsite	0.0004	0.00028	0.0031	0.00001	0.00996	0	0.00996	0.00025	0	0.00026
<b>Site Prep</b>										
Site Prep	0.00186	0.00807	0.0835	0.00016	0.00668	0.00025	0.00693	0.01845	0.00025	0.01871
Onsite	0.00186	0.00807	0.0835	0.00015	0.00661	0.00025	0.00686	0.01835	0.00025	0.0186
Offsite	0.00024	0.00017	0.00186	0.00001	0.00068	0	0.00068	0.00015	0	0.00016
<b>Grading</b>										
Grading	0.00331	0.01288	0.1451	0.00025	0.02746	0.00039	0.02785	0.01285	0.00039	0.01305
Onsite	0.00291	0.0126	0.142	0.00024	0.02746	0.00039	0.02785	0.01265	0.00039	0.01279
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026
<b>Building Const</b>										
Building Const	0.0888	0.5333	2.0754	0.00464	0.1474	0.07932	0.15491	0.04	0.07735	0.04731
Onsite	0.0307	0.2089	1.6325	0.00252	0	0.0796	0.0381	0.0381	0	0.0381
Offsite	0.0581	0.3244	0.4429	0.00212	0.1474	0.00172	0.1511	0.04	0.00364	0.0435
<b>Paving</b>										
Paving	0.00264	0.01	0.1415	0.00019	0.00996	0.0003	0.01038	0.00025	0.0003	0.00056
Onsite	0.00264	0.01	0.1384	0.00018	0.00996	0	0.00996	0.00025	0	0.00026
Offsite	0.0004	0.00008	0.0031	0.00019	0.00096	0	0.00096	0.00025	0	0.00026
<b>Architectural Coat</b>										
Architectural Coat	2.4653	0.0118	0.0209	0.00004	0.00192	0.00004	0.00192	0.00016	0.00051	0.00067
Onsite	2.4654	0.0113	0.0147	0.00002	0	0.00003	0.00003	0	0.00003	0.00003
Offsite	0.00081	0.00055	0.0062	0.00002	0.00192	0.00001	0.00193	0.00051	0.00001	0.00052
<b>Total Annual (Tons/year)</b>										
Onsite	2.51E+00	2.56E-01	2.20E+00	3.42E-03	6.28E-02	5.27E-03	6.79E-02	3.07E-02	5.27E-03	3.60E-02
Offsite	0.08035	0.32096	0.46026	0.00218	0.15278	0.00373	0.15649	0.04141	0.00355	0.04496
<b>Total Annual</b>	<b>2.57</b>	<b>0.88</b>	<b>2.66</b>	<b>0.01</b>	<b>0.22</b>	<b>0.01</b>	<b>0.22</b>	<b>0.07</b>	<b>0.01</b>	<b>0.08</b>

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/yr										
Off-Road	3.70E-03	0.016								

Fresno Co GPR/ZOU Update  
Unmitigated Industrial  
Annual

Fresno Co GPR/ZOU Update  
Mitigated Industrial  
Annual

Unmitigated Industrial

Total Annual		Annual								
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Demolition	0.0215	0.2058	0.1679	0.0032	0.0096	0.0094	0.0109	0.0025	0.0024	0.0095
Onsite	0.0211	0.2058	0.1648	0.0031	0	0.0094	0.0094	0	0.0024	0.0094
Offsite	0.0004	0.0008	0.0031	0.0001	0.0096	0	0.0096	0.0025	0	0.0026
Site Prep	0.01294	0.13247	0.08066	0.0016	0.08078	0.0045	0.08723	0.04075	0.00593	0.04669
Onsite	0.0127	0.1323	0.0788	0.0015	0.0802	0.0045	0.08665	0.0406	0.00593	0.04663
Offsite	0.00024	0.00017	0.00186	0.0001	0.00058	0	0.00058	0.00015	0	0.00016
Grading	0.016	0.16708	0.1253	0.00025	0.05976	0.00753	0.06729	0.02785	0.00692	0.03478
Onsite	0.0156	0.1668	0.1222	0.00024	0.0598	0.00753	0.06633	0.0276	0.00692	0.03452
Offsite	0.0004	0.00028	0.0031	0.00001	0.00996	0	0.00996	0.0025	0	0.0026
Building Const	0.2156	1.7734	1.958	0.0046	0.1423	0.07919	0.2216	0.0386	0.07462	0.1132
Onsite	0.1955	1.4901	1.53	0.00252	0	0.0756	0.0756	0	0.0712	0.0712
Offsite	0.0261	0.3133	0.428	0.00204	0.1423	0.00359	0.148	0.0386	0.00342	0.042
Paving	0.0063	0.06174	0.1194	0.00019	0.0096	0.00468	0.00504	0.00205	0.00378	0.00402
Onsite	0.2463	8.1562	1.171	0.01	1.886	4.086	4.086	0.006	3.766	3.766
Offsite	0.00037	0.00024	0.00284	0.00001	0.00996	0	0.00996	0.0025	0	0.0026
Architectural Coat	2.39095	0.01987	0.01999	0.00004	0.00185	0.00058	0.00243	0.00049	0.00058	0.00107
Onsite	2.39023	0.01904	0.0145	0.00002	0	0.00057	0.00057	0	0.00057	0.00057
Offsite	0.00072	0.00047	0.00549	0.00002	0.00185	0.00001	0.00186	0.00049	0.00001	0.0005
Total Annual (Tons/year)										
Onsite	2.61E+00	2.06E+00	2.03E+00	3.42E-03	1.39E-01	1.04E-01	2.43E-01	6.82E-02	9.78E-02	1.66E-01
Offsite	0.05823	0.31474	0.44439	0.0021	0.14761	0.0036	0.15132	0.03999	0.00343	0.04344
Total Annual	2.67	2.37	2.47	0.91	0.29	0.11	0.39	0.11	0.10	0.21

Mitigated Industrial

Total Annual		Annual								
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Demolition	0.0041	0.01629	0.1893	0.00032	0.00996	0.0094	0.01049	0.0025	0.0049	0.00775
Onsite	0.0037	0.016	0.1862	0.00031	0	0.0094	0.0094	0	0.0049	0.0094
Offsite	0.0004	0.00028	0.0031	0.00001	0.00996	0	0.00996	0.0025	0	0.0026
Site Prep	0.0021	0.00824	0.0536	0.00016	0.00668	0.0025	0.00933	0.01845	0.00025	0.01871
Onsite	0.00186	0.00807	0.0535	0.00015	0.00661	0.0025	0.00933	0.0183	0.00025	0.01855
Offsite	0.00024	0.00017	0.00186	0.00001	0.00058	0	0.00058	0.00015	0	0.00016
Grading	0.00331	0.01288	0.1451	0.00025	0.02746	0.00039	0.02785	0.01265	0.00039	0.01305
Onsite	0.00291	0.0126	0.142	0.00024	0.0276	0.00039	0.02785	0.01265	0.00039	0.01279
Offsite	0.0004	0.00028	0.0031	0.00001	0.00996	0	0.00996	0.0025	0	0.0026
Building Const	0.0868	0.5222	2.9655	0.0046	0.1423	0.0074	0.1481	0.0386	0.07723	0.0481
Onsite	0.0307	0.2089	1.6325	0.00252	0	0.0381	0.0381	0	0.0381	0.0381
Offsite	0.0561	0.3133	0.429	0.00204	0.1423	0.00359	0.148	0.0386	0.00342	0.042
Paving	0.00261	0.00996	0.14124	0.00019	0.00996	0.003	0.01025	0.0025	0.003	0.0056
Onsite	2.24E-03	9.72E-03	1.38E-01	1.80E-04	0.00E+00	3.00E-04	3.00E-04	0.00E+00	3.00E-04	3.00E-04
Offsite	0.00037	0.00024	0.00284	0.00001	0.00996	0	0.00996	0.0025	0	0.0026
Architectural Coat	2.38966	0.0015	0.02019	0.00004	0.00185	0.00004	0.00189	0.00049	0.00004	0.00053
Onsite	2.38884	0.00103	0.0147	0.00002	0	0.00057	0.00057	0	0.00057	0.00057
Offsite	0.00072	0.00047	0.00549	0.00002	0.00185	0.00001	0.00186	0.00049	0.00001	0.0005
Total Annual (Tons/year)										
Onsite	2.43E+00	2.06E+00	2.20E+00	3.42E-03	0.28E-02	0.27E-02	0.79E-02	3.07E-02	0.27E-02	3.60E-02
Offsite	0.05823	0.31474	0.44439	0.0021	0.14761	0.0036	0.15132	0.03999	0.00343	0.04344
Total Annual	2.49	0.67	2.64	0.91	0.21	0.01	0.22	0.07	0.01	0.08

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.0211	0.2058	0.1648	3.10E-04	9.94E-03	9.94E-03	9.94E-03	9.24E-03	9.24E-03	9.24E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
Total	2.19E-02	2.86E-01	1.88E-01	3.20E-04	9.69E-04	9.94E-03	1.09E-02	9.24E-03	9.24E-03	9.24E-03

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	3.70E-03	0.016	0.1862	3.10E-04	9.94E-04	9.94E-04	9.94E-04	4.90E-04	4.90E-04	4.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
Total	4.19E-03	1.83E-02	1.89E-01	3.20E-04	9.80E-04	9.94E-04	1.09E-03	5.20E-04	4.90E-04	4.90E-04

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.0127	0.1323	0.0788	1.90E-04	0.0802	0	0.0802	0.0406	0	0.0406
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.40E-04	1.70E-04	1.86E-03	3.10E-05	5.80E-04	0	5.80E-04	1.50E-04	0	1.60E-04
Total	0.01294	0.13247	0.08066	0.00016	0.08078	0.0045	0.08723	0.04075	0.00593	0.04669

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust						0	0.0361	0	0.0361	0.0361
Off-Road	1.86E-03	8.07E-03	0.0835	1.50E-04	0	0	2.90E-04	2.90E-04	0	2.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	2.40E-04	1.70E-04	1.86E-03	1.00E-05	5.80E-04	0	5.80E-04	1.50E-04	0	1.60E-04
Total	0.0021	0.00824	0.0536	0.00016	0.00668	0.0025	0.00933	0.01845	0.00025	0.01871

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0598	0	0.0598	0.0276	0	0.0276
Off-Road	0.0156	0.1668	0.1222	2.40E-04	7.53E-03	7.53E-03	7.53E-03	6.92E-03	6.92E-03	6.92E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
Total	0.016	0.16708	0.1253	0.00025	0.05976	0.00753	0.06729	0.02785	0.00692	0.03478

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0265	0	0.0265	0.0124	0	0.0124
Off-Road	2.91E-03	0.0126	0.142	2.40E-04	9.94E-04	9.94E-04	9.94E-04	3.90E-04	3.90E-04	3.90E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.00E-04	2.80E-04	3.10E-03	1.00E-05	9.90E-04	0	9.90E-04	2.50E-04	0	2.60E-04
Total	0.00331	0.01288	0.1451	0.00025	0.02746	0.00039	0.02785	0.01265	0.00039	0.01305

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.1955	1.4901	1.53	2.52E-03	0.0756	0.0756	0.0712	0.0712	0.0712	0.0712
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0.0108	0.2824	0.08	1.00E-03	0.0347	3.04E-03	0.0378	0.01	2.91E-03	0.0129
Worker	0.0463	0.0209	0.348	9.90E-04	0.1076	1.50E-04	0.1082	0.0286	5.10E-04	0.0291
Total	0.2156	1.7734	1.958	0.0046</						

Fresno Co GPR/ZOU Update  
Unmitigated Manufacturing  
Annual

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Mitigated Manufacturing  
Annual

Unmitigated Manufacturing

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.02283	0.21889	0.1784	0.00034	0.00102	0.01901	0.21162	0.00027	0.00982	0.01011	
Onsite	0.0224	0.2186	0.1751	0.00033	0	0.0196	0.2104	0	0.00982	0.00982	
Offsite	0.00043	0.00029	0.0033	0.00001	0.00102	0.00001	0.00102	0.00027	0	0.00029	
Site Prep	0.00646	0.06628	0.04033	0.00008	0.04039	0.00323	0.04362	0.02038	0.00297	0.02335	
Onsite	0.00634	0.0662	0.0394	0.00008	0.0401	0.00323	0.04333	0.0203	0.00297	0.02327	
Offsite	0.00012	0.00008	0.00993	0	0.00029	0	0.00029	0.00008	0	0.00008	
Grading	0.0007	0.07312	0.05486	0.0001	0.02572	0.00329	0.02901	0.01211	0.00303	0.01514	
Onsite	0.00682	0.073	0.0535	0.0001	0.0253	0.00329	0.02859	0.012	0.00303	0.01503	
Offsite	0.00018	0.00012	0.00136	0	0.00042	0	0.00042	0.00011	0	0.00011	
Building Const	0.20268	1.7411	1.8811	0.00386	0.0815	0.08296	0.1644	0.02215	0.07806	0.10021	
Onsite	0.1796	1.5516	1.6363	0.00269	0	0.0809	0.0809	0	0.0761	0.0761	
Offsite	0.02308	0.1795	0.2448	0.00117	0.0815	0.00206	0.0835	0.02215	0.00196	0.02411	
Paving	0.00035	0.07067	0.01014	0.00016	0.01038	0.00391	0.00519	0.00034	0.00261	0.00309	
Onsite	7.81E-03	7.42E-02	9.78E-02	1.50E-04	0.00E+00	3.90E-03	3.90E-03	0.00E+00	3.60E-03	3.60E-03	
Offsite	0.00034	0.00037	0.00414	0.00001	0.00128	0.00001	0.00129	0.00034	0.00001	0.00035	
Architectural Coat	1.27784	0.01158	0.0176	0.00033	0.00096	0.00065	0.00161	0.00025	0.00065	0.00091	
Onsite	1.27744	0.0113	0.0145	0.00002	0	0.00065	0.00065	0	0.00065	0.00065	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0.00025	0	0.00026	
<b>Total Annual (Tons/year)</b>											
Onsite	1.49E+00	2.01E+00	2.02E+00	3.37E-03	6.54E-02	1.03E-01	1.88E-01	3.23E-02	9.52E-02	1.28E-01	
Offsite	0.03375	0.18064	0.25763	0.0012	0.08547	0.00208	0.08748	0.0232	0.00197	0.02519	
<b>Total Annual</b>	<b>1.53</b>	<b>2.19</b>	<b>2.27</b>	<b>0.00</b>	<b>0.15</b>	<b>0.10</b>	<b>0.26</b>	<b>0.06</b>	<b>0.10</b>	<b>0.15</b>	

Mitigated Manufacturing

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.00436	0.01729	0.2912	0.00034	0.00102	0.00003	0.00105	0.00003	0.00154	0.00027	
Onsite	0.00393	0.017	0.1979	0.00033	0	0.00002	0.00002	0	0.00002	0.00002	
Offsite	0.00043	0.00029	0.0933	0.00001	0.00102	0.00001	0.00102	0.00001	0.00152	0.00027	
Site Prep	0.00105	0.00411	0.04263	0.00008	0.04039	0.00002	0.04041	0.00012	0.01181	0.00012	
Onsite	0.00093	0.00403	0.0417	0.00008	0.04018	0.00001	0.04019	0.00012	0.01182	0.00012	
Offsite	0.00012	0.00008	0.00093	0	0.00029	0	0.00029	0	0.00009	0.00008	
Grading	0.00145	0.00563	0.06346	0.0001	0.01182	0.00017	0.01199	0.00563	0.00017	0.0057	
Onsite	0.00127	0.00551	0.0621	0.0001	0.0114	0.00017	0.01157	0.00562	0.00017	0.00569	
Offsite	0.00018	0.00012	0.00136	0	0.00042	0	0.00042	0.00011	0	0.00011	
Building Const	0.06488	0.403	1.9908	0.00386	0.0815	0.08164	0.08164	0.02215	0.00904	0.02819	
Onsite	0.0328	0.2235	1.746	0.00269	0	0.08098	0.08098	0	0.00488	0.00488	
Offsite	0.03208	0.1795	0.2448	0.00117	0.0815	0.00006	0.08005	0.02215	0.00416	0.02411	
Paving	0.0023	0.07068	0.11344	0.00016	0.01038	0.00034	0.00102	0.00034	0.00024	0.00058	
Onsite	1.78E-03	7.81E-03	1.08E-01	1.50E-04	0.00E+00	2.30E-04	2.30E-04	0.00E+00	2.30E-04	2.30E-04	
Offsite	0.00024	0.00037	0.00414	0.00001	0.00128	0.00001	0.00129	0.00034	0.00001	0.00035	
Architectural Coat	1.27644	0.0131	0.0178	0.00033	0.00096	0.00003	0.00099	0.00003	0.00025	0.00029	
Onsite	1.27604	0.01303	0.0147	0.00002	0	0.00003	0.00003	0	0.00003	0.00003	
Offsite	0.0004	0.00028	0.0031	0.00001	0.00096	0	0.00096	0	0.00025	0.00026	
<b>Total Annual (Tons/year)</b>											
Onsite	1.32E+00	2.09E-01	2.17E+00	3.37E-03	2.95E-02	5.15E-03	3.47E-02	1.48E-02	5.15E-03	1.97E-02	
Offsite	0.03375	0.18064	0.25763	0.0012	0.08547	0.00208	0.08748	0.0232	0.00197	0.02519	
<b>Total Annual</b>	<b>1.35</b>	<b>0.44</b>	<b>2.43</b>	<b>0.00</b>	<b>0.11</b>	<b>0.01</b>	<b>0.12</b>	<b>0.04</b>	<b>0.01</b>	<b>0.04</b>	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.0224	0.2186	0.1751	3.30E-04	0.0196	0.0106		9.82E-03	9.82E-03	
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.30E-04	2.90E-04	3.30E-03	1.00E-05	1.00E-05	1.02E-03	2.70E-04	0	2.80E-04	0
<b>Total</b>	<b>2.28E-02</b>	<b>2.19E-01</b>	<b>1.78E-01</b>	<b>3.40E-04</b>	<b>1.02E-02</b>	<b>1.16E-02</b>	<b>2.70E-04</b>	<b>9.82E-03</b>	<b>1.01E-02</b>	<b>1.01E-02</b>

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	3.90E-03	0.017	0.1979	3.30E-04				5.20E-04	5.20E-04	5.20E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.30E-04	2.90E-04	3.30E-03	1.00E-05	1.02E-03	1.00E-05	1.02E-03	2.70E-04	0	2.80E-04
<b>Total</b>	<b>4.36E-03</b>	<b>1.73E-02</b>	<b>2.01E-01</b>	<b>3.40E-04</b>	<b>1.02E-03</b>	<b>1.00E-05</b>	<b>1.02E-03</b>	<b>2.70E-04</b>	<b>5.20E-04</b>	<b>5.20E-04</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0401	0	0.0401	0.0203	0	0.0203
Off-Road	8.34E-03	0.0662	0.0394	8.00E-05	3.23E-03	3.23E-03	2.97E-03	2.97E-03	2.97E-03	2.97E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.20E-04	8.00E-05	9.30E-04	0	2.90E-04	0	2.90E-04	8.00E-05	0	8.00E-05
<b>Total</b>	<b>0.00646</b>	<b>0.06628</b>	<b>0.04033</b>	<b>0.00008</b>	<b>0.04039</b>	<b>0.00323</b>	<b>0.04362</b>	<b>0.02038</b>	<b>0.00297</b>	<b>0.02335</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0181	0	0.0181	0	0	0.0181
Off-Road	9.30E-04	4.03E-03	0.0417	8.00E-05	1.20E-04	1.20E-04	1.20E-04	1.20E-04	1.20E-04	1.20E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.20E-04	8.00E-05	9.30E-04	0	2.90E-04	0	2.90E-04	8.00E-05	0	8.00E-05
<b>Total</b>	<b>0.00105</b>	<b>0.00411</b>	<b>0.04263</b>	<b>0.00008</b>	<b>0.01038</b>	<b>0.00034</b>	<b>0.01072</b>	<b>0.01181</b>	<b>0.00024</b>	<b>0.00933</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0253	0	0.0253	0.012	0	0.012
Off-Road	6.82E-03	0.073	0.0535	1.00E-04	3.23E-03	3.23E-03	3.03E-03	3.03E-03	3.03E-03	3.03E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.80E-04	1.20E-04	1.38E-03	0	4.20E-04	0	4.20E-04	1.10E-04	0	1.10E-04
<b>Total</b>	<b>0.007</b>	<b>0.07312</b>	<b>0.05486</b>	<b>0.0001</b>	<b>0.02572</b>	<b>0.00329</b>	<b>0.02901</b>	<b>0.01211</b>	<b>0.00303</b>	<b>0.01514</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Fugitive Dust					0.0114	0	0.0114	5.42E-03	0	5.42E-03
Off-Road	1.27E-03	5.81E-03	0.0621	1.00E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04	1.70E-04
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	1.80E-04	1.20E-04	1.38E-03	0	4.20E-04	0	4.20E-04	1.10E-04	0	1.10E-04
<b>Total</b>	<b>0.00145</b>	<b>0.00563</b>	<b>0.06346</b>	<b>0.0001</b>	<b>0.01182</b>	<b>0.00017</b>	<b>0.01199</b>	<b>0.00563</b>	<b>0.00017</b>	<b>0.0057</b>

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										





Fresno Co GPR/ZOU Update  
Unmitigated Retail  
Annual

Fresno Co GPR/ZOU Update  
Mitigated Retail  
Annual

Unmitigated Retail

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.01816	0.17481	0.10313	0.00206	0.00109	0.00981	0.0099	0.00209	0.00623	0.00832	
Onsite	0.0177	0.1745	0.1466	0.00225	0	0.0088	0.0088	0	0.00622	0.00922	
Offsite	0.00046	0.00031	0.00033	0.00001	0.00109	0.00001	0.0011	0.00029	0.00001	0.0003	
Site Prep	0.00134	0.01462	0.0073	0.00002	0.00033	0.00062	0.00085	0.00302	0.00057	0.00359	
Onsite	0.00131	0.0146	0.00709	0.00002	0.00027	0.00062	0.00089	0.003	0.00057	0.00357	
Offsite	0.00003	0.00002	0.00021	0	0.00006	0	0.00006	0.00002	0	0.00002	
Grading	0.00315	0.03405	0.01892	0.00004	0.01436	0.00148	0.01584	0.00689	0.00137	0.00826	
Onsite	0.00308	0.034	0.0184	0.00004	0.0142	0.00148	0.01568	0.00685	0.00137	0.00822	
Offsite	0.00007	0.00005	0.00052	0	0.00016	0	0.00016	0.00004	0	0.00004	
Building Const	0.18317	1.38884	1.4132	0.0027	0.02389	0.0628	0.08671	0.0065	0.00667	0.09337	
Onsite	0.1739	1.3191	1.3426	0.00233	0	0.0621	0.0621	0	0.06	0.06	
Offsite	0.00927	0.06974	0.0706	0.00037	0.02389	0.00067	0.02448	0.0065	0.00667	0.03317	
Paving	0.00366	0.03405	0.04569	0.00007	0.00052	0.00174	0.00226	0.00114	0.0016	0.00274	
Onsite	3.44E-03	3.36E-02	4.40E-02	7.00E-05	0.00E+00	1.74E-03	1.74E-03	0.00E+00	1.60E-03	1.60E-03	
Offsite	0.00022	0.00015	0.00168	0	0.00052	0	0.00052	0.00014	0	0.00014	
Architectural Coat	0.42519	0.00709	0.00959	0.00001	0.00016	0.00041	0.00057	0.00004	0.00041	0.00045	
Onsite	0.42512	0.00704	0.00907	0.00001	0	0.00041	0.00041	0	0.00041	0.00041	
Offsite	0.00007	0.00005	0.00052	0	0.00016	0	0.00016	0.00004	0	0.00004	
<b>Total Annual (Tons/year)</b>											
Onsite	6.25E-01	1.88E+00	1.57E+00	2.72E-02	2.05E-02	7.52E-02	9.56E-02	9.85E-03	7.22E-02	8.20E-02	
Offsite	0.01912	0.06232	0.07706	0.00008	0.02588	0.00071	0.02661	0.00703	0.00668	0.00771	
<b>Total Annual</b>	<b>0.63</b>	<b>1.65</b>	<b>1.64</b>	<b>0.00</b>	<b>0.05</b>	<b>0.08</b>	<b>0.12</b>	<b>0.02</b>	<b>0.07</b>	<b>0.09</b>	

Mitigated Retail

Total Annual		Annual									
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	
Tons/year											
Demolition	0.00341	0.01311	0.15803	0.00206	0.00109	0.00981	0.0099	0.00209	0.00623	0.00832	
Onsite	0.00296	0.0128	0.1545	0.00225	0	0.0088	0.0088	0	0.00622	0.00922	
Offsite	0.00046	0.00031	0.00033	0.00001	0.00109	0.00001	0.0011	0.00029	0.00001	0.0003	
Site Prep	0.00024	0.00093	0.00088	0.00002	0.00033	0.00062	0.00085	0.00302	0.00057	0.00359	
Onsite	0.00021	0.00091	0.00087	0.00002	0.00028	0.00062	0.00083	0.00285	0.00135	0.00318	
Offsite	0.00003	0.00002	0.00021	0	0.00006	0	0.00006	0	0.00002	0.00002	
Grading	0.00057	0.00224	0.00232	0.00004	0.00063	0.00069	0.00132	0.00066	0.00132	0.00268	
Onsite	0.0005	0.00219	0.0218	0.00004	0.00037	0.00037	0.00074	0.00064	0.00037	0.00101	
Offsite	0.00007	0.00005	0.00052	0	0.00016	0	0.00016	0.00004	0	0.00004	
Building Const	0.04017	0.45334	1.4552	0.0027	0.02389	0.0628	0.08671	0.0065	0.00667	0.09337	
Onsite	0.0399	0.3916	1.3846	0.00233	0	0.0621	0.0621	0	0.06	0.06	
Offsite	0.00027	0.06174	0.0706	0.00037	0.02389	0.00067	0.02448	0.0065	0.00667	0.03317	
Paving	0.00102	0.00061	0.00058	0.00007	0.00052	0.00114	0.00114	0.00063	0.00114	0.00177	
Onsite	8.00E-04	3.46E-03	4.93E-02	7.00E-05	0.00E+00	1.70E-04	1.70E-04	0.00E+00	1.50E-04	1.50E-04	
Offsite	0.00002	0.00015	0.00168	0	0.00052	0	0.00052	0.00014	0	0.00014	
Architectural Coat	0.42432	0.00669	0.00968	0.00001	0.00016	0.00041	0.00057	0.00004	0.00041	0.00045	
Onsite	0.42425	0.00664	0.00916	0.00001	0	0.00041	0.00041	0	0.00041	0.00041	
Offsite	0.00007	0.00005	0.00052	0	0.00016	0	0.00016	0.00004	0	0.00004	
<b>Total Annual (Tons/year)</b>											
Onsite	4.60E-01	1.42E-01	1.83E+00	2.72E-02	0.19E-03	3.82E-03	1.30E-02	4.43E-03	3.82E-03	8.25E-03	
Offsite	0.01912	0.06232	0.07706	0.00008	0.02588	0.00071	0.02661	0.00703	0.00668	0.00771	
<b>Total Annual</b>	<b>0.47</b>	<b>0.47</b>	<b>1.71</b>	<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>0.04</b>	<b>0.02</b>	

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.0177	0.1745	0.1466	2.90E-04	8.80E-03	8.80E-03	8.82E-03	8.22E-03	8.22E-03	8.22E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.60E-04	3.10E-04	3.53E-03	1.00E-05	1.00E-05	1.10E-03	2.90E-04	1.00E-05	3.00E-04	3.00E-04
<b>Total</b>	<b>1.82E-02</b>	<b>1.75E-01</b>	<b>1.50E-01</b>	<b>2.90E-04</b>	<b>8.81E-03</b>	<b>8.90E-03</b>	<b>2.90E-04</b>	<b>8.23E-03</b>	<b>8.52E-03</b>	<b>8.52E-03</b>

Demolition

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	2.90E-03	0.0128	0.1545	2.90E-04	8.80E-03	8.80E-03	8.82E-03	8.22E-03	8.22E-03	8.22E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	4.60E-04	3.10E-04	3.53E-03	1.00E-05	1.00E-05	1.10E-03	2.90E-04	1.00E-05	3.00E-04	3.00E-04
<b>Total</b>	<b>3.41E-03</b>	<b>1.31E-02</b>	<b>1.68E-01</b>	<b>2.90E-04</b>	<b>8.80E-03</b>	<b>8.80E-03</b>	<b>2.90E-04</b>	<b>1.99E-03</b>	<b>4.00E-04</b>	<b>6.90E-04</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	1.31E-03	0.0146	7.90E-03	2.00E-05	6.27E-03	0	6.27E-03	3.00E-03	0	3.00E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	3.00E-05	2.00E-05	2.10E-04	0	6.00E-05	0	6.00E-05	2.00E-05	0	2.00E-05
<b>Total</b>	<b>0.00134</b>	<b>0.01462</b>	<b>0.0073</b>	<b>0.00002</b>	<b>0.00633</b>	<b>0.00000</b>	<b>0.00633</b>	<b>0.00302</b>	<b>0.00000</b>	<b>0.00302</b>

Site Preparation

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	2.10E-04	9.10E-04	8.87E-03	2.00E-05	2.82E-03	0	2.82E-03	1.35E-03	0	1.35E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	3.00E-05	2.00E-05	2.10E-04	0	6.00E-05	0	6.00E-05	2.00E-05	0	2.00E-05
<b>Total</b>	<b>0.00024</b>	<b>0.00093</b>	<b>0.00885</b>	<b>0.00002</b>	<b>0.00288</b>	<b>0.00000</b>	<b>0.00288</b>	<b>0.00135</b>	<b>0.00000</b>	<b>0.00135</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	3.08E-03	0.034	0.0184	4.00E-05	0.0142	0	0.0142	6.85E-03	0	6.85E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	7.00E-05	5.00E-05	5.20E-04	0	1.60E-04	0	1.60E-04	4.00E-05	0	4.00E-05
<b>Total</b>	<b>0.00315</b>	<b>0.03405</b>	<b>0.01892</b>	<b>0.00004</b>	<b>0.01436</b>	<b>0.00148</b>	<b>0.01584</b>	<b>0.00689</b>	<b>0.00137</b>	<b>0.00826</b>

Grading

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	5.00E-04	2.10E-03	0.0218	4.00E-05	6.37E-03	0	6.37E-03	3.08E-03	0	3.08E-03
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0
Worker	7.00E-05	5.00E-05	5.20E-04	0	1.60E-04	0	1.60E-04	4.00E-05	0	4.00E-05
<b>Total</b>	<b>0.00057</b>	<b>0.00224</b>	<b>0.00232</b>	<b>0.00004</b>	<b>0.00663</b>	<b>0.00000</b>	<b>0.00663</b>	<b>0.00302</b>	<b>0.00000</b>	<b>0.00302</b>

Building Construction

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Tons/year										
Off-Road	0.1739	1.3191	1.3426	2.33E-03	0.0621	0.0621	0.06	0.06	0.06	0.06
Hauling	0	0	0	0	0	0	0	0	0	0
Vendor	2.17E-03	0.0099	0.0161	2.20E-04	6.89E-03	6.10E-04	7.81E-03	2.02E-03	5.90E-04	2.61E-03
Worker	7.10E-03	4.84E-0								

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Fresno Co GPR/ZOU  
Fresno County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,134.00	1000sqft	26.03	1,134,000.00	0
Government Office Building	3,075.00	1000sqft	70.59	3,075,000.00	0
Medical Office Building	2,046.00	1000sqft	46.97	2,046,000.00	0
High School	4,435.00	1000sqft	101.81	4,435,000.00	0
Industrial Park	5,154.00	1000sqft	118.32	5,154,000.00	0
Motel	2,600.00	Room	117.00	5,319,000.00	0
Apartments Low Rise	620.00	Dwelling Unit	38.75	620,000.00	1773
Mobile Home Park	1,308.00	Dwelling Unit	164.78	1,569,600.00	3741
Single Family Housing	9,359.00	Dwelling Unit	3,038.64	16,846,200.00	26767
Strip Mall	916.00	1000sqft	21.03	916,000.00	0
Manufacturing	2,753.00	1000sqft	63.20	2,753,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	45
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas and Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	203.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Hospitality modeled as Motel land use; Room # adjusted to match estimated square footage

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Construction Phase - this iteration only assessing operation-mobile

Vehicle Trips - adjusted to match TIA VMT

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	12,416,000.00	11,039,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	37,248,000.00	33,118,500.00
tblAreaCoating	Area_Nonresidential_Exterior	12416000	11039500
tblAreaCoating	Area_Nonresidential_Interior	37248000	33118500
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	15,500.00	1.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	1.00
tblConstructionPhase	PhaseEndDate	7/29/2821	5/27/2022
tblConstructionPhase	PhaseEndDate	4/1/2737	5/25/2022
tblConstructionPhase	PhaseEndDate	9/16/2060	5/20/2022
tblConstructionPhase	PhaseEndDate	2/14/2143	5/24/2022
tblConstructionPhase	PhaseEndDate	5/31/2779	5/26/2022
tblConstructionPhase	PhaseEndDate	9/16/2083	5/23/2022
tblConstructionPhase	PhaseStartDate	6/1/2779	5/27/2022
tblConstructionPhase	PhaseStartDate	2/15/2143	5/25/2022
tblConstructionPhase	PhaseStartDate	9/17/2083	5/24/2022
tblConstructionPhase	PhaseStartDate	4/2/2737	5/26/2022
tblConstructionPhase	PhaseStartDate	9/17/2060	5/21/2022
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.00
tblFleetMix	LDT1	0.06	0.00

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1860e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	2.1310e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	6.4300e-004	0.00
tblFleetMix	SBUS	9.9200e-004	0.00
tblFleetMix	UBUS	2.6600e-004	0.00
tblGrading	AcresOfGrading	3.00	46,500.00
tblGrading	AcresOfGrading	1.50	9,000.00
tblLandUse	LandUseSquareFeet	5,096,520.00	5,319,000.00
tblTripsAndVMT	VendorTripNumber	5,277.00	4,825.00
tblVehicleTrips	CC_TL	7.30	0.80
tblVehicleTrips	CC_TL	7.30	0.90
tblVehicleTrips	CC_TL	7.30	0.90
tblVehicleTrips	CC_TL	7.30	0.90
tblVehicleTrips	CC_TL	7.30	0.80
tblVehicleTrips	CC_TL	7.30	0.90
tblVehicleTrips	CC_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CNW_TL	7.30	0.90
tblVehicleTrips	CW_TL	9.50	1.17

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	CW_TL	9.50	1.17
tblVehicleTrips	HO_TL	7.50	0.92
tblVehicleTrips	HO_TL	7.50	0.96
tblVehicleTrips	HO_TL	7.50	0.91
tblVehicleTrips	HS_TL	7.30	0.80
tblVehicleTrips	HS_TL	7.30	0.90
tblVehicleTrips	HS_TL	7.30	0.90
tblVehicleTrips	HW_TL	10.80	1.32
tblVehicleTrips	HW_TL	10.80	1.32
tblVehicleTrips	HW_TL	10.80	1.33

**2.0 Emissions Summary**

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Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-20-2022	8-19-2022	237.4711	237.4711
		Highest	237.4711	237.4711

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	273.6252	14.9758	685.4886	1.9891		98.6944	98.6944		98.6944	98.6944	13,107.1950	5,026.9047	18,134.0997	61.4985	0.0896	19,698.2761
Energy	3.8351	34.1177	23.8085	0.2092		2.6497	2.6497		2.6497	2.6497	0.0000	64,400.8064	64,400.8064	5.0060	1.2144	64,887.8584
Mobile	48.5154	54.8652	308.4444	0.3177	45.4100	0.2538	45.6638	11.8856	0.2371	12.1227	0.0000	31,913.3714	31,913.3714	3.7263	3.4665	33,039.5358
Waste						0.0000	0.0000		0.0000	0.0000	11,060.9065	0.0000	11,060.9065	653.6809	0.0000	27,402.9277
Water						0.0000	0.0000		0.0000	0.0000	1,241.7683	2,425.2747	3,667.0430	127.9339	3.0591	7,776.9989
<b>Total</b>	<b>325.9756</b>	<b>103.9586</b>	<b>1,017.7415</b>	<b>2.5160</b>	<b>45.4100</b>	<b>101.5979</b>	<b>147.0079</b>	<b>11.8856</b>	<b>101.5813</b>	<b>113.4668</b>	<b>25,409.8698</b>	<b>103,766.3572</b>	<b>129,176.2270</b>	<b>851.8455</b>	<b>7.8296</b>	<b>152,805.5968</b>



Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	207.0570	0.9649	83.6410	4.4400e-003		0.4655	0.4655		0.4655	0.4655	0.0000	137.2928	137.2928	0.1313	0.0000	140.5759
Energy	3.8351	34.1177	23.8085	0.2092		2.6497	2.6497		2.6497	2.6497	0.0000	64,400.8064	64,400.8064	5.0060	1.2144	64,887.8584
Mobile	48.5154	54.8652	308.4444	0.3177	45.4100	0.2538	45.6638	11.8856	0.2371	12.1227	0.0000	31,913.3714	31,913.3714	3.7263	3.4665	33,039.5358
Waste						0.0000	0.0000		0.0000	0.0000	11,060.9065	0.0000	11,060.9065	653.6809	0.0000	27,402.9277
Water						0.0000	0.0000		0.0000	0.0000	1,241.7683	2,425.2747	3,667.0430	127.9339	3.0591	7,776.9989
<b>Total</b>	<b>259.4074</b>	<b>89.9478</b>	<b>415.8939</b>	<b>0.5313</b>	<b>45.4100</b>	<b>3.3689</b>	<b>48.7790</b>	<b>11.8856</b>	<b>3.3523</b>	<b>15.2379</b>	<b>12,302.6748</b>	<b>98,876.7453</b>	<b>111,179.4201</b>	<b>790.4783</b>	<b>7.7400</b>	<b>133,247.8967</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>20.42</b>	<b>13.48</b>	<b>59.14</b>	<b>78.88</b>	<b>0.00</b>	<b>96.68</b>	<b>66.82</b>	<b>0.00</b>	<b>96.70</b>	<b>86.57</b>	<b>51.58</b>	<b>4.71</b>	<b>13.93</b>	<b>7.20</b>	<b>1.14</b>	<b>12.80</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/20/2022	5/20/2022	5	1	
2	Site Preparation	Site Preparation	5/21/2022	5/23/2022	5	1	
3	Grading	Grading	5/24/2022	5/24/2022	5	1	

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

4	Building Construction	Building Construction	5/25/2022	5/25/2022	5	1
5	Paving	Paving	5/26/2022	5/26/2022	5	1
6	Architectural Coating	Architectural Coating	5/27/2022	5/27/2022	5	1

**Acres of Grading (Site Preparation Phase): 9000**

**Acres of Grading (Grading Phase): 46500**

**Acres of Paving: 0**

**Residential Indoor: 38,547,495; Residential Outdoor: 12,849,165; Non-Residential Indoor: 33,118,500; Non-Residential Outdoor: 11,039,500; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	14,470.00	4,825.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2,894.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3200e-003	0.0129	0.0103	2.0000e-005		6.2000e-004	6.2000e-004		5.8000e-004	5.8000e-004	0.0000	1.6995	1.6995	4.8000e-004	0.0000	1.7115
<b>Total</b>	<b>1.3200e-003</b>	<b>0.0129</b>	<b>0.0103</b>	<b>2.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>5.8000e-004</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.6995</b>	<b>1.6995</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.7115</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0495
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0495</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3200e-003	0.0129	0.0103	2.0000e-005		6.2000e-004	6.2000e-004		5.8000e-004	5.8000e-004	0.0000	1.6995	1.6995	4.8000e-004	0.0000	1.7114
<b>Total</b>	<b>1.3200e-003</b>	<b>0.0129</b>	<b>0.0103</b>	<b>2.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>5.8000e-004</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.6995</b>	<b>1.6995</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.7114</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0495
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0495</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.7813	0.0000	4.7813	0.5203	0.0000	0.5203	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5900e-003	0.0165	9.8500e-003	2.0000e-005		8.1000e-004	8.1000e-004		7.4000e-004	7.4000e-004	0.0000	1.6720	1.6720	5.4000e-004	0.0000	1.6855
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0165</b>	<b>9.8500e-003</b>	<b>2.0000e-005</b>	<b>4.7813</b>	<b>8.1000e-004</b>	<b>4.7821</b>	<b>0.5203</b>	<b>7.4000e-004</b>	<b>0.5210</b>	<b>0.0000</b>	<b>1.6720</b>	<b>1.6720</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.6855</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0588	0.0588	0.0000	0.0000	0.0594
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0588</b>	<b>0.0588</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0594</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.7813	0.0000	4.7813	0.5203	0.0000	0.5203	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5900e-003	0.0165	9.8500e-003	2.0000e-005		8.1000e-004	8.1000e-004		7.4000e-004	7.4000e-004	0.0000	1.6720	1.6720	5.4000e-004	0.0000	1.6855
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0165</b>	<b>9.8500e-003</b>	<b>2.0000e-005</b>	<b>4.7813</b>	<b>8.1000e-004</b>	<b>4.7821</b>	<b>0.5203</b>	<b>7.4000e-004</b>	<b>0.5210</b>	<b>0.0000</b>	<b>1.6720</b>	<b>1.6720</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.6855</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0588	0.0588	0.0000	0.0000	0.0594
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0588</b>	<b>0.0588</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0594</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					24.6596	0.0000	24.6596	2.6640	0.0000	2.6640	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0194	0.0145	3.0000e-005		8.2000e-004	8.2000e-004		7.5000e-004	7.5000e-004	0.0000	2.7267	2.7267	8.8000e-004	0.0000	2.7488
<b>Total</b>	<b>1.8100e-003</b>	<b>0.0194</b>	<b>0.0145</b>	<b>3.0000e-005</b>	<b>24.6596</b>	<b>8.2000e-004</b>	<b>24.6605</b>	<b>2.6640</b>	<b>7.5000e-004</b>	<b>2.6647</b>	<b>0.0000</b>	<b>2.7267</b>	<b>2.7267</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.7488</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0654	0.0654	0.0000	0.0000	0.0660
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0654</b>	<b>0.0654</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0660</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					24.6596	0.0000	24.6596	2.6640	0.0000	2.6640	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0194	0.0145	3.0000e-005		8.2000e-004	8.2000e-004		7.5000e-004	7.5000e-004	0.0000	2.7267	2.7267	8.8000e-004	0.0000	2.7488
<b>Total</b>	<b>1.8100e-003</b>	<b>0.0194</b>	<b>0.0145</b>	<b>3.0000e-005</b>	<b>24.6596</b>	<b>8.2000e-004</b>	<b>24.6605</b>	<b>2.6640</b>	<b>7.5000e-004</b>	<b>2.6647</b>	<b>0.0000</b>	<b>2.7267</b>	<b>2.7267</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.7488</b>



Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0654	0.0654	0.0000	0.0000	0.0660
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0654</b>	<b>0.0654</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0660</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5000e-004	7.8100e-003	8.1800e-003	1.0000e-005		4.0000e-004	4.0000e-004		3.8000e-004	3.8000e-004	0.0000	1.1586	1.1586	2.8000e-004	0.0000	1.1656
<b>Total</b>	<b>8.5000e-004</b>	<b>7.8100e-003</b>	<b>8.1800e-003</b>	<b>1.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.1586</b>	<b>1.1586</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>1.1656</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9700e-003	0.1301	0.0368	5.0000e-004	0.0160	1.4000e-003	0.0174	4.6200e-003	1.3400e-003	5.9600e-003	0.0000	48.1750	48.1750	3.6000e-004	7.2600e-003	50.3473
Worker	0.0243	0.0166	0.1870	5.1000e-004	0.0578	3.0000e-004	0.0581	0.0154	2.7000e-004	0.0157	0.0000	47.2903	47.2903	1.5400e-003	1.4400e-003	47.7568
<b>Total</b>	<b>0.0293</b>	<b>0.1467</b>	<b>0.2239</b>	<b>1.0100e-003</b>	<b>0.0738</b>	<b>1.7000e-003</b>	<b>0.0755</b>	<b>0.0200</b>	<b>1.6100e-003</b>	<b>0.0216</b>	<b>0.0000</b>	<b>95.4652</b>	<b>95.4652</b>	<b>1.9000e-003</b>	<b>8.7000e-003</b>	<b>98.1040</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5000e-004	7.8100e-003	8.1800e-003	1.0000e-005		4.0000e-004	4.0000e-004		3.8000e-004	3.8000e-004	0.0000	1.1586	1.1586	2.8000e-004	0.0000	1.1656
<b>Total</b>	<b>8.5000e-004</b>	<b>7.8100e-003</b>	<b>8.1800e-003</b>	<b>1.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.1586</b>	<b>1.1586</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>1.1656</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9700e-003	0.1301	0.0368	5.0000e-004	0.0160	1.4000e-003	0.0174	4.6200e-003	1.3400e-003	5.9600e-003	0.0000	48.1750	48.1750	3.6000e-004	7.2600e-003	50.3473
Worker	0.0243	0.0166	0.1870	5.1000e-004	0.0578	3.0000e-004	0.0581	0.0154	2.7000e-004	0.0157	0.0000	47.2903	47.2903	1.5400e-003	1.4400e-003	47.7568
<b>Total</b>	<b>0.0293</b>	<b>0.1467</b>	<b>0.2239</b>	<b>1.0100e-003</b>	<b>0.0738</b>	<b>1.7000e-003</b>	<b>0.0755</b>	<b>0.0200</b>	<b>1.6100e-003</b>	<b>0.0216</b>	<b>0.0000</b>	<b>95.4652</b>	<b>95.4652</b>	<b>1.9000e-003</b>	<b>8.7000e-003</b>	<b>98.1040</b>

**3.6 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5000e-004	5.5600e-003	7.2900e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.6000e-004	2.6000e-004	0.0000	1.0014	1.0014	3.2000e-004	0.0000	1.0095
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.5000e-004</b>	<b>5.5600e-003</b>	<b>7.2900e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>1.0014</b>	<b>1.0014</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.0095</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0495
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0495</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5000e-004	5.5600e-003	7.2900e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.6000e-004	2.6000e-004	0.0000	1.0014	1.0014	3.2000e-004	0.0000	1.0095
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.5000e-004</b>	<b>5.5600e-003</b>	<b>7.2900e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>1.0014</b>	<b>1.0014</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.0095</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0495
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0495</b>

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	332.1719					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-004	7.0000e-004	9.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>332.1720</b>	<b>7.0000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8700e-003	3.3200e-003	0.0374	1.0000e-004	0.0116	6.0000e-005	0.0116	3.0700e-003	5.0000e-005	3.1300e-003	0.0000	9.4581	9.4581	3.1000e-004	2.9000e-004	9.5514
<b>Total</b>	<b>4.8700e-003</b>	<b>3.3200e-003</b>	<b>0.0374</b>	<b>1.0000e-004</b>	<b>0.0116</b>	<b>6.0000e-005</b>	<b>0.0116</b>	<b>3.0700e-003</b>	<b>5.0000e-005</b>	<b>3.1300e-003</b>	<b>0.0000</b>	<b>9.4581</b>	<b>9.4581</b>	<b>3.1000e-004</b>	<b>2.9000e-004</b>	<b>9.5514</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	332.1719					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-004	7.0000e-004	9.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>332.1720</b>	<b>7.0000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8700e-003	3.3200e-003	0.0374	1.0000e-004	0.0116	6.0000e-005	0.0116	3.0700e-003	5.0000e-005	3.1300e-003	0.0000	9.4581	9.4581	3.1000e-004	2.9000e-004	9.5514
<b>Total</b>	<b>4.8700e-003</b>	<b>3.3200e-003</b>	<b>0.0374</b>	<b>1.0000e-004</b>	<b>0.0116</b>	<b>6.0000e-005</b>	<b>0.0116</b>	<b>3.0700e-003</b>	<b>5.0000e-005</b>	<b>3.1300e-003</b>	<b>0.0000</b>	<b>9.4581</b>	<b>9.4581</b>	<b>3.1000e-004</b>	<b>2.9000e-004</b>	<b>9.5514</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	48.5154	54.8652	308.4444	0.3177	45.4100	0.2538	45.6638	11.8856	0.2371	12.1227	0.0000	31,913.37 14	31,913.37 14	3.7263	3.4665	33,039.53 58
Unmitigated	48.5154	54.8652	308.4444	0.3177	45.4100	0.2538	45.6638	11.8856	0.2371	12.1227	0.0000	31,913.37 14	31,913.37 14	3.7263	3.4665	33,039.53 58

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,538.40	5,046.80	3893.60	1,602,754	1,602,754
General Office Building	11,045.16	2,506.14	793.80	2,353,564	2,353,564
Government Office Building	69,464.25	0.00	0.00	10,739,320	10,739,320
High School	62,400.45	17,651.30	7583.85	15,629,668	15,629,668
Industrial Park	17,368.98	13,091.16	6390.96	4,916,191	4,916,191
Medical Office Building	71,200.80	17,534.22	2905.32	12,464,442	12,464,442
Mobile Home Park	6,540.00	6,029.88	5545.92	2,305,038	2,305,038
Motel	8,710.00	8,710.00	8710.00	2,048,508	2,048,508
Single Family Housing	88,348.96	89,284.86	80019.45	31,444,889	31,444,889
Strip Mall	40,597.12	38,508.64	18713.88	7,234,268	7,234,268
Manufacturing	10,819.29	17,674.26	14012.77	35,777,975	35,777,975
<b>Total</b>	<b>391,033.41</b>	<b>216,037.26</b>	<b>148,569.55</b>	<b>126,516,615</b>	<b>126,516,615</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	1.32	0.80	0.92	48.40	15.90	35.70	86	11	3
General Office Building	1.17	0.80	0.90	33.00	48.00	19.00	77	19	4



Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	1.17	0.90	0.90	33.00	62.00	5.00	50	34	16
High School	1.17	0.90	0.90	77.80	17.20	5.00	75	19	6
Industrial Park	1.17	0.90	0.90	59.00	28.00	13.00	79	19	2
Medical Office Building	1.17	0.80	0.90	29.60	51.40	19.00	60	30	10
Mobile Home Park	1.32	0.90	0.96	48.40	15.90	35.70	86	11	3
Motel	1.17	0.90	0.90	19.00	62.00	19.00	58	38	4
Single Family Housing	1.33	0.90	0.91	48.40	15.90	35.70	86	11	3
Strip Mall	1.17	0.90	0.90	16.60	64.40	19.00	45	40	15
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
General Office Building	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Government Office Building	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
High School	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Industrial Park	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Medical Office Building	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Mobile Home Park	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Motel	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Single Family Housing	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Strip Mall	0.558400	0.056984	0.177680	0.121787	0.018699	0.005186	0.014995	0.021540	0.000643	0.000266	0.020696	0.000992	0.002131
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	26,446.3924	26,446.3924	4.2785	0.5186	26,707.9003
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	26,446.3924	26,446.3924	4.2785	0.5186	26,707.9003
NaturalGas Mitigated	3.8351	34.1177	23.8085	0.2092		2.6497	2.6497		2.6497	2.6497	0.0000	37,954.4140	37,954.4140	0.7275	0.6958	38,179.9581
NaturalGas Unmitigated	3.8351	34.1177	23.8085	0.2092		2.6497	2.6497		2.6497	2.6497	0.0000	37,954.4140	37,954.4140	0.7275	0.6958	38,179.9581

Fresno Co GPR/ZOU - Fresno County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	8.46115e+006	0.0456	0.3899	0.1659	2.4900e-003		0.0315	0.0315		0.0315	0.0315	0.0000	451.5193	451.5193	8.6500e-003	8.2800e-003	454.2025
General Office Building	1.46513e+007	0.0790	0.7182	0.6033	4.3100e-003		0.0546	0.0546		0.0546	0.0546	0.0000	781.8481	781.8481	0.0150	0.0143	786.4942
Government Office Building	3.9729e+007	0.2142	1.9475	1.6359	0.0117		0.1480	0.1480		0.1480	0.1480	0.0000	2,120.0907	2,120.0907	0.0406	0.0389	2,132.6894
High School	1.10343e+008	0.5950	5.4090	4.5435	0.0325		0.4111	0.4111		0.4111	0.4111	0.0000	5,888.3120	5,888.3120	0.1129	0.1080	5,923.3033
Industrial Park	6.65897e+007	0.3591	3.2642	2.7419	0.0196		0.2481	0.2481		0.2481	0.2481	0.0000	3,553.4789	3,553.4789	0.0681	0.0652	3,574.5955
Manufacturing	5.69871e+007	0.3073	2.7935	2.3465	0.0168		0.2123	0.2123		0.2123	0.2123	0.0000	3,041.0487	3,041.0487	0.0583	0.0558	3,059.1201
Medical Office Building	2.64343e+007	0.1425	1.2958	1.0885	7.7700e-003		0.0985	0.0985		0.0985	0.0985	0.0000	1,410.6360	1,410.6360	0.0270	0.0259	1,419.0187
Mobile Home Park	2.05419e+007	0.1108	0.9465	0.4028	6.0400e-003		0.0765	0.0765		0.0765	0.0765	0.0000	1,096.1943	1,096.1943	0.0210	0.0201	1,102.7084
Motel	1.32815e+008	0.7162	6.5106	5.4689	0.0391		0.4948	0.4948		0.4948	0.4948	0.0000	7,087.5371	7,087.5371	0.1358	0.1299	7,129.6548
Single Family Housing	2.24967e+008	1.2131	10.3662	4.4111	0.0662		0.8381	0.8381		0.8381	0.8381	0.0000	12,005.1188	12,005.1188	0.2301	0.2201	12,076.4592
Strip Mall	9.71876e+006	0.0524	0.4764	0.4002	2.8600e-003		0.0362	0.0362		0.0362	0.0362	0.0000	518.6300	518.6300	9.9400e-003	9.5100e-003	521.7120
<b>Total</b>		<b>3.8351</b>	<b>34.1177</b>	<b>23.8085</b>	<b>0.2092</b>		<b>2.6497</b>	<b>2.6497</b>		<b>2.6497</b>	<b>2.6497</b>	<b>0.0000</b>	<b>37,954.4140</b>	<b>37,954.4140</b>	<b>0.7275</b>	<b>0.6958</b>	<b>38,179.9581</b>

Fresno Co GPR/ZOU - Fresno County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	8.46115e+006	0.0456	0.3899	0.1659	2.4900e-003		0.0315	0.0315		0.0315	0.0315	0.0000	451.5193	451.5193	8.6500e-003	8.2800e-003	454.2025
General Office Building	1.46513e+007	0.0790	0.7182	0.6033	4.3100e-003		0.0546	0.0546		0.0546	0.0546	0.0000	781.8481	781.8481	0.0150	0.0143	786.4942
Government Office Building	3.9729e+007	0.2142	1.9475	1.6359	0.0117		0.1480	0.1480		0.1480	0.1480	0.0000	2,120.0907	2,120.0907	0.0406	0.0389	2,132.6894
High School	1.10343e+008	0.5950	5.4090	4.5435	0.0325		0.4111	0.4111		0.4111	0.4111	0.0000	5,888.3120	5,888.3120	0.1129	0.1080	5,923.3033
Industrial Park	6.65897e+007	0.3591	3.2642	2.7419	0.0196		0.2481	0.2481		0.2481	0.2481	0.0000	3,553.4789	3,553.4789	0.0681	0.0652	3,574.5955
Manufacturing	5.69871e+007	0.3073	2.7935	2.3465	0.0168		0.2123	0.2123		0.2123	0.2123	0.0000	3,041.0487	3,041.0487	0.0583	0.0558	3,059.1201
Medical Office Building	2.64343e+007	0.1425	1.2958	1.0885	7.7700e-003		0.0985	0.0985		0.0985	0.0985	0.0000	1,410.6360	1,410.6360	0.0270	0.0259	1,419.0187
Mobile Home Park	2.05419e+007	0.1108	0.9465	0.4028	6.0400e-003		0.0765	0.0765		0.0765	0.0765	0.0000	1,096.1943	1,096.1943	0.0210	0.0201	1,102.7084
Motel	1.32815e+008	0.7162	6.5106	5.4689	0.0391		0.4948	0.4948		0.4948	0.4948	0.0000	7,087.5371	7,087.5371	0.1358	0.1299	7,129.6548
Single Family Housing	2.24967e+008	1.2131	10.3662	4.4111	0.0662		0.8381	0.8381		0.8381	0.8381	0.0000	12,005.1188	12,005.1188	0.2301	0.2201	12,076.4592
Strip Mall	9.71876e+006	0.0524	0.4764	0.4002	2.8600e-003		0.0362	0.0362		0.0362	0.0362	0.0000	518.6300	518.6300	9.9400e-003	9.5100e-003	521.7120
<b>Total</b>		<b>3.8351</b>	<b>34.1177</b>	<b>23.8085</b>	<b>0.2092</b>		<b>2.6497</b>	<b>2.6497</b>		<b>2.6497</b>	<b>2.6497</b>	<b>0.0000</b>	<b>37,954.4140</b>	<b>37,954.4140</b>	<b>0.7275</b>	<b>0.6958</b>	<b>38,179.9581</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.56124e+006	236.9755	0.0383	4.6500e-003	239.3187
General Office Building	1.00246e+007	927.5101	0.1501	0.0182	936.6815
Government Office Building	2.7183e+007	2,515.0737	0.4069	0.0493	2,539.9433
High School	3.0158e+007	2,790.3319	0.4514	0.0547	2,817.9233
Industrial Park	4.55614e+007	4,215.5089	0.6820	0.0827	4,257.1928
Manufacturing	2.37033e+007	2,193.1215	0.3548	0.0430	2,214.8076
Medical Office Building	1.80866e+007	1,673.4442	0.2707	0.0328	1,689.9915
Mobile Home Park	6.77985e+006	627.2971	0.1015	0.0123	633.5000
Motel	3.98925e+007	3,691.0046	0.5971	0.0724	3,727.5020
Single Family Housing	7.46283e+007	6,904.8910	1.1171	0.1354	6,973.1681
Strip Mall	7.25472e+006	671.2341	0.1086	0.0132	677.8714
<b>Total</b>		<b>26,446.3924</b>	<b>4.2785</b>	<b>0.5186</b>	<b>26,707.9003</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.56124e+006	236.9755	0.0383	4.6500e-003	239.3187
General Office Building	1.00246e+007	927.5101	0.1501	0.0182	936.6815
Government Office Building	2.7183e+007	2,515.0737	0.4069	0.0493	2,539.9433
High School	3.0158e+007	2,790.3319	0.4514	0.0547	2,817.9233
Industrial Park	4.55614e+007	4,215.5089	0.6820	0.0827	4,257.1928
Manufacturing	2.37033e+007	2,193.1215	0.3548	0.0430	2,214.8076
Medical Office Building	1.80866e+007	1,673.4442	0.2707	0.0328	1,689.9915
Mobile Home Park	6.77985e+006	627.2971	0.1015	0.0123	633.5000
Motel	3.98925e+007	3,691.0046	0.5971	0.0724	3,727.5020
Single Family Housing	7.46283e+007	6,904.8910	1.1171	0.1354	6,973.1681
Strip Mall	7.25472e+006	671.2341	0.1086	0.0132	677.8714
<b>Total</b>		<b>26,446.3924</b>	<b>4.2785</b>	<b>0.5186</b>	<b>26,707.9003</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	207.0570	0.9649	83.6410	4.4400e-003		0.4655	0.4655		0.4655	0.4655	0.0000	137.2928	137.2928	0.1313	0.0000	140.5759
Unmitigated	273.6252	14.9758	685.4886	1.9891		98.6944	98.6944		98.6944	98.6944	13,107.1950	5,026.9047	18,134.0997	61.4985	0.0896	19,698.2761

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	33.2172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.3257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	66.5682	14.0108	601.8476	1.9847		98.2290	98.2290		98.2290	98.2290	13,107.1950	4,889.6119	17,996.8068	61.3672	0.0896	19,557.7002
Landscaping	2.5141	0.9649	83.6410	4.4400e-003		0.4655	0.4655		0.4655	0.4655	0.0000	137.2928	137.2928	0.1313	0.0000	140.5759
<b>Total</b>	<b>273.6252</b>	<b>14.9758</b>	<b>685.4886</b>	<b>1.9891</b>		<b>98.6944</b>	<b>98.6944</b>		<b>98.6944</b>	<b>98.6944</b>	<b>13,107.1950</b>	<b>5,026.9047</b>	<b>18,134.0997</b>	<b>61.4985</b>	<b>0.0896</b>	<b>19,698.2760</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	33.2172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.3257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5141	0.9649	83.6410	4.4400e-003		0.4655	0.4655		0.4655	0.4655	0.0000	137.2928	137.2928	0.1313	0.0000	140.5759
<b>Total</b>	<b>207.0570</b>	<b>0.9649</b>	<b>83.6410</b>	<b>4.4400e-003</b>		<b>0.4655</b>	<b>0.4655</b>		<b>0.4655</b>	<b>0.4655</b>	<b>0.0000</b>	<b>137.2928</b>	<b>137.2928</b>	<b>0.1313</b>	<b>0.0000</b>	<b>140.5759</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3,667.043 0	127.9339	3.0591	7,776.998 9
Unmitigated	3,667.043 0	127.9339	3.0591	7,776.998 9

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	40.3955 / 25.4667	41.2865	1.3209	0.0316	83.7371
General Office Building	201.55 / 123.531	204.8511	6.5903	0.1578	416.6441
Government Office Building	610.879 / 374.409	620.8838	19.9746	0.4784	1,262.8074
High School	147.263 / 378.675	243.0737	4.8303	0.1172	398.7438
Industrial Park	1191.86 / 0	974.8243	38.9334	0.9287	2,224.9187
Manufacturing	636.631 / 0	520.7007	20.7962	0.4961	1,188.4364
Medical Office Building	256.733 / 48.9016	225.8180	8.3890	0.2004	495.2512
Mobile Home Park	85.2215 / 53.7266	87.1011	2.7867	0.0668	176.6583
Motel	65.9536 / 7.32818	56.3166	2.1548	0.0514	125.5160
Single Family Housing	609.777 / 384.424	623.2256	19.9391	0.4776	1,264.0255
Strip Mall	67.8504 / 41.5857	68.9617	2.2186	0.0531	140.2603
<b>Total</b>		<b>3,667.0430</b>	<b>127.9339</b>	<b>3.0591</b>	<b>7,776.9989</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	40.3955 / 25.4667	41.2865	1.3209	0.0316	83.7371
General Office Building	201.55 / 123.531	204.8511	6.5903	0.1578	416.6441
Government Office Building	610.879 / 374.409	620.8838	19.9746	0.4784	1,262.8074
High School	147.263 / 378.675	243.0737	4.8303	0.1172	398.7438
Industrial Park	1191.86 / 0	974.8243	38.9334	0.9287	2,224.9187
Manufacturing	636.631 / 0	520.7007	20.7962	0.4961	1,188.4364
Medical Office Building	256.733 / 48.9016	225.8180	8.3890	0.2004	495.2512
Mobile Home Park	85.2215 / 53.7266	87.1011	2.7867	0.0668	176.6583
Motel	65.9536 / 7.32818	56.3166	2.1548	0.0514	125.5160
Single Family Housing	609.777 / 384.424	623.2256	19.9391	0.4776	1,264.0255
Strip Mall	67.8504 / 41.5857	68.9617	2.2186	0.0531	140.2603
<b>Total</b>		<b>3,667.0430</b>	<b>127.9339</b>	<b>3.0591</b>	<b>7,776.9989</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11,060.90 65	653.6809	0.0000	27,402.92 77
Unmitigated	11,060.90 65	653.6809	0.0000	27,402.92 77

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	285.2	57.8930	3.4214	0.0000	143.4275
General Office Building	1054.62	214.0783	12.6517	0.0000	530.3700
Government Office Building	2859.75	580.5034	34.3068	0.0000	1,438.1726
High School	5765.5	1,170.3444	69.1654	0.0000	2,899.4787
Industrial Park	6390.96	1,297.3071	76.6687	0.0000	3,214.0235
Manufacturing	3413.72	692.9543	40.9524	0.0000	1,716.7650
Medical Office Building	22096.8	4,485.4507	265.0825	0.0000	11,112.5143
Mobile Home Park	601.68	122.1356	7.2180	0.0000	302.5858
Motel	1423.5	288.9576	17.0769	0.0000	715.8803
Single Family Housing	9636.12	1,956.0453	115.5990	0.0000	4,846.0194
Strip Mall	961.8	195.2367	11.5382	0.0000	483.6907
<b>Total</b>		<b>11,060.9065</b>	<b>653.6809</b>	<b>0.0000</b>	<b>27,402.9277</b>

Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.2 Waste by Land Use**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	285.2	57.8930	3.4214	0.0000	143.4275
General Office Building	1054.62	214.0783	12.6517	0.0000	530.3700
Government Office Building	2859.75	580.5034	34.3068	0.0000	1,438.1726
High School	5765.5	1,170.3444	69.1654	0.0000	2,899.4787
Industrial Park	6390.96	1,297.3071	76.6687	0.0000	3,214.0235
Manufacturing	3413.72	692.9543	40.9524	0.0000	1,716.7650
Medical Office Building	22096.8	4,485.4507	265.0825	0.0000	11,112.5143
Mobile Home Park	601.68	122.1356	7.2180	0.0000	302.5858
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Single Family Housing	9636.12	1,956.0453	115.5990	0.0000	4,846.0194
Strip Mall	961.8	195.2367	11.5382	0.0000	483.6907
<b>Total</b>		<b>11,060.9065</b>	<b>653.6809</b>	<b>0.0000</b>	<b>27,402.9277</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Fresno Co GPR/ZOU - Fresno County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# Appendix B10

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Special Status Species Tables



**Table 1 Federal and/or State Listed Special-Status Wildlife Species Documented or with the Potential to Occur in Fresno County**

Common Name	Scientific Name	Agency Status (Federal/State/Other)
<b>Invertebrates</b>		
Crotch bumble bee	<i>Bombus crotchii</i>	--/SCE/--
western bumble bee	<i>Bombus occidentalis</i>	--/SCE/--
longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	FT/--/--
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT/--/--
valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT/--/--
vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE/--/--
<b>Fish</b>		
Lahontan cutthroat trout Paiute cutthroat trout	<i>Oncorhynchus clarkii henshawi</i>	FT/--/--
Paiute cutthroat trout	<i>Oncorhynchus clarkii seleniris</i>	FT/--/--
steelhead - Central Valley DPS	<i>Oncorhynchus mykiss irideus</i>	FT/--/--
<b>Amphibians</b>		
California tiger salamander	<i>Ambystoma californiense</i>	FT/ST/WL
Yosemite toad	<i>Anaxyrus canorus</i>	FT/--/SSC
foothill yellow-legged frog	<i>Rana boylei</i>	--/SE/SSC
California red-legged frog	<i>Rana draytonii</i>	FT/--/SSC
southern mountain yellow-legged frog	<i>Rana muscosa</i>	FE/SE/WL
Sierra Nevada yellow-legged frog	<i>Rana sierrae</i>	FE/ST/WL
<b>Reptiles</b>		
blunt-nosed leopard lizard	<i>Gambelia sila</i>	FE/SE/FP
giant garter snake	<i>Thamnophis gigas</i>	FT/ST/--
<b>Birds</b>		
tricolored blackbird	<i>Agelaius tricolor</i>	--/ST/SSC
Swainson's hawk	<i>Buteo swainsoni</i>	--/ST/--
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT/SE/--
willow flycatcher	<i>Empidonax traillii</i>	--/SE/--
bald eagle	<i>Haliaeetus leucocephalus</i>	FD/SE/FP
bank swallow	<i>Riparia riparia</i>	--/ST/--
great gray owl	<i>Strix nebulosa</i>	--/SE/--
least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE/--
<b>Mammals</b>		
Nelson's antelope squirrel	<i>Ammospermophilus nelsoni</i>	--/ST/--
giant kangaroo rat	<i>Dipodomys ingens</i>	FE/SE/--
Fresno kangaroo rat	<i>Dipodomys nitratoides exilis</i>	FE/SE/--
California wolverine	<i>Gulo gulo</i>	--/ST/FP
Sierra Nevada bighorn sheep	<i>Ovis canadensis sierra</i>	FE/SE/FP

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Common Name	Scientific Name	Agency Status (Federal/State/Other)
fisher – Southern Sierra Nevada ESU	<i>Pekania pennanti pop. 2</i>	FC/ST/SSC
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE/ST/--
Sierra Nevada red fox	<i>Vulpes vulpes necator</i>	FPE/ST/--

FE=Federally Endangered

FT=Federally Threatened

FC=Federal Candidate

FD=Federal Delisted

FPE=Federally Proposed for Listing as  
 Endangered

SE=State Endangered

ST=State Threatened

SCE=State Candidate Endangered

FP = CDFW Fully Protected

SSC = CDFW Species of  
 Special Concern

WL = CDFW Watch List

Source: California Natural Diversity Database (CNDDDB) (Fresno County), May 2021

**Table 2 Non-Listed Special-Status Wildlife Species Documented or with the Potential to Occur in Fresno County**

Common Name	Scientific Name	State Status
<b>Fish</b>		
hardhead	<i>Mylopharodon conocephalus</i>	SSC
<b>Amphibians</b>		
Mount Lyell salamander	<i>Hydromantes platycephalus</i>	SSC
western spadefoot	<i>Spea hammondi</i>	SSC
<b>Reptiles</b>		
Temblor legless lizard	<i>Anniella alexanderae</i>	SSC
Northern California legless lizard	<i>Anniella pulchra</i>	SSC
California legless lizard	<i>Anniella</i> spp.	SSC
California glossy snake	<i>Arizona elegans occidentalis</i>	SSC
western pond turtle	<i>Emys marmorata</i>	SSC
San Joaquin coachwhip	<i>Masticophis flagellum ruddocki</i>	SSC
coast horned lizard	<i>Phrynosoma blainvilli</i>	SSC
two-striped gartersnake	<i>Thamnophis hammondi</i>	SSC
<b>Birds</b>		
Cooper's hawk	<i>Accipiter cooperii</i>	WL
Northern goshawk	<i>Accipiter gentilis</i>	SSC
golden eagle	<i>Aquila chrysaetos</i>	FP, WL
short-eared owl	<i>Asio flammeus</i>	SSC
long-eared owl	<i>Asio otus</i>	SSC
burrowing owl	<i>Athene cunicularia</i>	SSC
mountain plover	<i>Charadrius montanus</i>	SSC
northern harrier	<i>Circus cyaneus</i>	SSC
California horned lark	<i>Eremophila alpestris</i>	WL
merlin	<i>Falco columbarius</i>	WL
prairie falcon	<i>Falco mexicanus</i>	WL
loggerhead shrike	<i>Lanius ludovicianus</i>	SSC
osprey	<i>Pandion haliaetus</i>	WL
double-crested cormorant	<i>Phalacrocorax auritus</i>	WL
white-faced ibis	<i>Plegadis chihi</i>	WL
yellow warbler	<i>Setophaga petechia</i>	SSC
Le Conte's thrasher	<i>Toxostoma lecontei</i>	SSC
yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	SSC
<b>Mammals</b>		
pallid bat	<i>Antrozous pallidus</i>	SSC
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSC
short-nosed kangaroo rat	<i>Dipodomys nitratoides brevinasus</i>	SSC
spotted bat	<i>Euderma maculatum</i>	SSC

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

<b>Common Name</b>	<b>Scientific Name</b>	<b>State Status</b>
western mastiff bat	<i>Eumops perotis californicus</i>	SSC
western red bat	<i>Lasiurus blossevillii</i>	SSC
Tulare grasshopper mouse	<i>Onychomys torridus tularensis</i>	SSC
American badger	<i>Taxidea taxus</i>	SSC

FP = CDFW Fully Protected

SSC = CDFW Species of Special Concern

WL = CDFW Watch List

Source: California Natural Diversity Database (CNDDDB) (Fresno County), May 2021

**Table 3 Federal and/or State Listed Special-Status Plants Documented or with the Potential to Occur in the Fresno County**

Common Name	Scientific Name	Agency Status (Federal/State/CRPR/Other)
Mariposa pussypaws	<i>Calyptidium pulchellum</i>	FT/--/1B.1
San Benito evening-primrose	<i>Camissonia benitensis</i>	FT/--1B.1
Tompkins' sedge	<i>Carex tompkinsii</i>	--/SR/4.3
tree-anemone	<i>Carpenteria californica</i>	--/ST/1B.2
succulent owl's-clover	<i>Castilleja campestris</i> var. <i>succulenta</i>	FT/SE/1B.2
California jewelflower	<i>Caulanthus californicus</i>	FE/SE/1B.1
palmate-bracted salty bird's-beak	<i>Chloropyron palmatum</i>	FE/SE/1B.1
Hoover's eriastrum	<i>Eriastrum hooveri</i>	FD/--/4.2
Tracy's eriastrum	<i>Eriastrum tracyi</i>	--/SR/3.2
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	--/SE/1B.2
Congdon's lewisia	<i>Lewisia congdonii</i>	--/SR/1B.3
San Joaquin woollythread	<i>Monolopia congdonii</i>	FE/--/1B.2
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	FT/SE/1B.1
Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	FT/SE/1B.1
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	FE/--/1B.2
Keck's checkerbloom	<i>Sidalcea keckii</i>	FE/--/1B.1
Greene's tuctoria	<i>Tuctoria greenei</i>	FE/SR/1B.1

FE=Federally Endangered

SE=State Endangered

FT=Federally Threatened

ST=State Threatened

FC=Federal Candidate

SR= State Rare

FD=Federal Delisted

**California Native Plant Society (CNPS)**

1A: Plants presumed extinct in California

1B: Plants rare, threatened, or endangered in California and elsewhere

2: Plants rare, threatened, or endangered in California, but more common elsewhere.

3: Plants about which we need more information.

4: Plants of limited distribution, a watch list.

**California Rare Plant rank (CRPR)**

0.1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 – Fairly endangered in California (20-80% occurrences threatened)

0.3 – Not very endangered in California (&lt;20% of occurrences threatened, or no current threats known)

Sources: California Native Plant Society (CNPS) (Fresno County), 2018 California Natural Diversity Database (CNDDB) (Fresno County), May 2021

**Table 4 Non-Listed Special-Status Plants Documented or with the Potential to Occur in the Fresno County**

Common Name	Scientific Name	CRPR Rank
Abrams' onion	<i>Allium abramsii</i>	1B.2
San Benito onion	<i>Allium howellii</i> var. <i>sanbenitense</i>	1B.3
Raven's milk-vetch	<i>Astragalus ravenii</i>	1B.3
heartscale	<i>Atriplex cordulata</i> var. <i>cordulata</i>	1B.2
Earlimart orache	<i>Atriplex cordulata</i> var. <i>erecticcaulis</i>	1B.2
Lost Hills crownscale	<i>Atriplex coronata</i> var. <i>vallicola</i>	1B.2
brittlescale	<i>Atriplex depressa</i>	1B.2
lesser saltscale	<i>Atriplex minuscula</i>	1B.1
subtle orache	<i>Atriplex subtilis</i>	1B.2
Bodie Hills rockcress	<i>Boechea bodiensis</i>	1B.3
Tulare rockcress	<i>Boechea tularensis</i>	1B.3
upswept moonwort	<i>Botrychium ascendens</i>	2B.3
scalloped moonwort	<i>Botrychium crenulatum</i>	2B.2
slender moonwort	<i>Botrychium lineare</i>	1B.1
Mingan moonwort	<i>Botrychium minganense</i>	2B.2
western goblin	<i>Botrychium montanum</i>	2B.1
watershield	<i>Brasenia schreberi</i>	2B.3
dwarf calycadenia	<i>Calycandenia villosa</i>	1B.1
pygmy pussypaws	<i>Calyptidium pygmaeum</i>	1B.2
Mono Hot Springs evening-primrose	<i>Camissonia sierrae</i> ssp. <i>alticola</i>	1B.2
chaparral harebell	<i>Campanula exigua</i>	1B.2
bristly sedge	<i>Carex comosa</i>	2B.1
mud sedge	<i>Carex limosa</i>	2B.2
Muir's tarplant	<i>Carlquistia muirii</i>	1B.3
Lemmon's jewelflower	<i>Caulanthus lemmonii</i>	1B.2
hispid salty bird's-beak	<i>Chloropyron mole</i> ssp. <i>hispidum</i>	1B.1
Bolander's woodreed	<i>Cinna bolanderi</i>	1B.2
fell-fields claytonia	<i>Claytonia megarhiza</i>	2B.3
Tulare cryptantha	<i>Cryptantha incana</i>	1B.3
Hall's tarplant	<i>Deinandra halliana</i>	1B.1
recurved larkspur	<i>Delphinium recurvatum</i>	1B.2
dwarf downingia	<i>Downingia pusilla</i>	2B.2
Sweetwater Mountains draba	<i>Draba incrassate</i>	1B.3
spear-fruited draba	<i>Draba lonchocarpa</i>	2B.3
tall draba	<i>Draba praealta</i>	2B.3
Mt. Whitney draba	<i>Draba sharsmithii</i>	1B.3
Sierra draba	<i>Draba sierra</i>	1B.3
Scribner's wheat grass	<i>Elymus scribneri</i>	2B.3

Common Name	Scientific Name	CRPR Rank
Hall's daisy	<i>Erigeron aequifolius</i>	1B.3
Keil's daisy	<i>Erigeron inornatus</i> var. <i>keilii</i>	1B.3
Kern River daisy	<i>Erigeron multiceps</i>	1B.2
Eastwood's buckwheat	<i>Eriogonum eastwoodianum</i>	1B.3
Western Heermann's buckwheat	<i>Eriogonum heermannii</i> var. <i>occidentale</i>	1B.2
Kings River buckwheat	<i>Eriogonum nudum</i> var. <i>regirivum</i>	1B.2
Monarch buckwheat	<i>Eriogonum ovalifolium</i> var. <i>monarchense</i>	1B.3
Temblor buckwheat	<i>Eriogonum temblorense</i>	1B.2
Barstow wooly sunflower	<i>Eriophyllum mohavense</i>	1B.2
Jepson's coyote-thistle	<i>Eryngium jepsonii</i>	1B.2
spiny-sepaled button-celery	<i>Eryngium spinosepalum</i>	1B.2
slender-stalked monkeyflower	<i>Erythranthe gracilipes</i>	1B.2
Stanislaus monkeyflower	<i>Erythranthe marmorata</i>	1B.1
Kaweah monkeyflower	<i>Erythranthe norrisii</i>	1B.3
Utah monkeyflower	<i>Erythranthe utahensis</i>	2B.1
San Joaquin spearscale	<i>Extriplex joaquinana</i>	1B.2
San Benito fritillary	<i>Fritillaria viridea</i>	1B.2
Monarch gilia	<i>Gilia yorkii</i>	1B.2
American manna grass	<i>Glyceria grandis</i>	2B.3
Sharsmith's stickseed	<i>Hackelia sharsmithii</i>	2B.3
Winter's sunflower	<i>Helianthus winteri</i>	1B.2
Blandow's bog moss	<i>Helodium blandowii</i>	2B.3
Monarch golden-aster	<i>Heterotheca monarchensis</i>	1B.3
short-leaved hulsea	<i>Hulsea brevifolia</i>	1B.2
California satintail	<i>Imperata brevifolia</i>	2B.1
field ivesia	<i>Ivesia campestris</i>	1B.2
Diablo Range hare-leaf	<i>Lagophylla diabolensis</i>	1B.2
forked hare-leaf	<i>Lagophylla dichotoma</i>	1B.1
alkali-sink goldfields	<i>Lasthenia chrysantha</i>	1B.1
rayless layia	<i>Layia discoidea</i>	1B.1
pale-yellow layia	<i>Layia heterotricha</i>	1B.1
Munz's tidy-tips	<i>Layia munzii</i>	1B.2
Panoche pepper-grass	<i>Lepidium jaredii</i> ssp. <i>album</i>	1B.2
Madera leptosiphon	<i>Leptosiphon serrulatus</i>	1B.2
Yosemite lewisia	<i>Lewisia disepala</i>	1B.2
orange lupine	<i>Lupinus citrinus</i> var. <i>citrinus</i>	1B.2
Hockett Meadows lupine	<i>Lupinus lepidus</i> var. <i>culbertsonii</i>	1B.3
showy golden madia	<i>Madia radiata</i>	1B.1
Indian Valley bush-mallow	<i>Malacothamnus aboriginum</i>	1B.2
broad-nerved hump moss	<i>Meesia uliginosa</i>	2B.2

County of Fresno  
**General Plan Review and Zoning Ordinance Update**

Common Name	Scientific Name	CRPR Rank
Shevock's copper moss	<i>Mielichhoferia shevockii</i>	1B.2
woodnymph	<i>Moneses uniflora</i>	2B.2
aparejo grass	<i>Muhlenbergia utilis</i>	2B.2
small mousetail moss	<i>Myurella julacea</i>	2B.3
shining navarretia	<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	1B.2
Panoche navarretia	<i>Navarretia panochensis</i>	1B.3
prostrate vernal pool navarretia	<i>Navarretia prostrata</i>	1B.2
rayless mountain ragwort	<i>Packera indecora</i>	2B.2
marble rockmat	<i>Petrophytum caespitosum</i> ssp. <i>acuminatum</i>	1B.3
Yosemite popcornflower	<i>Plagiobothrys torreyi</i> var. <i>torreyi</i>	1B.2
Yosemite bog orchid	<i>Platanthera yosemitensis</i>	1B.2
Letterman's blue grass	<i>Poa lettermanii</i>	2B.3
tundra thread moss	<i>Pohlia tundra</i>	2B.3
Robbins' pondweed	<i>Potamogeton robbinsii</i>	2B.3
California alkali grass	<i>Puccinellia simplex</i>	1B.2
aromatic canyon gooseberry	<i>Ribes menziesii</i> var. <i>ixoderme</i>	1B.2
bog sandwort	<i>Sabulina stricta</i>	2B.3
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	1B.2
chaparral ragwort	<i>Senecio aphanactis</i>	2B.2
prairie wedge grass	<i>Sphenopholis obtusata</i>	2B.2
Tehipite Valley jewelflower	<i>Streptanthus fenestratus</i>	1B.1
alpine jewelflower	<i>Streptanthus gracilis</i>	1B.3
Howell's tauschia	<i>Tauschia howellii</i>	1B.3
Bolander's clover	<i>Trifolium bolanderi</i>	1B.2
caper-fruited tropidocarpum	<i>Tropidocarpum capparideum</i>	1B.1
flat-leaved bladderwort	<i>Utricularia intermedia</i>	2B.2
oval-leaved viburnum	<i>Vibrunum ellipticum</i>	2B.3
grey-leaved violet	<i>Viola pinetorum</i> ssp. <i>grisea</i>	1B.2

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Sources: California Native Plant Society (CNPS) (Fresno County), 2018 California Natural Diversity Database (CNDDB) (Fresno County), May 2021



# Appendix NOP

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Notices of Preparation and Scoping Comments

**NOTICE OF PREPARATION**  
**of a Draft Program Environmental Impact Report for the**  
**Fresno County General Plan Review and Zoning Ordinance Update**

**Date:** January 15, 2021

**To:** State Clearinghouse, Responsible Agencies, Trustee Agencies, and Interested Parties

**From:** County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

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**Project Title:**

Fresno County General Plan Review and Zoning Ordinance Update (General Plan Amendment No. 529 and Amendment to Text No. 372)

**Project Location:**

Entire unincorporated portion of Fresno County – see Figure 1

**NOP Comment Period:**

January 15, 2021, to March 1, 2021, by 5:00 PM

**Lead Agency/Contact:**

Chris W. Motta, Principal Planner  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Telephone: (559)-600-4497  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

**Introduction:**

The County of Fresno (County) is reviewing its General Plan and updating its Zoning Ordinance. As Lead Agency under the California Environmental Quality Act (CEQA), the County has determined that the review and update may have a potential significant effect on the environment and that a Programmatic Environmental Impact Report (EIR) will be prepared to evaluate these potential effects.

The County first circulated a Notice of Preparation (NOP) of a Programmatic EIR for the General Plan Review and Zoning Ordinance Update Project (proposed project) in 2018. However, after circulating the NOP in 2018, the Project was temporarily paused for additional changes in project scope. A revised Project Scope of Work was authorized by the Board of Supervisors on April 14, 2020. The County has prepared this NOP to inform

agencies and interested parties that the County has resumed the General Plan Review and Zoning Ordinance Update Project and a Programmatic EIR will be prepared for the proposed project. This NOP solicits guidance from regulatory agencies about the scope and content of environmental information to be included in the Programmatic EIR related to the agencies' statutory responsibilities. The agencies will use the Programmatic EIR when considering their permits or other approvals related to the General Plan Review and Zoning Ordinance Update. The NOP also provides an opportunity for interested parties to inform the County what environmental issues they think should be addressed in the Programmatic EIR.

**Project Description:**

The existing 2000 County General Plan consists of multiple documents: the countywide General Plan Background Report, the countywide Economic Development Strategy, the countywide General Plan Policy Document, and over 40 regional, community, and specific plans. The General Plan Background Report, which inventories and analyzes existing conditions and trends in Fresno County, provides the formal supporting documentation for General Plan Policy Document. The countywide Economic Development Strategy formalizes objectives, strategic actions, organization responsibilities, and work plans to expand business activity and employment in the county. The countywide General Plan Policy Document contains explicit statements of goals, policies, and implementation programs that constitute the formal policy of Fresno County for land use, development, open space protection, and environmental quality. The current General Plan Policy Document is organized by and consists of the following seven countywide elements: 1) Economic Development; 2) Agriculture and Land Use; 3) Transportation and Circulation; 4) Public Facilities and Services; 5) Open Space and Conservation; 6) Health and Safety; and 7) Housing.

The General Plan functions as a guide for future development. The General Plan addresses a range of immediate, mid-, and long-term issues. The General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and "quality of life" considerations in a manner that recognizes resource limitations and productive agricultural land, and the sensitive habitats of the community's natural environment. It outlines policies and programs and sets out plan proposals to guide day-to-day decisions concerning the County's future. Under State law, the General Plan must serve as the foundation upon which all land use decisions are to be based, and must also be comprehensive, internally consistent, and have a long-term perspective.

The County's Zoning Ordinance is officially known as Division VI of the Ordinance Code of the County of Fresno. The stated purpose of the Zoning Ordinance is "to classify and regulate the highest and best use of buildings, structures, and land located in the unincorporated area of the County of Fresno in a manner consistent with the Fresno County General Plan." The Zoning Ordinance is effectively the principal tool for implementing the County's General Plan, and by State law, must be consistent with the General Plan.

The proposed project consists of a review and update of the County General Plan's Background Report and Policy Document, and a comprehensive update of the Zoning Ordinance. The revised General Plan is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2040. The revised General Plan would accommodate County population growth projected through 2040. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The revision includes only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document. The Zoning Ordinance update includes provisions, development standards, and guidelines for consistency with the revised General Plan, pursuant to State law. Figure 1, attached below, provides the Draft Countywide Land Use Diagram. Additional land use designation maps and diagrams for specific areas in the County are provided at the link at the end of this NOP.

#### **Probable Environmental Effects and Scope of the EIR:**

The EIR for the review and update of the General Plan and a comprehensive update of the Zoning Ordinance will describe existing environmental resource areas and conditions in Fresno County. Pursuant to CEQA Guidelines Section 15125, existing conditions will be described as they exist when this NOP is circulated based on the most recent available data and information. The EIR is intended to be a program-level document that will analyze the broad environmental effects of the proposed General Plan and Zoning Ordinance Update, considering broad policy alternatives and program-wide mitigation measures. The EIR will evaluate the potentially significant environmental impacts of implementing the proposed General Plan and Zoning Ordinance Update and will evaluate whether there are feasible mitigation measures that may lessen or avoid identified significant impacts. No specific development projects are being considered. Rather, the analysis will focus on the reasonably foreseeable direct and indirect physical environmental effects compared to existing conditions that could result from adoption and implementation of the General Plan and Zoning Ordinance Update. Effectively, the EIR will analyze potential impacts from buildout of the General Plan on the existing environment. The EIR will also identify and evaluate alternatives to the proposed project.

In accordance with *State CEQA Guidelines* Section 15063(a), the County did not prepare an Initial Study, but advises that the EIR will evaluate potentially significant environmental effects on each of the environmental topics outlined in Appendix G of the *State CEQA Guidelines*. The topics include the following:

- Aesthetics
- Agriculture and Forestry
- Air Quality
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources

- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

In addition, the EIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA.

**NOP Comment Period:**

In accordance with the time limits identified in State law, please respond to this NOP with your comments on the scope and content of the EIR at the earliest possible date, but **no later than 5:00 P.M. on March 1, 2021**. March 1<sup>st</sup> is 45 days following the date this NOP was first posted and published. Please include the name of the contact person for your agency and submit written comments to:

Chris Motta, Principal Planner  
 County of Fresno, Department of Public Works and Planning  
 Development Services and Capital Projects Division  
 Policy Planning Unit  
 2220 Tulare Street, Sixth Floor  
 Fresno, California 93721  
 Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

**Scoping Meeting:**

To facilitate responses to the NOP, the County will hold a scoping meeting on January 27, 2021. The meeting will begin at 5:30 PM and end at 7:00 PM. Due to ongoing public health concerns associated with the COVID 19 pandemic, the scoping meeting will be a web-based video conference that can be accessed at the following link during the aforementioned date and time:

<https://zoom.us/j/92088949930>

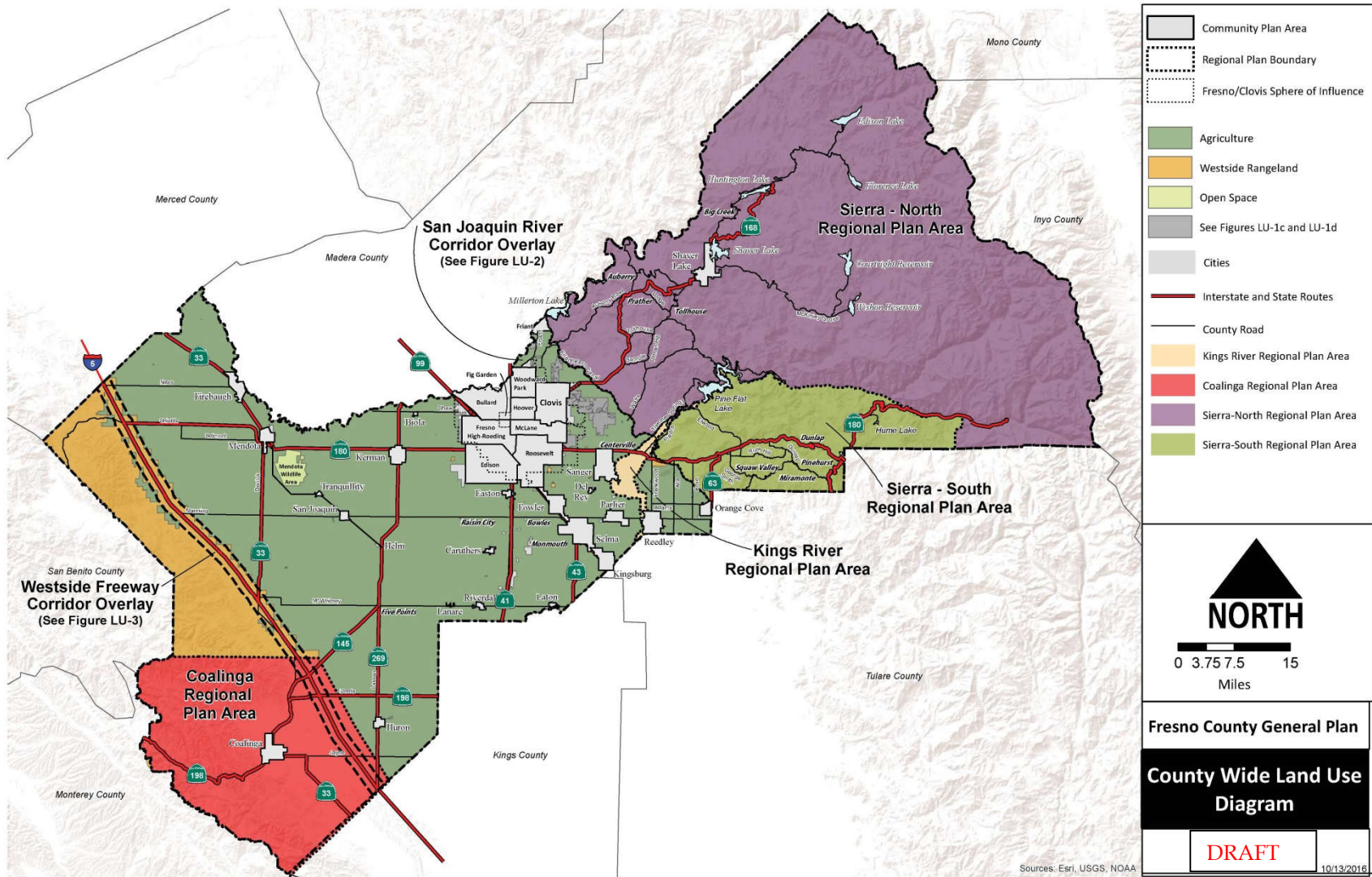
Passcode: 199024

The meeting can also be accessed via telephone at 1-669-900-9128, using the webinar ID of 920 8894 9930 and the passcode, above. Please note, the meeting will be presented in English language, but a translator will be present during the meeting to translate between English and Spanish languages, as needed.

**Additional Information:**

Please visit the dedicated General Plan Review/Zoning Ordinance Update webpage at [www.co.fresno.ca.us/gpr](http://www.co.fresno.ca.us/gpr)

**Figure 1 Draft Countywide Land Use Diagram**



Oral Scoping Meeting Comments January 27<sup>th</sup> 2021.

- Marisa Mitchell
  - More granularity on what is being considered
  - Has county contemplated renewable energy specific elements of the zoning ordinance or land use plans
  - Solar battery storage, hydrogen technology
- Leslie Martinez, LCJA – leadership council
  - 2018 comments, written & verbal
  - Strong alternatives that minimize impacts on disadvantaged communities
  - All feasible MMs on residences & environment – feedback from community & residents should be used here
  - Make community-based organizations engagement plan, take into account COVID-19 & lack of internet access
  - NOP mentions a background report -- what will that include & what will it not?
  - EIR should look at environmental impacts to vulnerable communities that already have cumulative environmental impacts.
  - Ensure look at more than just zoning industry
  - Wastewater services, air quality impacts & health impacts especially on disadvantaged communities, housing water & wastewater service and how that can relate to health of disadvantaged communities
  - Leadership council willing to help w/ community engagement model to get meaningful engagement and feedback
- Adam Livingstone – director planning sequoia riverlands
  - Habitat, ag resources, ag mitigation
- Mary (last name missing)
  - Question: looking at policies & programs of the General Plan.
  - Follow up question: how check how well or not well the policies were implemented/have worked.
- Daniel O-Connell – central valley partnership and Sierra Club’s Tehipite Chapter
  - Will there be a new baseline document
  - How analyze environmental justice aspects of the report for EIR
  - Note: following on Adam Livingston
  - There’s a history of inadequate mitigation on ag lands – best soil quality
  - Injustices in County – need to look at injustice
- Mariah Thompson
  - How will do air quality analysis after Friant Ranch decision has come down
  - VMT new requirement
- Leslie again
  - Background report clarification question

## George Dix

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**From:** Rick Rust <rick@mintierharnish.com>  
**Sent:** Tuesday, January 26, 2021 5:31 PM  
**To:** Matthew Maddox; George Dix  
**Subject:** [EXT] FW: Notice of Preparation - Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update

**CAUTION:** This email originated from outside of Rincon Consultants. Be cautious before clicking on any links, or opening any attachments, until you are confident that the content is safe .

NOP comment.

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**Note on COVID-19:** Our office is working remotely in an effort to help slow the spread of COVID-19. *We remain fully operational and accessible through email and calls to our office line will be routed to the desired staff member (my extension # is 208).*

**Rick Rust, AICP, GISP**



Planning Consultants  
1415 20th Street  
Sacramento, CA 95811  
P: (916) 446-0522  
F: (916) 446-7520  
[www.mintierharnish.com](http://www.mintierharnish.com)

----- Forwarded Message -----

From: Motta, Chris <cmotta@fresnocountyca.gov>  
Date: 1/26/2021 3:06:40 PM  
Subject: FW: Notice of Preparation - Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update  
To: Rick Rust <rick@mintierharnish.com>

Rick,

Initial comments from Navy (China Lake). More will likely be forthcoming. Their main concern is wind farms.



**Chris W. Motta, MURP** | **Principal Planner**  
Department of Public Works and Planning |

**Development Services and Capital Projects Division**  
2220 Tulare St. 6th Floor Fresno, CA 93721  
Main Office: (559) 600-4497 Direct: (559) 600-4227

[Your input matters! Customer Service Survey](#)



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**From:** Warren, Robert J CIV USN NAWCWD (USA) <robert.j.warren1@navy.mil>  
**Sent:** Tuesday, January 26, 2021 1:52 PM  
**To:** Motta, Chris <CMotta@fresnocountyca.gov>  
**Cc:** Kersey, John D CIV USN NAVFAC SW SAN CA (USA) <john.kersey@navy.mil>  
**Subject:** RE: Notice of Preparation - Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update

CAUTION!!! - EXTERNAL EMAIL - THINK BEFORE YOU CLICK

Good Afternoon Chris

Long time no speak – hope all is well.

Thank you for sending below.

I recently dialogued with a few of my DOD associates, and we are formulating a collective response to your NOP for the upcoming draft EIR.

I have copied my colleague Mr. John Kersey who serves as the Community Planning Liaison Officer for NAWS China Lake.

At this time, John is serving as our POC, and is clarifying our ‘working group’ and defining our collective input into a succinct and understandable format.

We are looking forward to working with you and Fresno County on this effort!

Take Care

Regards,

Jason Warren

NAVAIR Sustainability Office

China Lake, CA

7609399159

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**From:** Motta, Chris <[CMotta@fresnocountyca.gov](mailto:CMotta@fresnocountyca.gov)>

**Sent:** Friday, January 15, 2021 1:58 PM

**To:** Motta, Chris <[CMotta@fresnocountyca.gov](mailto:CMotta@fresnocountyca.gov)>

**Subject:** [Non-DoD Source] Notice of Preparation - Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update

Good Afternoon,

The County is providing notice that it will serve as the Lead Agency, consistent with Sections 15020 and 15021 of the California Environmental Quality Act, in preparing an Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update. A Notice of Preparation (NOP) of this Environmental Impact Report (EIR) is attached to this email.

The proposed project includes a review and revision of the Fresno County's General Plan Policy Document and an update of the General Plan Background Report and Zoning Ordinance. As Lead Agency under the California Environmental Quality Act (CEQA), the County has determined that the review and update may have a potentially significant effect on the environment and that an EIR will be prepared to evaluate these potential effects. The NOP solicits guidance from regulatory agencies about the scope and content of environmental information to be included in the EIR related to the agencies' statutory responsibilities. The NOP also provides an opportunity for interested parties to inform the County what environmental issues they think should be addressed in the EIR.

The County, in its role as Lead Agency, **will hold a public scoping meeting on January 27, 2021** to provide an opportunity for the public and representatives of public agencies and interested organizations to address the scope of the EIR. The meeting will begin at 5:30 PM and end at 7:00 PM. Due to ongoing public health concerns associated with the COVID 19 pandemic, the scoping meeting will be a web-based video conference that can be accessed at the following link:

<https://zoom.us/j/92088949930>

Passcode: 199024

The meeting can also be accessed via telephone at 1-669-900-9128, using the webinar ID of 920 8894 9930 and the passcode, above. Please note, the meeting will be presented in English language, but a translator will be present during the meeting to translate between English and Spanish languages, as needed.

This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). A **45-day public comment period**, during which time the County will receive comments on the NOP for the General Plan Review and Zoning Ordinance Update EIR, **begins January 15, 2021 and ends on March 1, 2021**. Comments should be sent via email to [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us) or to the following address:

Chris Motta, Principal Planner

County of Fresno, Department of Public Works and Planning

Development Services and Capital Projects Division

2220 Tulare Street, Sixth Floor Fresno, California 93721

As they become available, the revised public review draft of the updated General Plan Background Report, the revised General Plan Policy Document, including land use designation diagram, the Zoning Ordinance Update, NOP and the Draft EIR will be published on the County's dedicated webpage at: [www.co.fresno.ca.us/gpr](http://www.co.fresno.ca.us/gpr)

Sincerely,



**Chris W. Motta, MURP** | **Principal Planner**

**Department of Public Works and Planning** |

**Development Services and Capital Projects Division**

2220 Tulare St. 6th Floor Fresno, CA 93721

Main Office: (559) 600-4497 Direct: (559) 600-4227





NATIVE AMERICAN HERITAGE COMMISSION

January 19, 2021

Chris Motta, Principal Planner
County of Fresno, Department of Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, CA 93721

Re: 2018031066, Fresno County General Plan Review and Zoning Ordinance Update Project, Fresno County

Dear Mr. Motta:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

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JAN 25 2021

FRESNO COUNTY PW & PLANNING

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
    - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i.** Protecting the cultural character and integrity of the resource.
    - ii.** Protecting the traditional use of the resource.
    - iii.** Protecting the confidentiality of the resource.
  - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

## NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.



b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).

Sincerely,



Nancy Gonzalez-Lopez  
Cultural Resources Analyst

cc: State Clearinghouse



**Jared Blumenfeld**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Meredith Williams, Ph.D.  
Director  
8800 Cal Center Drive  
Sacramento, California 95826-3200



**Gavin Newsom**  
Governor

January 19, 2021

Mr. Chris Motta  
Principal Planner  
County of Fresno  
Department of Public Works and Planning  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721  
[gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

NOTICE OF PREPARATION OF A PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT FOR THE FRESNO COUNTY GENERAL PLAN REVIEW AND ZONING ORDINANCE UPDATE PROJECT – DATED JANUARY 15, 2021 (STATE CLEARINGHOUSE NUMBER: 2018031066)

Mr. Motta:

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation of an Environmental Impact Report (EIR) for Fresno County General Plan Review and Zoning Ordinance Update (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.
3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml\\_handbook.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf)).
4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* ([https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance\\_Lead\\_Contamination\\_050118.pdf](https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf)).
5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to DTSC's 2001 *Information Advisory Clean Imported Fill Material* ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP\\_FS\\_Cleanfill-Schools.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf)).
6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf>).

Mr. Chris Motta  
January 19, 2021  
Page 3

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP\\_App-1460.doc](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc). Additional information regarding voluntary agreements with DTSC can be found at: <https://dtsc.ca.gov/brownfields/>.

If you have any questions, please contact me at (916) 255-3710 or via email at [Gavin.McCreary@dtsc.ca.gov](mailto:Gavin.McCreary@dtsc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Gavin McCreary". The signature is written in a cursive style.

Gavin McCreary  
Project Manager  
Site Evaluation and Remediation Unit  
Site Mitigation and Restoration Program  
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research  
State Clearinghouse  
[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

Mr. Dave Kereazis  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
[Dave.Kereazis@dtsc.ca.gov](mailto:Dave.Kereazis@dtsc.ca.gov)

January 26, 2021

Chris W. Motta, Principal Planner  
Department of Public Works and Planning  
2220 Tulare St. 6th Floor Fresno, CA 93721

Mr. Motta,

Please add this communication to the record for the County's January 15, 2021 Notice of Preparation (NOP) for the review and update of the Fresno County General Plan and Zoning Ordinance (Project).

When the County presents an overview of the environmental review of the Project at the scoping meeting planned for January 27, 2021 at 5:30 PM, please see that these items are addressed.

- 1) The County published a similar NOP on March 21, 2018. As a result of that notice, agencies, community organizations and county residents submitted comments both orally and in writing.

At this stage in the environmental review of the Project, the public would benefit from knowing whether the comments submitted in 2018 will be incorporated into the current request for comments or whether those earlier comments will need to be resubmitted.

- 2) When the County published its 2018 NOP for this Project, those submitting comments had the benefit of being able to review the draft plans that were then under environmental review. This time around, those responding to the NOP do not have access to the latest revision of those draft plans.

At this stage in the environmental review of the Project, the public would benefit from knowing approximately when the County plans to release revised public review draft documents. Will the County release them prior to the end of the comment period for this NOP — by March 1, 2021? If not, will the County release them prior to the start of the 45-day comment period for the review of the draft EIR?

- 3) On April 14, 2020, as part of Task 4.1 of the revised Scope of Work for the Project, the Board of Supervisors approved a change in the analysis methodology for environmentally assessing the revision of the General Plan and Zoning Ordinance. That task is printed out below.

#### Task 4.1 Notice of Preparation (Revised)

Under Amendment 1, [approved October 13, 2015] a Notice of Preparation (NOP) was prepared and circulated for public input, and the original task was considered complete.

Under Amendment 2, [approved April 14, 2020] the County has directed that the overall approach to the environmental analysis in the EIR will change from a plan-to-plan comparison to an analysis that will focus on buildout of the proposed General Plan compared to existing conditions (in other words, a baseline comparison). This will require recirculation of the NOP to change the existing baseline used for impact analysis.

The Consultants will draft a revised project description providing information on the new analysis methodology and prepare a new/updated draft NOP pursuant to CEQA Guidelines. The Consultants will prepare and submit a new/updated NOP for review and approval by County staff. Based on County staff comments, the Consultants will prepare the final NOP for distribution. The Consultants assume the County will provide a list of contacts for the NOP distribution. The Consultants will assist with noticing and distribution, including hand-delivering the NOP to the State Clearinghouse.

At this stage in the environmental review of the Project, the public would benefit from knowing whether the change in methodology means that the environmental review will assess the entire revised draft General Plan Policy Document, including all of its policies, programs and goals.

- 4) As you know, the 2000 General Plan consists of multiple documents. Page 5 of the Introduction to the 2000 General Plan reads, “*The Fresno County General Plan consists of multiple documents: the countywide General Plan Background Report, the countywide General Plan Policy Document, and over 40 regional, community, and specific plans.*”

When this Project was first initiated in 2006, the idea was that the County would “*update*” the Background Report, “*review*” and possibly revise the Policy Document but do nothing with regard to the set of regional, community and specific plans. Since then, the County has decided to also “*update*” the Policy Document. We know this from several sources, including the January 15, 2021 NOP itself. But perhaps the clearest statement regarding the update of the Policy Document is found in the January 15, 2021 *Notice of Completion & Environmental Document Transmittal* located on the state’s Clearinghouse website. That statements reads:

### Project Description:

The proposed project consists of a review and update of the County General Plan's Background Report and Policy Document, and a comprehensive update of the Zoning Ordinance. The revised General Plan is intended to build on the major policies of the current 2000 General Plan but expand and strengthen them to meet the challenges and community needs through planning horizon year 2040. The Zoning Ordinance would be updated for consistency with the General Plan. (My underlining)

At this stage in the environmental review of the Project, and in light of the fact that the General Plan, and the parts thereof, must comprise an integrated, internally consistent and compatible statement of policies, the public would benefit from knowing how the new analysis methodology (a baseline comparison that will focus on buildout of the proposed Project compared to existing conditions) will address the fact that following Project approval, the General Plan will continue to be, in some measure, internally inconsistent and out of date with respect to current environmental conditions.

By way of example, although the Tranquillity Community Plan, which is part of the General Plan, was evaluated and revised as part of the County's update of the General Plan back in 1976, the community plan did not undergo similar review when the General Plan was updated in 2000, and it appears that the community plan will not be reviewed environmentally as part of the current update of the General Plan, which extends the planning horizon of the General Plan to the year 2040. The planning horizon for the Tranquillity Community Plan extends to the year 1984.

A more telling example is the Easton Community Plan, which is also part of the General Plan and which was last updated in 1989. That older plan no longer reflects current environmental conditions. The Easton Community Plan states that "*groundwater degradation will be avoided because of the dispersed, low intensity development.*" But we know this is no longer the situation because the SB 244 analysis that was adopted into General Plan this past fall states that in parts of Easton "*there are considerable drinking water concerns..., namely coliform, dibromochloropropane (DBCP), and nitrate contamination.*"

In short, I'm asking that the person presenting the overview of the environmental process give the public an idea as to how the environmental assessment will proceed given the fact that certain parts of the General Plan are not open to environmental review.

I thank you for considering my request that at the scoping meeting scheduled for January 27, 2021 those charged with explaining the environmental process take the time to address the items articulated above.

Sincerely,



Radley Reep

[radleyreep@netzero.com](mailto:radleyreep@netzero.com)

(559) 326-6227



**ANNOUNCEMENT OF NOTICE OF PREPARATION  
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE FRESNO COUNTY  
GENERAL PLAN REVIEW AND ZONING ORDINANCE UPDATE**

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The proposed project includes review and revision of the Fresno County's General Plan Policy Document and update of the General Plan Background Report and Zoning Ordinance. As Lead Agency under the California Environmental Quality Act (CEQA), the County has determined that the review and update may have a potential significant effect on the environment and that an Environmental Impact Report (EIR) will be prepared to evaluate these potential effects. The Notice of Preparation (NOP) solicits guidance from regulatory agencies about the scope and content of environmental information to be included in the EIR related to the agencies' statutory responsibilities. The NOP also provides an opportunity for interested parties to inform the County what environmental issues they think should be addressed in the EIR.

The public review draft of the updated General Plan Background Report and revised General Plan Policy Document, including land use designation diagram, and the Zoning Ordinance Update, and the NOP are posted on the County's website at: [www.co.fresno.ca.us/gpr](http://www.co.fresno.ca.us/gpr)

To facilitate responses to the NOP, the County will hold two scoping meetings. The first meeting will be held on March 26, 2018 at 2:00 PM at the Fresno County Board of Supervisors Chambers, 2281 Tulare Street, Room 301, Fresno, California 93721. The second meeting will be held on March 26, 2018 at 5:30 PM at Riverdale Memorial District located at 3085 W. Mount Whitney Avenue, Riverdale, CA 93656.

The NOP comment period starts on March 12, 2018 and ends on April 25, 2018 at 5:00 P.M. Please respond to the NOP with comments on the scope and content of the EIR at the earliest possible date, but **no later than 5:00 P.M. on April 25, 2018**. Please include the name of the contact person for your agency and submit written comments to:

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

Date: March 12, 2018



Rincon Consultants, Inc.

4825 J Street, Suite 200  
Sacramento, California 95819

916 706 1374 OFFICE AND FAX

info@rinconconsultants.com  
www.rinconconsultants.com

May 9, 2018  
Project No: 15-01712

Mohammad Khorsand  
County of Fresno, Department of Public Works & Planning  
Development Services & Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California, 93721

**Subject: Fresno County General Plan Review and Zoning Ordinance Update  
Summary of EIR Scoping Meeting Comments**

Dear Mr. Khorsand:

As you are aware, the County held two public scoping meetings on March 26, 2018, with the purpose of soliciting comments and inputs on the Draft EIR to be prepared for the Fresno County General Plan Review and Zoning Ordinance Update (project). The first EIR scoping meeting was held from 2:00 to 3:30 PM, at the County of Fresno Board of Supervisors Chambers. The second scoping meeting was held from 5:30 to 6:30 PM, at the Riverdale Memorial District in Riverdale.

A total of six people were in attendance at the first meeting, excluding County planning staff and Rincon staff. Six people were also in attendance at the second meeting, again excluding County planning and Rincon staff. Copies of the sign-in sheets from each meeting are attached to this letter. Please note that the sign-in sheet for the second meeting shows only five people. This is because Supervisor Mendes was in attendance but did not sign the sign-in sheet.

Comment sheets were provided at each meeting for submittal of written comments. However, no written comments were submitted at either meeting. Several attendees noted that they intend to submit written comments at a later date. Numerous comments and questions were provided verbally during each meeting. These comments were paraphrased in written format on an oversized paper tablet at the front of the meeting room as the commenter was speaking. The remainder of this letter presents each of these comments in the order they were provided at each meeting.

## Board of Supervisors Chambers Meeting Comments

- What version of the General Plan Review and Zoning Ordinance Update will be analyzed in the EIR; is the public drafts currently posted online, or will it be drafts revised per additional or future public comment?
- Will the General Plan Background Report form the existing setting used in the EIR?



- Will the General Plan Background Report be updated, as needed, during the CEQA process? For example, substantial tree mortality has occurred in the County that may not be reflected currently in the General Plan Background Report.
- When the public was initially asked for input on the General Plan Review, it was some time ago, and at that time the understanding was that the General Plan would have a horizon year of 2020. Now that the General Plan Review has a horizon year of 2040, the County should expect the potential for public comment regarding the additional 20 years added to the horizon year.
- Is this project being presented as a General Plan Update or a review/revision of the General Plan? Some materials and documents have used conflicting language. For example, the NOP states that the proposed project consists of “a comprehensive update of the County’s General Plan, Background Report, a review of the Policy Document, and a comprehensive update of the Zoning Ordinance.”
- The EIR should consider the potential for conflicts between the revised General Plan Policy Document and updated General Plan Background Report and Community Plans.
- Will there be public workshops for the General Plan Review, and if so, when?
- The EIR should explore locating industrial uses away from disadvantaged and environmental justice communities.
- The EIR should evaluate whether communities, particularly disadvantaged and environmental justice communities, would have reliable water supplies. The EIR should also evaluate the quality of these water supplies.
- Will the applicable Water Districts be contacted during preparation of the EIR to obtain the most recent water use, supply, and demand data? Directly contacting the Water Districts could be beneficial for obtaining the most recent and relevant data for the EIR analysis.
- The EIR should consider the following issues with regards to adverse impacts on disadvantaged and environmental justice communities: 1) air quality; 2) dust from truck traffic and agricultural activities; 3) noise from truck traffic; 4) adequacy of water supplies; 5) wastewater treatment; 6) road maintenance/safety; and, 7) cumulative impacts. The EIR should also consider mitigating impacts to these issues by rerouting truck traffic.
- In developing industries in Malaga and the Golden State Corridor, to protect the disadvantaged communities from air quality impacts as well as impacts from truck traffic.
- Does the General Plan Review and Zoning Ordinance Update include changes to the military boundary associated with Naval Air Station Lemoore?
- The current 2000 General Plan is considered to be a “self-mitigating” document, but the County has not been able to implement some of the General Plan policies that would mitigate impacts due to a lack of funding or other economic constraints. In light of this, the EIR should consider



the economic feasibility of implementing mitigation measures developed during this EIR process. The EIR should do an economic analysis for the cost of implementing the existing mitigation measure identified in the General Plan.

- Is it reasonable or fair to solicit agencies for Notice of Preparation comments when the County has not provided these agencies with an Initial Study or other similar documentation of the potential impacts of the project?
- The EIR should consider the history of adverse impacts to disadvantaged and environmental justice communities, but which have not been recognized as such due to few residents to be delineated or identified as an environmental justice population.
- What other public engagements will occur with regards to the project between this scoping meeting and the close of the Notice of Preparation comment period on May 4, 2018.
- The current public noticing of the scoping meeting may be inadequate considering how many people reside in Fresno County and how few people are in attendance.
- The Leadership Counsel is available to assist in bringing the public into another scoping meeting, if there will be another scoping meeting.
- The County has its own CEQA implementation procedures, and your procedures are closer to the *State CEQA Guidelines*. The County's CEQA procedures call for an Initial Study prior to preparation of an EIR.

## Riverdale Memorial District Meeting Comments

- How specific does the Environmental Justice Element of the General Plan and the environmental justice analysis in the EIR need to be?
- How will the EIR address the Sustainable Groundwater Management Act?
- Will the EIR analyze existing impacts that currently affect disadvantaged and environmental justice communities?
- Will the County examine zoning issues during this project? Specifically, the Zoning Ordinance currently requires fire sprinklers in buildings over 5,000 square feet, which includes barns and agricultural sheds, which may not be practical.
- Is it possible for the County to provide a list or summary of the major changes between the current Zoning Ordinance and the Zoning Ordinance Update?
- The EIR should evaluate the need for new bridge crossings over the San Joaquin River between the City of Madera and the County, with regards to neighborhood and population connectivity.
- The EIR should evaluate the substantial tree mortality that has occurred in the region, including both conifer forests and oak woodlands.



- The EIR should evaluate what uses are allowed in agricultural zoning districts, such as churches or small convenience stores, and how these uses might adversely impact agriculture.
- The EIR should evaluate how the County allocates roadway maintenance funding with regards to roadways in disadvantaged and environmental justice communities.
- The EIR should include a buildable lands analysis using parcel size criteria of two to five acres for undeveloped sites.
- The EIR should evaluate the potential population growth resulting from High Speed Rail.
- The EIR should evaluate countywide water quality.
- The EIR should evaluate adverse impacts to agriculture, water quality, and wildlife associated with salt buildup.
- The EIR should evaluate the potential vehicle miles travelled (VMT) impacts associated with development in unincorporated areas, such as the Interstate 5 corridor.
- How is the County reviewing Community Plans during the General Plan Review and Zoning Ordinance Update?
- The EIR should evaluate an alternative that prevents all significant and unavoidable impacts with mitigation that may, on its surface, seem infeasible or too costly to implement.
- How will the project impact individual residents and their property?
- There are residents in the County that will be impacted by the project but will not comment or provide input on the project or EIR because the entire process is complex and can be challenging to comprehend for the typical person not involved in planning, land use policy, zoning law, and so forth.
- Will the EIR evaluate the revised General Plan in its entirety, as a complete document, or only the changes between the existing General Plan and revised General Plan?

Sincerely,  
Rincon Consultants, Inc.

George Dix  
Senior Environmental Planner

Attachment: Scoping Meeting Sign-In Sheets



**Northern  
California**  
May 4, 2018

RECEIVED  
MAY 07 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

**Sent Via U.S. Mail and E-mail**

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

**Re: Fresno County General Plan**

Dear Mr. Khorsand:

We write on behalf of the American Civil Liberties Union of Northern California (“ACLU-NC”) to express concern regarding the proposed revisions to the Fresno County General Plan (“General Plan”). The County’s effort to include in the General Plan environmental justice goals and policies to support disadvantaged communities is an important first step. But the General Plan as currently drafted should be modified in the following four ways. First, state law requires the County to identify all disadvantaged communities but the draft General Plan unlawfully omits 67 census tracts identified by CalEPA as disadvantaged communities. Second, the County should identify the census tracts for the disadvantaged communities it included in the General Plan and disclose its methodology for identifying disadvantaged communities. Third, the draft General Plan must be amended to include policies and objectives that promote safe and sanitary homes. Fourth, the County must amend the policies and objectives to address the needs of disadvantaged communities and should adopt more concrete policies for promoting public facilities, safe and sanitary homes, and civic engagement in the public decision-making process.

**A. General Plans Must Include Environmental Justice**

General plans outline policies and programs, and provide plan proposals to guide day-to-day decisions concerning the County’s future. California state law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which in the planning agency’s judgment bears relation to its planning.” Gov. Code, § 65300. Prior to 2018, general plans included seven mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. Enacted into law in 2016, Senate Bill (“SB”) 1000 requires cities and counties to adopt an environmental justice element or integrate environmental justice related policies, objectives, and goals throughout other elements of their general plan. This requirement is triggered upon a city’s or county’s “adoption or next revision of two or more elements concurrently on or after January 1, 2018.” Gov. Code, § 65302 (h)(2).

**American Civil Liberties Union Foundation of Northern California**

EXECUTIVE DIRECTOR Abdi Soltani • BOARD CHAIR Magan Pritam Ray  
SAN FRANCISCO OFFICE: 39 Drumm St. San Francisco, CA 94111 • FRESNO OFFICE: PO Box 188 Fresno, CA 93707  
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Environmental justice “means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” Gov. Code, § 65040.12(e). SB 1000 recognizes certain communities are “disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.” Gov. Code, § 65302(h)(4)(A).

SB 1000 requires counties revising and adopting their General Plans to do the following two things. First, they must identify all disadvantaged communities within the area covered by the general plan. Gov. Code, § 65302(h)(1). The statute defines disadvantaged communities as areas “identified by the California Environmental Protection Agency [“CalEPA”] pursuant to Section 39711 of the Health and Safety Code.” Gov. Code, § 65302(h)(4)(A). Section 39711 was adopted in 2012 as part of Senate Bill (“SB”) 535 which, among other things, gave CalEPA responsibility for identifying disadvantaged communities. CalEPA developed the California Communities Environmental Health Screening Tool 3.0 (“CalEnviroScreen”) to assess all census tracts in California and identify areas disproportionately burdened by (or vulnerable to) multiple sources of pollution.

Second, counties must also identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, promote civic engagement, and prioritize improvements and programs that address the needs of those communities. Gov. Code, § 65302(h)(1)(A)-(C). SB 1000 clarifies that with respect to addressing health risks, objectives and policies should “include... the reduction of pollution exposure... and the promotion of public facilities... safe and sanitary homes, and physical activity.” Gov. Code, § 65302(h)(1)(A). The statute further defines public facilities to “includes public improvements, public services, and community amenities.” Gov. Code § 65302(h)(4)(B).

## **B. Fresno General Plan**

Fresno County failed in its mandatory duties to identify disadvantaged communities and to identify objectives and policies concerning health risks that meet the minimum statutory requirements. Further, the policies and objectives articulated in the draft General Plan fail to adequately address the needs of disadvantaged communities.

### *1. The Draft General Plan Must Be Amended to Identify All Disadvantaged Communities.*

Fresno County has a mandatory duty to identify disadvantaged communities within the county, but it has failed to include in the draft General Plan all the disadvantaged communities identified by CalEPA. In April 2017, CalEPA released its list of disadvantaged communities.<sup>1</sup> CalEPA identified 119 census tracts within Fresno County as disadvantaged communities. Yet the draft General Plan identifies only 52 disadvantaged communities. *See* Table EJ-1. Among the overlooked communities is West Park, part of Census Tract 6019001900, which is home to

<sup>1</sup> California Office of Environmental Health Hazard, “SB 535 Disadvantaged Communities,” <https://oehha.ca.gov/calenviroscreen/sb535>. Last visited Apr. 30, 2018.

approximately 1,157 residents whose needs have far too long been overlooked by the County. The draft General Plan omits 67 census tracts designated by CalEPA as disadvantaged communities, like West Park, that the County is required by Government Code section 65302(h)(1) to include. The draft General Plan must be amended to address this significant oversight.<sup>2</sup>

2. *The Draft General Plan Should Be Amended to Identify the Census Tracts of the Disadvantaged Communities It Included in the General Plan and to Explain the Methodology for Identifying Disadvantaged Communities.*

The County has a mandatory duty to include all disadvantaged communities designated by CalEPA. Gov. Code, §§ 65302(h)(1), 65302(h)(4)(A). This is a straightforward and mandatory requirement. While it is apparent from comparing the CalEnviroScreen tool on CalEPA's website to the draft General Plan that the county omitted at least 67 census tracts that CalEPA has designated as disadvantaged communities (*see supra* note 2), it is impossible to determine from the draft General Plan *which* communities have been left out. CalEPA identifies disadvantaged communities by census tract, while the draft General Plan identifies them by name, with no reference to corresponding census tract. The draft General Plan should be amended to provide corresponding census tract information for the communities it included so that the list of disadvantaged communities in the General Plan and on CalEPA's list can easily be compared. In addition, the County should explain any methodology relied upon in determining what disadvantaged communities to include and exclude. Greater transparency will ensure that all disadvantaged communities, such as West Park, are included.

3. *The Draft General Plan Must Be Amended to Include Objectives and Policies that Promote Safe and Sanitary Homes.*

The County has a mandatory duty to identify objectives and policies to reduce health risks in disadvantaged communities, but it has failed to include the promotion of safe and sanitary homes. SB 1000 provides a non-exhaustive list of means to facilitate the reduction of unique or compounded health risks for residents in disadvantaged communities. *See* Gov. Code § 65302(h)(1)(A). The draft General Plan "environmental justice goals and policies" identifies four goals and fourteen policies, yet none of these promote safe and sanitary homes. The draft General Plan must be amended to include additional policies and objectives that, at minimum, promote safe and sanitary homes.

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<sup>2</sup> The draft General Plan observes that CalEnviroScreen's focus on census tracts "does not account for instances where two communities may have drastically different experiences on being adversely impacted, though they share the same census tract and therefore their CalEnviroScreen score does not reflect the need of the disadvantaged community." Draft General Plan at 2-207. This acknowledges that the CalEnviroScreen tool may result in *under*-designation of disadvantaged communities because a community that is actually disadvantaged may receive a score that suggests less of an environmental burden than it experiences, if its score is blended with a less impacted community in the same census tract. Thus, the draft General Plan suggests communities not appearing on CalEPA's list should also be included. This would mean that the number of omitted communities is *higher* than 67.



4. *The County Must Amend Its Environmental Justice Policies and Objectives to Address the Needs of Disadvantaged Communities and Should Adopt More Concrete Policies for Promoting Public Facilities, Safe and Sanitary Homes, and Civic Engagement in the Public Decision-Making Process.*

The purpose of SB 1000 is to ensure that local government planning decisions do not hurt the most vulnerable Californians.<sup>3</sup> By requiring that cities and counties first identify disadvantaged communities, and then identify environmental justice policies and objectives, state law envisions that local governments will tailor their environmental justice objectives to the disadvantaged communities, and engage them in decision-making. Because the draft General Plan unlawfully omitted 67 census tracts designated as disadvantaged communities, the policies and objectives Fresno County identified necessarily fail to address the needs of those communities. In addition, the policies and objectives included in the draft General Plan do not go far enough. Specifically, the draft General Plan fails to identify concrete steps to ensure disadvantaged communities are active participants in the processes that impact their health and their communities. The General Plan should do more to ensure compliance with SB 1000 and should be amended as follows.

- i. Actual Community Needs

The County has a mandatory duty to “[i]dentify objectives and policies to reduce the unique or compounded health risks” and “that prioritize improvements and programs that address the needs of disadvantaged communities.” Gov. Code, § 65302(h)(1)(A)-(C). Because the draft General Plan did not identify at least 67 census tracts designated by CalEPA as disadvantaged communities, it could not have accounted for the unique needs of *these* communities. For example, the County policy to identify damaged or incomplete sidewalks and bike paths is inapplicable to residents whose communities lack sidewalks or bike paths at all. Furthermore, the discussion of convenient access to parks and recreational facilities ignores communities that lack green space and community amenities. Had all disadvantaged communities been identified, the draft General Plan policies and objectives would have more accurately addressed unique community health risks. The draft General Plan must be amended to identify objectives and policies applicable to all disadvantaged communities in Fresno county.

In developing policies and objectives that actually address the needs of disadvantaged communities, the County should engage those communities directly. Disadvantaged communities are often ignored in important land use planning decisions and SB 1000 seeks to rectify that imbalance by requiring cities and counties to identify these disproportionately burdened areas. Once identified, disadvantaged communities should be consulted as Fresno County crafts its General Plan policies and objectives. This approach is consistent with the requirement that the County identify policies and objectives that “promote civi[c] engagement in the public decision-making process.” Gov. Code, § 65302(h)(1)(B). ACLU-NC urges Fresno County to prioritize visiting these communities, in addition to any current county procedure for seeking input from residents in the General Plan area. All feedback from disadvantaged community residents should be reviewed and incorporated into the draft General Plan. All

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<sup>3</sup> Senate Committee on Governance and Finance at 3  
[https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201520160SB1000#](https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160SB1000#).

residents in disadvantaged communities in Fresno County should be able to voice their concerns and have those concerns addressed as the county plans for its future development.

ii. Health and Safety Policies

Fresno County should make its health problem goals more expansive and explicitly include improved public facilities. SB 1000 identifies the reduction of pollution exposure, improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity as means for reducing health risks, yet the draft General Plan fails to include every aspect of this list. In addition, the relevant section of the draft General Plan focuses almost exclusively on promoting physical activities through bicycle and pedestrian friendly communities. *See* Goal EJ-B. This is an important aspect of a healthy community but should not be the sole objective for reducing health problems. Instead, the objectives and policies should take into consideration the reality of living in disadvantaged communities. For example, West Park lacks sidewalks, street lights, and stop signs. For West Park residents, including bike lanes on roads with cars that frequently travel over 55 miles per hour would do little to increase the walkability of their community and fails to address their legitimate safety concerns. ACLU-NC encourages Fresno County to include health policies that also focus on improved sanitation infrastructure and more adequately address safety concerns such as bad lighting and speeding cars.

iii. Civic Engagement Policies

Fresno County should include more concrete policies for civic engagement. The draft General Plan provides only a single policy for community participation. Specifically, “the County shall ensure residents of disadvantaged communities are provided the opportunity to participate in decisions that may have an adverse impact to their health.” EJ-D.1. Without additional guidance in the General Plan, however, decision-makers may continue to ignore the voices of disadvantaged communities. Instead, Fresno County could include more policies aimed at improved community participation with, at the very least, the same specificity as provided in other areas of the draft General Plan.

For example, the land use and the environment section identifies the goal of “avoiding disproportionate adverse environmental impacts of developments on disadvantaged communities.” Goal EJ-A. The draft General Plan then articulates concrete actions the County shall take to effectuate this goal. Such actions include ensuring adequate separation and buffering between residential and industrial uses in disadvantaged communities, and requiring sensitive land use proposals include adequate setbacks to minimize air quality impacts for disadvantaged community residents.

Like the land use and environment section, the ACLU-NC encourages Fresno County to revise its community participation section to similarly direct specific activity by cities and counties. For example, the General Plan could mandate listening to and visiting residents of disadvantaged areas whenever a proposal concerns the land near their community. The draft General Plan could also mandate notices be disseminated to all nearby disadvantaged communities to ensure

community participation. As currently written the draft General Plan does not adequately promote civic engagement in the public decision-making process by disadvantaged communities.

### **Conclusion**

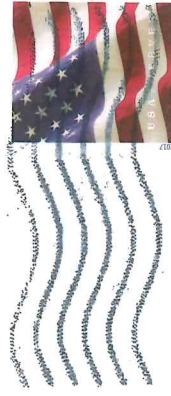
General plans are important public documents that must prioritize disadvantaged communities—communities that have been historically marginalized and overlooked—when planning for future development. Given the new requirements under SB 1000, Fresno County must identify all disadvantaged communities, including West Park, in its General Plan, and must include policies and objectives to promote safe and sanitary neighborhoods. Fresno County should also take additional steps to comply with the law. These additional steps include providing a more robust description of policies and goals for disadvantaged community participation in the public decision-making process, greater emphasis on infrastructure improvements, and a more transparent process for identifying disadvantaged communities.

Sincerely,



Kena C. Cador  
Equal Justice Works Fellow, sponsored by Apple Inc. and O'Melveny & Myers  
ACLU Foundation of Northern California

ACLU of Northern California  
P.O. Box 188  
Fresno, CA 93707



SACRAMENTO CA 957

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Mohammad Khorsand  
County of Fresno, Department of Public Works  
Development Services and Capital Projects Division  
2220 Tulare St, Sixth Floor  
Fresno, CA 93721



Northern  
California  
May 4, 2018

**Sent Via U.S. Mail and E-mail**

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

**Re: Fresno County General Plan**

Dear Mr. Khorsand:

We write on behalf of the American Civil Liberties Union of Northern California (“ACLU-NC”) to express concern regarding the proposed revisions to the Fresno County General Plan (“General Plan”). The County’s effort to include in the General Plan environmental justice goals and policies to support disadvantaged communities is an important first step. But the General Plan as currently drafted should be modified in the following four ways. First, state law requires the County to identify all disadvantaged communities but the draft General Plan unlawfully omits 67 census tracts identified by CalEPA as disadvantaged communities. Second, the County should identify the census tracts for the disadvantaged communities it included in the General Plan and disclose its methodology for identifying disadvantaged communities. Third, the draft General Plan must be amended to include policies and objectives that promote safe and sanitary homes. Fourth, the County must amend the policies and objectives to address the needs of disadvantaged communities and should adopt more concrete policies for promoting public facilities, safe and sanitary homes, and civic engagement in the public decision-making process.

**A. General Plans Must Include Environmental Justice**

General plans outline policies and programs, and provide plan proposals to guide day-to-day decisions concerning the County’s future. California state law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which in the planning agency’s judgment bears relation to its planning.” Gov. Code, § 65300. Prior to 2018, general plans included seven mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. Enacted into law in 2016, Senate Bill (“SB”) 1000 requires cities and counties to adopt an environmental justice element or integrate environmental justice related policies, objectives, and goals throughout other elements of their general plan. This requirement is triggered upon a city’s or county’s “adoption or next revision of two or more elements concurrently on or after January 1, 2018.” Gov. Code, § 65302 (h)(2).

**American Civil Liberties Union Foundation of Northern California**

EXECUTIVE DIRECTOR Abdi Soltani • BOARD CHAIR Magan Pritam Ray  
SAN FRANCISCO OFFICE: 39 Drumm St. San Francisco, CA 94111 • FRESNO OFFICE: PO Box 188 Fresno, CA 93707  
TEL (415) 621-2493 • FAX (415) 255-1478 • TTY (415) 863-7832 • WWW.ACLUNC.ORG

Environmental justice “means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” Gov. Code, § 65040.12(e). SB 1000 recognizes certain communities are “disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.” Gov. Code, § 65302(h)(4)(A).

SB 1000 requires counties revising and adopting their General Plans to do the following two things. First, they must identify all disadvantaged communities within the area covered by the general plan. Gov. Code, § 65302(h)(1). The statute defines disadvantaged communities as areas “identified by the California Environmental Protection Agency [“CalEPA”] pursuant to Section 39711 of the Health and Safety Code.” Gov. Code, § 65302(h)(4)(A). Section 39711 was adopted in 2012 as part of Senate Bill (“SB”) 535 which, among other things, gave CalEPA responsibility for identifying disadvantaged communities. CalEPA developed the California Communities Environmental Health Screening Tool 3.0 (“CalEnviroScreen”) to assess all census tracts in California and identify areas disproportionately burdened by (or vulnerable to) multiple sources of pollution.

Second, counties must also identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, promote civic engagement, and prioritize improvements and programs that address the needs of those communities. Gov. Code, § 65302(h)(1)(A)-(C). SB 1000 clarifies that with respect to addressing health risks, objectives and policies should “include... the reduction of pollution exposure...and the promotion of public facilities... safe and sanitary homes, and physical activity.” Gov. Code, § 65302(h)(1)(A). The statute further defines public facilities to “includes public improvements, public services, and community amenities.” Gov. Code § 65302(h)(4)(B).

## **B. Fresno General Plan**

Fresno County failed in its mandatory duties to identify disadvantaged communities and to identify objectives and policies concerning health risks that meet the minimum statutory requirements. Further, the policies and objectives articulated in the draft General Plan fail to adequately address the needs of disadvantaged communities.

### *1. The Draft General Plan Must Be Amended to Identify All Disadvantaged Communities.*

Fresno County has a mandatory duty to identify disadvantaged communities within the county, but it has failed to include in the draft General Plan all the disadvantaged communities identified by CalEPA. In April 2017, CalEPA released its list of disadvantaged communities.<sup>1</sup> CalEPA identified 119 census tracts within Fresno County as disadvantaged communities. Yet the draft General Plan identifies only 52 disadvantaged communities. *See* Table EJ-1. Among the overlooked communities is West Park, part of Census Tract 6019001900, which is home to

<sup>1</sup> California Office of Environmental Health Hazard, “SB 535 Disadvantaged Communities,” <https://oehha.ca.gov/calenviroscreen/sb535>. Last visited Apr. 30, 2018.

approximately 1,157 residents whose needs have far too long been overlooked by the County. The draft General Plan omits 67 census tracts designated by CalEPA as disadvantaged communities, like West Park, that the County is required by Government Code section 65302(h)(1) to include. The draft General Plan must be amended to address this significant oversight.<sup>2</sup>

2. *The Draft General Plan Should Be Amended to Identify the Census Tracts of the Disadvantaged Communities It Included in the General Plan and to Explain the Methodology for Identifying Disadvantaged Communities.*

The County has a mandatory duty to include all disadvantaged communities designated by CalEPA. Gov. Code, §§ 65302(h)(1), 65302(h)(4)(A). This is a straightforward and mandatory requirement. While it is apparent from comparing the CalEnviroScreen tool on CalEPA's website to the draft General Plan that the county omitted at least 67 census tracts that CalEPA has designated as disadvantaged communities (*see supra* note 2), it is impossible to determine from the draft General Plan *which* communities have been left out. CalEPA identifies disadvantaged communities by census tract, while the draft General Plan identifies them by name, with no reference to corresponding census tract. The draft General Plan should be amended to provide corresponding census tract information for the communities it included so that the list of disadvantaged communities in the General Plan and on CalEPA's list can easily be compared. In addition, the County should explain any methodology relied upon in determining what disadvantaged communities to include and exclude. Greater transparency will ensure that all disadvantaged communities, such as West Park, are included.

3. *The Draft General Plan Must Be Amended to Include Objectives and Policies that Promote Safe and Sanitary Homes.*

The County has a mandatory duty to identify objectives and policies to reduce health risks in disadvantaged communities, but it has failed to include the promotion of safe and sanitary homes. SB 1000 provides a non-exhaustive list of means to facilitate the reduction of unique or compounded health risks for residents in disadvantaged communities. *See* Gov. Code § 65302(h)(1)(A). The draft General Plan "environmental justice goals and policies" identifies four goals and fourteen policies, yet none of these promote safe and sanitary homes. The draft General Plan must be amended to include additional policies and objectives that, at minimum, promote safe and sanitary homes.

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4. *The County Must Amend Its Environmental Justice Policies and Objectives to Address the Needs of Disadvantaged Communities and Should Adopt More Concrete Policies for Promoting Public Facilities, Safe and Sanitary Homes, and Civic Engagement in the Public Decision-Making Process.*

The purpose of SB 1000 is to ensure that local government planning decisions do not hurt the most vulnerable Californians.<sup>3</sup> By requiring that cities and counties first identify disadvantaged communities, and then identify environmental justice policies and objectives, state law envisions that local governments will tailor their environmental justice objectives to the disadvantaged communities, and engage them in decision-making. Because the draft General Plan unlawfully omitted 67 census tracts designated as disadvantaged communities, the policies and objectives Fresno County identified necessarily fail to address the needs of those communities. In addition, the policies and objectives included in the draft General Plan do not go far enough. Specifically, the draft General Plan fails to identify concrete steps to ensure disadvantaged communities are active participants in the processes that impact their health and their communities. The General Plan should do more to ensure compliance with SB 1000 and should be amended as follows.

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In developing policies and objectives that actually address the needs of disadvantaged communities, the County should engage those communities directly. Disadvantaged communities are often ignored in important land use planning decisions and SB 1000 seeks to rectify that imbalance by requiring cities and counties to identify these disproportionately burdened areas. Once identified, disadvantaged communities should be consulted as Fresno County crafts its General Plan policies and objectives. This approach is consistent with the requirement that the County identify policies and objectives that “promote civi[c] engagement in the public decision-making process.” Gov. Code, § 65302(h)(1)(B). ACLU-NC urges Fresno County to prioritize visiting these communities, in addition to any current county procedure for seeking input from residents in the General Plan area. All feedback from disadvantaged community residents should be reviewed and incorporated into the draft General Plan. All

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<sup>3</sup> *Senate Committee on Governance and Finance* at 3  
[https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201520160SB1000#](https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160SB1000#).



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Fresno County should include more concrete policies for civic engagement. The draft General Plan provides only a single policy for community participation. Specifically, “the County shall ensure residents of disadvantaged communities are provided the opportunity to participate in decisions that may have an adverse impact to their health.” EJ-D.1. Without additional guidance in the General Plan, however, decision-makers may continue to ignore the voices of disadvantaged communities. Instead, Fresno County could include more policies aimed at improved community participation with, at the very least, the same specificity as provided in other areas of the draft General Plan.

For example, the land use and the environment section identifies the goal of “avoiding disproportionate adverse environmental impacts of developments on disadvantaged communities.” Goal EJ-A. The draft General Plan then articulates concrete actions the County shall take to effectuate this goal. Such actions include ensuring adequate separation and buffering between residential and industrial uses in disadvantaged communities, and requiring sensitive land use proposals include adequate setbacks to minimize air quality impacts for disadvantaged community residents.

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community participation. As currently written the draft General Plan does not adequately promote civic engagement in the public decision-making process by disadvantaged communities.

### **Conclusion**

General plans are important public documents that must prioritize disadvantaged communities—communities that have been historically marginalized and overlooked—when planning for future development. Given the new requirements under SB 1000, Fresno County must identify all disadvantaged communities, including West Park, in its General Plan, and must include policies and objectives to promote safe and sanitary neighborhoods. Fresno County should also take additional steps to comply with the law. These additional steps include providing a more robust description of policies and goals for disadvantaged community participation in the public decision-making process, greater emphasis on infrastructure improvements, and a more transparent process for identifying disadvantaged communities.

Sincerely,



Kena C. Cadore  
Equal Justice Works Fellow, sponsored by Apple Inc. and O'Melveny & Myers  
ACLU Foundation of Northern California



Building Industry Association  
of Fresno/Madera Counties, Inc.

April 12, 2018

Mohammad Khorsand  
County of Fresno  
Department of Public Works and Planning  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

RE: Notice of Preparation

Dear Mr. Khorsand:

Thank you for sending me the Notice of Preparation of an Environmental Impact Report (EIR) for the County's General Plan.

The Building Industry Association (BIA) is requesting that the County include in the EIR an area depicted on the attached map for consideration of residential uses. We believe that this area should be included for the following reasons:

1. There is a housing shortage in Fresno County and the lack of new homes is driving up prices.
2. Current restrictions and cost of fees are driving home buyers to Madera County, which is depriving Fresno County of tax revenue.
3. Although the area is currently served by wells, surface water could be acquired for the area.
4. The area is currently used as grazing land, which is low value.
5. Any environmental and endangered species impacts can be mitigated as has been done for other projects in the area.
6. Designating the area as residential will lessen the impact on more productive farmland adjacent to Fresno and Clovis.

If you have any questions, please contact me at (559) 226-5900 by email at [mikep@biafm.org](mailto:mikep@biafm.org).

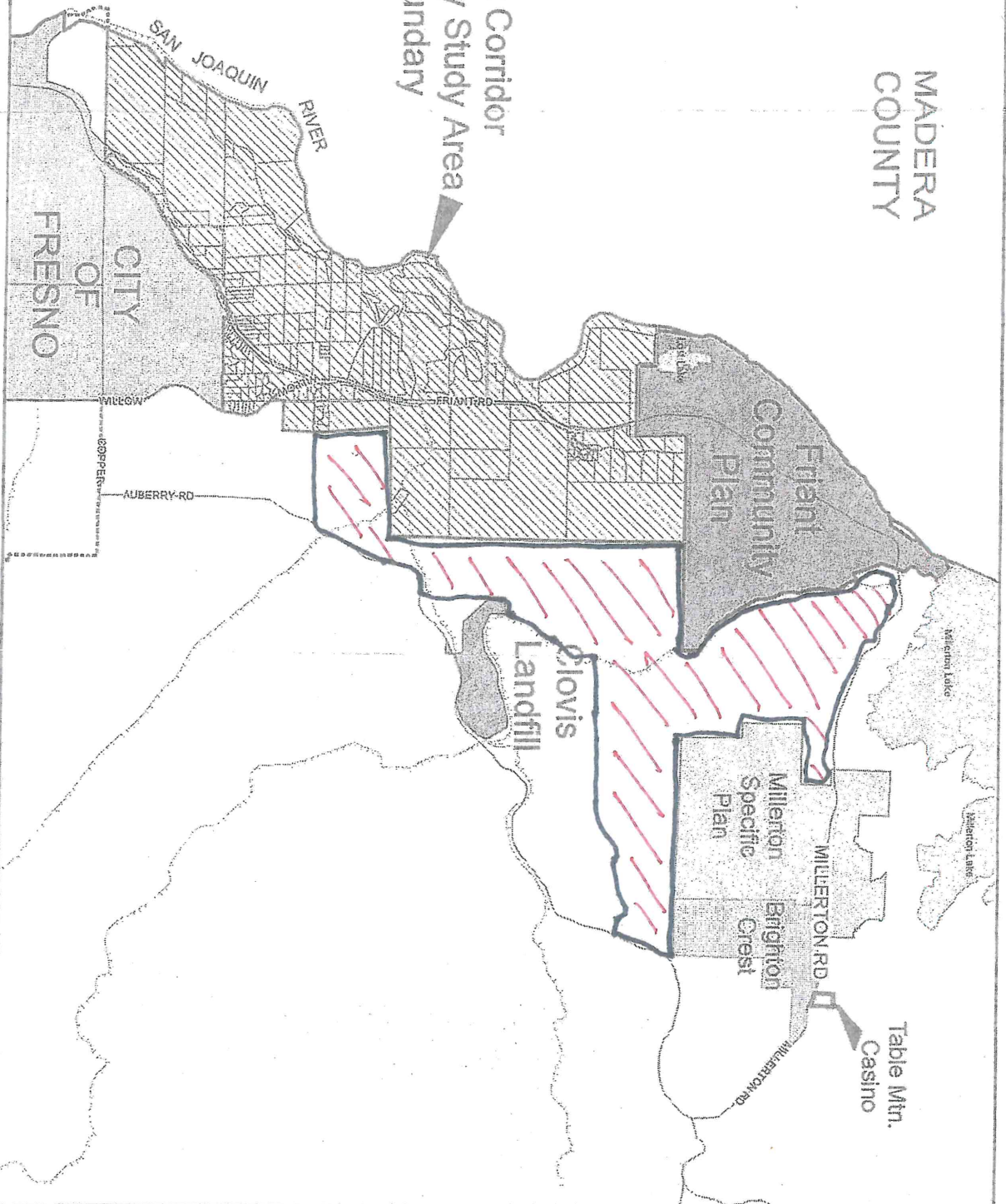
Sincerely,

Michael Prandini  
President & CEO



MADERA COUNTY

Friant Corridor  
Feasibility Study Area  
Boundary





Building Industry Association  
of Fresno/Madera Counties, Inc.  
420 Bullard Ave., Ste. 105  
Clovis, CA 93612

Mohammed Khorsand  
County of Fresno  
Department of Public Works and Planning  
Policy Planning Unit  
2220 Tulare St., Sixth Floor  
Fresno, CA 93721

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APR 13 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

93721-212705



# CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

FIGHTING FOR JUSTICE, CHANGING LIVES

May 4, 2018

Via postal and electronic mail to: mkhorsand@co.fresno.ca.us

Mohammad Khorsand  
Fresno County Department of Public Works and Planning  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

RECEIVED  
MAY 07 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

Re: 2018 Fresno County General Plan and Zoning Ordinance Update

Dear Mr. Khorsand,

California Rural Legal Assistance, Inc. (CRLA) is a non-profit law firm that has served rural communities throughout California for more than fifty years. CRLA's Community Equity Initiative specializes in environmental justice, equitable land use planning, and civil rights law.

Fresno County (the County) issued a CEQA Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (EIR) for the Fresno County General Plan Review and Zoning Ordinance Update. CRLA submits comments in response to this NOP. The NOP is based on the public review draft of the Fresno County General Plan Review and Zoning Ordinance Update (General Plan and Zoning update or the Project) released on January 26, 2018. CRLA submits these comments on behalf of Los Olvidados de West Park.

## Scoping Comments for Environmental Impact Report in Response to NOP

### **I. Fresno County May Not Rely on Outdated Data for the Project Environmental Impact Analysis**

The California Environmental Quality Act (CEQA) requires a project Environmental Impact Report (EIR) to include a description of the current physical environmental conditions in the vicinity of the project at the time the NOP is published.<sup>1</sup> The current environmental conditions provide the baseline to determine whether the project has significant environmental impacts.

The environmental baseline must be accurate, current, and comprehensive; including the "land, air, water, minerals, flora, fauna, noise, [and] objects of historic or aesthetic significance;"<sup>2</sup> this includes natural and man-made conditions.<sup>3</sup> The significant environmental impacts of the project must be considered in the full environmental context.<sup>4</sup> Use of the proper baseline is mandatory and essential for a meaningful assessment of a project's environmental impacts.<sup>5</sup>

Fresno County is not using a proper baseline as required. The Fresno County Public Works Department stated during a public meeting on March 26, 2018 that the draft background report in the General Plan and Zoning

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<sup>1</sup> 14 CCR §15125(a)

<sup>2</sup> Cal. Pub. Resources Code §21060.5

<sup>3</sup> 14 CCE 15360

<sup>4</sup> 14 CCR §15125(b)

<sup>5</sup> *Sunnyvale W. Neighborhood Ass'n v. City of Sunnyvale City Council* (2010) 190 CA4th 1351

to ensure accuracy of data.<sup>13</sup> The general plan aims to increase residential and industrial development in the county, which will cause a secondary impact on the environment through the creation of additional solid and hazardous waste. Information related to the County's capacity to manage this waste must be accurate.

- Groundwater information must be updated to reflect recent developments in SGMA, more updated information regarding groundwater levels, and contamination from 1, 2, 3 Trichloropropane and other contaminants in communities throughout Fresno County. The current information on water contamination is incomplete and fails to identify specific communities impacted by contamination.<sup>14</sup>
- Air quality data and the emissions inventory are outdated and include data from a single air monitor.<sup>15</sup> There are at least seven air monitors within Fresno County operated by the San Joaquin Valley Air Pollution Control District<sup>16</sup>; additional data is available via Purple Air community monitors.<sup>17</sup> Additional, current data must be provided for an accurate baseline from which to conduct an EIR.
- Attainment status data for the San Joaquin Valley Area Basin must be current.<sup>18</sup>

The background report must reflect current natural and man-made environmental conditions to have accurate environmental baseline consistent with the County's obligations under CEQA. The Office of Planning and Research provides substantial resources for jurisdictions to locate and incorporate current and accurate local and regional data throughout the general plan document.<sup>19</sup> The County must review these resources; their data should be incorporated into the Fresno County general plan.

## **II. Fresno County Must Address Legal Inadequacies in the General Plan Before It Can Conduct a Proper Environmental Impact Analysis or Meet Statutory Requirements**

### *a. A legally-compliant general plan is a prerequisite to a legally-compliant EIR*

The general plan must conform with the statutory requirements set forth in California Government Code §65300-65303.4, State Land Use and Planning Law, Housing Law, and state and federal civil rights laws. An EIR based on a general plan that does not meet statutory requirements lacks the 'necessary foundation' for an acceptable analysis. The general plan is the foundational document for land use planning and the master EIR will be relied upon for planning decisions for many years. Fresno County must ensure that the general plan complies with statutory requirements before it conducts the plan's environmental impact report to ensure that the general plan EIR is legally adequate and can be reasonably relied upon for future decision-making.

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<sup>13</sup> Id. p. 6-48-49

<sup>14</sup> Id. pp. 7-6 – 7-10, 7-12.

<sup>15</sup> Id. p 7-23

<sup>16</sup> [http://www.valleyair.org/Programs/RAAN/raan\\_monitoring\\_system.htm](http://www.valleyair.org/Programs/RAAN/raan_monitoring_system.htm)

<sup>17</sup> <http://www.purpleair.com>

<sup>18</sup> Draft Fresno County General Plan Background Report, p. 7-26

<sup>19</sup> <http://www.opr.ca.gov/planning/general-plan/data-mapping-tool.html>

manage other environmental hazards, or both. This may include, but is not limited to, floodplain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days.<sup>22</sup>

Fresno County began updating its Local Hazard Mitigation Plan in 2017 and is required to include climate adaptation planning in the safety element of its general plan or use its Local Hazard Mitigation Plan to meet this requirement. The County did not include compliant climate adaptation planning in its Safety Element. The draft Local Hazard Mitigation Plan released in April 2018 does not meet statutory requirements and cannot be utilized to comply with the requirements of Cal Gov't Code 65302(g)(4). The vulnerability assessment is insufficient, there are no adaptation and resilience goals, policies and objectives, and there are no implementation measures.

Fresno County must include climate adaptation planning in its Safety Element as required by Cal Gov't Code 65302(g)(4) or update its Local Hazard Mitigation Plan to meet the requirements and incorporate it into the safety element of the general plan.

*c. The draft General Plan and Zoning Ordinance do not comply with density bonus law*

California Government Code § 6519 mandates that jurisdictions provide density bonuses to housing developers that set aside a percentage of units as affordable for low-income residents. Fresno County's draft zoning ordinance fails to fully implement the mandates of § 6519 and must be amended to reflect statutory obligations. The EIR cannot be complete or lawful unless these obligations are adopted and assessed under CEQA. CRLA has identified the following issues, but a further review of the entire statute by county staff is necessary to ensure that all statutory requirements are correctly implemented.

- CA Govt Code § 6519(c)(e) prohibits jurisdictions from providing density bonuses in situations where affordable housing complexes are demolished to make way for the construction of new housing. Fresno County fails to include the protections of this section in the draft zoning ordinance.
- CA Govt Code §6519(b)(1)(E) states that density bonuses must be provided for developments providing units for emergency, homeless, transitional, and foster youth shelters. Fresno County fails to include this in the ordinance.
- CA Govt Code §6519 mandates that units constructed with a density bonus include a deed restriction protecting the development as affordable for 55 years. Fresno County's ordinance provides for only 30 years of protection.
- CA Govt Code §6519 includes language that states that cost reductions for projects must benefit affordable housing development. The County's draft ordinance does not include language stating that cost reductions must benefit affordable housing. The County must include the additional language, so it is explicit that cost reductions for developers must benefit affordable housing development.

The draft zoning ordinance also requires that developers seeking a density bonus to apply for a Conditional Use Permit (CUP). This additional requirement is an unlawful obstacle to the development of affordable housing in

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<sup>22</sup> Id



ii. Commercial parcels are insufficient to meet housing needs

The County has almost zero land zoned for high-density residential, so the County relies heavily on commercial C-4 parcels for low-income housing in its 5th Cycle Housing Element adequate sites inventory. Seventy-four (74) of 146 parcels designated for low-income housing are zoned C-4. The reliance on C-4 parcels to address the deficiency of R-3/R-4 parcels is inappropriate. The parcels are far too small to realistically be utilized for housing development and should not have been included in the adequate sites inventory. Ninety-six (96) parcels are less than .3 acres in size. The most common parcel size is less than .2 acres and could accommodate 1-3 affordable housing units. Of the parcels that are in residential zones, many sites are less than .1 acre in size.

The County has asserted that a program for lot consolidation included in the element would allow the sites to be utilized for affordable housing development. This assertion is incorrect and misleading. Lot consolidation can be utilized for affordable housing development only when sufficient vacant lots are adjacent to each other for consolidation to result in a parcel with significantly greater buildout potential. Most parcels in the low-income adequate sites inventory can accommodate less than five units and are not adjacent to other vacant lots; they cannot realistically be consolidated with other lots to increase buildout potential.

Consolidation of the few adjacent parcels will not result in sufficient development capacity to realistically accommodate an affordable housing development. The greatest number of adjacent parcels are in Biola (APNs 01629411-01629415). Consolidation of these parcels would result in a parcel with a buildout potential of ten units. Consolidation of other adjacent parcels would result in parcels with a buildout capacity of less than ten units.

The County's plan to rely on consolidation of small commercial parcels throughout the County to provide adequate sites for affordable housing development is unrealistic. Together with the lack of R3/R4 zoned land throughout the County, it is extremely difficult if not impossible for affordable housing developers to construct sufficient affordable housing to meet the residential needs of low-income individuals in Fresno County.

The County must address these insufficiencies during the General Plan and Zoning Ordinance update to ensure compliance with state and federal law. It must re-zone parcels to R-3/R-4 to accommodate the housing needs of low-income individuals in its jurisdiction. State Housing Law also requires that a jurisdiction review and revise the Housing Element as frequently as appropriate to ensure the element is effectively accomplishing its goals. Fresno County must review and revise the adequate sites inventory for low-income units to ensure that the sites it contains have realistic buildout potential within the eight-year planning period. The sites currently listed do not. A proper analysis under CEQA must include proper designation and potential development and consolidation of parcels, and densities that reflect compliance with general plan and housing element requirements.

*e. The SB 244 Analysis does not conform with statutory obligations*

i. Fresno County must conduct a thorough analysis of the infrastructure deficiencies in DUCs within its jurisdiction

Senate Bill 244 (Wolk, 2011) mandates that jurisdictions identify disadvantaged unincorporated communities (DUCs) within their sphere of influence and analyze the infrastructure deficiencies within these communities. SB 244 was created to address patterns of disinvestment from DUCs and exclusion of their residents from land use

The analysis of water in the community fails to identify that the water infrastructure in the area is not adequate to meet the needs of the community. At least ten homes in the community have been excluded from CSA 39 A/B and rely on private wells. These homes are experiencing a water emergency; they have nitrate and/or uranium contamination at levels unsafe for human consumption. Several private wells are drying up due to depleted groundwater sources; at least two wells have stopped producing entirely. Approximately seven households are currently receiving bottled water, one residence uses an emergency water tank. These resources will be eliminated in summer 2018 due to lack of ongoing state funds. This information must be included in the analysis of water infrastructure for West Park.

West Park residents have individual septic systems at their homes; no wastewater system is present in the community. The SB 244 analysis for West Park recognizes this, but fails to recognize that the septic systems are inadequate for the community. Many septic systems are aging and failing, some are entirely non-functional. At least one home is forced to use portable toilets due to lack of functioning septic infrastructure; this has led to untreated sewage leaking onto the ground. The aging septic systems represent a public health and groundwater quality threat. Residents of West Park are seeking consolidation into the City of Fresno wastewater systems and have requested the City and County provide wastewater services to the community.

The water and wastewater issues identified above represent an “opportunit[y] to provide more efficient, high quality service through consolidation [or] extension of services” as is emphasized in the OPR General Plan Guidelines.<sup>29</sup> The potential for extension of water services to the homes currently on private wells, and the potential for extension of wastewater services from the City into the community, must be identified and analyzed in the SB 244 analysis for West Park. The County must additionally identify funding sources that could assist with such extension of services or consolidation. Residents have urged the County to seek funding from the State Water Resources Control Board for both projects; if the County is unwilling to seek funding for these projects, the reasoning behind this decision should be addressed as well.

The analysis of storm water drainage infrastructure for West Park fails to accurately reflect the situation in the community. Many places in the community flood any time the area receives rainfall; storm-water is not effectively managed by the existing infrastructure. Residents report that there are no ditches in the community. Standing water poses a public health threat because of mosquito breeding, and because children are forced to walk in the middle of the road to avoid flooding. Residents have requested the County complete a master drainage plan for the area, but the County has not done so. The County’s SB 244 analysis for West Park must identify potential funding available to conduct a master drainage plan and provide sufficient drainage infrastructure to the community.

West Park lacks additional infrastructure not identified in the SB 244 analysis for the community. The community has no sidewalks, street lights, gutters, curbs, traffic control devices, bike paths, or recreational facilities.

The draft general plan contains additional inaccuracies related to West Park that must be corrected. The land use map used in the draft Policy Document—opposite page 2-16—is outdated and inaccurate. It shows West Park as located in the Edison Community Plan within the SOI of the City of Fresno. The Edison Community Plan has

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<sup>29</sup> OPR 2017 Guidelines, pg 67

are five acres in the county zoned R-3; no parcels are zoned R-4. Fresno County has one of the most severe affordable housing crises in the state; five acres of R-4 zoning is not sufficient to accommodate the emergency shelter needs of the County's population.

SRO's with more than seven units (large SROs) are not permissible by-right in any zone in the county. They are permissible with a CUP in R-3, R-4 zones. SROs with six or fewer units (small SROs) are permissible by-right in R-3 and R-4 zones. The draft zoning ordinance §834.4.340 (b) states that large SROs are permissible with a CUP and small SROs are permissible by-right in C-4 zones, but this is inaccurate; the C-4 permissible-use tables do not include any mention of SROs at all. As there are zero acres zoned R-4 and five acres zoned R-3 in the entire county, developers of small SROs would be required to seek a re-zone; developers of large SROs would be required to seek a rezone as well as a conditional use permit. Both procedures are unlawful obstacles to development of SROs because they are costly, complicated, time-consuming, and discretionary.

The County must either allow emergency shelters and SROs by-right in lower-density zones or re-zone sufficient land to R-3/R-4 to accommodate the need for these facilities. It must additionally amend the Zoning Ordinance to allow for emergency shelters by-right in C-4 zones as is required by the Housing Element and §834.4.340 (b) of the zoning ordinance.

It is impossible to have a proper EIR without this information.

*b. The draft documents do not facilitate housing for the homeless and other persons with special needs*

The draft General Plan and Zoning Ordinance are inconsistent with the Housing Element policy to facilitate housing for the homeless and other persons with special needs. They also do not comply with state and federal law that prohibit the County from discriminating against residential care facilities or discouraging their development.

Residential facilities provide a critical service to disabled individuals and individuals with special needs. There are presently no zones in the draft Zoning Ordinance where residential care facilities are permitted by-right. The only zones where such facilities are permitted at all are in R-3/R-4 zones; a discretionary Director's Review and Approval (DRA) is required for residential care facilities in these zones. The DRA process requires that a developer submit a lengthy list of documents and pay a \$1,570 fee. If the application is rejected, an applicant must pay an additional \$500.00 to appeal the decision. The Director's Review process also requires that notice be provided to all landowners near the proposed site. The Director can deny the application or place conditions on its approval. Any applicant currently seeking to construct a residential care facility in Fresno County would have to apply for a re-zone to R-3/R-4 in addition to the DRA because of the lack of R-3/R-4 zones in the jurisdiction. A re-zone application requires its own complicated series of steps and fees in the thousands of dollars. These requirements represent unlawful obstacles to the development of residential care facilities.

Approximately 13% of the residents of unincorporated Fresno county are disabled, this represents approximately 20,000 individuals. These residents experience constraints on their ability to live in the communities of their choosing and do not enjoy the same benefits afforded to non-disabled individuals. The County has failed to meet the needs of these communities as required by the housing element and by law. The County must create zones where residential care facilities are permissible by-right and re-zone sufficient land to accommodate the

**Policy ED-A.18**

The County shall support efforts to create and expand regional and intermodal transportation systems that support increased hauling of raw products into the county and export of finished goods nationally and globally.<sup>36</sup>

**Policy ED-B.5**

The County shall support the development of a statewide high-speed rail service through the Central Valley and the location of the heavy maintenance and operation facilities within Fresno County. If the heavy maintenance and operations facility is located in unincorporated areas of Fresno County, the County shall plan and identify land uses necessary to support and serve the heavy maintenance and operations facility.

The above policies will result in a net increase of goods hauling and industrial activity within the County, specifically in the disadvantaged unincorporated communities of Calwa and Malaga. The policies will also result in increased population growth and residential development as residents relocate for job access and because of increased connectivity from high-speed rail. The housing element directs residential development of low-income, high-density housing into the same communities where future industrial development is planned. The adequate sites inventory for low-income housing contains nine parcels located in Calwa, including one parcel zoned for industrial use.

The implementation of these policies violates the County's federal and state environmental justice obligations. Environmental justice protections prohibit the County from implementing plans, policies, or activities that disproportionately burden low-income communities and minority communities. Calwa and Malaga are both low-income, minority communities that rank among the most polluted census tracts in the state. These policies direct highly-polluting industry into overly-burdened environmental justice communities while simultaneously directing low-income housing development to the same locations. The policies must be revised to prevent protected groups from bearing the burden of the County's industrial development.

The EIR must also analyze the direct, indirect, and cumulative impacts of increasing development and industry in the county. The analysis must include, but is not limited to, the impact of increased emissions and noise from industry and truck traffic, and the potential for groundwater depletion or contamination from industrial and residential development. The EIR must specifically analyze the health and safety impact on current and future residents of Calwa and Malaga, as the county is directing both high-density residential development and increased industrial development to these communities.<sup>37</sup> The environmental impact that will result from these policies must be mitigated within these communities. Pushing noxious uses into vulnerable communities will violate state and federal housing, land use and environmental laws, and make CEQA compliance impossible.

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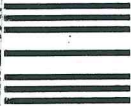
<sup>36</sup> 2018 draft General Plan Policy Document, p. 2-7, Policy ED-A18

<sup>37</sup> 14 CCR 15126.2 (a)

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Fresno, California 93726



**CRLA**



**Mohammad Khorsand**  
**Fresno County Department Of Public Works**  
**2220 Tulare Street Floor 6**  
**Fresno CA 93721-2127**

**RECEIVED**  
MAY 07 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING



# CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

FIGHTING FOR JUSTICE, CHANGING LIVES

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May 4, 2018

Via postal and electronic mail to: [mkhorsand@co.fresno.ca.us](mailto:mkhorsand@co.fresno.ca.us)

Mohammad Khorsand  
Fresno County Department of Public Works and Planning  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

Re: 2018 Fresno County General Plan and Zoning Ordinance Update

Dear Mr. Khorsand,

California Rural Legal Assistance, Inc. (CRLA) is a non-profit law firm that has served rural communities throughout California for more than fifty years. CRLA's Community Equity Initiative specializes in environmental justice, equitable land use planning, and civil rights law.

Fresno County (the County) issued a CEQA Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (EIR) for the Fresno County General Plan Review and Zoning Ordinance Update. CRLA submits comments in response to this NOP. The NOP is based on the public review draft of the Fresno County General Plan Review and Zoning Ordinance Update (General Plan and Zoning update or the Project) released on January 26, 2018. CRLA submits these comments on behalf of Los Olvidados de West Park.

## **Scoping Comments for Environmental Impact Report in Response to NOP**

### **I. Fresno County May Not Rely on Outdated Data for the Project Environmental Impact Analysis**

The California Environmental Quality Act (CEQA) requires a project Environmental Impact Report (EIR) to include a description of the current physical environmental conditions in the vicinity of the project at the time the NOP is published.<sup>1</sup> The current environmental conditions provide the baseline to determine whether the project has significant environmental impacts.

The environmental baseline must be accurate, current, and comprehensive; including the "land, air, water, minerals, flora, fauna, noise, [and] objects of historic or aesthetic significance;"<sup>2</sup> this includes natural and man-made conditions.<sup>3</sup> The significant environmental impacts of the project must be considered in the full environmental context.<sup>4</sup> Use of the proper baseline is mandatory and essential for a meaningful assessment of a project's environmental impacts.<sup>5</sup>

Fresno County is not using a proper baseline as required. The Fresno County Public Works Department stated during a public meeting on March 26, 2018 that the draft background report in the General Plan and Zoning

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<sup>1</sup> 14 CCR §15125(a)

<sup>2</sup> Cal. Pub. Resources Code §21060.5

<sup>3</sup> 14 CCE 15360

<sup>4</sup> 14 CCR §15125(b)

<sup>5</sup> *Sunnyvale W. Neighborhood Ass'n v. City of Sunnyvale City Council* (2010) 190 CA4th 1351

update would act as the baseline for the EIR. The draft background report contains incomplete, outdated information and data throughout and fails to accurately reflect the environmental conditions in the County of Fresno as of March 21, 2018, the date of the Notice of Preparation for the Environmental Impact Report. It must be substantially reviewed and revised before it can be lawfully relied upon as the baseline.

The entire report must be revised and updated with the most current data available. Examples of inaccurate or outdated data include:

- Data on freight shipments and truck routes in Fresno County, which have an impact on air quality through diesel exhaust emissions, are six years old.<sup>6</sup> This information must be current to accurately assess the impact of Fresno County's proposed policies to increase goods hauling into Fresno County as well as proposed policies to address truck traffic and industrial development near sensitive uses and urban areas.
- Transportation project tables are not current. Programmed transportation projects will impact air quality and land use; the report should be updated to reflect current project lists.<sup>7</sup>
- The information and data provided regarding water systems, quality, and quantity in the public facilities section of the background report is based on outdated Municipal Service Reviews (MSR) and Sphere of Influence (SOI) updates. Most of the MSRs are eleven years old; most of the SOIs are at least seven years old. The reference section of this chapter indicates that no individuals were contacted for updated information about the water systems.<sup>8</sup> This section also fails to identify water contamination in multiple communities, contains outdated information on SGMA, and insufficiently reflects infrastructure needs in rural communities such as new construction of water treatment facilities, delayed maintenance, and wells impacted by the drought. Each water provider must be individually contacted for updated information related to water quality, availability, and the anticipated sustainability of water resources, because MSRs and SOIs are too old to provide accurate data. Consumer Confidence Reports must also be reviewed to evaluate the most current water quality information.
- Wastewater treatment facility information<sup>9</sup> and flood control information<sup>10</sup> similarly relies on documents that are over a decade out of date. Wastewater facility and flood information must be accurate as they implicate sustainability and quality of water resources. Information related to the Fresno County Local Agency Management Program (LAMP) should be integrated into this section to ensure its accuracy.
- Data related to solid waste and solid waste management is more than twenty years out of date.<sup>11</sup> The American Ave landfill facility is set to reach maximum capacity within the planning period.<sup>12</sup> Information related to residential solid waste services is based on outdated documents; no individuals were consulted

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<sup>6</sup> Id. p. 5-54, 5-55

<sup>7</sup> Id. p. 5-75

<sup>8</sup> Id. p. 6-16

<sup>9</sup> Id. p. 6-20 – 6-31

<sup>10</sup> Id. p. 6-33

<sup>11</sup> Id. p. 6-39.

<sup>12</sup> Id. p. 6-41.

to ensure accuracy of data.<sup>13</sup> The general plan aims to increase residential and industrial development in the county, which will cause a secondary impact on the environment through the creation of additional solid and hazardous waste. Information related to the County's capacity to manage this waste must be accurate.

- Groundwater information must be updated to reflect recent developments in SGMA, more updated information regarding groundwater levels, and contamination from 1, 2, 3 Trichloropropane and other contaminants in communities throughout Fresno County. The current information on water contamination is incomplete and fails to identify specific communities impacted by contamination.<sup>14</sup>
- Air quality data and the emissions inventory are outdated and include data from a single air monitor.<sup>15</sup> There are at least seven air monitors within Fresno County operated by the San Joaquin Valley Air Pollution Control District<sup>16</sup>; additional data is available via Purple Air community monitors.<sup>17</sup> Additional, current data must be provided for an accurate baseline from which to conduct an EIR.
- Attainment status data for the San Joaquin Valley Area Basin must be current.<sup>18</sup>

The background report must reflect current natural and man-made environmental conditions to have accurate environmental baseline consistent with the County's obligations under CEQA. The Office of Planning and Research provides substantial resources for jurisdictions to locate and incorporate current and accurate local and regional data throughout the general plan document.<sup>19</sup> The County must review these resources; their data should be incorporated into the Fresno County general plan.

## **II. Fresno County Must Address Legal Inadequacies in the General Plan Before It Can Conduct a Proper Environmental Impact Analysis or Meet Statutory Requirements**

### *a. A legally-compliant general plan is a prerequisite to a legally-compliant EIR*

The general plan must conform with the statutory requirements set forth in California Government Code §65300-65303.4, State Land Use and Planning Law, Housing Law, and state and federal civil rights laws. An EIR based on a general plan that does not meet statutory requirements lacks the 'necessary foundation' for an acceptable analysis. The general plan is the foundational document for land use planning and the master EIR will be relied upon for planning decisions for many years. Fresno County must ensure that the general plan complies with statutory requirements before it conducts the plan's environmental impact report to ensure that the general plan EIR is legally adequate and can be reasonably relied upon for future decision-making.

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<sup>13</sup> Id. p. 6-48-49

<sup>14</sup> Id. pp. 7-6 – 7-10, 7-12.

<sup>15</sup> Id. p 7-23

<sup>16</sup> [http://www.valleyair.org/Programs/RAAN/raan\\_monitoring\\_system.htm](http://www.valleyair.org/Programs/RAAN/raan_monitoring_system.htm)

<sup>17</sup> <http://www.purpleair.com>

<sup>18</sup> Draft Fresno County General Plan Background Report, p. 7-26

<sup>19</sup> <http://www.opr.ca.gov/planning/general-plan/data-mapping-tool.html>



*b. Fresno County's draft general plan does not comply with statutory obligations for climate adaptation planning*

California Government Code §65302(g)(4) mandates that jurisdictions include climate adaptation planning in their safety element upon the next revision of the jurisdiction's Local Hazard Mitigation Plan that occurs on or after January 1, 2017. Jurisdictions are required to conduct a vulnerability assessment that identifies the risks that climate change poses to the local jurisdiction, then identify policies and implementation measures to address these risks. Jurisdictions may use their Local Hazard Mitigation Plan to fulfill the requirement for climate adaptation planning if the Local Hazard Mitigation Plan complies with all of these requirements, but must demonstrate how each requirement is met.<sup>20</sup>

Each component of climate adaptation planning has specific requirements. The vulnerability assessment must identify the risks that climate change poses to the local jurisdiction and must utilize the following:<sup>21</sup>

- Information from the Internet-based Cal-Adapt tool
- Information from the most recent version of the California Adaptation Planning Guide
- Information from local agencies on the types of assets, resources, and populations that will be sensitive to various climate change exposures
- Information from local agencies on their current ability to deal with the impacts of climate change
- Historical data on natural events and hazards, including locally prepared maps of areas subject to previous risk, areas that are vulnerable, and sites that have been repeatedly damaged
- Existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities
- Federal, state, regional, and local agencies with responsibility for the protection of public health and safety and the environment, including special districts and local offices of emergency services

The adaptation and resilience goals, policies and objectives must be based on then vulnerability assessment for the protection of the community, and the implementation measures must be designed to carry out these goals. The implementation measures must be feasible, and must include:

- Feasible methods to avoid or minimize climate change impacts associated with new uses of land.
- The location, when feasible, of new essential public facilities outside of at-risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas.
- The designation of adequate and feasible infrastructure located in an at-risk area.
- Guidelines for working cooperatively with relevant local, regional, state, and federal agencies.
- The identification of natural infrastructure that may be used in adaptation projects, where feasible. Where feasible, the plan shall use existing natural features and ecosystem processes, or the restoration of natural features and ecosystem processes, when developing alternatives for consideration. For the purposes of this clause, "natural infrastructure" means the preservation or restoration of ecological systems, or utilization of engineered systems that use ecological processes, to increase resiliency to climate change,

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<sup>20</sup> Cal Gov't Code 65302(g)(4)(d)(i)

<sup>21</sup> Cal Gov't Code 65302(g)(4)

manage other environmental hazards, or both. This may include, but is not limited to, floodplain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days.<sup>22</sup>

Fresno County began updating its Local Hazard Mitigation Plan in 2017 and is required to include climate adaptation planning in the safety element of its general plan or use its Local Hazard Mitigation Plan to meet this requirement. The County did not include compliant climate adaptation planning in its Safety Element. The draft Local Hazard Mitigation Plan released in April 2018 does not meet statutory requirements and cannot be utilized to comply with the requirements of Cal Gov't Code 65302(g)(4). The vulnerability assessment is insufficient, there are no adaptation and resilience goals, policies and objectives, and there are no implementation measures.

Fresno County must include climate adaptation planning in its Safety Element as required by Cal Gov't Code 65302(g)(4) or update its Local Hazard Mitigation Plan to meet the requirements and incorporate it into the safety element of the general plan.

*c. The draft General Plan and Zoning Ordinance do not comply with density bonus law*

California Government Code § 6519 mandates that jurisdictions provide density bonuses to housing developers that set aside a percentage of units as affordable for low-income residents. Fresno County's draft zoning ordinance fails to fully implement the mandates of § 6519 and must be amended to reflect statutory obligations. The EIR cannot be complete or lawful unless these obligations are adopted and assessed under CEQA. CRLA has identified the following issues, but a further review of the entire statute by county staff is necessary to ensure that all statutory requirements are correctly implemented.

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The draft zoning ordinance also requires that developers seeking a density bonus to apply for a Conditional Use Permit (CUP). This additional requirement is an unlawful obstacle to the development of affordable housing in

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<sup>22</sup> Id

violation of Gov't Code §6519(a)(2), which prohibits jurisdictions from requiring that additional reports or studies be submitted to receive a density bonus.

The County must update the density bonus program to be consistent with CA Govt Code §6519. It must also remove the requirement that a developer seek a CUP to receive the benefits of the density bonus.

*d. The Housing Element does not comply with statutory requirements*

The County is required by law to encourage the development of affordable housing. The Housing Element must identify adequate sites for housing development to meet the needs of all economic segments of the community. Government Code §6558 sets forth the required contents of the housing element of the general plan. The housing element of the County's general plan fails to meet statutory requirements because the County has failed to provide sufficient sites for affordable housing development and has included sites in its adequate sites inventory that do not have realistic buildout potential. The county must correct these issues in the General Plan amendment and review and revise the housing element.<sup>23</sup>

The County states in the draft General Plan that "because there is already a large inventory of vacant rural residential lots, additional rural residential development is not needed to accommodate projected unincorporated growth." The assertion that there are sufficient residential parcels in Fresno County to meet residential need is incorrect. There are vacant parcels in the county, but not sufficiently high-density parcels to accommodate low-income housing needs. The affordable housing crisis in Fresno is so significant that Housing and Community Development recently placed Fresno County in SB 35 streamlining status for 50% affordable units.<sup>24</sup> An April 2018 study found that Fresno County needs approximately 41,000 additional units of affordable housing to meet local need.<sup>25</sup>

The EIR cannot be complete unless these requirements are met.

i. There are insufficient R-3/R-4 parcels in the County

Fresno County contains nearly three million acres of land. A total of five acres in the county are zoned high-density R-3 residential. Zero acres in the county are zoned high-density R-4 residential. Zones R-3/R-4 are the only residential zones where high-density multifamily housing is permitted. The fact that Fresno County has failed to zone essentially any land in the entire county for high-density residential development is an obstacle to affordable housing construction that cannot be overstated. Affordable housing developers would be required to seek a re-zone and an amendment to the general plan to pursue the construction of high-density affordable housing in essentially any residential zone in the County. These procedures require extra fees, applications, and notice requirements; they discourage affordable housing development and conflict with the County's obligations under federal and state housing laws.

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<sup>23</sup> CA Gov't Code §65588(e)

<sup>24</sup> HCD SB 35 Statewide Determination Study, available at: [http://www.hcd.ca.gov/community-development/housing-element/docs/SB35\\_StatewideDeterminationSummary01312018.pdf](http://www.hcd.ca.gov/community-development/housing-element/docs/SB35_StatewideDeterminationSummary01312018.pdf)

<sup>25</sup> California Housing Partnership Corporation, "Fresno County's Housing Emergency and Proposed Solutions"

ii. Commercial parcels are insufficient to meet housing needs

The County has almost zero land zoned for high-density residential, so the County relies heavily on commercial C-4 parcels for low-income housing in its 5th Cycle Housing Element adequate sites inventory. Seventy-four (74) of 146 parcels designated for low-income housing are zoned C-4. The reliance on C-4 parcels to address the deficiency of R-3/R-4 parcels is inappropriate. The parcels are far too small to realistically be utilized for housing development and should not have been included in the adequate sites inventory. Ninety-six (96) parcels are less than .3 acres in size. The most common parcel size is less than .2 acres and could accommodate 1-3 affordable housing units. Of the parcels that are in residential zones, many sites are less than .1 acre in size.

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Consolidation of the few adjacent parcels will not result in sufficient development capacity to realistically accommodate an affordable housing development. The greatest number of adjacent parcels are in Biola (APNs 01629411-01629415). Consolidation of these parcels would result in a parcel with a buildout potential of ten units. Consolidation of other adjacent parcels would result in parcels with a buildout capacity of less than ten units.

The County's plan to rely on consolidation of small commercial parcels throughout the County to provide adequate sites for affordable housing development is unrealistic. Together with the lack of R3/R4 zoned land throughout the County, it is extremely difficult if not impossible for affordable housing developers to construct sufficient affordable housing to meet the residential needs of low-income individuals in Fresno County.

The County must address these insufficiencies during the General Plan and Zoning Ordinance update to ensure compliance with state and federal law. It must re-zone parcels to R-3/R-4 to accommodate the housing needs of low-income individuals in its jurisdiction. State Housing Law also requires that a jurisdiction review and revise the Housing Element as frequently as appropriate to ensure the element is effectively accomplishing its goals. Fresno County must review and revise the adequate sites inventory for low-income units to ensure that the sites it contains have realistic buildout potential within the eight-year planning period. The sites currently listed do not. A proper analysis under CEQA must include proper designation and potential development and consolidation of parcels, and densities that reflect compliance with general plan and housing element requirements.

*e. The SB 244 Analysis does not conform with statutory obligations*

i. Fresno County must conduct a thorough analysis of the infrastructure deficiencies in DUCs within its jurisdiction

Senate Bill 244 (Wolk, 2011) mandates that jurisdictions identify disadvantaged unincorporated communities (DUCs) within their sphere of influence and analyze the infrastructure deficiencies within these communities. SB 244 was created to address patterns of disinvestment from DUCs and exclusion of their residents from land use

planning decisions that have resulted in DUCs experiencing higher levels of air and water contamination, closer proximity of industrial and other polluting land uses, fewer community amenities, and less infrastructure than other areas. Government Code §65302.10(b)-(c) implements SB 244 and requires that the County identify each disadvantaged legacy community within its boundaries that is not within the sphere of influence of a city, describe the community, demonstrate its location with a map, and provide an analysis of water, wastewater, storm water drainage, and structure fire protection needs or deficiencies within the community.

The SB 244 analysis must analyze water quality, water availability, sustainability of the water supply, wastewater or septic systems and their state of repair, the adequacy of existing storm water drainage systems for preventing flooding, and the structural fire protection needs in the community. The analysis must consider both the horizon year and the impacts of climate change.<sup>26</sup> The SB 244 analysis must identify funding resources available to address the specific deficiencies in each community, as well as “opportunities to provide more efficient, high quality service through consolidation, extension of services, or other regional solutions to address inadequacy of services and infrastructure.”<sup>27</sup> The Offices of Planning and Research (OPR) has created a chart that should be utilized when undergoing the disadvantaged communities analysis.<sup>28</sup>

ii. The County’s SB 244 analysis fails to adequately identify infrastructure deficiencies in DUCs

Fresno County’s SB 244 analysis fails to fully implement the mandates of SB 244. The County relied entirely on outdated Municipal Service Reviews and a single study to conduct its analysis of infrastructure needs and therefore failed to accurately describe the infrastructure needs in multiple DUCs. The County did not speak directly with any staff working in the DUCs identified in the SB 244 analysis, and did not speak with any community-based organizations, residents, or others familiar with infrastructure needs in the communities. Reliance entirely on documents such as MSRs, many of which are over a decade old, is inappropriate and inadequate to conduct the analysis mandated by SB 244. The County must conduct additional research and analysis to comply with the mandates of SB 244. These issues are directly related to any proper CEQA analysis.

The analysis of the community of West Park is demonstrative of problems that exist throughout the SB 244 section of the draft general plan. Information for the community of Del Rey, where CRLA works, is similarly inaccurate and inadequate and must be revised.

West Park Community

The community of West Park is located at the intersection of Church/Valentine in Fresno County. The SB 244 analysis of this community is #14 in the general plan and can be found on page 3-73. The community should be correctly named as West Park, rather than being referred to as “Church Avenue/Valentine Avenue Community.” The infrastructure analysis of West Park fails to meet the requirements of SB 244 and is factually inaccurate.

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<sup>26</sup> OPR 2017 General Plan Guidelines, pg 66

<sup>27</sup> OPR 2017 General Plan Guidelines, pg 67

<sup>28</sup> Id.

The analysis of water in the community fails to identify that the water infrastructure in the area is not adequate to meet the needs of the community. At least ten homes in the community have been excluded from CSA 39 A/B and rely on private wells. These homes are experiencing a water emergency; they have nitrate and/or uranium contamination at levels unsafe for human consumption. Several private wells are drying up due to depleted groundwater sources; at least two wells have stopped producing entirely. Approximately seven households are currently receiving bottled water, one residence uses an emergency water tank. These resources will be eliminated in summer 2018 due to lack of ongoing state funds. This information must be included in the analysis of water infrastructure for West Park.

West Park residents have individual septic systems at their homes; no wastewater system is present in the community. The SB 244 analysis for West Park recognizes this, but fails to recognize that the septic systems are inadequate for the community. Many septic systems are aging and failing, some are entirely non-functional. At least one home is forced to use portable toilets due to lack of functioning septic infrastructure; this has led to untreated sewage leaking onto the ground. The aging septic systems represent a public health and groundwater quality threat. Residents of West Park are seeking consolidation into the City of Fresno wastewater systems and have requested the City and County provide wastewater services to the community.

The water and wastewater issues identified above represent an “opportunit[y] to provide more efficient, high quality service through consolidation [or] extension of services” as is emphasized in the OPR General Plan Guidelines.<sup>29</sup> The potential for extension of water services to the homes currently on private wells, and the potential for extension of wastewater services from the City into the community, must be identified and analyzed in the SB 244 analysis for West Park. The County must additionally identify funding sources that could assist with such extension of services or consolidation. Residents have urged the County to seek funding from the State Water Resources Control Board for both projects; if the County is unwilling to seek funding for these projects, the reasoning behind this decision should be addressed as well.

The analysis of storm water drainage infrastructure for West Park fails to accurately reflect the situation in the community. Many places in the community flood any time the area receives rainfall; storm-water is not effectively managed by the existing infrastructure. Residents report that there are no ditches in the community. Standing water poses a public health threat because of mosquito breeding, and because children are forced to walk in the middle of the road to avoid flooding. Residents have requested the County complete a master drainage plan for the area, but the County has not done so. The County’s SB 244 analysis for West Park must identify potential funding available to conduct a master drainage plan and provide sufficient drainage infrastructure to the community.

West Park lacks additional infrastructure not identified in the SB 244 analysis for the community. The community has no sidewalks, street lights, gutters, curbs, traffic control devices, bike paths, or recreational facilities.

The draft general plan contains additional inaccuracies related to West Park that must be corrected. The land use map used in the draft Policy Document—opposite page 2-16—is outdated and inaccurate. It shows West Park as located in the Edison Community Plan within the SOI of the City of Fresno. The Edison Community Plan has

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<sup>29</sup> OPR 2017 Guidelines, pg 67

been replaced by the Southwest Specific Plan, and does not include West Park. West Park is not included in any specific plan and is not within the Fresno SOI. West Park must also be included in the list of environmental justice communities in the EJ Element; it currently is not.

### **III. The draft General Plan and Zoning Ordinance Must Be Internally Consistent Before the County Conducts the Environmental Impact Analysis**

A general plan must be internally consistent.<sup>30</sup> A general plan that fails to meet this statutory obligation it is susceptible to legal challenge and any EIR based on it is similarly vulnerable.

The draft General Plan and Zoning Ordinance fail to meet the statutory requirement of internal consistency. Policies related to industrial expansion in Calwa and Malaga included in the Economic Element are inconsistent with policies in the Environmental Justice Element that protect overly burdened communities from additional environmental contamination.

The general plan is also inconsistent in relation to housing obligations. Fresno County's fifth-cycle housing element policy 2A-10 states that the county will use the zoning ordinance update to (a) ensure compliance with state laws related to emergency shelters, reasonable accommodation, and farmworker housing, and (b) will make amendments to the zoning ordinance as necessary to facilitate housing for individuals with special needs and people experiencing homelessness. The fifth cycle housing element also includes a commitment by the County to allow emergency shelters by-right in R-3, R-4, and C-4 zones.

The draft General Plan and Zoning Ordinance update did not implement these policies and are therefore internally inconsistent.

#### *a. The draft documents are not compliant with state laws related to emergency shelters and SRO units*

State Housing Law requires that jurisdictions identify a zone or zones where emergency shelters are permitted by-right. The identified zone or zones must include sufficient capacity to accommodate the need for emergency shelters within the jurisdiction. If there are insufficient zones in the county to accommodate the need, the jurisdiction's housing element must include a program to amend the zoning ordinance to meet these requirements within one year of adoption of the housing element. The jurisdiction must demonstrate that existing land use processes are objective and encourage and facilitate the development of, or conversion to, emergency shelters. State Housing Law also requires that jurisdictions identify sufficient sites to facilitate and encourage the development of single-room occupancy (SRO) units. Emergency shelters and SRO units are essential to meet the housing needs of low-income, farmworker, disabled, and other protected groups.

The draft Zoning Ordinance fails to fulfill the County's obligation to encourage and facilitate the development of emergency shelters and SRO units. The County did not amend the zoning ordinance to allow emergency shelters by-right in C-4 zones. The County has also failed to ensure that the existing zones permitting by-right construction of emergency shelters have sufficient capacity to accommodate the County's need. Currently there

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<sup>30</sup> Cal. Gov't Code §65300.5

are five acres in the county zoned R-3; no parcels are zoned R-4. Fresno County has one of the most severe affordable housing crises in the state; five acres of R-4 zoning is not sufficient to accommodate the emergency shelter needs of the County's population.

SRO's with more than seven units (large SROs) are not permissible by-right in any zone in the county. They are permissible with a CUP in R-3, R-4 zones. SROs with six or fewer units (small SROs) are permissible by-right in R-3 and R-4 zones. The draft zoning ordinance §834.4.340 (b) states that large SROs are permissible with a CUP and small SROs are permissible by-right in C-4 zones, but this is inaccurate; the C-4 permissible-use tables do not include any mention of SROs at all. As there are zero acres zoned R-4 and five acres zoned R-3 in the entire county, developers of small SROs would be required to seek a re-zone; developers of large SROs would be required to seek a rezone as well as a conditional use permit. Both procedures are unlawful obstacles to development of SROs because they are costly, complicated, time-consuming, and discretionary.

The County must either allow emergency shelters and SROs by-right in lower-density zones or re-zone sufficient land to R-3/R-4 to accommodate the need for these facilities. It must additionally amend the Zoning Ordinance to allow for emergency shelters by-right in C-4 zones as is required by the Housing Element and §834.4.340 (b) of the zoning ordinance.

It is impossible to have a proper EIR without this information.

*b. The draft documents do not facilitate housing for the homeless and other persons with special needs*

The draft General Plan and Zoning Ordinance are inconsistent with the Housing Element policy to facilitate housing for the homeless and other persons with special needs. They also do not comply with state and federal law that prohibit the County from discriminating against residential care facilities or discouraging their development.

Residential facilities provide a critical service to disabled individuals and individuals with special needs. There are presently no zones in the draft Zoning Ordinance where residential care facilities are permitted by-right. The only zones where such facilities are permitted at all are in R-3/R-4 zones; a discretionary Director's Review and Approval (DRA) is required for residential care facilities in these zones. The DRA process requires that a developer submit a lengthy list of documents and pay a \$1,570 fee. If the application is rejected, an applicant must pay an additional \$500.00 to appeal the decision. The Director's Review process also requires that notice be provided to all landowners near the proposed site. The Director can deny the application or place conditions on its approval. Any applicant currently seeking to construct a residential care facility in Fresno County would have to apply for a re-zone to R-3/R-4 in addition to the DRA because of the lack of R-3/R-4 zones in the jurisdiction. A re-zone application requires its own complicated series of steps and fees in the thousands of dollars. These requirements represent unlawful obstacles to the development of residential care facilities.

Approximately 13% of the residents of unincorporated Fresno county are disabled, this represents approximately 20,000 individuals. These residents experience constraints on their ability to live in the communities of their choosing and do not enjoy the same benefits afforded to non-disabled individuals. The County has failed to meet the needs of these communities as required by the housing element and by law. The County must create zones where residential care facilities are permissible by-right and re-zone sufficient land to accommodate the



construction of residential care facilities. It is critical to comply with these requirements to prepare an adequate EIR.

#### **IV. The Environmental Impact Report Must Analyze the Effects of Increased Development and Industry**

##### *a. The EIR must consider all significant environmental effects*

CEQA requires that the EIR identify and describe a project's significant environmental effects, including direct, indirect, secondary, and long-term effects, as well as significant cumulative impacts.<sup>31</sup> The EIR must examine whether a project will lead to economic or population growth or encourage development or other activities that could affect the environment.<sup>32</sup> The discussion should also analyze any significant environmental effects the project might cause by bringing development and people to the area, including health and safety hazards those individuals may be exposed to.<sup>33</sup>

##### *b. The draft general plan contains policies that will increase development and expose residents to health hazards*

The draft general plan contains new or modified policies that will result in economic and population growth, and increased industrial development. The general plan directs industrial growth and future residential development to specific communities. The direct, indirect, and cumulative impact of these policies must be fully analyzed in the EIR.

The draft general plan contains the following policies:

##### **Policy ED-A.7**

The County shall encourage the location of new industry within Fresno County. The County shall identify circumstances and criteria for locating new industrial locations and uses in the unincorporated areas consistent with the County's economic development strategies. Initial focus of potential new or redeveloped industrial areas shall include Malaga, Calwa, and the Golden State Industrial Corridor.<sup>34</sup>

##### **Policy ED-A.14**

The County shall support accelerated development of high-value-added food, fiber, and other agricultural product processing firms and, whenever possible, encourage the vertical integration of the growing, processing, packaging, and marketing sectors to develop jobs within Fresno County.<sup>35</sup>

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<sup>31</sup> Pub Res C §21100(b)(1); §21100(b)(2) 14 Cal Code Regs §15126.2(a), §15126.2(b)

<sup>32</sup> Pub Res C §21100(b)(1); §21100(b)(5); 14 Cal Code Regs §15126.2(d)

<sup>33</sup> 14 CCR 15126.2

<sup>34</sup> 2018 draft General Plan Policy Document, p. 2-5, Policy ED-A7

<sup>35</sup> Id. p 2-7

**Policy ED-A.18**

The County shall support efforts to create and expand regional and intermodal transportation systems that support increased hauling of raw products into the county and export of finished goods nationally and globally.<sup>36</sup>

**Policy ED-B.5**

The County shall support the development of a statewide high-speed rail service through the Central Valley and the location of the heavy maintenance and operation facilities within Fresno County. If the heavy maintenance and operations facility is located in unincorporated areas of Fresno County, the County shall plan and identify land uses necessary to support and serve the heavy maintenance and operations facility.

The above policies will result in a net increase of goods hauling and industrial activity within the County, specifically in the disadvantaged unincorporated communities of Calwa and Malaga. The policies will also result in increased population growth and residential development as residents relocate for job access and because of increased connectivity from high-speed rail. The housing element directs residential development of low-income, high-density housing into the same communities where future industrial development is planned. The adequate sites inventory for low-income housing contains nine parcels located in Calwa, including one parcel zoned for industrial use.

The implementation of these policies violates the County's federal and state environmental justice obligations. Environmental justice protections prohibit the County from implementing plans, policies, or activities that disproportionately burden low-income communities and minority communities. Calwa and Malaga are both low-income, minority communities that rank among the most polluted census tracts in the state. These policies direct highly-polluting industry into overly-burdened environmental justice communities while simultaneously directing low-income housing development to the same locations. The policies must be revised to prevent protected groups from bearing the burden of the County's industrial development.

The EIR must also analyze the direct, indirect, and cumulative impacts of increasing development and industry in the county. The analysis must include, but is not limited to, the impact of increased emissions and noise from industry and truck traffic, and the potential for groundwater depletion or contamination from industrial and residential development. The EIR must specifically analyze the health and safety impact on current and future residents of Calwa and Malaga, as the county is directing both high-density residential development and increased industrial development to these communities.<sup>37</sup> The environmental impact that will result from these policies must be mitigated within these communities. Pushing noxious uses into vulnerable communities will violate state and federal housing, land use and environmental laws, and make CEQA compliance impossible.

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<sup>36</sup> 2018 draft General Plan Policy Document, p. 2-7, Policy ED-A18

<sup>37</sup> 14 CCR 15126.2 (a)

**VII. Conclusion**

Fresno County must address the inadequacies of the draft general plan and zoning in order to conduct a lawful Environmental Impact Analysis. The County must review the entire background report to ensure that environmental and land use data is current and accurately reflects baseline conditions for the EIR. The County must substantially revise the draft General Plan and Zoning Ordinance to bring them into compliance with state law prior to completing the EIR. The draft general plan policies that will increase industrial development must be fully analyzed for their direct, indirect and cumulative impacts in the EIR.

Sincerely,

/S/

Mariah C. Thompson  
Staff Attorney, Community Equity Initiative  
California Rural Legal Assistance, Inc.  
3747 E. Shields Ave  
Fresno, CA 93726  
(559)233-6710  
mthompson@crla.org

cc: Ilene Jacobs, Director of Litigation, Advocacy, and Training, California Rural Legal Assistance, Inc.  
ijacobs@crla.org

Marisol Aguilar, Director, Community Equity Initiative, California Rural Legal Assistance, Inc.  
maguilar@crla.org

**CENTRAL VALLEY FLOOD PROTECTION BOARD**

3310 El Camino Ave., Ste. 170  
SACRAMENTO, CA 95821  
(916) 574-0609 FAX: (916) 574-0682



April 10, 2018

Mr. Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

RECEIVED  
APR 18 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

Subject: Notice of Preparation of a Draft Program Environmental Impact Report for  
the Fresno County General Plan Review and Zoning Ordinance Update

Dear Mr. Khorsand,

The Central Valley Flood Protection Board (Board) staff received the Notice of Preparation of a Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update.

Fresno county is located within the boundaries of the Sacramento and San Joaquin Drainage District, as set forth in Section 8501 of the California Water Code. California Government Code Section 65302.7 requires each city or county located within the boundaries of the Sacramento and San Joaquin Drainage District to submit the draft Safety Element of the General Plan to the Board at least 90 days prior to the adoption of the General Plan.

If you have any questions, please contact Mr. Ali Porbaha at (916) 574-2378, or via email at [Mohammad.Porbaha@CVFlood.ca.gov](mailto:Mohammad.Porbaha@CVFlood.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Geoff Shaw".

Geoff Shaw, PE  
Chief Engineer

Attachment: Notice of Preparation of a Draft Program Environmental Impact Report for the  
Fresno County General Plan Review and Zoning Ordinance Update

**NOTICE OF PREPARATION**  
**of a Draft Program Environmental Impact Report for the**  
**Fresno County General Plan Review and Zoning Ordinance Update**

**Date:** March 21, 2018

**To:** State Clearinghouse, Responsible Agencies, Trustee Agencies, and Interested Parties

**From:** County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

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**Project Title:**

Fresno County General Plan Review and Zoning Ordinance Update (General Plan Amendment # 529 and Zone Code Text Amendment # 372)

**Project Location:**

Entire unincorporated portion of Fresno County – see Figure 1

**NOP Comment Period:**

March 21, 2018, to May 4, 2018, by 5:00 PM

**Lead Agency/Contact:**

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

**Introduction:**

The County of Fresno (County) is reviewing its General Plan and updating its Zoning Ordinance. As Lead Agency under the California Environmental Quality Act (CEQA), the County has determined that the review and update may have a potential significant effect on the environment and that an Environmental Impact Report (EIR) will be prepared to evaluate these potential effects.

The County has prepared this Notice of Preparation (NOP) to inform agencies and interested parties that an EIR will be prepared for the General Plan Review and Zoning Ordinance Update Project (proposed project). This NOP solicits guidance from regulatory agencies about the scope and content of environmental information to be included in the EIR related to the agencies' statutory responsibilities. The agencies will use the EIR when

considering their permits or other approvals related to the General Plan Review and Zoning Ordinance Update. The NOP also provides an opportunity for interested parties to inform the County what environmental issues they think should be addressed in the EIR.

**Project Description:**

The existing 2000 County General Plan consists of multiple documents: the countywide General Plan Background Report, the countywide General Plan Policy Document, and over 40 regional, community, and specific plans. The General Plan Background Report, which inventories and analyzes existing conditions and trends in Fresno County, provides the formal supporting documentation for General Plan Policy Document. The countywide General Plan Policy Document contains explicit statements of goals, policies, and implementation programs that constitute the formal policy of Fresno County for land use, development, open space protection, and environmental quality. The current General Plan Policy Document is organized by and consists of the following seven countywide elements: 1) Economic Development; 2) Agriculture and Land Use; 3) Transportation and Circulation; 4) Public Facilities and Services; 5) Open Space and Conservation; 6) Health and Safety; and 7) Housing.

The General Plan functions as a guide to the type of community that residents of Fresno County desire, and provides the means by which that desired future can be achieved. The General Plan addresses a range of immediate, mid-, and long-term issues with which the community is concerned. The General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and "quality of life" considerations in a manner that recognizes resource limitations and productive agricultural land, and the sensitive habitats of the community's natural environment. It outlines policies and programs and sets out plan proposals to guide day-to-day decisions concerning the County's future. Under State law, the General Plan must serve as the foundation upon which all land use decisions are to be based, and must also be comprehensive, internally consistent, and have a long-term perspective.

The County's Zoning Ordinance is officially known as Division VI of the Ordinance Code of the County of Fresno. The stated purpose of the Zoning Ordinance is "to classify and regulate the highest and best use of buildings, structures, and land located in the unincorporated area of the County of Fresno in a manner consistent with the Fresno County General Plan." The Zoning Ordinance is effectively the principal tool for implementing the County's General Plan, and by State law, must be consistent with the General Plan.

In June 2006, the Fresno County Board of Supervisors directed County staff to initiate a review of the 2000 General Plan along with a comprehensive update of the County Zoning Ordinance. This effort was called for in General Plan policy LU-H.16, which states that the County will review the 2000 General Plan goals, policies, and implementation programs every five years and revise them as deemed necessary. With input from the public and other agencies, as well as comments received at several public hearings, the County completed the review and developed a final draft of the revised countywide

General Plan Policy Document in 2014. The final draft was presented to the Fresno County Board of Supervisors for adoption at a public hearing that was held on September 30, 2014. However, based on the public testimony, the Board of Supervisors directed County staff to continue the review of the General Plan, update the General Plan Background Report and prepare an EIR for the General Plan Review and the Zoning Ordinance Update Project.

The proposed project consists of a comprehensive update of the County's General Plan, Background Report, a review of the Policy Document, and a comprehensive update of the Zoning Ordinance. The revised General Plan is intended to build on the major policies of the current 2000 General Plan, but expand and strengthen them to meet the challenges and community needs through planning horizon year 2040. The revised General Plan would accommodate County population growth projected through 2040. The revised General Plan seeks to preserve agricultural land and natural resources; conserve public spaces and recreational resources; promote the wellbeing of County residents; maintain economic vitality and balance; and direct land use policies that enable sustainable and forecasted growth in the County. The revision includes only minimal changes to the land use designations and land use maps in the existing 2000 General Plan. The majority of revisions are to goals, policies, and implementation programs of the General Plan. The revision also includes addressing laws affecting the General Plan, including the addition of an Environmental Justice Element to the General Plan Policy Document. The Zoning Ordinance update includes provisions, development standards, and guidelines for consistency with the revised General Plan, pursuant to State law. Figure 1, attached below, provides the Draft Countywide Land Use Diagram. Additional land use designation maps and diagrams for specific areas in the County are provided in the link below.

The public review draft of the updated General Plan Background Report and revised General Plan Policy Document, including land use designation maps, and the Zoning Ordinance Update were released for public review on January 26, 2018. Members of the public can provide comments on the draft documents until the close of the NOP comment period (April 25, 2018). These documents, diagrams and maps are available for review on the County's General Plan Review and Zoning Ordinance Update webpage at:

[www.co.fresno.ca.us/gpr](http://www.co.fresno.ca.us/gpr)

The public review draft of the revised General Plan Policy Document contains the existing year 2000 Policy Document with proposed revisions shown as red text that is either underlined or strikethrough. Strikethrough text represents proposed text deletions and revisions and underline text represents proposed text additions to the Policy Document.

### **Probable Environmental Effects and Scope of the EIR:**

The EIR for the General Plan Review and Zoning Ordinance Update will describe existing environmental resource areas and conditions in Fresno County. The EIR is intended to be a program-level document that will analyze the broad environmental effects of the

proposed General Plan revisions and Zoning Ordinance Update, considering broad policy alternatives and program-wide mitigation measures. The EIR will evaluate the potentially significant environmental impacts of implementing the proposed General Plan revisions and Zoning Ordinance Update and will evaluate whether there are feasible mitigation measures that may lessen or avoid identified significant impacts. No specific development projects are being considered. Rather, the analysis will focus on the reasonably foreseeable direct and indirect physical environmental effects that could result from adoption and implementation of the Revised General Plan and Zoning Ordinance Update. The EIR will also identify and evaluate alternatives to the proposed project.

In accordance with *State CEQA Guidelines* Section 15063(a), the County did not prepare an Initial Study, but advises that the EIR will evaluate potentially significant environmental effects on each of the environmental topics outlined in Appendix G of the *State CEQA Guidelines*. The topics include the following:

- Aesthetics
- Agriculture and Forestry
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation/Traffic
- Utilities and Service Systems

In addition, the EIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA.

**NOP Comment Period:**

In accordance with the time limits identified in State law, please respond to this NOP with your comments on the scope and content of the EIR at the earliest possible date, but **no later than 5:00 P.M. on May 4, 2018**. April 25 is 45 days following the date this NOP was first posted and published. Please include the name of the contact person for your agency and submit written comments to:

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
Email: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

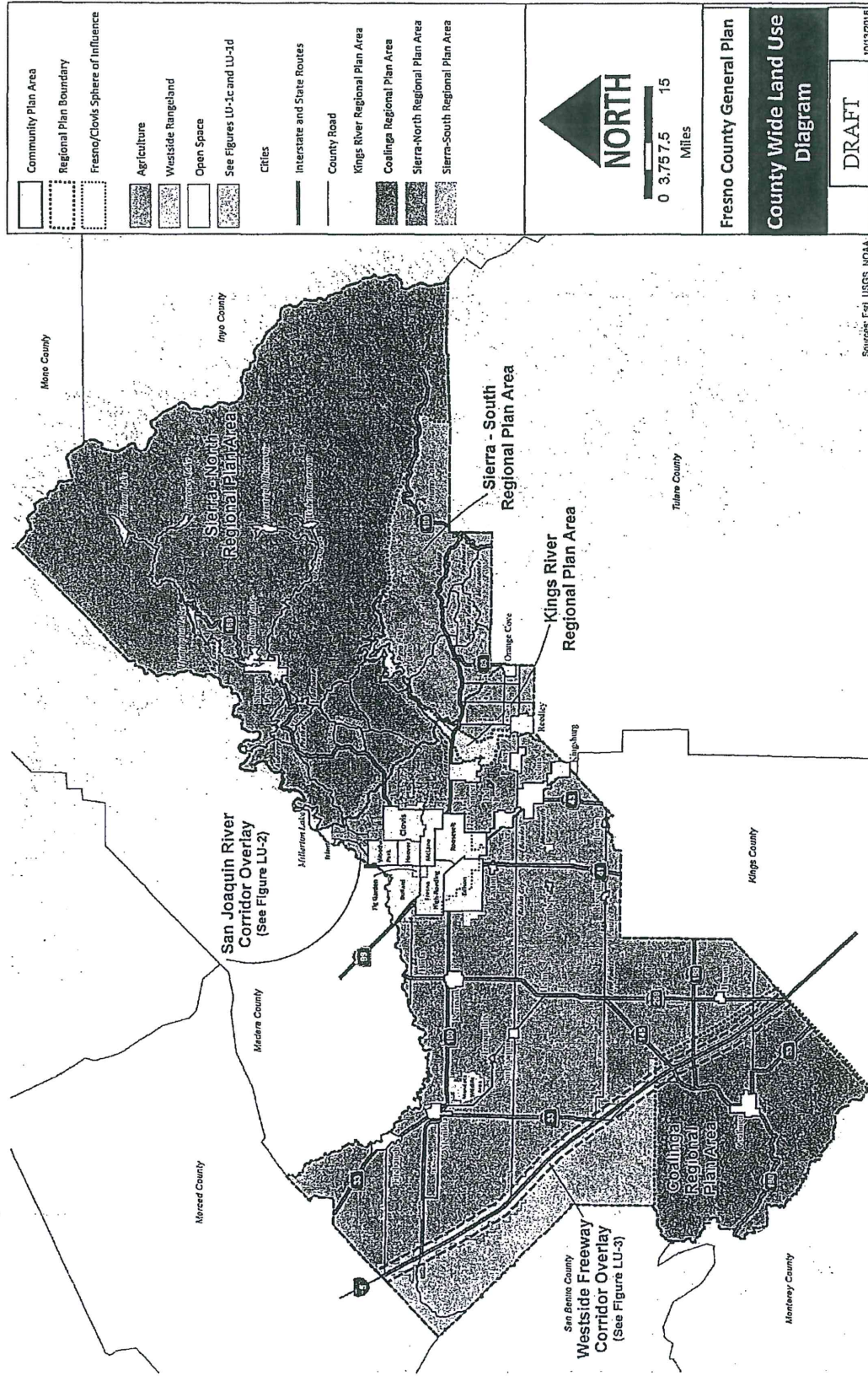
**Scoping Meeting:**

To facilitate responses to the NOP, the County will hold two scoping meetings. The first meeting will be held on March 26, 2018 at 2:00 PM at the Fresno County Board of



Supervisors Chambers, 2281 Tulare Street, Room 301, Fresno, California 93721. The second meeting will be held on March 26, 2018 at 5:30 PM at Riverdale Memorial District located at 3085 W. Mount Whitney Avenue, Riverdale, CA 93656.

**Figure 1 Draft Countywide Land Use Diagram**



U.S. POSTAGE >> PITNEY BOWES



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F R O M

STATE OF CALIFORNIA  
CALIFORNIA NATURAL RESOURCES AGENCY  
CENTRAL VALLEY FLOOD PROTECTION BOARD  
3310 El Camino Avenue, Suite 170  
SACRAMENTO, CA 95821

To: MR. MOHAMMAD KHORSAND  
2220 TULARE STREET, SIXTH FLOOR  
FRESNO, CA 93721

DWR 1235A (Rev. 10/16)

Vertical barcode on the right edge of the envelope.



2600 Fresno Street, Third Floor  
Fresno, California 93721-3604  
(559) 621-8277 FAX (559) 498-1012

**Development and Resource Management Department**  
**Jennifer Clark, AICP, Director**

May 4, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

**SUBJECT: Fresno County General Plan Review and Zoning Ordinance Update**

Dear Mr. Khorsand:

Thank you for the opportunity to comment on the Notice of Preparation for Fresno County's General Plan Review and Zoning Ordinance Update. As part of the County, the City recognizes the benefits of planning for future growth and encourages mutually agreed upon policies for areas that lie within shared planning boundaries.

Our comments on all three documents are noted below:

#### **NOP**

The Notice of Preparation states that the County will be preparing an Environmental Impact Report for the General Plan Review and Zoning Ordinance Update. The City concurs with this level of review, and with the proposed scope, which includes analysis in all of the topical areas in called out in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

#### **General Plan Review**

General Comment: The General Plan document uses the term Fresno County frequently as a location, for example, "...and the location of the High Speed Rail heavy maintenance and operation facilities within Fresno County (from policy ED-B.5, page 2-8)." It might be helpful at the beginning of the General Plan to clarify that the use of the term "Fresno County" in this way is intended to be general, not jurisdictional, so it would include all lands within Fresno County, including incorporated cities.

## Introduction

1. Page 1-6, Regional, Community and Specific Plans, Fresno-Clovis Area Community Plans. The City of Fresno Development Code, in Section 15-104-B-4 (b), establishes the Fresno General Plan (2014) as the plan that takes priority over community plans, excepting airport land use plans and the Downtown plans. We would recommend that the County clarify its priority of plans for areas within the City of Fresno and its sphere of influence by cross referencing applicable policies and/or Fresno Municipal Code sections as may be amended. We also recommend that county land use in the Fresno Sphere of Influence (SOI) be consistent with the Fresno General Plan's Land Use Diagram (Figure LU-1).

## Economic Development

2. Page 2-8, Policy ED-B.4: UC Medical School. This policy states that the County shall support the establishment of a University of California Medical School in the San Joaquin Valley and its associated research and training facilities in Fresno County. The City interprets this policy as directing any such facility to an incorporated or urbanized area within the County.

## Land Use and Agriculture

3. Page 2-50, Policy LU-C.4: Does the deletion of this policy result in the repealing of the Friant Community Plan?
4. Page 2-60, Policy LU-E.6: Planned Residential Development Conditions. We suggest that any rural residential development within the SOI should require a conditional use permit to enable application of the City's development standards. Suggest adding another policy category titled "Planned Residential Development within City Spheres of Influence", or something similar. In addition, the conditions for both this policy and the following one (Policy LU-E.7) do not require the availability of an adequate water source. We recommend that this requirement be included in these two policies. We note that such language is included in Policy LU-E.8, Rural Residential Northeast of the Enterprise Canal (Clovis).
5. Page 2-79, Policy LU-G.8: Community Plan Updates. The City supports the idea of jointly updating any overlapping county plans when it updates its own plans. In addition, the City would encourage the County to consider the adoption of the city's land use within the SOI.
6. Page 2-79, Policy LU-G.13: Leapfrog Growth. The City supports this policy, but would encourage flexibility in its application when processing contested annexations.
7. Page 2-81: LU G.19 (No title). The City suggests that this policy be maintained, but modified as follows: "On land that is not within a city's planned urban boundary but is within a city's sphere of influence, the County shall maintain zoning consistent with the

General Plan (or if applicable, community or specific plan) land use designations adopted by that city for land within its sphere of influence. Methods to ensure consistency could include but are not limited to joint amendments to land use maps through specific planning processes.”

#### Transportation and Circulation

General Comment: The City supports continuing collaboration with the County toward consistent City and County transportation planning. Please see Attachment A for detailed comments.

#### Public Facilities and Services, and Open Space and Conservation (Water Resources)

General Comment: Development in Fresno County should reflect the forthcoming implementation of the Sustainable Groundwater Management Act (SGMA) as the County will be subject to a groundwater sustainability plan beginning January 2020. This plan will include requirements for development to procure surface water sources to limit undesirable results which could preclude underlying aquifers from benefiting from SGMA compliance.

#### Open Space and Conservation

#### Historical, Cultural and Geological Resources

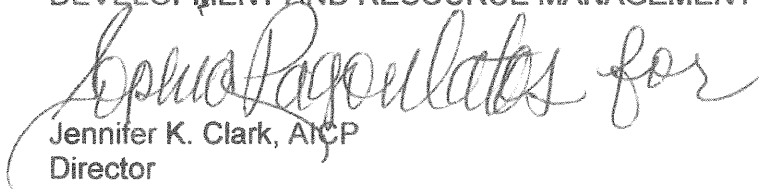
8. Page 2-167, Goal OS-J: To identify, protect, and enhance Fresno County’s important historical... It appears that this goal actually contains three goals and might be more understandable if split into 3 separate parts:
  - a. To identify, protect, and enhance Fresno County’s important historical, archeological, paleontological, geological, and cultural sites and their contributing environment;
  - b. To promote and encourage preservation, restoration, and rehabilitation of Fresno County’s historically significant resources; and
  - c. To promote historical awareness and community identity by recognizing the county’s valued assets that have contributed to past county events, trends, styles of architecture, and economy.
  
9. Page 2-167, Policy OS-J.3: Minimize Impacts. If the Fresno County Historical Landmarks and Records Advisory Commission is the appropriate acting body, can the parenthesis be removed? This would help in understanding the County’s process for evaluation of these resources.

#### Zoning Ordinance Update

General Comment: Any of the comments made above with regard to the General Plan would also be applicable to any corresponding revisions to the zoning ordinance and zoning map.

Sincerely,

DEVELOPMENT AND RESOURCE MANAGEMENT DEPARTMENT

A handwritten signature in cursive script that reads "Jennifer K. Clark for". The signature is written in black ink and is positioned over the typed name and title.

Jennifer K. Clark, AICP  
Director

Enclosure

**Attachment A**  
**Transportation and Circulation Comments**

General Plan Policy Document

1. Policies for pedestrian facilities within the City of Fresno Sphere of Influence should be included. Page 2-156 discusses policy to ensure street designs that encourage walking yet very few policies mention pedestrian activity.
2. Roadway classifications along roadways within the City of Fresno Sphere of Influence should match the classifications shown on the City of Fresno General Plan Land Use and Circulation map (Figure LU-1). Examples of differences include but are not limited to:
  - a. Temperance Avenue – City of Fresno designation is Super Arterial but shown as an Expressway on Figure TR-1b
  - b. Jensen Avenue - City of Fresno designation is Super Arterial but shown as an Expressway on Figure TR-1b
  - c. Herndon Avenue, west of Riverside - City of Fresno designation is Super Arterial but shown as an Expressway on Figure TR-1b
  - d. Friant Road, south of Audubon to SR 41 southbound ramps - City of Fresno designation is Super Arterial but shown as an Arterial on Figure TR-1b
  - e. Grantland Avenue, south of Veterans Blvd - City of Fresno designation is Super Arterial but shown as an Arterial on Figure TR-1b
  - f. California Avenue, west of West Avenue - City of Fresno designation is Collector but shown as an Arterial on Figure TR-1b
3. The City of Fresno Public Works Department has developed a policy regarding access points along Super Arterial roadways. Access points along roadways designated Super Arterial within the City of Fresno Sphere of Influence should be subject to the same access point spacing requirements.
  - a. Limited to one (1) three-quarter (3/4) opening in each direction per one-half (1/2) mile segment. These openings shall prohibit left-turning movements onto the super arterial roadway.
  - b. Limited to four (4) driveways and/or streets in each direction per one-half (1/2) mile segment. Spacing of these openings should be equidistant (i.e. approximately two (2) per quarter mile - cluster openings should be avoided). Driveways and/or streets shall be limited to right-turn movements only
4. The City of Fresno has an Active Transportation Plan, adopted on March 2, 2017 which is the planning document for bicycle and pedestrian facilities. This plan has



superseded the Bicycle Master Plan (BMP), which is referenced in the County's General Plan document.

5. The City of Fresno has adopted four (4) level of service (LOS) Traffic Impact Zones (TIZ) which establish the LOS and peak hour trip threshold allowed in each TIZ. Please reference General Plan Map MT-4 for more information.
6. TR-A21 – Right-of-way in the City of Fresno Sphere of Influence should be preserved based on City standards/roadway classifications.
7. The policy document contains no discussion regarding Senate Bill 743 or Vehicle Miles Traveled (VMT).

#### General Plan Background Report

1. The City of Fresno adopted the Active Transportation Plan (ATP) on March 2, 2017. The document references the Bicycle Master Plan (2010) which was replaced by the ATP.
2. Fulton Street is now open to vehicular traffic. The document refers to Fulton as a pedestrian mall.
3. Class IV protected bicycle facilities are not mentioned as a bicycle facility classification/option.
4. There is a desire by communities, especially on the west side of SR 99 to reroute the current truck routes out of existing residential neighborhoods.



## City of Reedley

1733 Ninth Street  
Reedley, CA 93654  
(559) 637-4200  
FAX 637-2139

April 12, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

RECEIVED  
APR 16 2018

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

**SUBJECT: Comment Letter Regarding Fresno County General Plan Review and Zoning Ordinance Update (Amendment #529 and Zone Code Text Amendment #372)**

Mr. Khorsand,

The City of Reedley is grateful for the opportunity to comment on the preparation of a Draft Program EIR for the Fresno County General Plan Review and Zoning Ordinance Update. Upon review of the associated documents, the City offers the following comments:

- The City encourages Fresno County to incorporate the designation of a "greenbelt" around the City of Reedley's perimeter, allowing for a buffer between neighboring Fresno County cities. Such a designation is to accommodate the protection of both environmentally sensitive areas and existing agricultural activities found within these areas, and provide for the maintenance of physical separation vital to a sense of place. Such a buffer is identified within the City of Reedley's currently adopted General Plan, within the Conservation, Open Space, Parks and Recreation Element (COSP 4.3B). The City also welcomes open dialogue with the County regarding specific strategies to incorporate such an area through the use of existing zoning designations, overlay zones, or additional methodologies most appropriate for the area, if desired.
- The City applauds the County's efforts to engage in regional coordination activities, such as the Multi-Jurisdictional Housing Element, the Regional Transportation Plan, and additional activities. The City wishes to express support for the continuation of such activities, in an effort to further address the issues of sustainability, mobility, connectivity, safety and quality of life for all Fresno County residents and visitors in an efficient and collaborative manner.

If you have any questions, or to discuss specifics in further detail, please feel free to contact me at (559) 637-4200 Ext. 286; or via email at [rob.terry@reedley.ca.gov](mailto:rob.terry@reedley.ca.gov).

Respectfully,

Rob Terry  
Community Development Director



**City of Reedley**  
City Hall  
1717 Ninth Street  
Reedley, CA 93654

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Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

93721-212706





# FRESNO COUNTY FIRE

PROTECTION DISTRICT

210 South Academy Avenue  
Sanger, California 93657  
Telephone: (559) 493-4300  
Fax: (559) 875-7451  
[www.fresnocountyfire.org](http://www.fresnocountyfire.org)

April 19, 2018

Mohammad Khorsand – Development Services Division  
County of Fresno  
Fresno County Public Works & Development Services  
2220 Tulare Street, Suite A  
Fresno, CA 93721

Transmitted by Email to: [gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

RE: **Application Reference #:** **GPA #529** & Zone Code Text #372  
**Name of Applicant:** **COUNTY OF FRESNO PLANNING DEPT**  
**Address of Project:** **UNICORP PORTION OF FRESNO CO**  
**City, State & Zip of Project:**

Fresno County Fire Protection District (FCFPD) has received notice of the project and will continue to review the project for its potential impacts on the FCFPD.

## Application Types

<b>Site Plan Review (SPR)</b>	<b>Initial Study Application (ISA)</b>
<b>Director Review Application (DRA)</b>	<b>Variance Application (VA)</b>
<b>Conditional Use Permit (CUP)</b>	<b>General Plan Application (GPA)</b>
<b>Tentative Parcel Map (TPM, TPMW)</b>	<b>Tentative Tract Map (TTM)</b>
<b>Pre-Application for Certificate of Compliance (PCOC)</b>	

All application types stated above **SHALL** comply with California Code of Regulations Title 24 – Fire Code. Prior to receiving your FCFPD conditions of approval for your project, you must submit construction plans to the County of Fresno Public Works and Planning for review. It is the **Applicants Responsibility** to deliver a minimum of **three** sets of plans to the FCFPD.

Your project/development shall annex to Community Facilities District No. 2010-01 of the Fresno County Fire Protection District. The project/development also will be subject to the requirements of the current Fire Code and Building Code when a building permit or certificate of occupancy is sought.

Before plans are submitted to the Fresno County Fire Protection District please visit our website at [www.fresnocountyfire.org](http://www.fresnocountyfire.org) and fill out the Fire Permit Application to submit with your plans.

Please Note – requirements for your project may include but are not limited to:

**Water Flow Requirements**  
**Water Storage Requirements**  
**Fire Pumps**  
**Road Access**  
**Public Resources Code 4290**

**Fire Hydrants**  
**Fire Sprinklers Systems**  
**Fire Alarm Systems**  
**Premises Identification**  
**Title 15.60 County Ordinance**

Please contact the FCFPD at **(559) 493-4359** to schedule an over the counter meeting to receive your specific requirements for your project. Failure to schedule an appointment with the FCFPD will affect your ability to obtain final approval for your project.

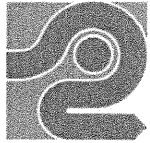
Sincerely,

MARK A. JOHNSON  
Fire Chief

By



CHRIS CHRISTOPHERSON, BATTALION CHIEF  
Law Enforcement/Fire Prevention



**Fresno Metropolitan Flood Control District**  
*Capturing Stormwater since 1956*

File 430.31

May 4, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, CA 93721

Dear Mr. Khorsand,

**Fresno Metropolitan Flood Control District (FMFCD)  
Comments to the Notice of Preparation of an a Environmental Impact Report  
for General Plan Review and Zoning Ordinance Update  
General Plan Amendment #529 and Zone Code Text Amendment #372**

This letter is in response to the County's request for comments on the General Plan Amendment #529 and Zone Code Text Amendment #372. FMFCD bears responsibility for storm water management within the Fresno-Clovis metropolitan area, including the area within the Plan boundary. Within this area, the community has developed and adopted Storm Drainage and Flood Control Master Plans as shown on the included attachment. (Exhibit A - Map depicting the Storm Drainage and Flood Control Master Plan).

The Master Plan system for the Plan area was designed for a two-year storm event (minor storm event). Storms that exceed the intensity of the collection system for the minor storm event are referenced as major storms (less frequent, but more intense rainfall). Excess runoff from major storms will be temporarily stored on surface streets (pooling) and flows will occur between local drainage inlet areas over the crest or crown of local streets and other surface control points at the maximum flood pool elevation, until the rainfall intensity subsides, and the minor system can collect the excess water from the surface. Surface storage of excess runoff is beneficial and is a necessary element to consider and manage in order to prevent flooding of structures and lessen the volume and depth of water at any particular low-lying area. It is appropriate to store such excess water in public rights of way to decrease the risk of flooding structures that may result in meaningful damages. The maximum flood pool elevation should be utilized to determine the minimum finish floor elevations. The maximum flood pool elevation shall be studied for all development within the Plan area. The grading of proposed development within the Plan area shall be designed such that there are not adverse impacts to the passage of said major storm through that development. Additionally, the development shall provide any surface flowage easements or covenants for any portions of the redevelopment area that cannot convey storm water to public right of way without crossing private.

k:\letters\co of fresno general plan\gp amendment 529-zone code text amendment 372(wl).docx

**Fresno Metropolitan Flood Control District (FMFCD)**  
**Comments to the Notice of Preparation of an a Environmental Impact Report**  
**for General Plan Review and Zoning Ordinance Update**  
**General Plan Amendment # 529 and Zone Code Text Amendment # 372**  
**May 4, 2018**  
**Page 2 of 4**

If there are to be storm water discharges from private facilities to FMFCD's storm drainage system, they shall consist only of storm water runoff and shall be free of solids and debris. Landscape and/or area drains are not allowed to connect directly onto FMFCD's facilities.

FMFCD will need to review and approve the final improvement plans for all development (i.e. grading, street improvement and storm drain facilities) within the boundaries of the Plan area to insure consistency with the future Storm Drainage Master Plan.

Storm drain easement will be required whenever storm drain facilities are located on private property. No encroachments into the easement will be permitted including, but not limited to, foundations, roof overhangs, swimming pools, and trees.

Permanent drainage service will be available provided the developer can verify to the satisfaction of the County and FMFCD that runoff can be safely conveyed to existing Master Planned facilities. Permanent drainage service will not be available if the downstream Master Planned facilities are not constructed or operational and in this instance FMFCD recommends temporary drainage facilities until permanent drainage service is available.

FMFCD may require the developer to construct certain storm drain facilities as described in the Storm Drain Master Plan. The cost of construction of Master Plan facilities excluding dedication of storm drainage easements is eligible for credit against the drainage fee of the drainage area served by the facilities. A development agreement shall be executed with FMFCD to affect such credit. Reimbursement provisions, in accordance with the Drainage Fee Ordinance, will be included to the extent that developer's Master Plan costs for an individual drainage area exceed the fee of said area. Should be facilities cost for such individual area total less than the fee of said area, the difference shall be paid upon demand to the County or FMFCD.

The individual properties shall make sure they are located within a flood prone area as designated on the most current official Flood Insurance Rate Maps available at the Federal Emergency Management Agency (FEMA) Flood Map Service Center.

In an effort to improve storm runoff quality, outdoor storage areas shall be constructed and maintained such that material that may generate contaminants will be prevented from contact with rainfall and runoff and thereby prevent the conveyance of contaminants in runoff into the storm drain system.

**Fresno Metropolitan Flood Control District (FMFCD)  
Comments to the Notice of Preparation of an a Environmental Impact Report  
for General Plan Review and Zoning Ordinance Update  
General Plan Amendment # 529 and Zone Code Text Amendment # 372  
May 4, 2018  
Page 3 of 4**

FMFCD encourages, but does not require that roof drains from non-residential development be constructed such that they are directed onto and through a landscaped grassy swale area to filter out pollutants from roof runoff.

Runoff from areas where industrial activities, product, or merchandise come into contact with and may contaminate storm water must be directed through landscaped areas or otherwise treated before discharging it off-site or into a storm drain. Roofs covering such areas are recommended. Cleaning of such areas by sweeping instead of washing is to be required unless such wash water can be directed to the sanitary sewer system. Storm drains receiving untreated runoff from such areas that directly connect to FMFCD's system will not be permitted. Loading docks, depressed areas, and areas servicing or fueling vehicles are specifically subject to these requirements. FMFCD's policy governing said industrial site NPDES program requirements are available. Contact FMFCD's Environmental Department for further information regarding these policies related to industrial site requirements.

Five drainage areas within the FMFCD Storm Drainage and Flood Control Master Plan Service area and two areas outside the Master Plan service area do not drain into regional stormwater management basins. Targeted development in these areas are required to meet specific number standards for stormwater runoff outlined in the Post-Development Standards Technical Manual. These standards apply to priority development in drainage areas not discharging to a stormwater management basin. Go to [www.fresnofloodcontrol.org](http://www.fresnofloodcontrol.org) to view the manual and detailed maps. The manual provides guidance for implementing stormwater quality Best Management Practices (BMPs) for drainage areas that do not drain to the Basin System, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

In general, the District develops and adopts the storm drainage master plan using the then adopted planned land uses set for by the County of Fresno. If the land use changes to a "higher intensity" at a later date, the public drainage system may be undersized to accommodate the higher storm water runoff rates. For drainage purposes, a land use with a "higher intensity" means that the land use is expected to have more impervious surfacing than what was originally planned for resulting in a numerically higher rational "C" factor and storm water discharge rate. In these instances, some form of mitigation may be required.



**Fresno Metropolitan Flood Control District (FMFCD)  
Comments to the Notice of Preparation of an a Environmental Impact Report  
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General Plan Amendment # 529 and Zone Code Text Amendment # 372  
May 4, 2018  
Page 4 of 4**

Specifically; District staff has noticed that on Table LU-1 “Land Use Designations and Development Intensity Standards” the proposed changes to the landuse designations medium high density residential, neighborhood commercial, community commercial and central business commercial allows for either mixed use residential development or increased densities of residential development on a per acre basis which may increase the amount of impervious surfacing and result in a higher “C” factor.

The District monitors the County’s proposed planned and existing landuses, the remaining developable areas and the existing storm drainage infrastructure and compares it to the adopted storm drainage master planned landuses and when practical will replan the area to accommodate some or all of changes brought about by the rezones and or planning documents.

If you have any questions or concerns regarding our comments, please feel free to contact me at (559) 456-3292

Very truly yours,

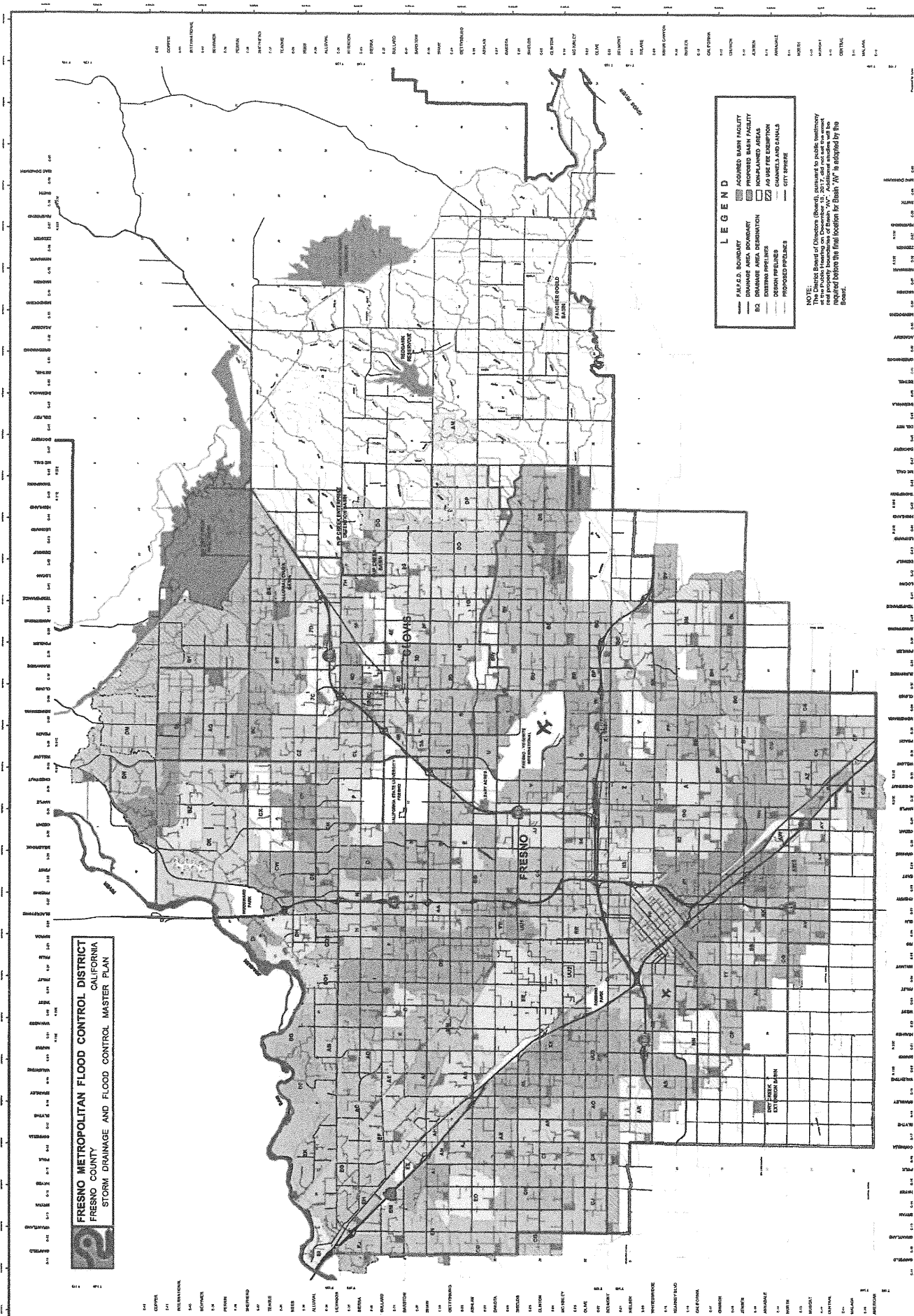


Wendell Lum  
Master Plan Special Projects Manager

WL/lrl

Attachment(s)

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT  
FRESNO COUNTY  
CALIFORNIA  
STORM DRAINAGE AND FLOOD CONTROL MASTER PLAN**



**LEGEND**

- F.A.S. BOUNDARY
- ▨ ACQUIRED DRAIN FACILITY
- ▩ DRAINAGE AREA SEPARATION
- ▧ EXISTING PIPELINES
- ▦ DESIGN PIPELINES
- ▤ CHANNEL AND CANALS
- ▥ PROPOSED PIPELINES
- CITY STREET

NOTE: The Board of Directors (Board) pursuant to public testimony at the Public Hearing on December 15, 2011, did not have the authority to approve the final location for Basin 'AV' as indicated by the Board.

Map grid labels: 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



Mohammed Khorsand, Senior Planner  
County of Fresno, Department of Public Works and Planning Development Services and Capital Projects  
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2220 Tulare Street, Sixth Floor  
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May 4, 2018

**RE: Fresno County December 2017 Public Review Draft General Plan Revision**

Mr. Khorsand,

Thank you for the opportunity to provide comments on the Fresno County December 2017 Public Review Draft General Plan Background Report and Policy Document Revision (respectively “Draft Background Report” and “Draft Policy Document” and collectively, “Revision” or “Draft”). We the undersigned organizations -- Leadership Counsel for Justice and Accountability; The Diocese of Fresno, Social Justice Ministry; Friends of Calwa; and have followed and provided oral and written comments on the Fresno County General Revision process and drafts for several years. Our organizations work together on policy issues that affect the allocation of investment and wellbeing in our entire Fresno County community, with a particular focus on ensuring an effective public process and ensuring responsible use of our natural resources, healthy and safe communities, and fair treatment of our County’s most vulnerable groups.

While we have provided comments on the Draft Background Report and elements of the Policy Document, implementation measures in Section 3 of the Policy Document were difficult to meaningfully respond to given extreme ambiguity and deficiencies in underlying goals and policies. Implementation measures are critical components to ensuring success of the General plan, and must be adequately articulated. They must be clear, time bound, financially and technically feasible as well as include metrics that will allow the County to effectively evaluate its efforts. Some of the Economic Development, Agriculture and Land Use, Transportation and Circulation and Environmental Justice implementation programs can potentially negatively impact, fail to protect and impact the ability of residents in disadvantaged unincorporated communities from enjoying their homes. Environmental Justice implementation programs, for example, fail to include any time bound actions to be taken by county departments to meaningfully address and protect disadvantaged communities from multiple sources of pollution. As the county works to correct deficiencies in underlying Goals and Policy in the Policy Document, we look forward to supporting the county in developing strong implementation programs that respond to community needs.

Please do not hesitate to reach out with any questions regarding our comments. We look forward to discussing these comments with Fresno County staff and hope to collaborate with Fresno County staff on an open, inclusive process towards creating a common shared vision of development that is equitable, sustainable and promotes the well-being of all residents in Fresno County.



## **I. Comments on the Draft Background Report**

### ***A. SB 244 Analysis Does Not Satisfy Statutory Requirements***

Government Code Section 653021.0 requires that cities and counties, on or before the due date to update their housing elements for the fifth housing element planning period, update their land use element to include all disadvantaged communities within their respective jurisdictions; provide an explanation of the current status of critical water, wastewater, stormwater, and fire protection infrastructure; and identify alternatives to funding extension of needed services to these areas. Gov. Code § 65302.10.<sup>1</sup> In order to comply with these obligations, Fresno County must include omitted disadvantaged unincorporated communities (“DUCs”) as well as accurate information about the infrastructure needs of unincorporated communities and specific information about and steps towards financing infrastructure fixes and services extensions.

#### **1. Improve Identification of DUCs and Methodology for Identifying These Communities**

Government Code Section 65302.10 requires counties to identify “each legacy community within the boundaries of the county, but not including any area within the sphere of influence of any city,” and defines disadvantaged communities as 10 or more dwelling units in close proximity to each other. The analysis in the Draft Background Document is missing several communities in this analysis, including the communities of Tombstone Territory,<sup>2</sup> Burrel, Five Points, and Flamingo Mobile Home Park, and the Bretton Avenue and Malaga Avenue communities. Fresno County must add the missing communities to its analysis and revise its methodology for identifying disadvantaged unincorporated communities to ensure that it does not exclude any DUCs from its analyses throughout the General Plan.

The County’s methodology for identifying unincorporated communities looks primarily at parcel density using a GIS-based analysis, and then does a search for dwelling unit density on Google Earth. This methodology is inconsistent with the statute, which directs jurisdictions to consider dwelling units without regard to parcel density. § 65302.10. We have also noted that the analysis includes inaccurate information with respect to the number of parcels in Lanare and possibly other communities. Additionally, the exclusion of communities located on agriculturally zoned land pursuant to Fresno County’s methodology is not permitted by law, so the County must revise its methodology and analysis to include such communities. Fresno County should revise its analysis of legacy communities as well as its methodology as necessary analysis to ensure more accurate identification of existing disadvantaged unincorporated communities. We further recommend that Fresno County speak with local community-based nonprofits who work with many unincorporated communities, to include communities of which those organizations have knowledge.

#### **2. Expand Analysis of Infrastructure and Service Deficiencies in Disadvantaged Unincorporated Communities to Identify Present and Future Needs In Light of Existing and Forecasted Conditions**

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<sup>1</sup> All references to statute are to the Government Code unless otherwise indicated.

<sup>2</sup> Tombstone Territory can be found by searching 12186 E Central Avenue, Sanger, CA 93657



While Fresno County has set out information regarding what water, wastewater, stormwater, and fire protection infrastructure and service exists in the identified communities, its analysis lacks information on the adequacy of that infrastructure to serve present and future needs in light of existing and forecasted conditions.

*a. Inadequate information as to the adequacy of wastewater infrastructure*

The analysis for several communities, including Easton and Monmouth, states that “septic tanks provide sewer services to residents of this area.” No information is provided regarding the adequacy of those septic systems or of the impact of septic systems and lack of municipal wastewater service on the capacity for further growth and infill development. For instance, the wastewater system that serves Cantua Creek and El Porvenir currently require repairs; Fresno County is in the process of procuring federal Community Development Block Grant funds to make these necessary repairs. From our work in the County, we know that disadvantaged unincorporated communities often suffer from leaking and failing septic systems, which at times even back up into residents homes and in their yards. To meet the requirement in Section 65302.10 that the County analysis deficiencies in wastewater service in DUCs, this analysis must include information about the adequacy of wastewater infrastructure in each community. The analysis should also include information about the impact of existing wastewater infrastructure on the infill and economic development opportunities of each community.

*b. Inadequate information as to adequacy of stormwater infrastructure*

The analysis includes some information as to stormwater infrastructure in disadvantaged communities. The analysis notes that some communities do not have stormwater drainage infrastructure and notes that some communities, including Raisin City and Lanare s states that “roadside ditches are used to manage stormwater for the area.” The analysis, however, does not discuss the adequacy or inadequacy of either the lack of infrastructure or of the very rudimentary infrastructure. We are aware that in several communities, including Lanare, flooding occurs in times of rain. Additionally, the analysis states that County Service Area No. 30 provides stormwater drainage to Three Rocks and that the MSR for CSA 30 found the services sufficient. However, residents of Three Rocks report periodic flooding because of inadequate stormwater drainage services in their communities.

Fresno County must add community-specific information about the effectiveness of roadside ditches and other infrastructure to drain stormwater in DUCs. This is of particular importance given the likely increase in flood risks due to climate change and changing precipitation patterns.

*c. Inadequate information regarding drinking water access and quality.*

The Draft indicates that many DUCs rely on well water or receive water from CSDs but does not provide information about the quality of that water in many cases. Groundwater relied on in DUCs for domestic use in Fresno County is often contaminated by nitrates, arsenic, hexavalent chromium, and 123-TCP, while surface water may be impacted by surface water treatment byproducts. For instance, in Cantua Creek and Three Rocks, domestic water is contaminated by Total Haloacetic Acids. While the County is



in the process of developing a new groundwater system that will supply residents with potable water free of these contaminants, the SB 244 analysis should reflect the existing water contamination that continues to impact residents in Cantua Creek and Three Rocks and only states that both communities are served by CSDs and applicable MSRMs identified “no deficiencies” in the area. pp. 3-54, 71. Additionally, several communities are reliant on domestic wells or state smalls and that information is not included in the analysis. Residents in some communities, including Tombstone Territory, have experienced complete well failure and have experienced or continue to experience no running water.

The County must revise the Draft to provide information about drinking water quality in DUCs, including whether drinking water complies with the basic drinking water requirements established in the maximum contaminant levels set by the state and if wells are vulnerable to failure due to reduced groundwater levels. A recent report was released by UC Davis regarding water access in the San Joaquin Valley. The report offers critical information that should be included into the analysis.<sup>3</sup> See Office of Planning and Research (“OPR”) 2017 General Plan Guidelines, p. 66, (“analysis should also consider adequacy of groundwater resources, and be consistent with utilities planning in the circulation element and the fire and flood protection policies in the safety element.”)

Finally, OPR’s General Plan Guidelines state that jurisdictions’ SB 244 analysis should “consider the impacts of a changing climate.” p. 66. The OPR Guidelines also state that “[t]his analysis should also consider adequacy of groundwater resources.” The Draft Background Report’s analysis includes no mention let alone analysis of the impacts of climate change on the availability and adequacy of infrastructure and services in County DUCs, nor the condition of groundwater resources in communities that depend on groundwater for drinking water. The County should revise the Draft to incorporate data and information, including available scientific data and anecdotal data from service providers and residents, relevant to the impacts of climate change on water, wastewater, stormwater, and fire protection infrastructure and service in DUCs in Fresno County, as well as information on groundwater shortages and contamination.

*d. The County must correct its analysis of legacy communities consistent with legal mandates.*

Fresno County must correct its the SB 244 analysis to address the aforementioned deficiencies by communicating with other Fresno County Departments about existing conditions and projects underway in DUCs and by conducting quantitative and qualitative analysis of infrastructure and service deficiencies through meetings with community residents, CBO representatives, and other stakeholders with relevant knowledge. Leadership Counsel has a wealth of experience with community outreach and engagement and would gladly provide assistance with this effort.

In addition, we recommend that the County use the chart which the OPR’s General Plan Guidelines advises jurisdictions to use to conduct its SB 244 analysis. p. 67. The chart includes rows for information about the infrastructure and services listed in the statute as well as “potential additional services” for

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<sup>3</sup> The Struggle for Water Justice in California’s San Joaquin Valley. Available at: [https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/The%20Struggle%20for%20Water%20Justice%20FULL%20REPORT\\_0.pdf](https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/The%20Struggle%20for%20Water%20Justice%20FULL%20REPORT_0.pdf)



analysis, such as sidewalks, lighting, libraries, schools, and community centers; a column to identify general plan policies that could help address identified deficiencies; and a column to note community input on deficiencies and funding alternatives, among others. Use of this chart could facilitate a more comprehensive analysis by the County which both meets and exceeds the the County's requirements under the law.

### **3. Fresno County Must Set Out Possible Avenues of Financial Support on a Case by Case Basis, Correct Inaccuracies its List of Funding Resources, and Consider Regional Solutions**

State law also calls for Fresno County to identify financial funding alternatives for the extension of services in DUCs. Specifically, the law states that Fresno County must conduct "an analysis, based on then existing available data, or benefit assessment districts or other financing alternatives that could make the extension of services to identified communities financially feasible." Gov. Code § 65302.10(c). OPR's General Plan Guidelines also advise that jurisdictions' SB 244 analysis "consider where there may be opportunities to provide more efficient, high quality service through consolidation, extension of services, and other regional solutions to address inadequacy of services and infrastructure." p. 67.

Financing necessary infrastructure in services in DUCs depends on the specific conditions and needs of each community. Therefore Fresno County must identify for *each community* which funding sources could apply to address their infrastructure deficiencies, instead of listing out potential funding sources for these types of projects. Additionally, the identified financial resources are inaccurate and out of date and the Background Report should update relevant information. In addition, the County must supplement its analysis to include identification of other mechanisms to address infrastructure and service deficiencies including service consolidation, service extension, and other regional solutions that can complement and reduce necessary financial investments.

#### ***B. The Land Use Chapter Introduction Should Cover Unincorporated Areas in Addition to Incorporated Areas.***

Sections 3.1 and 3.2 of the Draft Land Use Chapter provide almost no information about development and investment trends in unincorporated areas. Meanwhile the County describes that development is increasingly focused on incorporated areas, and trends show sprawl development and creation of new development expanding out from incorporated areas. We recommend that the County supplement this section since information about development trends or lack thereof and their bases are essential to determining appropriate policies to address development needs in unincorporated communities, where a large portion of Fresno County residents reside. Of particular concern is a more in depth analysis of the extent to which the population share has grown in incorporated areas as a result of annexations and how much is a result of out-migration and an in depth analysis of growth in historic communities, including legacy communities.

#### ***C. The Land Use Element Should Include Summaries of Community Plans.***

The Land Use Element summarizes each Specific Plan in the County but does not do so for the Community Plans. p. 3-23. Since Community Plans are also important planning documents for



development in rural communities, Fresno County should also include brief summaries of Community Plans. In this section, Fresno County should discuss the need for updating these plans, many of which are outdated. In the case of Lanare, for example, the community plan is more than 30 years old and must be updated.

***D. The Draft Background Report Does Not Satisfy Legal Requirements to Include Data and Relevant Policies, Programs and Regulations Concerning Air Quality.***

Government Code section 65302.1 requires cities and counties within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) to include a “report describing local air quality conditions including air quality monitoring data, emission inventories, lists of significant source categories, attainment status and designations, and applicable state and federal air quality plans and transportation plans, and a “summary of local, district, state, and federal policies, programs, and regulations that may improve air quality in the city or county.” § 65302.1(c)(1), (2).

As Fresno County is located within the SJVAPCD’s jurisdiction, it is subject to the air quality analysis requirements set forth in Section 65302.1(c). While the Draft Background Report includes a general discussion of the poor air quality within the Valley, the Draft does not meet the requirements of the statute. First, the Draft lacks the required lists of significant source categories which contribute to poor air quality in the region. The Draft only acknowledges the general categories of stationary, areawide, and mobile sources and identifies farming operations as one type of areawide contributor. pp. 7:21-22. The Draft Background Report must be revised to specifically list significant sources that fall within the broad categories of stationary, areawide, and mobile sources which exist in every jurisdiction.

The Draft Background Report provides no information about the disproportionate exposure to various air contaminants that communities, most often disadvantaged communities, located next to freeways, commercial agriculture operations, dairies, industrial facilities, and other significant sources of pollution. The disproportionate exposure of numerous disadvantaged communities in Fresno County is documented in data available through the State Office of Environmental Health Hazards’ California Communities Environmental Health Screening Tool, which identifies ) unincorporated neighborhoods on East Central Avenue and Daleville as among the most burdened in the state for exposures to PM 2.5., diesel, toxic releases from facilities and Cantua Creek as among the most burdened by exposures to PM 2.5 and pesticides. The more affluent unincorporated community of Millerton New Town, on the other hand, is among the least burdened by diesel emissions in the state and average for PM 2.5 and toxic release exposures statewide<sup>4</sup> See Background Report, p. 7-22; § 65302.1(c)(1), (2). The County should include this and other information in the Draft Background Report to identify and analyze neighborhoods that are disproportionately impacted by air pollution.

The Draft Background Report and Policy Document also fail to include an adequate discussion of state and federal air quality and transportation plans and local, state, and federal policies, programs, and regulations which may improve air quality. For instance, the Draft’s air quality report includes no

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<sup>4</sup> Data is available through the CalEnviroScreen mapping tool at this link:  
<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>





discussion of the Fresno Regional Transportation Plan / Sustainable Communities Strategy. While the Policy Document includes certain policies related to air quality, the Draft fails to discuss local policies and how they may improve air quality, including in relationship to other local, state, and federal policies. The County must revise the Draft to comply with Section 65302.1(c)'s mandate that the General Plan include a report that discusses local, state, and federal policies, programs, regulations, and plans relevant to air quality.

***E. Background Report Fails to Include an Adequate Analysis of Water Scarcity, Groundwater, and Drinking Water Issues in Fresno County***

Fresno County is required by Government Code section 65302(d) to address water resources within its policies on conservation of natural resources. Therefore Fresno County must provide an accurate analysis of the current situation of water resources as part of its Background Document. Fresno County must include information on groundwater scarcity and the current problems with groundwater shortages impacting drinking water resources for County residents. An analysis of existing water resource issues is particularly important since the Background Report forms the basis of the EIR and the justification for the policies in the Policy Document regarding water resources.

The community of Tombstone Territory, which depends on domestic wells for its drinking water, is currently in a situation of emergency because many homes' wells have gone dry and numerous families have contaminated well water. There is not an isolated case in the County, as many other communities on domestic wells run the risk of the same fate. Even cities like Sanger are concerned that they do not have capacity to serve the drinking water needs of their residents. Fresno County should include an extensive analysis of the situation of drinking water resources for Fresno County residents in its Background Report.

The California Department of Water Resources has also designated the Kings Basin, within which Fresno County sits, as a basin in critical overdraft, and has mandated that the basin form a plan by 2020 to reach sustainable groundwater management by 2040. This information is critical to justifying the policies for collaborative groundwater management that Fresno County sets out in its Open Spaces and Conservation Element, and must be included in the Background Report.

To provide the basis for policies to analyze water resource impacts from proposed activities, the Background Document should also include information regarding the development and zoning of industrial and commercial developments that are in close proximity to residential homes and the potential harmful impacts on water quality and supply in these communities.

***F. The Noise Analysis Should Describe the Disproportionate Impact that Noise Has on Disadvantaged Communities***

The Background Report includes an analysis of major noise sources in the county and noise contours along major traffic corridors. However, it does not describe the disproportionate impact that noise has on some disadvantaged communities. The Background Report must describe the disparity in noise impacts



accurately by including references to low income communities around which agricultural, industrial and other activities are currently zoned and permitted.

For example, Cantua Creek and El Porvenir experience severe noise impacts from airplanes from the nearby airport, trucks going to nearby agricultural areas, and agriculture equipment operation. Residents who live along East Central Avenue between Highways 99 and 41 endure noise from the nearby highways, from the hundreds of trucks and cars trips that pass in front of their homes on a daily basis, and from round-the-clock construction of new industrial facilities that is taking place.

***G. The Background Report Should Discuss Economic and Demographic Conditions in Fresno County, Including Disparities by Race and Income Level***

As the Background Report provides the framework for the General Plan’s Goals and Policies, including environmental justice goals and policies, it should include relevant information regarding demographics in Fresno County and in Fresno County’s various towns and communities, differential access to basic services, and differential levels of vulnerability to environmental and safety risks.

**II. Comments on the Policy Document**

***A. Economic Development Goals and Policies Should Prioritize Economic Development for Lower Income Communities and Residents through Community Development and Career Development Strategies.***

**1. Incorporate Effective Measures To Prevent Displacement of Existing Business and Ensure Local Hire**

Fresno County has a wide variety of actors and businesses that contribute to its vibrant economy. The Economic Development Element focuses on bringing in industry and supporting agriculture. While the appearance of new actors bringing in new jobs and services may be beneficial to the County, the County should also include policies that ensure that these new businesses are not displacing local businesses, are hiring local residents, have high labor standards for workers, and are also meeting the local commercial needs for healthy food and retail stores. These needs have thus far not been met in disadvantaged communities in Fresno County, and Fresno County must ensure that any investment it acts to promote or permit does not aggravate existing disparities in health, jobs, and economic opportunities. Leadership Counsel has worked on advocacy surrounding local hire policies in the City of Fresno and elsewhere, and would be glad to be a resource for development of such policies and related implementation measures.

**2. Adopt & Prioritize Infill Development As An Economic Development Strategy**

The County should prioritize efforts to support and attract new business that meets the needs of existing communities, especially rural communities and disadvantaged unincorporated communities which disproportionately lack access to fresh and healthy food options, retail, healthcare and exercise facilities, among other essential commercial services. The OPR Guidelines affirm this approach, noting that many models for economic development recognize the role of infill development to “leverage resources and



increase access to services and amenities to support healthy lifestyles for local community members.” p. 209. We provide recommendations on how to improve and enact infill development policies in section II(B)(2) of this letter.

### **3. Ensure That Development Programs Advance Workforce Development & Living Wage Job and Career Opportunities Suited to a Changing Economy**

The 2017 General Plan Guidelines published by the Governor’s Office on Planning and Research also recommend that General Plans ensure that its planning for housing, job growth and vital services are complimentary so that all sectors of society are treated equally and growth “does not perpetuate or exacerbate existing problems.” p. 54. Providing low-paying jobs to low income communities with little chance of educational or technical capacity building opportunities keeps low income families impoverished and does not allow for upward mobility. Thus Fresno County must ensure that it is encouraging the creation of well-paying jobs with opportunities for career advancement to low income areas, integrated with affordable housing and high quality schools, so that low income families are able to escape the cycle of poverty. The General Plan focuses on emerging job and career fields and the likely transition of jobs from agricultural field work to other agricultural sectors and other sectors yet does not include policies aimed at ensuring career paths for low income residents, low income communities, and farmworkers who face reduced work opportunities due to a changing agricultural economy. Accordingly, Economic Development goals and policies should include goals and policies designed to ensure job readiness for and preferential access to emerging industries including clean energy, technology, services, and small-scale and large-scale agricultural industries, for lower income residents and communities, including farmworkers.

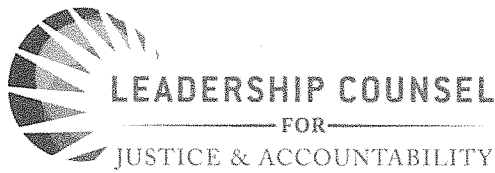
To this end, we recommend that the County expand on the following policies:

ED-A.3 - Expand representation on the Economic Development team to include representation from community based organizations, community based workforce development and apprenticeship programs, labor unions, local school districts, State Center Community College District and local universities such as Fresno State and Fresno Pacific.

Include new economic development policies focused on strengthening draft policies ED-A.9, A.10, A.13 and A.14 - by requiring partnerships between communities, business leaders, regional workforce developers, local schools and universities to establish workforce development programs to ensure that workers impacted and/or displaced by decreased labor demands due to changing crop patterns, crop shifts, and climate change receive training and necessary support to transition to new and emerging economic development opportunities.

Additionally, ED-A.12 and A.13 should ensure inclusion of and opportunities for small-scale farmers and farmers from under-represented communities.

Additionally, the County should add goals and policies to the General Plan to ensure adequate preferences and training for local communities including lower income residents including farmworkers to enter career paths including emerging areas in the technology, service, clean energy, and agricultural sectors.



This is of particular concern for lower income communities and employment sectors that will be impacted by climate change and decreased agricultural work.

#### **4. Remove Obstacles For Small-scale Farmers**

Several policies throughout the Agriculture and Land Use chapter prohibit subdivision of agricultural land for agricultural activities to less than 20 acres, or 40 acres, dependent on land use designation. Those policies, include LU-A.6, A.7 and LU-D.4. This maintains substantial barriers for residents hoping to develop small scale farming operations that could, in turn support other general plan goals including increasing access to fruits and vegetables, increasing economic opportunity, creating community gardens, and diversifying the agricultural economy. Those policies should be eliminated or amended to allow for smaller parcel sizes in agricultural areas when such parcels will further GP policies related to health and well being and economic opportunity for lower income residents and communities.

#### ***B. The General Plan Must Include Goals and Policies that Promote Economic and Environmental Well-being in Existing Communities, in Particular Communities Confronting Historic Underinvestment and Environmental Degradation.***

Fresno County's General Plan Update offers an opportunity to lay out both policies and implementation measures designed to secure and maintain a healthy and vibrant future for all residents of Fresno County. Unfortunately, historic decisions with respect to growth, investment, and land use have created vast differences among different racial and economic segments of the population with respect to neighborhood amenities, basic services, and healthy environments.

In Fresno County, disadvantaged unincorporated communities exhibit extreme and disproportionate deficits in basic services and infrastructure including water to wastewater infrastructure and services, sidewalks, complete streets, parks, street lighting, and other amenities necessary for the enjoyment of a safe and healthy environment. Of particular concern as well, disadvantaged unincorporated communities are disproportionately Latino as compared to unincorporated communities as a whole and are majority Latino, while unincorporated communities that are not disadvantaged are majority caucasian.<sup>5</sup> Fresno County also exhibits high levels of segregation, including within unincorporated Fresno County.<sup>6</sup> Despite the fact that unincorporated communities provide a large portion of Fresno County's labor force for its profitable agricultural industry, there has been a history of lack of planning and service provision for these cornerstone communities as evidenced by persistent drinking water quality and access issues, lack of wastewater or stormwater services, lack of pedestrian safety measures and facilities, lack of community plans and updated zoning, and lack of even acknowledgment for some in this draft document. At the same time, disadvantaged unincorporated communities are often most vulnerable to environmental degradation due to harmful land uses near and in their communities. For example, industrial uses surround Malaga, Calwa, and other communities - especially those outside of cities, and agricultural uses impact environmental quality in communities throughout the county. As noted above, of particular

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<sup>5</sup> California Unincorporated, 2013, available at : [http://www.policylink.org/sites/default/files/CA%20UNINCORPORATED\\_FINAL.pdf](http://www.policylink.org/sites/default/files/CA%20UNINCORPORATED_FINAL.pdf)

<sup>6</sup> San Joaquin Valley Fair Housing and Equity Assessment, 2014 (Available upon request)



concern is that many of these communities are disproportionately and majority communities of color. Malaga and Calwa, for example, are both 90% or more Latino.<sup>7</sup>

While good planning mandates fair and equitable treatment of all neighborhoods and sectors of the county, so too does state and federal law. Under federal law, Fresno County, as a recipient of federal funding, is both prohibited from discrimination in housing-related activities and transactions and has a duty to affirmatively further fair housing (“AFFH”). 42 U.S.C. 3601, *et seq* (Title VIII of the Civil Rights Act of 1968); 42 U.S.C §§ 2000d; 80 FR 42357, *et seq*. Federal regulation defines AFFH to mean:

“[t]aking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws. The duty to affirmatively further fair housing extends to all of a program participant’s activities and programs relating to housing and urban development.”

In addition, the law prohibits both actions and omissions that are intentionally discriminatory as well as those that result in a *disparate adverse impact* on protected classes. Under the same law Fresno County is also prohibited from contributing to any historical patterns of segregation and discrimination.

California Government Code section 12955(l) also prohibits discrimination and discriminatory impacts in the context of land use planning: it is “unlawful” to make land use decisions that discriminate against groups of a certain race or national origin (among other protected groups) in a way that makes housing opportunities unavailable to these groups. This applies to siting polluting services near and failing to provide infrastructure and services to certain areas, since these decisions critically impact the livability of the area.

Furthermore, General Plan law requires that the General Plan be “integrated, internally consistent, and compatible.” Gov. Code § 65300.5. This means that no policies in the General Plan may be in conflict with the County’s policies that it puts forth to comply with Government Code Sections 65302(h) and 65302.10, which require Fresno County to meet critical infrastructure needs of disadvantaged and environmentally burdened communities, respectively, and are intended to require local jurisdictions to diminish existing disparities in investment and environmental burdens that disproportionately harm disadvantaged communities.

As currently drafted, the General Plan’s goals, policies and implementation measures signal continued under-investment and lack of planning in disadvantaged communities, and concentration of harmful land uses near disadvantaged communities. These policies and omissions threaten to perpetuate *disparate impacts* under civil rights and fair housing laws, violate prohibitions against land use discrimination that

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<sup>7</sup> 2010 Census



impacts housing for certain groups, and violate state planning mandates. We have provided a series of recommendations below to bring the Draft Policy Document into compliance with Fresno County's civil rights obligations so that its General Plan treats all residents equitably.

**1. Ensure adequate drinking water, wastewater, and stormwater infrastructure and services in disadvantaged communities**

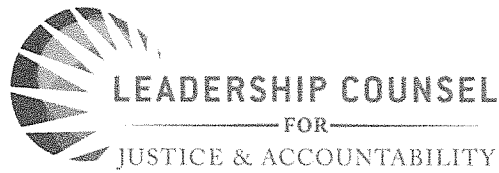
Severe deficiencies and disparities in the most basic infrastructure and services - drinking water and wastewater service - are evident through lower income communities in Fresno County. Not only do such disparities impact health and quality of life, but they also impede economic opportunity and security in the same communities. As noted in our comments above, many residents and many communities lack access to safe drinking water and many lack access to reliable wastewater services.

Unsafe drinking water exposes residents to both acute and chronic illnesses including cancers and gastrointestinal disorders, and inadequate wastewater service exposes residents to bacteria and pathogens. Many communities reliant on domestic wells, lose access entirely to domestic water and vulnerability to such water loss is increasing due to climate change and continued groundwater depletion. Additionally, lack of basic services, general plan policies, and other local policies including the Local Area Management Plan, restrict development and infill if community water or wastewater services are not available. This undermines community stability and economic development opportunities. Finally, lack of access to safe water and wastewater services can constitute a severe economic hardship as families must pay for bottled water, frequent septic system pumping, and damages caused by failing septic systems.

The County must develop goals and policies to address this urgent need. The County must complete an analysis as to which communities are at risk from unsafe or unreliable drinking water, and which communities are at risk from inadequate wastewater treatment. Due to the recent report from UC Davis and the County's analysis of disadvantaged communities there is better information now regarding the prevalence of vulnerable and tainted drinking water supplies, but there are still widespread gaps in information regarding homes reliant on private wells and septic systems. It is critical that the County conduct an analysis of risk and vulnerability in this General Plan.

Several communities with inadequate drinking water or wastewater service are in close proximity to community water systems and / or wastewater systems. For example, unincorporated communities just outside of the City of Fresno, and Tombstone Territory is similarly situated right outside of the sphere of influence of Sanger. In these circumstances service extension is of the most feasible and affordable means of securing safe drinking water and wastewater service to disadvantaged communities. Fresno County must include goals, policies and implementation measures in the General Plan to work with relevant agencies secure drinking water and wastewater service extend services to communities like Tombstone Territory.

We have extensive experience working with communities to secure adequate drinking water and wastewater services, and would be pleased to work with Fresno County to develop additional goals,



policies, and implementation measures necessary to ensure that all residents have access to safe and adequate drinking water and wastewater services prior to adoption of the General Plan

## **2. Include and Implement Infill Development Policies to Leverage Opportunities in Disadvantaged Communities**

The land use goals and policies, combined with recent zoning changes, promote investment in areas that are not existing disadvantaged, unincorporated communities, specifically by promoting and facilitating residential and supportive uses in urban cores, along transportation corridors, and areas zoned for primarily large lot development. Furthermore, long term underinvestment in disadvantaged unincorporated communities acts as a further obstacle to investment pursuant to the Draft's policies as drafted. Policy LU-F.3 promotes more dense housing along "major transportation corridors and transit routes" in areas that are "served by the full range of urban services, including...public services." and LU-F.4 also instructs the County to increase density and mixed use development for infill development only in "urban" areas. This leaves out most existing rural communities, which lack adequate "urban services," further hindering their ability to attract needed stores, medical clinics, housing, and other services and amenities. Section LU-E on Non-Agricultural Rural Development explicitly describes the County's intent to decrease development in rural communities. The County's lack of inclusion of policies or programs to update Community Plans for rural unincorporated community further emphasizes the County's plans not to invest in or develop critical infrastructure and services in these communities. These policies are concerning given the acute need for healthy stores, clinics, and other amenities in rural disadvantaged communities and perpetuate a cycle of underinvestment that communities are working so hard to reverse.

In order to address these critical needs and comply with its civil rights obligations not to further existing patterns of inequitable investment, the County should include a policy that encourages infill development in existing rural communities and neighborhoods. Complementary policies should be included in other relevant elements including the environmental justice element, health and safety element, and public facilities element. Second, Fresno County should add a Land Use implementation program that requires updates to existing Community Plans and requires creation of Community Plans for rural communities that do not currently have one. This policy should include a timeline for updating Community Plans and creating new Community Plans. Fresno County must add this policy and program to ensure that residents in all areas of the county have access to vital medical services, healthy food, affordable housing, and job and educational opportunities in their communities.

Third, Fresno County must include a methodology for identifying areas to be developed. The 2017 General Plan Guidelines from the OPR Guidelines recommend that land use elements contain a methodology for identifying areas to be developed. p. 52. Such a methodology has not been identified here. The OPR Guidelines also recommend that land use elements promote equitable access to parks. p. 54. Courts often look to OPR's General Plan Guidelines when considering whether a General Plan meets the requirements of state law General Plan law by courts.

*a. Prioritize Infrastructure and Infill Opportunities in Existing Communities Instead of Facilitating Infrastructure and Development in New Growth Areas.*



The General Plan should demonstrate an unequivocal preference for investment and development in existing communities rather than new growth areas. While stating a preference for urban core development, also loosens standards for sprawl and new town development in policy LU-A.1 by creating greater allowances for new development areas absent available services. The policy undermines the stated goal of preserving farmland while also drawing investment to new areas rather than existing communities. Any policies providing for new infrastructure and accompanying development should distinguish between infill development in existing communities, including and especially disadvantaged communities, where infrastructure is needed, and new towns and large scale sprawl, which are both inconsistent with the goal of directing growth away from agricultural land.

Recent General Plan amendments, included in Appendix B of the Draft General Plan, as well as transportation priorities contained in the draft 2018 Regional Transportation Plan<sup>8</sup> also demonstrate continued prioritization of investment in new growth areas. These policies and activities undermine several of the county's planning goals including helping to promote healthy and sustainable neighborhoods throughout the county.

The Policy Element must include a policy to prioritize the infrastructure and services needs of existing communities before new growth in order to comply with General Plan law, Environmental Justice law, civil rights law, and law on planning for disadvantaged communities.

## **2. Address Transportation in Disadvantaged Communities through Rural Complete Streets, Alternative Public Transit Models, and Investment**

Currently, there is a wide disparity between the amount of investment in transportation infrastructure in disadvantaged communities versus higher income communities in Fresno County, and as an unfortunate corollary, less investment in communities of color. Such a disparity can be seen simply by visiting disadvantaged communities in Fresno and contrasting their roads, sidewalks, and public transit with that of other areas of the County. This disparity in investment can also be witnessed by looking at the location of the projects proposed by Fresno County for construction in the 2018 RTP/SCS, the projects list for which includes very few projects that benefit rural disadvantaged unincorporated communities, and some projects for disadvantaged communities which are not projected to be completed until 2050.<sup>9</sup> Fresno County must include a policy in its Transportation and Circulation Element to prioritize equitable transportation investment, and bring up disadvantaged communities' transportation infrastructure to the same or similar level of transportation as other areas of the county.

### *a. Rural Complete Streets*

We are encouraged to see Complete Streets addressed for rural as well as for urban areas. A program should be added under the Administration and Implementation of the the Transportation and Circulation

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<sup>8</sup> Draft 2018 RTP/SCS Appendix C, Financing Mobility: Reference Materials, found at [https://www.fresnocog.org/wp-content/uploads/2017/02/2018-RTP\\_Appendix-C\\_DRAFT.pdf](https://www.fresnocog.org/wp-content/uploads/2017/02/2018-RTP_Appendix-C_DRAFT.pdf)

<sup>9</sup> Draft 2018 RTP/SCS Appendix C, Financing Mobility: Reference Materials, found at [https://www.fresnocog.org/wp-content/uploads/2017/02/2018-RTP\\_Appendix-C\\_DRAFT.pdf](https://www.fresnocog.org/wp-content/uploads/2017/02/2018-RTP_Appendix-C_DRAFT.pdf)





Element to include periodic review of *both* the urban and Rural Area Complete Streets Policy and update of guidelines to this program.

We are encouraged by the call for the county to work with districts to plan Safe Routes to School in program TR-B.7. However, this section should include a call for the development of a Safe Routes to School plan that identifies infrastructural and non-infrastructural projects and programs that increase both bicycling *and* walking to and from school, as well as identifies the schools most in need of improvements, either because of status as disadvantaged by income or health status, or high rates of collisions.

We are encouraged by the language on maintaining and implementing the Bicycle and Recreational Trails Master Plan. The county should develop a system to seeking state and funding to implement projects in the plan that prioritizes needs in Disadvantaged Communities.

The Rural Area Complete Streets Policy should include a program for periodic review of the policy and update of guidelines. We are encouraged to see a Rural Area Complete Streets Policy included in the Draft Revisions to the Transportation and Circulation Element. A program should be added under the Administration and Implementation of the the Transportation and Circulation Element to include periodic review of a Rural Area Complete Streets Policy and update of guidelines to this program. A program should also be added to ensure that there is funding to implement this policy.

*b. Explore alternative public transit models*

We recommend inclusion of a program to continue exploring alternative public transit models. Fresno County has a very large area of jurisdiction, with some large areas consisting of a low density of small communities far removed from larger cities and from each other, which makes fixed route transit both costly and inadequate to serve the transit needs of large portions of the county. Last year, Cantua Creek began a green ridesharing program called Van y Vienen that is flexible to community needs, affordable for residents, and driven by community residents. The project is successfully transporting residents every week, and is making a huge difference in residents' ability to access medical appointments, healthy food stores, and other services and resources in nearby cities. Encouraged by this successful model and rising incentives for such projects, agencies like Fresno County Rural Transit Agency (FCRTA) and many Central Valley MPOs are now looking into alternative modes of transit like Van y Vienen.

To better serve the transportation of all of its residents equitably, Fresno County should write an explicit program in its implementation for the Transportation and Circulation Element stating that it will continue to look into such programs.

**3. Access to Healthy Green Spaces for Disadvantaged Communities**

We are encouraged to see that the County will promote the continued and expanded use of national forests and national parks, and will expand the creation of parks in central community locations. Fresno County has the right idea in policy OS-H.6 to include parks in central locations so that residents can access green spaces easily and at a low cost, since many low income residents cannot afford the high price of visiting national parks. Additionally, we are pleased to see new policies with respect to



community gardens. However, in Fresno County, parks in disadvantaged communities are badly in need of maintenance, and many communities lack a healthy green space for recreation.

Fresno County's program OS-H.A in its Open Spaces and Conservation Administration and Implementation section requires the county to do an inventory of existing park space and look into other potential areas where parks may be established. Given the current lack of adequate park infrastructure in disadvantaged unincorporated communities, Fresno County must include a separate policy to look for funding for parks in disadvantaged unincorporated communities. Fresno County must ensure implementation of this policy by establishing an implementation program in its Open Spaces and Conservation Element to allocate funding for maintaining parks in disadvantaged communities.

#### **4. Complete and Update Community Plans; Definition of Urban Areas**

The Land Use Element should include a policy to create new Community Plans and update outdated Community Plans. Community plans are necessary to the healthy development and sustainability of communities. Program 6 of Fresno County's current Housing Element stated that this General Plan review process would address "the issue of updating the community plans," and committed to "[a]nnually explore and pursue funding opportunities for community plan updates as necessary to promote development within existing communities with active transportation and access to services and amenities." The policy suggested incorporating the community plans as a chapter in the General Plan's Policy Document "to address countywide policies and policies unique to the community plan areas as well as discussing irrelevant/outdated existing community plan policies."

Far from addressing the issue of updating outdated community plans, Fresno County's Policy Document does not include the community plans as part of the General Plan, and only lists them out. In order to comply with its commitment in the Housing Element, Fresno County must include all community plans as part of the General Plan, and include a program in its Land Use Administration and Implementation section to seek funding for community plan updates and conduct updates to community plans. It must set out a timeline for completing new community plans for unincorporated communities without a plan and for updating existing outdated community plans.

Fresno County should also include a Land Use program to create Community Plans for all unincorporated communities. We note that several communities don't have, and have never had community plans, and as noted community plans are critical to the economic and environmental well-being of the County and its constituent communities.

As a related matter, we would appreciate clarification as to the term "Urban Areas" which seems to have different definitions and uses in different sections. As the classification dictates certain programs, policies and land uses throughout the general plan, there must be clarity as to the meaning of the term and the determination of boundaries of Urban Areas.

#### **5. Protect Disadvantaged Communities from Polluting Activities and Prioritize Improving Air quality in Vulnerable Neighborhoods.**



As discussed in other sections of these comments with respect to environmental justice, land use, and transportation, the general plan and associated zoning code must improve environmental conditions, including air quality and groundwater quality in disadvantaged communities. As drafted, the Draft perpetuates negative environmental impacts on vulnerable communities and communities of color including the communities of Malaga and Calwa. As such, the General Plan, as drafted does not comply with interrelated state mandates including planning law

### ***C. Fresno County Must Improve Planning for Environmental Justice Communities***

State law requires protection from disproportionate environmental impacts based on civil rights and fair housing mandates, and recent changes to the government code through Senate Bill 1000 (Leyva, 2016) reinforce Fresno County's obligation to promote environmental justice, reduce health risks in disadvantaged communities, and ensure meaningful engagement in decision-making processes through general plan programs, policies and implementation measures. Specifically, Government Code Section 65302(h) requires Fresno County to:

- (A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
- (B) Identify objectives and policies to promote civil engagement in the public decision-making process.
- (C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

Fresno County's Environmental Justice Element sets out policies for protecting Environmental Justice (EJ) communities from sensitive land uses, increased safe active transportation infrastructure in EJ communities, healthy communities, and healthy food. Unfortunately, the goals and policies in the element are not sufficient. Furthermore, goals and policies in other elements of the general plan undermine environmental justice and are not consistent with goals that are or must be included among the County Environmental Justice goals, policies, and programs. The County can comply with its environmental, civil rights, and fair housing mandates with amended goals, policies and implementation measures that improve identification of environmental justice communities, ensure adequate protection from polluting land uses; secure basic infrastructure, community development and housing in disadvantaged communities; reduce health and safety risks including risks related to climate change; and ensure access to decision-making processes for residents of historically underrepresented communities.

#### **1. Improve Identification of Environmental Justice Communities and Explain Methodology for Identifying These Communities**

The Environmental Justice Element does not disclose the methodology it used to identify disadvantaged communities. While explains that Fresno County used the CalEnviroScreen tool to identify EJ communities, it does not explain how staff found communities based on the census tract data given by CalEnviroScreen. Fresno County should disclose how it used the CalEnviroScreen tool to identify



communities, how it found discrete communities within census tracts, and whether it used any other tools to find communities.

Also, in reading through the list of EJ communities identified, the communities of Daleville and Tombstone Territory are missing. Leadership Counsel can provide information about these communities and help connect Fresno County staff with residents in those communities to evaluate their needs and begin the engagement process.

In order to better identify all environmental justice communities in Fresno County, Fresno County should conduct qualitative data gathering in addition to its analysis through CalEnviroScreen and Google Earth. The County should speak directly to advocates who work in these communities in the county to double check their lists.

## **2. Include Adequate Protections of EJ Communities from Polluting Land Uses**

The proposed land use scheme in the general plan and zoning code perpetuates economic injustice and disproportionate impacts by encouraging industrial near lower income communities and communities of color, by allowing high impact and health impacting uses in even the supposed “light industrial” zone, by allowing both light and heavy industrial uses near residential areas, and by failing to require an adequate evaluation of impacts prior to land use approvals for such uses.

Any policies to protect EJ communities from pollution are meaningless if such considerations are not planned for, and in fact we see from the General Plan that Fresno County is planning on siting industrial facilities near Calwa, Malaga, and other disadvantaged communities, according to Policy ED-A.7. Fresno County must avoid siting polluting sources near EJ communities in order to protect EJ communities from further contamination. The OPR Guidelines recommend that local agencies consider establishing buffers zones, changing project siting, limiting number of facilities in areas, and changing land use designations around EJ communities to avoid additional contamination from polluting activities. p. 172. However, Fresno County appears to be siting new polluting industrial activities right near at least three EJ communities. Given that state law requires the General Plan to be inwardly consistent, this is also a violation of General Plan law. Gov Code § 65300.5.

Policies in the Economic Development and Agriculture and Land Use Elements will aggravate existing pollution of EJ communities’ air and water and cause additional noise contamination. The Economic Development Element includes several strategies to increase agricultural revenues by concentrating food processing and other value-add industries near lower income communities and communities of color, including fringe communities near cities and Malaga and Calwa in particular. Several policies in the Agriculture and Land Use Element as well demonstrate no regard for environmental justice or sensitive populations. LU-A.2 allows agriculture related uses by right without defining what agricultural related uses may entail or ensuring protection of nearby communities from potential impacts of such activities. Similarly, A.3 allows processing activities on agricultural land without requiring any analysis of potential air, water, traffic, or health impacts that may impact vulnerable communities. Policies included under Goal LU-D focus on increasing commercial activity at highway interchanges among highway five yet gives no consideration to potential benefits and impacts of focussed commercial development on nearby



residential communities. The policies do not acknowledge or address the potential impacts of concentrating economic development at freeway interchanges, as opposed to within communities in need of increased access to goods and services, nor do they address environmental impacts of increased commercial zoning on nearby communities.

Fresno County should must amend goals and policies related to siting of industrial and agricultural facilities including ED-A.6, A.7, A.14, A.15, A.16, and A.18 to include language ensuring that development, siting, concentration of facilities, and goods movement related to food processing and industrial development include protections for sensitive populations, comply with civil rights and fair housing laws, and be consistent with the General Plan's environmental justice, land use, and housing goals and policies. Additionally any siting and land use changes made in furtherance of policy ED-B.5 must include protections for sensitive populations and must be consistent with environmental justice, land use, and housing goals and policies.

We are also concerned about the goals and policies related to Oil and Gas, especially with respect to the impact of related activities and infrastructure on nearby communities and natural resources. The General Plan must include policies and implementation measures to protect natural resources and sensitive uses from the impact of gas and oil activities and infrastructure. We are especially concerned about the impacts of differential permitting standards based on three types of areas, with lower permitting standards for "non urban areas". The term Urban Areas is defined differently throughout the Draft and we therefore ask that its meaning be clarified. In this case, however, it seems that Urban Areas are tied to the existence of adopted community plans. As discussed in other sections of this letter, many community plans are out of date. Adequate protection for residences and other sensitive uses from oil and gas activities should not be dependent, or related in any way, to the existence of an adopted community plan but should instead be dependent on nearby sensitive uses including homes.

The Transportation and Circulation Element also ties environmental protections to "Urban Areas" in policy TR-A.16. It is critical that such protections are not limited to communities that have community plans for the reasons stated above.

The proposed zoning ordinance reinforces our concerns related to disproportionate impacts of certain industrial and agricultural uses on disadvantaged communities and communities of color. In particular, we are concerned regarding the number and intensity of allowable uses including uses allowable by right that can be sited near residential areas. We are further concerned that, according to the zoning map, several very high intensity uses are sited near low income, residential communities. We are also concerned that the zoning code allows broad allowance for dairies, and in particular expansion of dairies, near residential communities. We will conduct a thorough review of the zoning upon confirmation that that is the updated code that will be adopted with, and implemented by the general plan.

Fresno County must also include policies to protect communities from excessive noise by ensuring that noise is considered when evaluating environmental and social impacts from permitting new agricultural and industrial projects. As stated in the OPR Guidelines, "proposed land uses should be analyzed to ensure they are compatible with existing uses in the surrounding area, especially residential developments



and sensitive receptors, such as schools, hospitals, and places of worship."<sup>10</sup> This analysis should be more stringent for disadvantaged communities who are already overburdened by noise impacts. Such an analysis should also be included in the Environmental Justice element to ensure that noise does not disproportionately impact environmental justice communities.

We recognize that policies in section HS-G seek to protect noise-sensitive uses from excessive noise either through noise-reducing project design features or by allowing noise sensitive land uses to only locate in areas with ambient noise levels below specific thresholds. These policies must be consistent with the Environmental Justice and Economic Development elements to ensure unincorporated communities in Fresno County are not disproportionately burdened by noise pollution.

The General Plan and associated zoning ordinance must be improved to ensure goals, policies, and implementation measures that protect sensitive uses, and especially disadvantaged communities and environmental justice communities from impacts of potentially incompatible land uses in order to comply with California's planning laws, housing laws, and civil rights laws. We look forward to working with the county to develop these goals, policies, and relevant implementation measures prior to adoption of the General Plan and associated zoning code.

### **3. Improve Planning for Infrastructure and Service Provision to Environmental Justice Communities**

Government Code Section 65302(h) dictates that Fresno County must identify how it will ensure that EJ communities have access to public facilities and safe and sanitary homes. These public facilities include drinking water, wastewater, schools, food access, health services, safe and sanitary homes, and resources for physical activity.<sup>11</sup>

Fresno County has included policies EJ-B.A and EJ-C.A to work with developers to locate commercial outlets near disadvantaged, and to ensure that FCRTA "maintains" routes from disadvantaged communities to healthcare facilities and shopping outlets with healthy foods. EJ-C.1 promotes "access to" healthcare facilities and supermarkets, and EJ-C.2 establishment of healthy food stores in disadvantaged communities. Section EJ-B also contains policies that would locate stores nearby homes in EJ communities and ensure active transportation infrastructure for accessing stores and schools, and remove barriers to accessing outdoor physical activities. EJ-B.1 also commits to encouraging "walking and bicycling as daily physical activities by conveniently locating daily goods outlets, urban services and recreational facilities within a comfortable walking or biking distance from residential areas of disadvantaged communities." However, there are no policies in the Land Use Element to direct such infrastructure into EJ communities, many of whom live in rural areas that are specifically mentioned as areas where the County does not want to develop and areas where the County has not update Community Plans for decades. Therefore EJ-B.1 lacks concrete policies for directing development into these areas and cannot be considered an adequate commitment under Fresno County's obligations to identify *how* it will

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<sup>10</sup> OPR Guidelines, p. 133-134, referencing (Gov. Code § 65302 (f)(2), (f)(3)). "The noise contours must be used as a guide to establish a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise

<sup>11</sup> OPR Guidelines, p. 172



ensure access to public facilities for EJ communities. Furthermore, these policies do not ensure that these communities have adequate drinking water and wastewater services.

#### **4. Change Land Use and Zoning to Protect EJ Communities**

Government Code Section 65302(h) requires Fresno County to identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities. While Fresno County has included policies for including buffer zones and increased considerations in siting sensitive land uses near EJ communities, it has not included any policies for changing land uses in or near EJ communities. In order to do this, Fresno County should include policies in the Environmental Justice Element to actively change land use designations to prevent additional industrial use, facilitate more dense (infill) development, develop more affordable housing units, and allow for mixed use development to serve EJ communities' needs.

In addition, policy statements in the EJ Element to include buffer zones and protect disadvantaged communities from air pollution and other impacts of industrial uses are not reflected in the Zoning Ordinance, which does not provide for any heightened protections for disadvantaged communities. In fact, the Zoning Ordinance only requires a 15 foot setback for industrial uses adjacent to residential uses - a minimal set back which will not alleviate air quality impacts for nearby sensitive uses in disadvantaged communities. This inconsistency between the Zoning Ordinance and the Draft General Plan must be rectified to comply with the government code zoning ordinance and general plan's consistency requirement and SB 1000.

#### **5. Incorporate Climate Change Planning**

Climate Change resiliency should be incorporated into the Environmental Justice Element and the Health and Safety Element. The requirements of Government Code 65302 regarding climate change analysis in General Plans are laid out below in section G of this letter.

The OPR Guidelines encourage jurisdictions to consider climate change as a necessary part of crafting policies to mitigate environmental impacts on environmental justice communities. p. 170. In Fresno County, climate change is already having an impact on the environment, in particular on drinking water resources as the yearly snowpack and rainfall becomes more variable. Environmental Justice communities on domestic wells are the most susceptible to fluctuations in groundwater quantity from climate-related changes in groundwater. Fresno County must evaluate the impact of climate change on groundwater, air and other environmental factors impacting EJ communities and include programs and policies to address, mitigate and prevent these impacts.

#### **6. Ensure That Policies and Programs Facilitate and Promote Civic Engagement By Disadvantaged Communities in the Public Decision-Making Process.**

The new Environmental Justice Element includes Policy EJ-D.1, which requires the County to "ensure that residents of disadvantaged communities are provided the opportunity to participate in decisions that may have an adverse impact to their health." While this policy statement reflects the spirit of Section



65302(h)'s requirement that jurisdictions promote civic engagement in the public decision-making process, the Draft EJ Element, General Plan, and Zoning Ordinance lack any specific policies and objectives that will result in implementation that will actually facilitate and promote civic engagement. At the same time, the Draft Zoning Ordinance land use siting policies, which restrict resident participation, including in land use decisions that impact public health and quality of life, are inconsistent with this stated goal and therefore unlawful. § 65860.

The Draft Zoning Ordinance allows for various land uses that are associated with significant adverse impacts to public health, quality of life, and use and enjoyment of housing in the vicinity of such land uses with minimal to no public notice requirements. For instance, warehousing and wholesale is allowed by right -- with no public process -- in all industrial zones. Draft Ordinance, Table 2-8, Allowable Uses and Permit Requirements For Industrial Zones. The California Air Resource Board ("ARB") has identified warehouse and distribution centers as a significant contributor to diesel PM emissions, a known carcinogen. ARB Air Quality and Land Use Handbook: A Community Health Perspective, p. 11.<sup>12</sup> Petroleum refining and chemical manufacturing -- operations associated with significant health risks - require a CUP in M-3 districts, but the Draft Zoning Ordinance only requires notice of hearings for CUPs within a 300 foot radius. Draft Ordinance, Section 842.5. ARB Handbook, pp. 22-23. Draft Ordinance Section 842.5 and 874.6.020 only require that the notice of hearings for CUPs be provided to the owners of property, leaving tenants without any assurance of notice or ability to participate in the CUP consideration and issuance process.

Further, the Draft Ordinance includes no requirement for translation of notices into languages commonly spoken in neighborhoods where uses are proposed to be located, including uses linked to negative health impacts such as chemical manufacturing and petroleum refineries. See § 874.6.020. As a result, residents with limited to no English language proficiencies are significantly less likely to understand the notices they receive and have the opportunity to engage in the decision-making process.

While the County has not provided a draft land use map with the Draft General Plan Update which identifies the specific proposed land use designations of parcels, the Draft General Plan includes a land use map which identifies land use designations by general category. Based on this land use map as well as zoning of parcels identified in the County's online GIS system, existing and proposed industrial sites are disproportionately located next to disadvantaged communities that are disproportionately comprised of people of color, immigrants, and other groups protected under state and federal civil rights and fair housing laws. The lack of meaningful public notice for various industrial land uses will disproportionately exclude and impact EJ communities and populations that are the subject of SB 1000 and conflicts with General Plan Policy EJ-D.1's requirement that the County ensure that residents of disadvantaged communities have the opportunity to participate in decisions which may impact their health. We would be happy to work with the County to develop General Plan and Zoning Ordinance policies which ensure that residents have the opportunity to meaningfully engage in such land use decisions, including by requiring publication of notice in languages commonly spoken in the community in or near which the project is proposed; extended timelines for notice; notice requirements for uses such as warehouses which pose adverse health impacts; and noticing requirements for tenants, among others.

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<sup>12</sup> Available at <https://www.arb.ca.gov/ch/handbook.pdf>





In addition to ensure meaningful notice requirements for permit approvals under the Zoning Ordinance, the EJ Element should include proactive policies to ensure robust civic engagement opportunities in other decision-making processes relating to land use. One policy which the County could adopt would be to ensure representation by one or more residents from disadvantaged communities on the Planning Commission or to create a Disadvantaged Community Land Use and Investment Advisory Committee to provide ongoing advice and feedback to the County. In addition, the County can and should adopt policies to ensure that public outreach regarding land use planning includes events in disadvantaged communities, including rural communities; professional translation requirements and standards; and meeting times outside of work hours to facilitate resident engagement. Leadership Counsel is happy to talk with staff in person to discuss the details of these and other options to meet the County's requirement to adopt policies that promote civic engagement under SB 1000.

#### **D. Adopt A Comprehensive Set of Goals and Policies to Improve Air Quality**

Fresno County must enact preventive planning policies that protect residents from cumulative air pollution from a variety of sources, including air pollution from agricultural and industrial activities. General Code section 65302.1 requires Fresno County to amend relevant elements of its General Plan (i.e. land use, circulation, housing, conservation, and open space) to include a "comprehensive set of goals, policies and objectives that may improve air quality" and a set of "feasible implementation measures" to carry out those goals. Gov. Code § 65302.1(b). The goals, policies and objectives for improving air quality must be designed to do the following:

- a) Determine and mitigate project level and cumulative air quality impacts under the California Environmental Quality Act (CEQA) (Division 13 (commencing with Section 21000) of the Public Resources Code).
- b) Integrate land use plans, transportation plans, and air quality plans.
- c) Plan land uses in ways that support a multimodal transportation system.
- d) Local action to support programs that reduce congestion and vehicle trips.
- e) Plan land uses to minimize exposure to toxic air pollutant emissions from industrial and other sources.
- f) Reduce particulate matter emissions from sources under local jurisdiction.
- g) Support district and public utility programs to reduce emissions from energy consumption and area sources.

Policies OS-G.4, which requires consultation with the SJVAPCD for CEQA review for projects, and EJ-A.2, which requires mitigation where necessary for air quality impacts on disadvantaged communities, simply state the County's existing duties under CEQA and are not a "comprehensive set of goals, policies, and objectives" that improve air quality and meet the requirements of Government Code Section 65302.

In adopting the requirements established by Section 65203.1, the state legislature recognized that the "San Joaquin Valley has a serious air pollution problem" that requires the cooperation of land use and transportation planning agencies, transit operators, developers, the San Joaquin Valley Air Pollution



Control District, and the public and a “fundamental shift” in our land use and transportation planning practices to solve. *Id.* § 65203.1(a).

Fresno County must use the guidelines from the statute to formulate effective air quality protections and add policies to its Policy Document to comply with the statute. Furthermore, Fresno County must act now to comply with this statute.<sup>13</sup>

To this end, General Code section 65302.1 requires Fresno County to plan land uses, local actions, and support programs to reduce emissions from transportation, industrial source, energy consumption and other sources. The intent of General Code section 65302.1 is clearly to ensure that the cumulative and widespread impacts from many sources by instructing Fresno County and other local jurisdictions to evaluate air quality conditions on a County-wide basis and plan for reduction of contamination from the variety of sources. Fresno County’s project-by-project evaluation thus does not comply with this statute.

#### ***E. Improve Protections of Vital Groundwater Resources***

We commend Fresno County’s participation in local groundwater management efforts. We are grateful to see that the County has developed policies committing to “ensure that new development does not limit the capacity or function of groundwater recharge areas,” direct available water resources to those areas, and “develop and maintain an inventory of sites within the County that are suitable for groundwater recharge.”<sup>14</sup> We also commend the County’s willingness to consult with GSAs prior to significant General Plan Amendments.<sup>15</sup>

We are encouraged by the addition of a policy to actively participate in the development and implementation of Groundwater Sustainability Plans in PF-C.10, OS-A.6, OS-A.8 and OS-A.10. While we ask the County to note that the name of these plans should be more accurately written as “Groundwater Sustainability Plans” in accordance with SGMA, we are encouraged to see the County’s participation in this important process. Sustainable management of groundwater resources is critical to the economic wellbeing of Fresno County’s agriculturally based industries, and is particularly important to the physical well being of Fresno County residents who depend on groundwater for their drinking water resources.

However, in order to adequately protect drinking water resources, Fresno County must create a water budget in collaboration with local GSAs; analyze all projects for their potential impact on groundwater, including cumulative impacts; and encourage consolidation of drinking water systems.

#### **1. Create a water budget in collaboration with local GSAs**

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<sup>13</sup> According to the statute, “[t]he legislative body of each city and county within the jurisdictional boundaries of the district shall comply with this section no later than one year from the date specified in Section 65588 for the next revision of its housing element that occurs after January 1, 2004.” Check the deadline looking at 65588 and the PDF on HCD’s housing element section of its website.

<sup>14</sup> December 2017 Draft General Plan Revisions, Policies OS-A.6 - OS-A.8, LU-A.20.

<sup>15</sup> December 2017 Draft General Plan Revisions, Policies OS-A.10.



Developing a water budget for the county is vital to efforts to sustainably manage groundwater resources. We strongly recommend that Fresno County not delete PF-C.5, which would require the County to develop a water budget. The County should work with Groundwater Sustainability Agencies to develop a Fresno County water budget in coordination with the Groundwater Sustainability Plans pertaining to each basin in the County. Such a water budget would be essential to Policy PF-C.16 requiring analysis of the impact of discretionary projects on the water supply. We also recommend that the analysis of the water supply in PF-C.16 also state that such an analysis will seek to ensure adequate supply of clean drinking water sources, and projects will not be approved if these supplies are threatened.

We also recommend that Fresno County add a program to implement this policy, by reinstating program OS-A.B, specifying that this it will develop a water budget in coordination with local GSAs. It should also add a policy in the Open Spaces and Conservation element and the Public Services element to collaborate with GSAs on groundwater management, similarly to the way it collaborates with IRWMP in other programs.

**2. All projects potentially impacting water resources should be analyzed for their impacts on water supply and quality, including cumulative impacts**

Additionally, policies PF-C. 15 and PF-C.16 require projects to evaluate the water supply if they are proposed in County land, but omits existing city projects that have environmental impacts to County residents who already do not have a sustainable water supply and or have a water supply that is contaminated. Cumulative impacts on drinking water supply should be central to this analysis.

We recommend that the Policy Document include an analysis detailing the cumulative effects on water supplies for communities throughout the County, specifically communities who do not have consolidation options as as a means to access clean water. In addition to the identified policies, the county should look for viable, sustainable, and permanent solutions for communities who are experiencing high cost of surface water and high levels of contamination.

**3. Protect drinking water supplies by enacting a strong policy to encourage consolidation of drinking water systems**

Fresno County must ensure effective planning to ensure adequate water resources, and also cannot violate the Human Right to Water, which was passed into legislation in 2012.<sup>16</sup> Drinking water systems are much more effective at protecting communities and families from variations in water supply and quality, and therefore must be an integral part of water resource management and guaranteeing the human right to water. We strongly recommend that Fresno County protect its residents' drinking water supplies by encouraging consolidation of drinking water systems by changing its Policy PF-C.18 to "The County shall discourage the proliferation of small community water system *when consolidation with or connection to another larger system is infeasible and another permanent solution for drinking water exists.*"

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<sup>16</sup> Water Code section 106.3.



Septic systems are one of the main causes of nitrates contamination in the Central Valley,<sup>17</sup> and domestic wells have been prey to widespread shortages of water and water contamination issues in the Central Valley, with no assurance that such conditions will change in the future. Emergency water shortages in East Porterville, Tombstone Territory, Okieville, and numerous other communities show the delicate predicament that rural Central Valley communities on domestic wells face. Instead of encouraging domestic well usage in rural communities, Fresno County must encourage the construction of water systems and extension of drinking water from nearby drinking water systems where geographically and economically feasible. To avoid nitrate and bacteria contamination from septic systems, Fresno County must also encourage wastewater system construction or extension of wastewater systems out to communities on septic systems where feasible.

***F. Land Use Element Must Include an Accurate Land Use Designation Map and Provide Better Definitions Regarding Different Land Use Designations and Related Conditions.***

**1. Provide an Accurate Land Use Designation Map and Better Define Land Use Designations**

The lack of a land use map defining where different land uses are proposed, undermines our ability to conduct a comprehensive and informed review of the Agricultural and Land Use Element, the General Plan as a whole, and the zoning code. We request that a map be released immediately along with additional time to respond to relevant goals, policies, and implementation measures in both the General Plan draft and the Draft zoning code. The table outlining relevant land uses (Table LU-1) does not appear to include all types of residential uses and densities in the county but without an accompanying map it is hard to determine where discrepancies may lie. Further clarification as to if, when, and under what circumstances different land uses may overlap would be helpful in analyzing this and other elements.

**2. Define Certain non-agricultural uses**

The same table references “certain non-agricultural uses” as allowable uses in several land use designations but does not define what those non agricultural uses are. The draft should be updated to clarify that ambiguity.

***G. Incorporate Effective Climate Adaptation and Mitigation Policies***

Section 65302 of the Government Code requires Fresno County to include an extensive analysis of potential climate change impacts in its Safety Element. Under the law, this analysis must go beyond an analysis of flooding and fire protection. The Fresno County Policy Document, however, omits the prior “Safety for Climate Change” policy in the Health and Safety Element. HS-C.6, which encourages expansion of stormwater and flood protection infrastructure capacity to changes in precipitation and extreme weather events from climate change, covers only the effects of flooding. Climate change has a wide variety of effects, including but not limited to extreme heat waves, drought, and reductions in surface water and groundwater supply. The OPR Guidelines state that the General Plans should plan to

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<sup>17</sup> UC Davis, Technical Report 4: Groundwater Nitrate Occurrence With a Focus on Tulare Lake Basin and Salinas Valley Groundwater, found at <http://groundwaternitrate.ucdavis.edu/files/139106.pdf>, p. 26.



use the built environment to promote climate resiliency goals, among other things. p. 205. The County should assess and establish clear policies to ensure that all communities have adequate groundwater supply to protect drinking water resources in case of drought from climate change, and should address the other effects of climate change including extreme heat.

\* \* \* \* \*

Thank you for your consideration of our recommendations above. We look forward to an updated draft and working with Fresno County staff on implementation measures for the policies in its 2018 General Plan. We will provide suggested implementation measures when goals and policies are improved in accordance with our suggestions.

Sincerely,

Amanda Monaco  
Policy Advocate  
Leadership Counsel for Justice and Accountability

Marty Martinez  
Safe Routes to Schools National Partnership

Jim Grant  
Catholic Diocese of Fresno



May 4, 2018

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**Sent via Email & Fresno County General Plan & Zoning Ordinance Comment Form**

**RE: Comments on Draft Zoning Ordinance Update**

Dear Mr. Khorsand:

Thank you for the opportunity to provide comments on Fresno County's Draft Zoning Ordinance Update ("Draft Ordinance" or "Draft"). This letter addresses the changes required for the County to comply with the County's 2015-2023 Housing Element and requirements in state law to make certain amendments to its Zoning Ordinance to allow and promote the development of affordable housing.

Leadership Counsel for Justice and Accountability works alongside residents of disadvantaged communities of the San Joaquin Valley and East Coachella Valley to advocate for sound policy and eradicate injustice to secure equal access to opportunity regardless of wealth, race, income, and place. Leadership Counsel works directly with residents in several communities in unincorporated Fresno County, including Calwa, Daleville, Lanare, Cantua Creek, Toombstone Territory, and the Jane Addams neighborhood that is intersected by the City of Fresno.

Public Interest Law Project provides litigation and advocacy support to local legal services and public interest law programs throughout California. PILP works to bring affordable housing to lower income families and homeless people, provide access to services and public benefits for lower-income persons and persons with disabilities, and protect persons displaced by government action.

As explained in detail below, the Draft Ordinance fails to satisfy the County's obligations to comply with the Employee Housing Act and the State Density Bonus Law, to allow for the development and operation of emergency shelters and transitional, supportive housing, and multi-family housing at densities sufficient to meet the County's need for housing affordable to lower-income residents, and to provide necessary reasonable accommodations.. In addition, the Draft Zoning Ordinance and General Plan Updates establish inconsistent density limitations in conflict with state law and the County's Housing Element. We ask that the County revise the Draft Zoning Ordinance and General Plan to comply with these and other applicable mandates before their adoption. Leadership Counsel and PILP are available and happy to meet with County staff to assist the County in its effort to develop a Zoning

Ordinance and General Plan Update that comply with all applicable law and that advance access to affordable housing opportunities for all Fresno County residents.<sup>1</sup>

**I. The Draft Ordinance Fails to Comply With The Employee Housing Act**

The Draft Zoning Ordinance fails to comply with the Employee Housing Act ("EHA"), Health and Safety Code Section 17000, *et seq.*, by excluding housing expressly included in the EHA in its definitions of employee housing, by failing to allow employee housing in zones where agriculture is allowed and by placing unwarranted restrictions on the development of employee housing.

The Employee Housing Act at Government Code Section 17021.6 reads:

“Any employee housing consisting of no more than 36 beds in a group quarters or 12 units or spaces designed for use by a single family or household shall be deemed an agricultural land use for the purposes of this section. For the purpose of all local ordinances, employee housing shall not be deemed a use that implies that the employee housing is an activity that differs in any other way from an agricultural use. No conditional use permit, zoning variance, or other zoning clearance shall be required of this employee housing that is not required of any other agricultural activity in the same zone. The permitted occupancy in employee housing in a zone allowing agricultural uses shall include agricultural employees who do not work on the property where the employee housing is located.” (Sec. 17021.6(b))

Government Code Section 17021.5 further provides that:

“No conditional use permit, zoning variance, or other zoning clearance shall be required of employee housing that serves six or fewer employees that is not required of a family dwelling of the same type in the same zone.” (§ 17021.5(b)), and;

“employee housing that serves six or fewer employees shall not be subject to any business taxes, local registration fees, use permit fees, or other fees to which other family dwellings of the same type in the same zone are not likewise subject.” (§ 17021.5(c))

Fresno County’s 2015-2023 Housing Element (“Housing Element”) acknowledges that the County’s current Zoning Ordinance is inconsistent with the EHA and Housing Element Program 10 requires the County to amend its Zoning Ordinance to come into compliance by the end of 2016. P. 2A-150.

In enacting these provisions, the Legislature declared “that it is the policy of this state that each county and city shall permit and encourage the development and use of sufficient numbers and types of employee housing facilities as are commensurate with local need.” §§ 17021.5(e), 17021.6. The Housing Element states that “about 58,600 workers were employed in farm labor throughout [Fresno] County [in 2012], indicating a significant need to provide housing for farmworkers and their families...” Housing Element, p. 2A-8. The Housing Element further acknowledges that, “Farmworkers have a difficult time locating

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<sup>1</sup> Leadership Counsel for Justice and Accountability is also submitting separate comments on the Draft General Plan and Background Report, which compliment these comments.

affordable housing in Fresno County,” because many farmworkers have limited English language skills and very low household incomes. Housing Element, p. 2-56.

The County must revise its Zoning Ordinance to address the inconsistencies with the EHA described below to permit and encourage the development and operation of employee housing consistent with state law and the Housing Element.

**A. The Draft Zoning Ordinance Definition of Farmworker Housing Dwellings and Farmworker Complexes Excludes Employee Housing Encompassed By The EHA**

For purposes of compliance with the EHA, the Draft Zoning Ordinance refers to the terms “Farmworker,” “Farmworker dwelling unit,” and “Farmworker housing complex.” The Draft Zoning Ordinance is inconsistent with the EHA, because the definitions of these terms limit the definition of employee housing permitted under the Draft Ordinance to exclude housing accommodations encompassed by the EHA.

First, the Ordinance defines “Farmworker,” as, “A person who derives more than half of their total income as an employee in service of an active agricultural operation,” and limits the definition of Farmworker dwelling units and Farmer housing complexes to units occupied by farmworkers. However, the EHA’s provisions extends to all employee housing consisting of 36 beds or 12 single family units occupied by employees, without restriction to the percent of income derived by the employee in agriculture or any other form of employment. Health & Safety Code §§ 17005, 17021.5, 17021.6.

Second, the definitions of “Farmworker dwelling unit” and “Farmworker Housing Complex” impose limitations on the types of housing permitted under the Zoning Ordinance that are inconsistent with the scope of housing that the County must allow under the EHA. For instance, the definition of “Farmworker Housing Complexes” includes only dwelling units occupied “exclusively” by farmworkers. Draft Zoning Ordinance, p. 7-19. The EHA, in contrast, provides that “Employee housing,” “means any portion of any housing accommodation, or property upon which a housing accommodation is located” occupied by five or more employees which otherwise meets the requirements of Health and Safety Code Section 17008. §§ 17008(a)(1), 17008(b)(1)(D). A jurisdiction may not restrict housing accommodations under the EHA on the basis that the accommodations are not *exclusively* occupied by farmworkers, as the Draft Zoning Ordinance would do.

In addition, the Draft Zoning Ordinance limits the type of housing accommodations included in the definition of “Farmworker dwelling unit” to single-family residential units and in the definition of “Farmworker housing complexes” to group quarters or “residential units”. The Draft does not define “residential units,” but refers to the definition of “Dwelling unit” to define the term, “Residence.” Draft Zoning Ordinance p. 7-45. The Draft Ordinance in turn defines “Dwelling unit” as a structure designed exclusively for residential occupancy, including single, two- and multi-family dwellings, and not trailers “except in the ‘T-P’ zone district.” Draft Zoning Ordinance ,p.7-17. Yet, Health and Safety Code Section 17008 provides that employee housing consists of “any living quarters,” and lists a number of types of housing not included in Draft Ordinance definitions. See § 17008(a)(1).

The definitions used by the Draft Ordinance for employee housing place restrictions on the types of housing accommodations permitted and the circumstances under which they are



permitted that are not permissible under the EHA. To address this inconsistency, we recommend that the County revise the Draft Ordinance to align with and refer to the definitions included in the Ordinance with those contained in Health and Safety Code Section 17008.

### **B. The Draft Ordinance Improperly Excludes Farmworker Housing From Zone Districts Where Agricultural Uses Are Allowed**

The Draft Zoning Ordinance does not satisfy the core requirement of Health and Safety Code Sections 17021.5 and 17021.6 that jurisdictions allow employee housing of up to 36 beds in group quarters or twelve individual dwelling units on the same terms as residential uses in the same zone district.

The section of the Draft Ordinance which establishes specific standards for farmworker housing states that Farmworker Housing Complexes consisting of up to 36 beds or 12 single family units are allowed in AE and AL Zone Districts. Draft Zoning Ordinance, § 834.4.160(A), p. 4-40. On the other hand, Table 2-2, Allowable Uses and Permit Requirements for Agricultural Uses, indicates that Farmworker Complexes are allowed by right in Districts A-1 and A-2, which also allows agricultural uses by right. Draft Zoning Ordinance, p. 2-9. The County must correct this inconsistency in the Draft Zoning Ordinance § 834.4.160 to clarify that employee housing is allowed on the same terms as agriculture in Zone Districts A-1 and A-2.

The Draft Ordinance also allows agricultural uses in several zones in which it does not allow farmworker housing complexes. These districts include R-A, R-R, R-1-A, R-1-AH, R-1-E, and R-1-EH, where agricultural uses are allowed by right. Draft Zoning Ordinance, Table 2-4, p. 2-20; 2-4-1, p. 2-24.

The County must revise the Draft Ordinance to treat employee housing of the sizes described in Sections 17021.5 and 17021.6 as an agricultural use and therefore must be allowed in zones where agriculture uses are allowed.

### **C. The Draft Ordinance Places Unwarranted Restrictions on Farmworker Housing Complexes**

Draft Zoning Ordinance Section 834.4.160 imposes a number of “minimum standards” which farmworker housing complexes must meet to receive County approval. Some of these standards conflict with the EHA’s clear prohibition on differential treatment of employee housing from agriculture. *See* § 17021.6 (prohibiting local regulation that implies that “employee housing is an activity that differs *in any other way* from an agricultural use.” italics added). These inappropriate standards include the following:

- Minimum parcel size of 20 acres whereas agricultural uses are allowed on parcels smaller than 20 acres in several zone districts. Draft Zoning Ordinance §§ 834.4.160(A)(4)(a); *See* Table 2-5, pp. 2-27, 28. § 834.4.160(B)(4)(a).
- 200 foot minimum property line setback for year round farmworker housing, while no such limits are imposed on agricultural uses. They are also more than five times the set back required for residential uses in R-1-A and R-1-AH districts and for primary structures in A-2 districts and four times the set back required for residential uses in the R-1-E district. *Id.* pp. 2-15, 27, 28.

- Prohibition on subdivision of the parcel on which the Farmworker Housing Complex is located, to the extent the same restriction is not imposed on agricultural uses. Draft Zoning Ordinance (§ 834.4.160(B)(7)).

In addition, Draft Zoning Ordinance Section 834.4.160(B)(8) provides that farmworker housing “is subject to removal within ninety (90) days...if the agricultural employment upon which the need for the unit(s) is based is eliminated.” This section is inconsistent with Sections 17021.6 and 17008, which provide that employee housing included in the scope of the Act includes housing not maintained in connection with any work or workplace. §§ 17008(b)(1)(B); 17021.6(d). It is also inconsistent with state policy expressed in the EHA, “that each county and city shall permit and encourage the development and use of sufficient numbers and types of employee housing facilities as are commensurate with local need,” and given the County’s own recognition in its Housing Element of the enormous unmet need for farmworker housing. §§ 17021.5(e), 17021.6; Housing Element, pp. 2A-8, 2-56. By subjecting farmworker housing to removal based on the elimination or suspension of one agricultural employer, farmworkers who become re-employed at another agricultural operation and farmworkers already employed at other agricultural operations may lose their housing and the total housing supply for farmworkers in the County will decrease, exacerbating the County’s great need for farmworker housing.

The County must address the aforementioned inconsistencies with the Employee Housing Act in order to come into compliance with that Act and satisfy its commitment to do so pursuant to Housing Element Program 10.

## **II. The Draft Ordinance Is Inconsistent With the State Density Bonus Law**

The State Density Bonus Law requires local governments to provide developers with a density bonus, concessions and incentives when development projects include affordable units. Local governments must adopt regulations to implement the law. Gov. Code § 65915. Fresno County must amend its Zoning Ordinance to meet the current requirements of the Density Bonus Law. Housing Element, p.2A-148. Housing Element Program 10 requires the County to adopt a density bonus up to 35% over otherwise maximum allowable residential density in a given zone district and to provide other incentives to developers who meet the threshold for the amount of affordable housing provided by 2016. Housing Element, p. 2A-9.

The Draft Zoning Ordinance section, “Affordable Housing Incentives - Density Bonus,” contains a number of significant discrepancies with the State Density Bonus Law. These discrepancies must be corrected prior to adoption of the final Zoning Ordinance for the County to comply with state law and Housing Element Program 10.

### **A. The Draft Ordinance Fails To Provide for a Density Bonus For Housing For Foster Youth, Disabled Veterans, and Homeless Persons As Required By Government Code Section 65915**

The Density Bonus Law includes five bases upon which a development shall qualify for a density bonus and incentives or concessions pursuant to the law. The Draft Ordinance fails to include one of these bases, that set forth in Government Code Section 65915(b)(E):

“Ten percent of the total units of a housing development for transitional foster youth,

as defined in Section 66025.9 of the Education Code, disabled veterans, as defined in Section 18541, or homeless persons, as defined in the federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Sec. 11301 et seq.)..." (See Draft Ordinance, p. 3-27)

The County must revise the Draft Ordinance to include this basis.

**B. The Draft Ordinance Includes Exceptions to the Requirement to Grant Concessions or Incentives That Are Not Permitted by State Law**

Next, Government Code Section 65915(d)(1) provides that a city or county shall grant the concession or incentive requested by the applicant, unless the county makes one of three written findings set forth in sub-sections (A), (B), and (C) based on substantial evidence. Sub-section (A) reads as follows:

"The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs...or for rents for the targeted units to be set as specified in subdivision (c)." Gov. Code § 65915(d)(1)(A).

Draft Zoning Ordinance Section 824.3.040 runs afoul of the limitations imposed on the County to refuse to grant incentives and concessions under the Density Bonus Law. First, Section 824.3.040(A)(1) misstates finding (A) of Government Code Section 65915(d)(1) as follows:

"The incentive or concession is not required to provide for affordable housing costs...or for rents for the targeted units to be set as specified in Section 824.3.070 B. (Unit cost requirements)" Draft Zoning Ordinance.

An incentive or concession may result in "identifiable and actual cost reductions," and qualify for that incentive or concession under the State Density Bonus Law, but may not be "required" per se to meet the costs of providing affordable housing units pursuant to section 824.3.040. We advise that the County revise Draft Zoning Ordinance section 824.3.040 to accurately mirror the language of Government Code Section 65915(d)(1).

Draft Zoning Ordinance Section 824.3.040(A)(2) similarly deviates from state law. That section provides that, "The applicant shall show that a waiver or modification of development standards is necessary to make the housing units economically feasible." This requirement and basis for refusal to grant an incentive or concession is not allowed by statute. Gov. Code § 65915(d)(1). The Density Bonus Statute allows applicants improperly denied a density bonus, incentive, or concession to initiate judicial proceedings, recover attorney's fees and costs of suit, and provides that the city or county that denied the request bears the burden of proof to establish the propriety of the denial. Gov. Code § 65915(d)(3).

Furthermore, when describing the types of incentives allowed, the Draft Zoning Ordinance provides that reductions in site development standards and other regulatory incentives proposed by the applicant or the County must result in not only identifiable and actual cost reductions but also "financially sufficient" reductions. Draft Zoning Ordinance §

824.3.040(C)(1)&(3). While the Density Bonus Law allows for the first two qualifiers contained in the Draft Zoning Ordinance -- that the cost reductions be “identifiable” and “actual” -- it does not allow for the later qualifier, that they be “financially sufficient.” The term “financially sufficient” is also vague and ambiguous as used in Section 824.3.040(C) and its inclusion would authorize the Board to deny incentives on grounds other than those permitted by state law. The County must revise Section 824.3.040(C)(1) and (3) by removing the “financially sufficient” language and making it and other subsections consistent with state law.

### **C. The Proposed Discretionary Approval Requirement for a Density Bonus Approval is Inconsistent With Section 65915(f)(5)**

Draft Zoning Ordinance Section 824.3.090(A), “Processing of Bonus Requests,” provides as follows:

“A. Permit Requirement. A request for a density bonus and other incentives and concessions shall be evaluated and decided through Conditional Use Permit approval in compliance with Chapter 842.5 (Conditional Use Permits).”

Section 824.3.090(A) runs expressly contrary to the Density Bonus Law, which explicitly states that, “The granting of a density bonus shall not require, or be interpreted, in and of itself, to require a general plan amendment, zoning change, or other discretionary approval.” § 65915(f)(5). The California Office of Planning and Research, the comprehensive state planning agency, defines a Conditional Use Permit as, a “discretionary permit that enables a city or county to consider, on an individual basis, specific land uses that might otherwise have undesirable effects upon an area and to approve such uses when conditions can be placed on them that would avoid those effects.” Office of Planning & Research, 2017 General Plan Guidelines, p. 235. Draft Zoning Ordinance Section 824.3.090, which establishes the County’s purpose and requirements for the issuance of a Conditional Use Permit, leave no doubt that a Conditional Use Permit is a “discretionary” and not ministerial approval.<sup>2</sup>

In addition, the requirement that a density bonus be processed through a Conditional Use Permit would impermissibly require the County to make a series of findings required for the issuance of a Conditional Use Permit under the Draft Zoning Ordinance and which are not authorized under the Density Bonus Law. Draft Zoning Ordinance, § 842.5.050(B)(1)-(4).<sup>3</sup> Gov. Code § Section 65915. For this reason too, the County must revise the Draft Zoning Ordinance so that a density bonus request is not subject to a conditional use permit process, or any other discretionary review process. to eliminate the requirement that the issuance of density bonuses occur through the issuance

### **D. The Draft Ordinance’s Bases to Deny Waivers of Development**

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<sup>2</sup> See e.g., Section 842.5.010, Purpose of Chapter, “...This review shall determine whether the proposed use should be allowed by weighing the public need for and the benefit(s) to be derived from the proposed use, against the potential negative effects it may cause;” and Section 842.5.050(A), Findings and Decision, Commission’s Action, “The Commission may approve or deny a Conditional Use Permit in whole or in part, and may impose specific development and operational conditions.”

<sup>3</sup> See, for example, 842.5.050(B)(3), “The proposed use will have no adverse impact on abutting property and surrounding neighborhood or allowed use thereof.”

### **Standards Exceed Those Allowed Under Section 65915**

Government Code Section 65915(e)(1) requires local governments to grant an application for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development that otherwise qualifies for a density bonus at the density permitted under the Density Bonus Law. While Draft Zoning Ordinance Section 824.3.120(B) provides for the issuance of waivers, it attempts to limit the issuance of waivers by requiring that the application “show that the waiver or modification is necessary to make the housing units economically feasible.” The Density Bonus Law does not permit the County to limit the issuance of waivers on this basis. § 65915(e)(1). Thus, the Draft Zoning Ordinance section 824.3.120(B) must be revised to comply with state law.

### **III. The County Must Revise the Draft Ordinance to Allow Emergency Shelters In Accordance With Government Code Section 65583**

Government Code section 65583(a)(4) requires each city and county to establish at least one zone where emergency shelters are permitted without discretionary review. The zone must have sufficient capacity to accommodate the need for emergency shelters identified in the housing needs assessment portion of the housing element, specifically, Government Code section 65583(a)(7). Gov. Code § 65583(a)(4).

The definition portion of the zoning ordinance amendments state that emergency shelters are permitted in the C-4 and C-M zones without discretionary review. Draft Zoning Ordinance, § 834.4.130. But the list of permitted uses in the C-4 zone does not include emergency shelters. Draft Zoning Ordinance, Table 2-6, beginning on p. 2-46. Nor does the list of permitted uses for the C-M zone include emergency shelters. Draft, Table 2-8, , beginning on p. 2-62. The C-M zone also does not permit any residential uses, with or without discretionary review. As the state agency charged with interpreting and applying state Housing Element law, the Department of Housing and Community Development (“HCD”) provides guidance on the Housing Element law’s requirements. HCD’s guidance regarding SB 2 requires that the County evaluate the compatibility of emergency shelters with the other permitted uses in the zone when determining where emergency shelters should be allowed. *See* HCD memo, dated May 7, 2008, updated April 19, 2013. ; Based on the permitted uses in the C-M zone and the lack of any residential uses in this zone, it will be difficult to make a finding that shelters would be a compatible use in the C-M zone. The County should identify a different zone where emergency shelters are permitted without discretionary review; a zone compatible with residential uses and where transportation and services are available.

Also, the calculation required to determine the number of beds allowed in an emergency shelter is very complicated [3 x 1 unit per 2400 sq.ft; not to exceed 60 beds]. The Draft Zoning Ordinance should include a chart where a potential developer could determine the maximum number of beds based on the square footage of the site in order to promote and facilitate the development of emergency shelters.

### **IV. The Draft Ordinance Does Not Comply With State and Federal Laws Requiring The County to Ensure Reasonable Accommodations**

The Draft’s proposed Reasonable Accommodation policy does not comply with federal Fair

Housing Act (42 USC § 3604(f)(3)(B)) or the state Fair Employment and Housing Act (FEHA) (Gov. Code §§ 12927(i)(1) and 12955(1)).<sup>4</sup> Draft, § 852.5.010, *et seq.* It also does not satisfy Housing Element Program 10's requirement that the County establish a reasonable accommodations procedure to provide flexibility in policies, rules, and regulations in order to allow persons with disabilities access to housing.

First, the County cannot require the request for an accommodation be distributed to all neighbors within 300 feet, nor any notice indicating the change requested is related to a reasonable accommodation. Because the accommodation requested is necessary to accommodate someone's disability, any information about a person's disability, including the fact that the person has a disability, is confidential. Requiring notice of that confidential information to neighboring properties is unlawful and violates the privacy rights of the person requesting the accommodation. *See* The Joint Statement of the Department of Housing and Urban Development and the Department of Justice on State and Local Land Use Laws and Practices and the Application of the Fair Housing Act and the model ordinance on HCD's website.

Second, the Draft Zoning Ordinance § 852.5.030 requires the payment of a fee when submitting a request for an reasonable accommodation. This also runs afoul of anti-discrimination laws. The only charge that could be assessed for an accommodation request is if the accommodation itself, a variance, has a related fee. There cannot be a fee assessed just for making the reasonable accommodation request, it is a legal requirement to provide the accommodation not an optional development strategy subject to development fees.

Third, the policy can only contain two grounds to deny a reasonable accommodation request: if the request is an undue burden or a fundamental alteration of the policy or program. *See* Joint Statement. Section 852.5.070 provides for additional bases for denial that conflict with the requirements of state and federal fair housing laws. The County is correct that a reasonable accommodation is only required for individual who meets the definition of disability as detailed in 852.5.020, and must be necessary for the individual to have access to housing. The additional grounds included in the Draft Zoning Ordinance, impact on surrounding uses or the physical attributes of the property and structures, ( §852.5.070) must be removed and their continued inclusion would conflict with both federal and state anti-discrimination laws.

**V. The County Must Revise the Draft Ordinance to Include Transitional and Supportive Housing In the Residential Land Uses Chart**

Government Code Section 65583 (a)(5) requires transitional and supportive housing to be permitted as a residential use, subject only to restrictions that apply to other residential dwellings of the same type in the same zone. Housing Element Program 10 commits the County to comply with this section through its Zoning Ordinance Update.

The Draft Zoning Ordinance only reference to permitting transitional and supportive housing in residential zones is in the definition section of the Draft Zoning Ordinance, pp.. 7-55 and

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<sup>4</sup> A sample Reasonable Accommodation Ordinance is available on the state Department of Housing and Community Development's website ([http://www.hcd.ca.gov/community-development/building-blocks/program-requirements/address-remove-mitigate-constraints/docs/MODEL\\_REASONABLE\\_ACCOMODATION\\_ORDINANCE.pdf](http://www.hcd.ca.gov/community-development/building-blocks/program-requirements/address-remove-mitigate-constraints/docs/MODEL_REASONABLE_ACCOMODATION_ORDINANCE.pdf))

7-57. Both transitional and supportive housing should be included in the permitted uses chart for residential zones contained in the Draft beginning on page 2-18.

**VI. The Draft Zoning Ordinance Does Not Allow Adequate Density in TP or CP Zones or Establish Minimum Densities in Zones Identified to Accommodate the County’s Lower-Income RHNA**

The Housing Element commits the County to increase the maximum density in the following zones to 20 dwelling units (du)/acre: R-2, R-2-A, RP, C-4, TP and CP. The Draft Zoning Ordinance does enact the increased density in most of these zones, but the TP zone which still only permits a maximum density of 18 du/ac (1du/2400 sq.ft.). Draft, Table 2-5, p. 2-33. The CP zone also still only permits 18 du/ac (1 du/2400 sq. ft) Draft, Table 2-7, p. 2-54. The Draft Zoning Ordinance must be revised to permit 20 dwelling units/acre in the TP and CP zones to implement the County’s commitment to increase the permitted density in the TP and CP zones. The County should also adopt minimum densities in each of the zones identified to accommodate housing affordable to lower income households to ensure the capacity calculation in the Housing Element is achieved.

The R-3, R-3-A, and R-4 zones all exceed the 20 du/ac as the maximum density but the County did not include any parcels with this zoning designation in the Housing Element’s inventory. Future inventories and any rezoning necessary to comply with state No Net Loss Law requirements should include available parcels in these zones to accommodate affordable housing.

**VII. Residential Densities Allowed Under The Draft Zoning Ordinance & General Plan Documents Are Inconsistent**

The Draft Zoning Ordinance and General Plan Update respectively set forth allowable densities for zoning districts and land use designations within which those zone districts fall which are inconsistent with each other. The following chart identifies General Plan land use designations assigned by the Zoning Ordinance to respective zones which the County relies on to meet its lower-income housing need and the densities established respectively by the Draft Zoning Ordinance and General Plan Update to those zone districts and land use designations:

<b>Zone &amp; Density Permitted in Draft Zoning Ordinance Update<sup>5</sup></b>	<b>Land Use Designation &amp; Density Assigned in Draft General Plan Update<sup>6</sup></b>
R-2 – 20 UPA	Medium Density Residential – 2.8-5.8 UPA
R-2-A – 20 UPA	Medium Density Residential – 2.8-5.8 UPA
R-3 – 29 UPA	Medium High Density Residential – 5.8-14.5 UPA

<sup>5</sup> Draft Zoning Ordinance, Table 2-1, “Zones,” pp. 2-1, 2, and Table 2-5, Residential Zones General Development Standards Requirements By Individual Zone. Densities have been converted from dwelling units per square feet to dwelling units per acre.

<sup>6</sup> Draft General Plan Table 3-2, Fresno County General Plan Land Use Designations, pp. 3-17, 18.

R-3-A – 29 UPA	Medium High Density Residential – 5.8-14.5 UPA
R-4 – 43.56 UPA	Medium High Density Residential – 5.8-14.5 UPA
RP – 20 UPA	Office Commercial – 5.8-14.5 UPA
C-4 – 20 UPA	Central Business Commercial – 5.8-14.5 UPA
TP – 18 UPA	No Corresponding Land Use Designation Assigned
CP – 18 UPA	Office Commercial – 5.8-14.5 UPA

The inconsistencies in allowable densities in Draft Zoning Ordinance and General Plan Update conflict with state law which requires the County’s ordinances be consistent with the County’s general plan. Gov. Code § 65860. The inconsistency between the Draft Zoning Ordinance and General Plan Update also conflicts with the County’s obligation under Housing Element Program 3, “Adequate Sites Program,” which commits the County to complete General Plan and Zoning Ordinance technical amendments in 2016 to remedy existing inconsistencies between the documents related to allowable density. Housing Element, p. 2A-3.

The County must revise the Draft General Plan and Draft Zoning Ordinance to ensure the permitted residential densities in all zones are consistent between both documents and that the zones satisfy the maximum density requirements set forth in the Housing Element and described in Section VI above.

\* \* \* \* \*

Thank you for your consideration of our comments. Please contact Ashley Werner at [awerner@leadershipcounsel.org](mailto:awerner@leadershipcounsel.org) or (559) 369-2786 if you would like to find a time to discuss these comments over the phone or in person.

Sincerely,



Ashley Werner Senior Attorney Leadership Counsel for Justice and Accountability	Valerie Feldman Staff Attorney Public Interest Law Project
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cc: Daniel Cederborg, County Counsel  
 Arthur Wille, Senior Deputy County Counsel





**League of Women Voters of Fresno  
1345 Bulldog Lane, Ste. 4  
Fresno, California 93710**

May 4, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

**Re: Comment on the Notice of Preparation (NOP) for the Environmental Impact Report (EIR)  
for the assessment of the Draft 2017 General Plan and Draft 2017 Zoning Ordinance**

Dear Mr. Khorsand:

The League of Women Voters of Fresno (League) is a nonpartisan political organization that encourages the informed and active participation of citizens in government, works to increase understanding of major public issues and helps shape public policy through education and advocacy.

Having reviewed the draft 2017 General Plan Policy Document, draft 2017 General Plan Background Report and Draft 2017 Zoning Ordinance, the League offers these comments regarding the scope of work for the environmental review.

The League expects the General Plan to be workable, to be fully implemented as written and to be routinely monitored for compliance. The same holds true for all environmental mitigation measures associated with the General Plan, whether listed outside the General Plan or incorporated into the General Plan as policy statements.

At the time the EIR for the 2000 General Plan was approved, the Board of Supervisors made a Finding of Overriding Considerations. This was necessitated by an environmental conclusion that implementation of the 2000 General Plan would create a number of adverse impacts that could not be reduced to levels of insignificance, among them, impacts to agriculture, transportation, public services, water resources, biological resources and air quality. Nonetheless, the EIR also identified nearly 300 policies in the 2000 General Plan Policy Document to serve as mitigation measures to reduce the severity of these impacts.

Public Resources Code 21081.6(b) requires that *"a public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable...."* Unfortunately, the County has not been able to implement all 300 of these policies. For example, as reported in the County's Annual Progress Report for 2016, due to lack of available funding, County staff has not been able to develop the groundwater monitoring program required by Policy OS-A.9 – an adopted mitigation measure.

With regard to this lack of enforcement, the League does not accept, as justification, a shortfall in County funding, nor does it accept the argument that, as a matter of necessity, County planning staff has the authority to decide which mitigation measures can be implemented and which cannot be implemented.

It's important to note that the County has not established a program to monitor implementation, and although General Plan Program LU-H.D contains a mechanism for a mitigation measure monitoring program, the County has chosen not to utilize it. And it's also important to note that when the General Plan was adopted in 2000, the belief among County staff, elected officials and EIR consultants was that the General Plan would be "*self-mitigating*," but that assumption has proven incorrect.

Importantly, the EIR for the 2000 General Plan did not explain why various adverse impacts could not be fully mitigated, nor did it calculate the degree to which the policies identified as mitigation measures would protect the environment. As a result, decision makers had little information by which to judge the extent to which adverse impacts could be mitigated, and they were **not informed** as to the true environmental cost of approving a General Plan with significant and unavoidable impacts.

Therefore, the League urges the County to (1) evaluate the cause for and the extent of the County's inability to implement mitigation measures in the 2000 General Plan, since many of these same policies will be carried over into the new Plan, (2) describe in measurable terms the physical effects of any adverse impacts that remain significant after mitigation, (3) determine the amount of funding needed to fully implement mitigation measures so that implementation is assured, (4) determine the conditions under which General Plan "*self-mitigation*" can work, and (5) include in the range of reasonable alternatives a no-harm alternative (i.e., one without impacts harmful to the environment) so that the Board has an opportunity to understand the full environmental cost (physically and financially) of adopting a General Plan with significant and unavoidable adverse impacts.

Thank you for the opportunity to comment.

Sincerely,



Marianne Kast, President  
[fourkasts@gmail.com](mailto:fourkasts@gmail.com)



**League of Women Voters of Fresno  
1345 Bulldog Lane, Ste. 4  
Fresno, California 93710**

May 4, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

**Re: Comment on the Process used by the County to prepare the Draft 2017 General Plan and Draft 2017 Zoning Ordinance and to provide for their public review**

Dear Mr. Khorsand:

The League of Women Voters of Fresno (League) is a nonpartisan political organization that encourages the informed and active participation of citizens in government, works to increase understanding of major public issues and helps shape public policy through education and advocacy.

Having reviewed the draft 2017 General Plan Policy Document, draft 2017 General Plan Background Report and Draft 2017 Zoning Ordinance, the League offers these comments on the process used by the County to prepare documents and make them available for public review.

The project under consideration is the review of the 2000-2020 General Plan required by General Plan Policy LU-H.14 and the revision of the Zoning Ordinance required by General Plan Policy LU-H.15.

With respect to the preparation and public review of these planning documents, the League expects the County to support transparency and to champion robust, widespread public participation.

In 2005, the county initiated a major Five-Year Review of the 2000-2020 General Plan Policy Document, and that review is still unfinished in 2018. Between 2010 and 2014, the County released for public review 5 different draft revisions of the Policy Document.

Then in 2015, unbeknownst to the public, the County initiated a process that changed the General Plan *review* into a general Plan *update*. In the fall of 2015, the Board of Supervisors advanced this change by authorizing the preparation of a full EIR. Then in the summer of 2016, the County removed all mention of the General Plan review from its website. That web information was restored in January 2018 in concert with the release of a 6<sup>th</sup> draft of the Policy Document. The NOP for the environmental evaluation of the new draft stated that the proposed project was a comprehensive update of the County's General Plan, and the draft Background Report released at the same time made it clear that the time period for the new Plan would be the twenty years from 2020 through 2040.

During 2017 and 2018, concerned that the County was moving toward a comprehensive update of the General Plan, League members repeatedly asked County planning staff, the Planning Commission and the Board of Supervisors whether the County was, in fact, updating the General Plan. The response was always no.

As a result, from 2005 through 2017, the public thought they were participating in a Five-Year Review of the 2000-2020 General Plan. They submitted comments appropriate to that time period, and the county prepared draft revisions accordingly. The public has only recently discovered the County will apply those comments to a new time period: 2020-2040.

Board Chairman Brian Pacheco asked the County Council on May 26, 2017 about the significance of the terms *review* and *update*. County Counsel responded that the Board had yet to clarify where the Board stood on the matter of "*review versus update*" and recommended that the Board do so because that decision could affect legal opinions from County Counsel as to what should be included in the process. Despite County Counsel's recommendation that the Board clearly define the process that was underway, there has been no statement from the Board, itself, as to whether the County is conducting a major review or a comprehensive update of the General Plan.

With regard to public outreach and support for robust public participation, the County's outreach since 2015 has consisted of a single public notice that the 6<sup>th</sup> draft revision of the General Plan Policy Document was available for public review. And the portion of the notice that appeared in publications did not state that the General Plan was being updated nor that the planning horizon had been changed from 2020 to 2040.

The League objects to the lack of community outreach for this 2020-2040 update of the General Plan, which is very much unlike what occurred for the update of the General Plan in 2000 when the public attended over 35 public forums and open houses in communities across the county. The League is aware that the County has chosen May 4, 2018 as the final day to submit comments on the draft documents for the update of the General Plan.

In as much as county residents are largely unaware that the County is engaged in an 2020-2040 update of the General Plan, the League urges the Board of Supervisors to (1) make a clear public statement to that effect (2) publish legal notices clarifying the matter and (3) develop a community outreach program that invites the public to comment on what's needed in the way of long-range planning for the 20 years from 2020 to 2040.

Thank you for the opportunity to comment.

Sincerely,



Marianne Kast, President  
[fourkasts@gmail.com](mailto:fourkasts@gmail.com)

## Comment Sheet

Please let us know your concerns so we can address them in the Environmental Impact Report.

Name: Lucy Hornbaker

Affiliation: resident  
(resident, businessperson, agency representative,  
community group member, etc.)

Address: Lucy Hornbaker

Phone: 559-867-4278

PO Box 162  
Riverdale CA 93656

Email: amisslucy@gmail.com

Comments:

I attended a meeting of the Fresno General Plan Review relating to the environmental aspect and was impressed that the public meeting for the plan was attended by so few people. After reviewing the plan I realize that it is quite complex and that although few people are actually aware of the plan and/or understand it, it still does affect all the people in the county. My concern is that the few people giving input on the plan have special interests and that the public meetings only reflect this fact. Because the plan will be important to the lives of all Fresno County residents, I urge the staff to be aware of this in structuring the new plan review.

The plan covers a lot of issues but I would like to address the issue of air quality control. I congratulate the county on the work that has been done to improve the quality of the air in the county, but would like to encourage a continued effort to work toward continued success in the future. This factor alone determines the health of all our citizens. As new information is available to clear up the air, please make it possible for the county to use this information for everyone's advantage.

Please keep the well being of all Fresno County residents in mind when updating the new General Plan. Thank you.



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Please submit by May 4, 2018, to:  
Mohammad Khorsand  
County of Fresno, Dept. of Public Works & Planning  
Development Services & Capital Projects Division  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721  
[gpr@co.fresno.ca.us](mailto:gpr@co.fresno.ca.us)

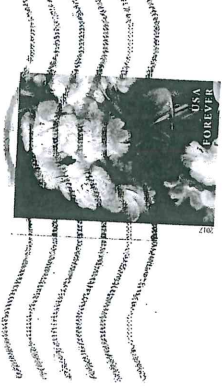
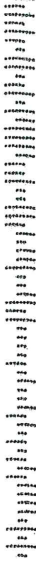
Lucy Hornbaker  
PO Box 162  
Riverdale CA 93656

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FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

Mohammad Khorsand  
County of Fresno Dept of Public Works and Planning  
Development Services & Capital Projects Division  
2220 Tulare Street Sixth Floor  
Fresno California 93721

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# MALAGA COUNTY WATER DISTRICT

3580 SOUTH FRANK STREET - FRESNO, CALIFORNIA 93725  
PHONE: 559-485-7353 - FAX: 559-485-7319

FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

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Fresno County  
Dept. of Public Works & Planning  
Administration

Mr. Steven E. White, Director  
Fresno County  
Department of Public Works and Planning  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, Ca 93721

Re: Malaga County Water District Comments on County of Fresno 2040 General Plan Public Review Draft (December 2017) Released January 26, 2018.

Dear Mr. White,

The Malaga County Water District ("District") hereby submits the following comments to the Public Review Draft of the County of Fresno General Plan Review/2040 General Plan.

### General Plan Background Report

The General Plan Background Report ("Background Report") contains limited information about the Malaga Community (the term "Malaga Community" as used herein refers generally to the area bordered by North Avenue to the north, American Avenue to the south, Maple Avenue to the west, and Sunnyside Avenue to the east). The information in the Background Report about the Malaga Community is generally limited to some of the services provided to the community by the District.

In addition to the limited scope of information in the Background Report, the District is also concerned that much of the information in the Background Report related to the services provided by the District is inaccurate or outdated. For example, in the Background Report's description of services provided to the Malaga Census Designated Place ("CDP"), the Report relies exclusively on a 2007 Municipal Service Review for the District and a 2013 Kings Basin Disadvantaged Communities Pilot Project Study ("KBDAC Study") to state facts about water and sewer service provided to the Malaga CDP by the District, many of those facts are erroneous or outdated as follows:

Water (page 3-69)

1. "Water is provided to this area by the Malaga County Water District through 2 groundwater wells." The District currently has 3 water wells.
2. "The water infrastructure is sufficient to serve the current population." This statement is true.
3. "The KBDAC Study noted, however, that Malaga's drinking water exceeded acceptable standards for DBCP and arsenic." This statement is erroneous. There exists a DBCP plume within the Malaga County Water District service area which has caused the District to take wells out of service and replace them with new, deeper, lined, wells to avoid the plume. Results of routine water quality testing showed DBCP in drinking water delivered by the District as non-detectable without filtration. Similarly, while arsenic is present in the District's drinking water above the public health goal standard, levels of arsenic in the District's drinking water are well below the maximum contaminant level as set by the California Department of Water Resources, without filtration.

Wastewater: (page 3-69)

1. "The sewer infrastructure is sufficient to serve the current population." This statement is true.
2. "The KBDAC Study reported that there have been problems with infiltration." This statement is erroneous. The KBDAC Study reported that the District potentially has excessive infiltration. However, the District is unaware of the source of the KBDAC conclusion that the District may potentially have excessive infiltration in that the District has a sewer system maintenance program that includes regular cleaning and inspection of the sewage collection system to prevent infiltration and sanitary sewer overflows. Regular cleaning and inspection of the District's sanitary sewer collection system has not detected any infiltration problems and if an infiltration problem is detected, the District has a response plan in place and will take any and all necessary measures eliminate the infiltration or potential infiltration.

There are additional examples of outdated or erroneous information regarding services provided by the District in Chapter 6 of the Background Report as follows:

#### Section 6.1 Water

Similar to the examples above, information set forth in the Background Report related to the water service provided by the District (at page 6-9) is based on the District's 2007 Municipal Service Review. As a result of using outdated information, the findings and conclusion in the Background Report are largely erroneous or outdated.

#### Section 6.2 Wastewater Collection and Treatment.

The information set forth in the Background Report related to the wastewater service



provided by the Malaga County Water District (at page 6-20) is based on the District's 2007 Municipal Service Review and on various reports from the "Central Valley Water Board" by which we believe the County of Fresno to mean the Central Valley Regional Water Quality Control Board, the validity of which being contested by the Malaga County Water District. As a result of using outdated or contested information, the findings and conclusion in the Background Report are largely erroneous or outdated.

#### Section 6.4 Solid and Hazardous Waste Disposal and Recycling.

Similarly, the information provided in the Background Report related to solid waste collection services provided by the Malaga County Water District (page 6-7) is based on the 2007 MSR and as a result is outdated and incomplete.

The District also provides a wide range of vital services through its recreation department which do not appear to be contained in the Background Report.

The District is concerned that the Background Report contains significant erroneous and outdated information related to the services provided by not only the District but by all agencies providing services in unincorporated communities in the County. The District is ready and willing to provide current information regarding services provided by the District and encourages the County to reach out to all agencies providing services in the County agency providing services to confirm the accuracy of the information contained in the Background Report.

### Fresno County General Plan Policy Document.

#### Part II: Goals and Policies.

##### Economic Development Element.

Under paragraph ED-A.7 the County is amending this Goal/Policy from locating new industry within Cities and unincorporated communities to encouraging the location of new industry within the unincorporated County and specifically within the Malaga, Calwa, and Golden State Industrial corridor. This policy, at least as it relates to Malaga, appears to be in direct contradiction to the proposed Environmental Justice Element of the Fresno County General Plan. ("FCEJE") Under CalEnviroScreen 3.0 scores, generated by the California Environmental Agency ("Cal EPA") referenced in the FCEJE, the Malaga Census Tract (Tract 6019001500) has the 5<sup>th</sup> highest score in the State of California with a pollution burden percentile of 99.99 and disadvantaged population characteristics percentile of 92.77. Considering that the Malaga Census Tract extends eastward to Temperance Avenue, well beyond the Malaga Community, the Malaga Community with its proximately to State Route 99 corridor and industrial development in and around the Malaga Community, certainly would score much higher. The high pollution burden and high disadvantaged population characteristics of the Malaga Community are, as the FCEJE states: "largely a result of inappropriate zoning (e.g., residential uses located adjacent to industrial uses)." The high ranking of the Malaga Community by Cal EPA is the result of or aggravated by locating heavy industrial,

manufacturing and commercial uses adjacent to residential area, schools, and parks within the Malaga Community without correlating mitigation measures and policies such as those in the FCEJE goals. Any increase industrial saturation or intensity in or around the Malaga Community as proposed in Section ED-A.7 will result in not only greater pollution burden on the residents of the Malaga Community, but will also further limit the community's access to retail and other service uses which coupled with a lack of public transportation will require the residents of the Malaga Community to drive to obtain basic services such as groceries, basic household goods, and health and well-being services with greater frequency. In addition to the excessive pollution and lack of services, the current and proposed land use and zoning within the Malaga Community has resulted in poor road conditions and inadequate circulation patterns for the high frequency of truck traffic in the Malaga Community, inadequate availability of housing particularly low-income housing, inadequate open space and parks, and inadequate economic opportunity for the residents of the Malaga Community.

In short, the current Land Use Policies of the County and the new proposed Land Use Policies including Section ED-A.7 violate most of the policy goals of the FCEJE listed at pages 2-206 - 2-207 of the draft policy document together with numerous existing General Plan Policies and Goals.

Given the challenges of the Malaga Community and the proposed increase of intensity in industrial uses in the Malaga Community, the County should prepare a specific plan for the Malaga Community which identifies, among other things, the need for development standards in the Malaga Community (e.g. circulation, roads, and aesthetics), parks and recreation facilities and open spaces, retail and residential/retail mixed use development, and identify areas for new residential development particularly low-income housing in the Malaga Community. The Malaga County Water District is currently working in conjunction with Fresno County LAFCo in the preparation of a Municipal Service Review that includes not only the services provided by the Malaga County Water District, but the needs of the Malaga Community. The Malaga County Water District provides services to the Malaga Community beyond those set forth in the Background Report. The Malaga County Water District primarily through its Recreation Department and Community Center facilities provides community food distribution, senior activities, afterschool and summer youth and teen programs, conducts town hall meetings related to such issues as public safety and many other vital service in addition to the traditional services provided by a recreation district. These services are provided to the greater Malaga Community without regard to whether or not a person receiving or participating in such services is a resident of the Malaga County Water District. In recent years, providing these services has become increasingly difficult due to the rise in need for such services due in part to the ever increasing burden of the residents of the Malaga Community as defined by Cal EPA and the County of Fresno, and a static level of funding

The Malaga County Water District looks forward to working with the County to mitigate the impacts of the County's concentration of industrial, manufacturing, and commercial uses within the Malaga Community and providing necessary services to improve the health, safety, and welfare of the residents of the greater Malaga Community through the development of a Malaga Community specific plan or other mitigating measures.

Very truly yours,



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Charles Garabedian, Jr.  
President  
Malaga County Water District



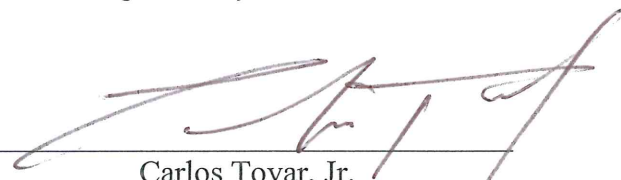
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Salvador Cerrillo  
Vice-President  
Malaga County Water District



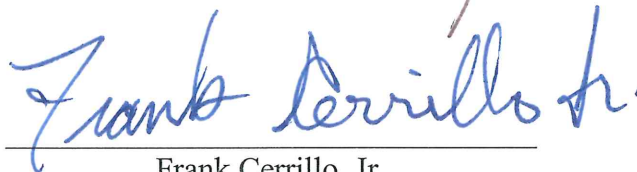
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Irma Castaneda  
Director  
Malaga County Water District



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Carlos Tovar, Jr.  
Director  
Malaga County Water District



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Frank Cerrillo, Jr.  
Director  
Malaga County Water District

## Khorsand, Mohammad

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**From:** John Dirickson <John.Dirickson@cardno-gs.com>  
**Sent:** Friday, May 04, 2018 10:41 AM  
**To:** GPR  
**Cc:** Kettler, William  
**Subject:** Fresno County General Plan EIR comments  
**Attachments:** AICUZ\_Lemoore\_20180411.zip; MIA plus AICUZ.jpg; MIA\_Lemoore\_20180411.zip

Mohammad Khorsand,

The Navy appreciates the ability to comment on the Fresno County General Plan EIR. The Navy and Fresno County made great strides working together to produce the Joint Land Use Study in 2011. With the current review and revision of the General Plan, it's a great opportunity to include several military influence areas found in Fresno County. The impacts of these military influences should be considered in the EIR.

Please consider any environmental factors affecting planning in Fresno County from these two areas:

1. NAS Lemoore Military Influence Area (MIA) The MIA was discussed and accepted during the Joint Land Use (JLUS) development.

Military Influence Area (MIA) is an official geographic planning or regulatory area where military operations impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. The Navy requests that all projects proposed to the county inside the MIA be forwarded to the Navy for review and comment.

2. NAS Lemoore Air Installation Compatible Use Zone (AICUZ) This was discussed and accepted during the JLUS development.

The AICUZ itself is a composite of many factors: average noise levels, accident potential and aircraft flight paths and altitudes.

The purpose of the AICUZ Program is to protect the health, safety and welfare from noise and hazards through compatible development in the airport environment. The program was instituted by the Department of Defense to address the problem of land development surrounding military air installations. It provides for the development and implementation of a plan to determine those land areas for which development should be significantly influenced by the operation of the airfield. These land areas are then designated as the AICUZ for that installation.

Please don't hesitate to call if there are any questions. It would be my pleasure to meet and discuss at your office.

v/r,

**John Dirickson**

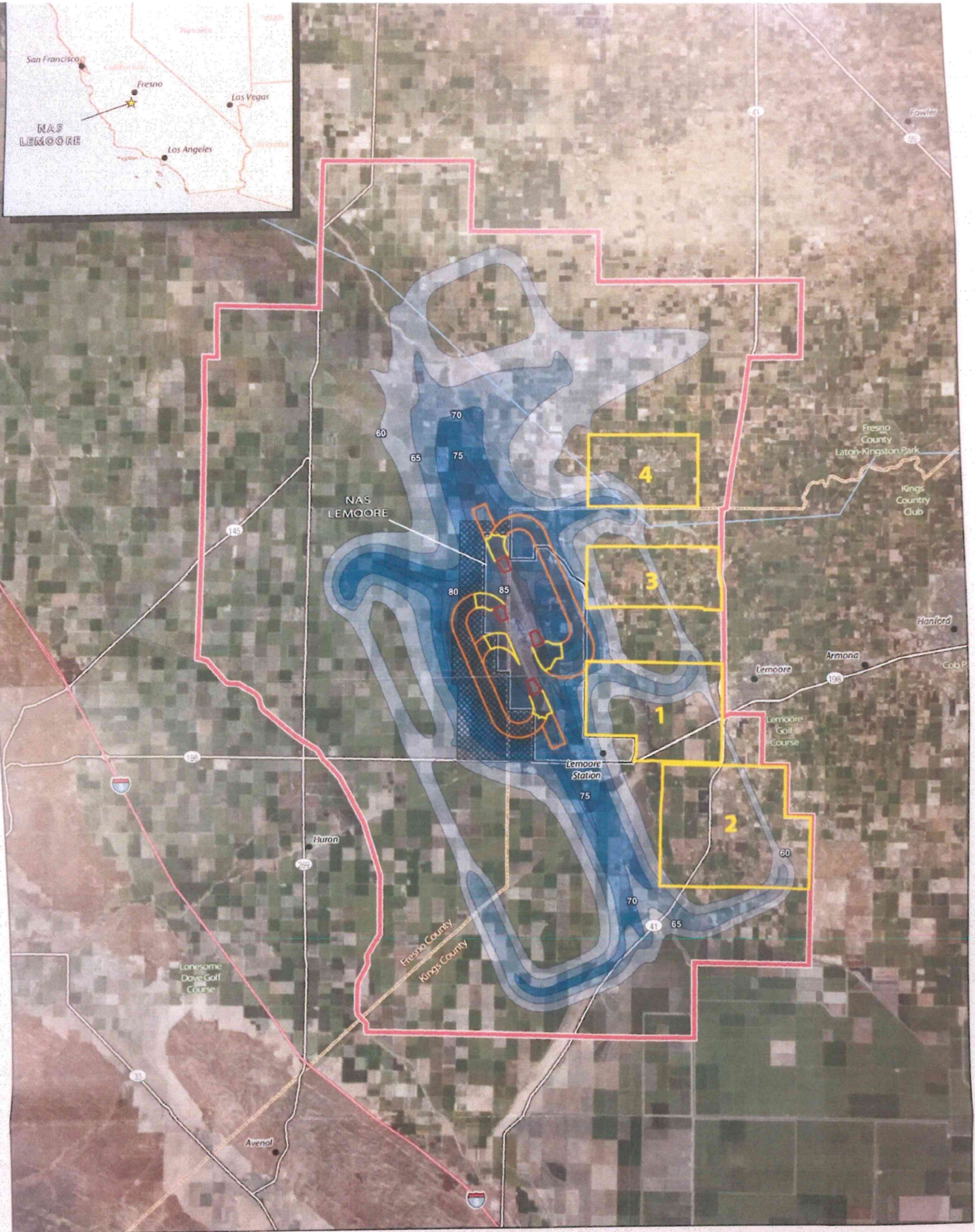
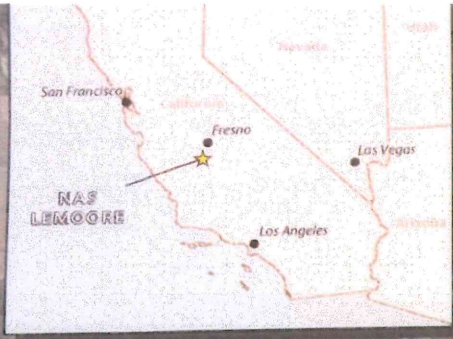
MANAGER, COMMUNITY PLANS & LIAISON OFFICE  
CARDNO



Mobile (+1) 559-854-1688

Address NAS Lemoore, 700 Avenger Ave., Lemoore, CA 93246

Email [john.dirickson@cardno-gs.com](mailto:john.dirickson@cardno-gs.com) Web [www.cardno.com](http://www.cardno.com)



**Legend**

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- Noise Contours (dB DNL)
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**High Priority Watch Areas**  
NAS Lemoore  
Fresno and Kings Counties, California



## NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department  
1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
Phone (916) 373-3710  
Email: [nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
Website: <http://www.nahc.ca.gov>  
Twitter: @CA\_NAHC



RECEIVED  
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FRESNO COUNTY  
DEPT. OF  
PUBLIC WORKS & PLANNING

April 30, 2018

Mohammad Khorsand  
Fresno County  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, CA 93721

RE: SCH#2018031066, Fresno County General Plan Review and Zoning Ordinance Update, Fresno County

Dear Mr. Khorsand:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). **If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.** (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

**CEQA was amended significantly in 2014.** Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

**The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible** in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

#### AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or

tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
- a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
- a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
- a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).
7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf)



Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at:  
<http://nahc.ca.gov/resources/forms/>

#### NAHC Recommendations for Cultural Resources Assessments

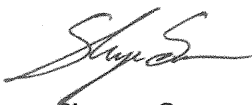
To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

- b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions, please contact me at my email address: [sharaya.souza@nahc.ca.gov](mailto:sharaya.souza@nahc.ca.gov).

Sincerely,



Sharaya Souza  
Staff Services Analyst  
(916) 573-0168

cc: State Clearinghouse

State of California  
Native American Heritage Commission  
1550 Harbor Blvd., Ste. 100  
West Sacramento, CA 95691



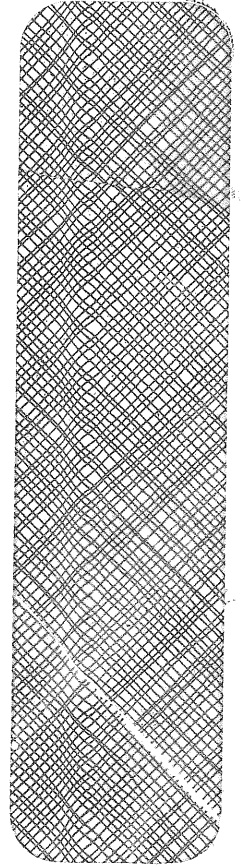
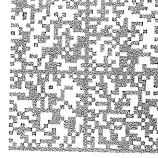
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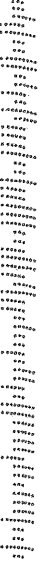
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May 4, 2018

Dear Mr. Khorsand,

This letter is written as comment on the Notice of Preparation for the environmental assessment of the draft 2017 Fresno County General Plan Policy Document.

I'd like to address the matter of the proposed change to Policy LU-A.1, which directs urban growth to existing urban centers.

As noted below, the 2000 General Plan directs must urban growth to existing urban centers.

### **Policy LU-A.1**

*"The County shall maintain agriculturally-designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available."*

The draft 2017 Policy Document revises this policy by adding the phrase shown in red:

### **Draft Policy LU-A.1 Agricultural Land Conservation**

*"The County shall maintain agriculturally-designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available or can be provided consistent with the adopted General or Community Plan. (RDR)"*

First of all, I ask that those preparing the EIR require the County to clearly define what is meant by "valuable agricultural lands." When the 750-unit Friant Ranch housing project was approved in 2011, an intense debate broke out as to whether the General Plan considered grazing lands "valuable," and more specifically, whether the directive in Policy LU-A.1 applied to such lands. I reason that the environmental impact of the implementation of Policy LU-A.1 (whether amended or left as is) cannot be known with any degree of certainty unless there is clear understanding as to which acreage it applies.

As shown below, the phrase "or can be provided consistent with the adopted General or Community Plan," expresses two new ideas which I will discuss separately.

(1) "or can be provided" and (2) "consistent with the adopted General or Community Plan"

I'll begin with the later part: "consistent with the adopted General or Community Plan."

Why is this phrase being added to Policy LU-A.1? Since we all understand full well that all development must be consistent with adopted plans, why state the obvious? Well, there is a reason. I see the phrase, politically and figuratively, as a "dog whistle" – a coded message commonly understood by one particular group of people, but not by others.

The message is directed to developers. With this change in Policy LU-A.1, the County is saying that commercial or residential development can be approved most anywhere in the county as long as the Board of Supervisors changes the underlying land use designation to match. In the case of Friant Ranch, the land use designation was changed from Agricultural to Medium Density Residential, thereby making the project consistent with the General Plan.

With regard to the first part of the phrase – “*or can be provided,*” the understanding here is that commercial or residential development could be allowed in “other areas” (non-urban areas) as long as developers provide the necessary infrastructure.

I would like to point out the very significant change being made to the County’s theme for “Urban-Centered Growth.” Notice that the word “*already*” is being removed from the definition.

**2000 General Plan Policy Document**

Urban-Centered Growth:

*“The plan promotes compact growth by directing most new urban development to incorporated cities and existing urban communities that **already** have the infrastructure to accommodate such growth.”*

**Draft 2017 General Plan Policy Document**

Urban-Centered Growth:

*“The plan promotes compact growth by directing most new urban development to incorporated cities and existing unincorporated urban communities ~~that already have the~~ where public facilities and infrastructure are available or can be provided consistent with the adopted General Plan or Community Plan to accommodate such growth.”*

I ask that the EIR address the impacts to agriculture that may result from the change that directs new urban development to areas where it does not “*already*” exist but “*can be provided.*”

I thank you for the opportunity to comment.



Radley Reep  
[radleyreep@netzero.com](mailto:radleyreep@netzero.com)  
(559) 326-6227



May 1, 2018

Mohammad Khorsand  
County of Fresno, Department of Public Works and Planning  
Development Services and Capital Projects Division  
Policy Planning Unit  
2220 Tulare Street, Sixth Floor  
Fresno, California 93721

**Re: Draft Fresno County General Plan Revision**

Dear Mr. Khorsand:

I am writing on behalf of Sequoia Riverlands Trust (SRT) to comment on the Draft Fresno County General Plan Policy Document released for review in December 2017 (“Draft Policy Document”). SRT is a regional, accredited land trust that inspires love and lasting protection for important lands. As part of this mission, we work with willing landowners to conserve habitat and farmland in Fresno County and elsewhere in the Southern San Joaquin Valley.

Fresno County is home to some of the most productive farmland and rangeland on the planet, and is one of the three most productive agricultural counties in California.<sup>1</sup> In 2016, crop receipts alone amounted to over \$6.1 billion.<sup>2</sup> Given the jobs and revenue this sector of the economy brings to the region, we share the County’s view that “careful land use decision-making is essential to minimizing the conversion of productive agricultural land.”<sup>3</sup> We are also grateful to see new policies supporting water conservation, including commitments to “ensure that new development does not limit the capacity or function of groundwater recharge areas,” to inventory those areas and direct available water resources to them, and to consult with Groundwater Sustainability Agencies prior to significant General Plan Amendments.<sup>4</sup>

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<sup>1</sup> California Department of Food and Agriculture (CDFA). 2016. California County Agricultural Commissioners’ Reports. Retrieved from [https://www.nass.usda.gov/Statistics\\_by\\_State/California/Publications/AgComm/2016/2016croptyearcactb00.pdf](https://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/2016/2016croptyearcactb00.pdf).

<sup>2</sup> CDFA, 2016.

<sup>3</sup> Draft Policy Document, 2-39 - 2-40.

<sup>4</sup> Draft Policy Document, Policies OS-A.6 - OS-A.8; Policy OS-A.10.

But we are concerned about the proposal to alter General Plan Policy LU-A.1, which calls for “direct[ing] urban growth away from valuable agricultural land to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available.”<sup>5</sup> In the Draft Policy Document, the last clause now reads “other areas planned for such development where public facilities and infrastructure are available or can be provided consistent with the adopted General or Community Plan”<sup>6</sup>—a change that could greatly expand the areas where urban development is permitted. If the General Plan is going to call for new infrastructure, it should distinguish between existing communities (including disadvantaged communities) where such infrastructure is needed, and new towns, which are inconsistent with the goal of directing growth away from agricultural land.

We would also encourage the County to consider a more comprehensive and integrated agricultural mitigation policy. Policy LU-A.16 commits to “implement[ing] agricultural land preservation programs for long-term conservation of viable agricultural operations,” and provides a list of examples, including “land trusts; conservation easements; dedication incentives; new and continued Williamson Act contracts; Farmland Security Act contracts; the California Farmland Conservancy Program Fund; agricultural education programs; zoning regulations; agricultural mitigation fee program; urban growth boundaries; transfer of development rights; purchase of development rights; and agricultural buffer policies.”<sup>7</sup> Policy LU-A.14, which is unchanged, requires the County to “ensure that the review of discretionary permits includes an assessment of the conversion of productive agricultural land and that mitigation be required where appropriate.”<sup>8</sup> These policies could be strengthened by setting a required mitigation ratio of at least one acre of farmland conserved for every acre converted, and integrating elements listed in LU-A.16, such as conservation easements held by land trusts, into a more clearly-defined farmland mitigation program. Should the County wish to explore this further, SRT would be happy to offer examples and guidance, and to assist with implementation.

We appreciate the opportunity to comment, and look forward to your response.

Sincerely,



Sopac McCarthy Mulholland  
President and CEO  
Sequoia Riverlands Trust

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<sup>5</sup> Draft Policy Document, Policy LU-A.1.

<sup>6</sup> Draft Policy Document, Policy LU-A.1.

<sup>7</sup> Draft Policy Document, Policy LU-A.16.

<sup>8</sup> Draft Policy Document, Policy LU-A.14.

# Appendix TIS

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Vehicles Miles Traveled Technical Memorandum





# Technical Memorandum

24 May 2022

<b>To</b>	Della Acosta, Rincon Consultants Project Manager, County of Fresno		
<b>From</b>	Jill Hough, PTP, GHD Gary A. Mills, PM, GHD	<b>Contact:</b>	Gary.Mills@ghd.com
<b>Subject</b>	Fresno County General Plan – VMT Analysis	<b>Project no.</b>	11180407

## 1. Introduction

This memorandum summarizes the assessment of vehicle miles traveled (VMT) conducted for the proposed Fresno County General Plan Update, referred to herein as “the Project”. The Project includes projections of employment and housing and population throughout areas of unincorporated Fresno County, including “spheres of influence” that are under Fresno County jurisdiction, associated with full build-out.

SB 743 was signed into law in 2013, with the intent to better align CEQA practices with Statewide sustainability goals related to efficient land use, greater multimodal choices, and greenhouse gas reductions. The provisions of SB 743 became effective Statewide on July 1, 2020. Under SB 743, automobile delay, traditionally measured as level of service (LOS), is no longer considered an environmental impact under CEQA. Instead, impacts are determined according to changes in VMT. VMT measures the number and length of vehicle trips made on a daily basis and is a useful indicator of overall land use and transportation efficiency, where the most efficient system is one that minimizes VMT by encouraging shorter vehicle trip lengths, more trips made by walking and biking, and increased carpooling and transit usage.

This memorandum has been prepared to present the results of a VMT evaluation of the Project, as previously described, and obtain concurrence from the Fresno County planning department on the technical data and information contained herein. As part of this study, GHD has reviewed available literature, guidance, and documentation from the Fresno Council of Governments (Fresno-COG) and Fresno County to identify the “Fresno County SB 743 Implementation Regional Guidelines”, July 2021, as the basis of VMT baseline estimates and threshold recommendations.

GHD has analyzed the metrics of VMT per Capita and VMT per Job into this VMT evaluation, based on comparing the anticipated VMT per Capita and VMT per Job attributable to the Project (derived from the Fresno-COG travel demand model) with the estimated Countywide averages in Fresno County.

## 2. Technical Analysis Parameters & Methodologies

This section outlines the analysis parameters and methodologies that were used in the transportation impact analysis to quantify the measures of effectiveness for the analysis scenarios. Figures have been provided in the Appendices, including housing and employment.

This document is in draft form. The contents, including any opinions, conclusions or recommendations contained in, or which may be implied from, this draft document must not be relied upon. GHD reserves the right, at any time, without notice, to modify or retract any part or all of the draft document. To the maximum extent permitted by law, GHD disclaims any responsibility or liability arising from or in connection with this draft document.

## 2.1 OPR’s Technical Advisory and Thresholds of Significance

In December 2018, the Governor’s Office of Planning and Research (OPR) released its final *Technical Advisory on Evaluating Transportation Impacts in CEQA*. For residential and office projects, OPR recommends that a reduction of 15% or more in the rate of VMT should be the target for land use projects such as residential, office, and retail. The Technical Advisory does recognize that lead agencies have the discretion to set or apply their own thresholds of significance. Fresno County and Fresno-COG have adopted thresholds, outlined in the previously mentioned, “Fresno County SB 743 Implementation Regional Guidelines”, January 2021.

### Project Land Use and Threshold of Significance

The proposed project consists of an additional 11,275 housing units and additional employment of 20,745<sup>1</sup>. The additional housing units and jobs would be located within the jurisdiction of Fresno County, including city spheres of influence which are in the jurisdiction and responsibility of Fresno County. The patterns of growth associated with this additional development were modelled by the Fresno-COG land use model in the 2042 planning horizon year and the resulting growth in households and jobs are illustrated on Figures A.4 to E.4 1 and Figures A.7 to E.7, respectively, contained in the appendix.

Consistent with the adopted VMT significance criteria for evaluating residential uses and non-residential uses in Fresno County, this analysis is based on a set of significance threshold in which VMT impacts associated with the Project would be considered significant as follows:

- The rate of VMT per Capita attributable to the Project exceeds 87% of the Countywide average rate of VMT per Capita; and
- The rate of VMT per Employee attributable to the Project exceeds 87% of the Countywide average rate of VMT per Employee.

### Comparison of Project Land Use and Modeled Land Use Growth

As previously mentioned, the proposed project consists of an additional 11,275 housing units and additional employment of 20,745. For purposes of developing the 2042 land use assumptions informing the Fresno-COG ABM, Fresno-COG derived 2042 land use projections using the Fresno-COG ABM land use model. A comparison of the land use assumptions is presented in Table 2-1. As shown in the table, the growth in households is essentially the same between the Project household growth and the Fresno-COG ABM land use growth. The growth in employment is higher for the Project than that which results from the Fresno-COG ABM land use model.

Table 2-1 Comparison of Project Land Use and Fresno-COG Projection for Jurisdiction of Fresno County

Jurisdiction	Increase Households	Annual Household Growth Rate	Employment	Annual Employment Growth Rate
Project Land Use (2021 to 2042)	11,275	0.7%	20,745	0.9%
Fresno-COG Land Use Projection (2019 to 2042)	10,749	0.7%	10,445	0.5%
Difference for Fresno-COG Compared to Project	-526	--	-10,300	--

**Note:** “Project Land Use” refers to the growth in household units and employment from 2021 to 2042 provided by Rincon Consultants. “Fresno-COG Land Use Projection” refers to the growth in housing units and employment predicted by the Fresno-COG ABM Land Use Model.

The projected growth in employment for the Project represents approximately 37 percent of the Countywide employment growth modelled by the Fresno-COG ABM integrated land use model.

### Screening Thresholds

OPR’s Technical Advisory lists the following screening thresholds for land use projects. These types of development projects are presumed to have a less than significant impact on vehicle miles traveled and therefore, a less than significant adverse impact on transportation. OPR’s Technical Advisory suggests that

<sup>1</sup> These estimates were provided by Rincon Consultants, Inc.

lead agencies may screen out projects from a VMT analysis using project size, maps, and transit availability, such as the following:

- Projects that are consistent with the Sustainable Communities Strategy (SCS) or General Plan and generate or attract fewer than 110 daily trips (per CEQA).
- Map-based screening for residential and office projects located in low VMT areas, and incorporate similar features (density, mix of uses, transit accessibility).
- Certain projects within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor. However, this will not apply if information indicates that the project will still generate high levels of VMT.
- Affordable Housing Development in infill locations.
- Locally serving retail projects, typically less than 50,000 square feet.

The Project is estimated to generate more than 110 daily trips. As a General Plan growth scenario, the Project consists of growth within unincorporated areas and cities' sphere-of-influence areas throughout the county that may or may not be located near major transit stop or along a high-quality transit corridor; and may or may not be located within low VMT areas. Therefore, the proposed General Plan growth scenario requires a VMT analysis.

## 2.2 CEQA Baseline Considerations

Under CEQA, project impacts must be evaluated by comparing environmental conditions after project implementation to conditions at a point in time referred to as the baseline. The CEQA Guidelines Section 15125 provides the following guidance for establishing the baseline:

*“An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant... The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.”*

CEQA Guidelines also state that generally, the baseline is the environmental condition that exists at the time the notice of preparation is published, or environmental analysis is commenced, from both a local and regional perspective. However, a lead agency may define the baseline by referencing historic conditions, as long as substantial evidence is provided that such a baseline is necessary to provide the most accurate picture practically possible of the project's impacts given that existing conditions change or fluctuate over time. The 2019 baseline and 2042 baseline provided in this memorandum are estimated from the Fresno-COG activity-based travel demand model (Fresno-COG ABM).

## 2.3 Vehicle Miles Traveled (VMT)

VMT is the volumes and distances of automobile travel on a daily basis. This memorandum presents the VMT for the Project through modeling the project land uses in the Fresno-COG land use model and ABM and presenting the model-calculated VMT. Baseline VMT estimates of 2019 and 2042 for both unincorporated Fresno County and all of Fresno County are reported based on outputs from the Fresno-COG ABM. The Project VMT (both residential and job-related), based on the proposed land uses, is forecasted by the model. The forecasted residential VMT with the Project was then divided by the projected population to estimate VMT per Capita with the 2042 scenario that includes growth with the Project; this is then compared to the baseline VMT per Capita for Fresno County (established by Fresno-COG). Similarly, the forecasted job-related VMT with the Project was then divided by the projected number of jobs to estimate VMT per Job with the 2042 scenario that includes growth with the Project, which is then compared to the baseline VMT per Job for Fresno County (also established by Fresno-COG).

## 2.4 VMT Policies

*Caltrans VMT-Focused Traffic Impact Study Guidelines (May 2020)*

Caltrans references OPR's Technical Advisory as a basis for this impact study guidance document. Caltrans recommends use of OPR's recommended thresholds for land use projects. However, neither OPR nor Caltrans guidelines specify if thresholds should be governed by countywide, citywide or regional VMT; nor do they specify thresholds for land uses other than office uses and residential uses.

*Fresno County Council of Governments (Fresno-COG)*

Fresno County Council of Governments (Fresno-COG) is in the process of updating the Fresno-COG ABM; however, they have established and adopted policy for implementing OPR's Technical Advisory as a basis for VMT impact study guidance based on the currently adopted Fresno-COG ABM. Fresno-COG recommends use of OPR's recommended thresholds for land use projects governed by countywide VMT for both residential and office uses. The Fresno-COG ABM reports residential VMT, employment VMT, VMT per Capita, and VMT per Employee as measures of effectiveness and land-use efficiencies.<sup>2</sup>

### 3. Baseline VMT

**TOTAL COUNTYWIDE VMT**

Total countywide VMT for years 2019 and 2042 Baseline were estimated based on Fresno-COG ABM. Residential VMT and employment VMT results, population and employment information from Fresno-COG ABM are provided by traffic analysis zone (TAZ). A summary of population, employment, and baseline VMT results for year 2019 are presented in Table 3-1. As previously mentioned, the Fresno County jurisdiction includes both unincorporated areas as well as "sphere-of-influence" areas that are proximate to the various city jurisdictions in Fresno County. As shown in Table 3-1, the tabulations of VMT for Unincorporated Fresno County are 31.6 and 38.3 for average VMT per Capita and VMT per Employee, respectively; and the tabulations of VMT for Fresno County jurisdiction, inclusive of cities' spheres-of-influence, are 26.3 and 38.4 for average VMT per Capita and VMT per Employee, respectively. Since the Project consists of growth within both the unincorporated and cities' spheres-of-influence areas, the remainder of the VMT analysis and evaluation reflects all areas of Fresno County jurisdiction, both unincorporated areas and areas within cities' spheres-of influence.

**Table 3-2 Fresno County Year 2019 Baseline VMT**

Jurisdiction	Population	Households	Employment	Total VMT per Resident	Total VMT per Employee
Unincorporated	107,938	34,363	73,975	31.6	38.3
Fresno County Jurisdiction	180,823	56,594	83,082	26.3	38.4
All Cities + County (Countywide)	<b>1,010,385</b>	<b>326,303</b>	<b>404,136</b>	<b>16.1</b>	<b>25.7</b>

**Note:** "Unincorporated" refers to the unincorporated areas of Fresno County, excluding areas within cities' spheres-of-influence. "Fresno County Jurisdiction" refers to both unincorporated areas and cities' spheres-of-influence. "Cities and County" refers to all areas of the County, including cities, cities' spheres-of-influence, and unincorporated areas.

A summary of VMT for 2042, as well as 2042 population, households and employment for Fresno County jurisdiction and Countywide are presented in Table 3-2.

<sup>2</sup> SB 743-related VMT Technical Guidance was finalized in January 2021 and subsequently adopted.

Table 3-2 Fresno County Year 2042 Baseline VMT

Jurisdiction	Population	Households	Employment	Total VMT per Resident	Total VMT per Employee
Fresno County Jurisdiction	208,307	66,191	93,527	23.4	35.5
All Cities + County	1,286,053	407,370	473,263	14.6	23.9

*Note: "Unincorporated" refers to the unincorporated areas of Fresno County, excluding areas within cities' spheres-of-influence. "Fresno County Jurisdiction" refers to both unincorporated areas and cities' spheres-of-influence. "Cities and County" refers to all areas of the County, including cities, cities' spheres-of-influence, and unincorporated areas.*

## 4. VMT Impact Determination & Mitigation Measures

### 4.1 VMT Impact Significance Threshold

SB 743 required changes to the State CEQA Guidelines regarding the analysis of transportation impacts. OPR proposed, and the California Natural Resource Agency has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric by which to evaluate transportation impacts due to a project. OPR's Technical Advisory recommends establishing and following standards of significance that apply to this transportation impact analysis. If the project is identified as having a significant impact, mitigation measures will be recommended, if applicable.

**Recommended VMT impact significance threshold for residential projects (including the residential portions of the Project):** A proposed project exceeding 87 percent of the existing countywide average VMT per Capita may indicate an adverse transportation impact. Therefore, **VMT impacts would be considered potentially significant if VMT attributable the Project exceeds 14.0 miles per capita.**

**Recommended VMT impact significance threshold for commercial projects (including the commercial portions of the Project):** A proposed project exceeding 87 percent of the existing countywide average VMT per Employee may indicate an adverse transportation impact. Therefore, **VMT impacts would be considered potentially significant if VMT attributable the Project exceeds 22.4 miles per employee.**

### 4.2 Year 2042 Project VMT Impact Findings

To evaluate the impact of the Project on Cumulative (Year 2042) Conditions, the VMT per Capita and VMT per Employee attributable to the Project was forecasted utilizing the Year 2042 Fresno-COG ABM and integrated Land Use model. The year 2042 model land use was prepared by Fresno-COG staff and provided to GHD. Fresno-COG staff also completed the 2042 travel demand forecast using the 2042 modelled land use. Approximately 10,445 estimated jobs due to the Project was assumed in the Fresno-COG travel demand model for year 2042, located throughout the unincorporated areas and cities' spheres-of-influence areas of the County.

As shown in Table 4-1, under the 2042 With Project scenario the Project is forecasted to result in a net increase of 125,507 VMT. While the number of jobs increases by seven percent compared to 2019 Baseline conditions, Total VMT increases by 3.5 percent with the Project.

Based on 5,071 added jobs, the net increase equates to no more than 24.75 VMT per Employee, below the estimated existing rate of 28 VMT per Employee for Fresno County described above. The 2019 With Project scenario is therefore considered below the threshold.

**Table 4-1 Year 2042 plus Project VMT**

Scenario	Jurisdiction	Total Residential VMT	Total Employment VMT	Population	Total Employment	VMT per Capita	Above VMT per Capita Threshold?	VMT per Employee	Above VMT per Employee Threshold?
2042 Baseline	Countywide	16,977,476	10,923,672	1,182,003	459,964	14.4	-	23.7	-
2042 With Project	Countywide	17,000,903	11,168,286	1,183,634	470,264	14.4	-	23.7	-
Net Change with Project	-	23,427	244,614	1,631	10,300	14.4 <sup>1</sup>	Yes	23.7 <sup>2</sup>	Yes

<sup>1</sup> The rate of VMT per Capita attributable to the Project was assumed to be equal to the VMT per capita without the project

<sup>2</sup> The rate of VMT per Employee attributable to the Project was assumed to be equal to the VMT per capita without the project.

As shown above, the 2042 With Project scenario is forecasted to result in a net increase of 23,427 residential VMT and a net increase of 244,614 employment VMT. The total population increases by 0.1 percent compared to 2042 Baseline conditions and total residential VMT increases by 0.1 percent with the Project. The total employment increases by 2 percent compared to 2042 Baseline conditions and total employment VMT increases by 2 percent with the Project.

Based on 23,427 additional population and 10,300 added jobs, the Project would therefore generate 14.4 VMT per Capita and 23.7 VMT per Employee under Year 2042 conditions, above the existing threshold of 14.0 VMT per Capita and 22.4 VMT per employee, respectively, for Fresno County and therefore above the respective impact thresholds for VMT per Capita and VMT per employee.

Based on this assessment: VMT attributable to the Project is anticipated to exceed the average rate of VMT per Capita and VMT per Employee in Fresno County. Therefore, **VMT impacts would be considered significant, and VMT mitigations would be required.**

## 5. Mitigations and Additional Considerations

### 5.1 Measures to Reduce VMT

As described in the previous section, this analysis found that VMT impacts would be significant for both households and employment, and VMT mitigations would be required. This section describes several relevant transportation planning measures to reduce VMT. Because the Project relates to large swaths of parcels throughout the County with differing land use characteristics and transportation contexts, the variety of possible measures to reduce VMT, presented in this section, range in complexity, cost, and viability relative to the locations of future growth and surrounding transportation system.

Transit and transportation demand management (TDM) strategies should aim to ensure that individuals can access basic amenities and key destinations related to employment, health, or personal trips. Due to the rural character of much of the Project Study Area, ensuring adequate transportation services to these destinations is a critical component of this plan.

In addition, large employment sites within the Project Area create a need to address commute trips. Of the total persons employed within the Project study area, almost 68 -percent commute from outside of the study area. As such, transit service and TDM programs should aim to provide efficient transportation choices that result in reducing traffic congestion, pollution, and commuting stress.

This section summarizes the existing transit and TDM service to the Project Study Area and provides strategies to address the goals listed above through expanded transit service and TDM programs.

#### 5.1.1 Transit and TDM Context

Fresno County is serviced by Fresno County Rural Transit Agency (FCRTA). FCRTA provides public transit service from rural communities to the City of Fresno, including the Coalinga Intercity Transit Route through

the community of Easton and the Southeast Transit Route through the community of Fowler. The area is also served by Fresno County Economic Opportunities Commission (EOC) through Social Services funding, including overnight hours of door-to-door transit for CalWORKs clients working at major employers who operate overnight shifts, when other transit options are not available.

## 5.1.2 Project Transit and TDM Strategies

The following goals drive strategies for transit service and TDM programs to improve connectivity and access to and within the Project study area and surrounding areas, with a specific focus on disadvantaged communities:

- **Mitigate Air Quality and Congestion Impacts:** Travel demand is better managed by encouraging mode shares away from single occupant vehicles to active modes.
- **Improve Connectivity and Access for Disadvantaged Populations:** Implementing the multimodal and safety improvements presented within the most recent RTP/SCS will promote increased access and connectivity for priority populations. Priority populations are defined by the California Air Resources Board as disadvantaged communities, low-income communities, and low-income households, who are especially vulnerable to the impacts of climate change.

To address existing transit needs in the Project study area, the following strategies should be considered in coordination with the current AB 617 planning efforts and 2022 RTP/SCS<sup>3</sup> to improve connectivity and access to and within the Project study area. These strategies correspond to areas within the Project study area that will be identified on a project-specific bases.

- **Expand Transit Service:** Consider opportunities to expand FCRTA fixed route and shuttle-based transit service in the Project study area to serve locations of future growth with the Project, with consideration to anticipated increases in commute trips.
- **Public-facing TDM Programs:** Promote existing TDM programs led by Fresno COG and other public agencies including ridesharing programs, carpool and vanpool programs, and demand-response services, such as:
  - Fresno COG “Valley Rides” Ridesharing
  - Carpool Incentive Program
  - Commuter Vanpool Program
  - Agricultural Worker Vanpool Program
  - Senior Taxi Scrip Program
- **Employer-based TDM Programs:** Per San Joaquin Valley Air Pollution Control District, the employer-based trip reduction Rule 9410 (December 17, 2009) requires employers with at least 100 eligible employees at a worksite to implement programs to reduce vehicle miles traveled (VMT) from private vehicles used by employees to commute to and from their worksites. Employers should promote the education, information, and promotion of the above mentioned TDM programs.
- **Mobility-As-A-Service:** Provide additional access and connectivity for underserved populations. Strategies to improve connectivity and access include on-demand shuttles to connect individuals to desired destinations.
- **Safe-Routes-To-School:** Encourage school-related trips currently made via car to be made via active modes.
- **Connectivity Enhancement:** The bicycle and pedestrian facilities presented in the Fresno County Regional Active Transportation Plan (ATP) should connect to transit route stops where applicable, to accommodate “first mile” and “last mile” travel (travel between modes to a destination). In addition,

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<sup>3</sup> The Fresno COG Regional Transportation Plan (RTP) Update Draft is currently undergoing public comment

existing and future bus stops should be improved to comply with ADA design standards to ensure ADA-accessible bus stops and comfortable bus shelters.

- **Land Use:** Modify land use plans<sup>4</sup> to increase residential development in areas with low VMT/capita characteristics and/or decrease development in areas with high VMT/capita characteristics and modify land use plans to increase commercial development in areas with low VMT/employee characteristics and/or decrease development in areas with high VMT/employee characteristics.
- **Education and Promotion/Encouragement:** Voluntary travel behavior change program including Promotions and marketing.
- **Commute Trip Reductions (smaller employers):** Implement or provide access to:
  - Voluntary commute trip reduction programs
  - Alternative work schedules and Telework Program
  - Employer-sponsored vanpools or shuttles
  - Rideshare Program - Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services
  - Provide car-sharing and bike-sharing programs
  - Provide partially or fully subsidized transit passes
  - Provide telework options
  - Provide employee transportation coordinators at employment sites
  - Provide a guaranteed ride home service to users of non-auto modes
- **Bicycle Infrastructure:** Implement on-street bicycle facilities, provide bicycle parking, and provide secure bicycle parking and showers.
- **Neighborhood Infrastructure:** Implement neighborhood improvements such as:
  - Traffic calming improvements
  - Pedestrian network improvements
  - Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle
  - Improve or increase access to transit
  - Increase access to common goods and services, such as groceries, schools, and daycare
  - Incorporate a neighborhood electric vehicle network
  - Provide traffic calming
  - Limit or eliminate parking supply

The TDM measures discussed above would result in potential VMT reductions as presented in Table 3. In actual practice, VMT strategies range widely in effectiveness, also shown in Table 3. This wide range is due to a variety of factors related to the physical environmental, the characteristics of the surrounding transportation system, the patterns of development and the diversity, density and design characteristics of individual development projects.

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<sup>4</sup> For future proposed development projects



Table 3 Transportation – VMT Emissions Reduction Estimates

Category	Strategy	Range of Effectiveness (Percent Reduction in GHG Emissions)	Basis
Land Use	Modify land use plan to increase residential development in areas with low VMT/capita characteristics and/or decrease development in areas with high VMT/capita characteristics	N/A	-
Land Use	Modify land use plan to increase commercial development in areas with low VMT/employee characteristics and/or decrease development in areas with high VMT/employee characteristics	N/A	-
Parking	Reduce Parking Supply	5.0% - 12.5%	VMT
Parking	Unbundle parking or price parking	2.6% - 13.0%	VMT
Parking	Parking cash-out	0.6% - 7.7%	VMT
Transit	Extend existing transit services to serve the locations of future growth with the Project	0.1% - 8.2%	VMT
Transit	Reduce transit headways	0.2% - 2.5%	VMT
Transit	Implement neighborhood shuttle and/or shuttle to transit	N/A	-
Transit	Add transit stops and shelters in vicinity of locations of future growth with the Project	N/A	-
Education	Voluntary travel behavior change program	0.1% - 8.0%	VMT
Education/Promotion	Promotions and marketing	0.1% - 4.0%	VMT
Commute Trip Reductions	Implement or provide access to a voluntary commute trip reduction program	0.8% - 4.0%	Commute VMT
Commute Trip Reductions	Alternative work schedules and Telework Program	0.1% - 5.5%	Commute VMT
Commute Trip Reductions	Employer-sponsored vanpools or shuttles	0.3% - 13.4%	Commute VMT
Commute Trip Reductions	Rideshare Program - Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services	0.7% - 5.5%	Commute VMT
Commute Trip Reductions	Provide car-sharing and bike-sharing programs	N/A	-
Commute Trip Reductions	Provide partially or fully subsidized transit passes	N/A	-
Commute Trip Reductions	Provide employee transportation coordinators at employment sites	N/A	-
Commute Trip Reductions	Provide a guaranteed ride home service to users of non-auto modes	N/A	-
Bicycle Infrastructure	Implement On-street Bicycle Facilities	N/A	-
Bicycle Infrastructure	Provide Bicycle Parking	N/A	-
Bicycle Infrastructure	Provide Secure bicycle parking and showers	N/A	-
Neighborhood Infrastructure	Traffic calming improvements	0.5% - 24.6%	VMT
Neighborhood Infrastructure	Pedestrian network improvements	6.7% - 20.0%	VMT
Neighborhood Infrastructure	Provide incentives or subsidies that increase the use of modes other than single-occupancy vehicle	N/A	-

Category	Strategy	Range of Effectiveness (Percent Reduction in GHG Emissions)	Basis
Neighborhood Infrastructure	Improve or increase access to transit	0.5% - 24.6%	VMT
Neighborhood Infrastructure	Increase access to common goods/services (e.g., groceries, schools, daycare)	6.7% - 20.0%	VMT
Neighborhood Infrastructure	Incorporate a neighborhood electric vehicle network	0.5% - 12.7%	VMT
Neighborhood Infrastructure	Limit or eliminate parking supply	N/A	-

Source: California Air Pollution Control Officers Association (CAPCOA) GHG Reductions

As previously mentioned, the complexity, cost and viability associated with the preceding list of Transportation Demand Management measures (TDM) varies significantly. Most jurisdictions in California have selected TDM measures from this list with associated “maximum VMT reductions” that have been empirically observed and reported by the California Pollution Control Officers Association (CAPCOA). Since the results were empirical in nature, the observed VMT reductions and effectiveness of the TDM measures are by no means guaranteed and should be used with discretion and judgement by the lead agency (Fresno County) as appropriate to the future proposed project at hand. In addition, this list is not all inclusive and alternate measures could be evaluated based on a future specific proposed project.

The effectiveness of constrained parking supply or alternatively priced parking is context sensitive, and the availability of parking off site will be a limiting factor in its overall effectiveness in managing transportation demand; and may result in unwanted consequences such as ‘spillover’ parking into surrounding residential areas, particularly if there is a lack of transit options. The commute trip reductions measures (see above) would be best targeted to office-related employment growth, which accounts for an unspecified number of jobs as part of the Project; hence the overall VMT reductions are difficult to quantitatively evaluate; and the same can be concluded regarding teleworking.

The extent to which alternative work schedules are likely implementable will depend on the type of employment growth that will be proposed in the future. Both bicycle infrastructure and pedestrian network improvements would make marginal improvements to otherwise short vehicle trips between future workplaces and nearby destinations (for purposes of errands, dining, and the like), as well as between future residences and nearby destinations, but their effects on VMT reduction would be dependent on the availability of nearby transit and largely limited in the absence of nearby transit service. Both bicycle infrastructure and pedestrian improvements should be carefully considered in areas with nearby transit service.

## 5.2 Residential Population and Employees and VMT

Project impacts were evaluated based on VMT per capita and VMT per employee. As described in preceding sections of this memorandum, the incremental growth in VMT with and without the proposed Project is attributable to the increase in household population and employees associated with the Project. Project generated VMT per capita was calculated by dividing the estimated net change in VMT by the total number of new residential population (1,631) in 2042. Project generated VMT per employee was calculated by dividing the estimated net change in VMT by the total estimated number of new employees (10,300) in 2042.

## 6. Conclusion

Based on the recommended significance criteria, and the analysis described in this memorandum, VMT impacts would be significant, and VMT mitigations would be required in order to either offset or reduce the level of the significant impact. In general, the General Plan Update seeks to reduce vehicle trips and trip length by planning more dense development within existing communities, improving pedestrian and bicycle facilities and connectivity, and encouraging transit service expansion.

The General Plan Update includes policies to reduce the length and frequency of vehicle trips by encouraging mixed use Fresno County General Plan Draft EIR. Other CEQA Considerations focus on planned residential uses within neighborhood and town centers, thereby locating residential development in proximity to transportation and work; ensuring neighborhood connectivity; and providing incentives for housing and infrastructure development in housing opportunity zones located within urban development areas.

Even with policies aimed to reduce VMT, some significant unavoidable impacts considering excessive VMT will occur. VMT deficiencies will translate into deficiencies in transportation performance along several local and regional roadways and intersections in Fresno County, as a result of future housing and population growth. Roadway widenings are not anticipated due to funding and other constraints associated with state or federal monies per statewide policies. It is anticipated that even with implementation of the Project with mitigations, significant VMT deficiencies will occur; therefore, this impact with mitigation would be considered significant and unavoidable.

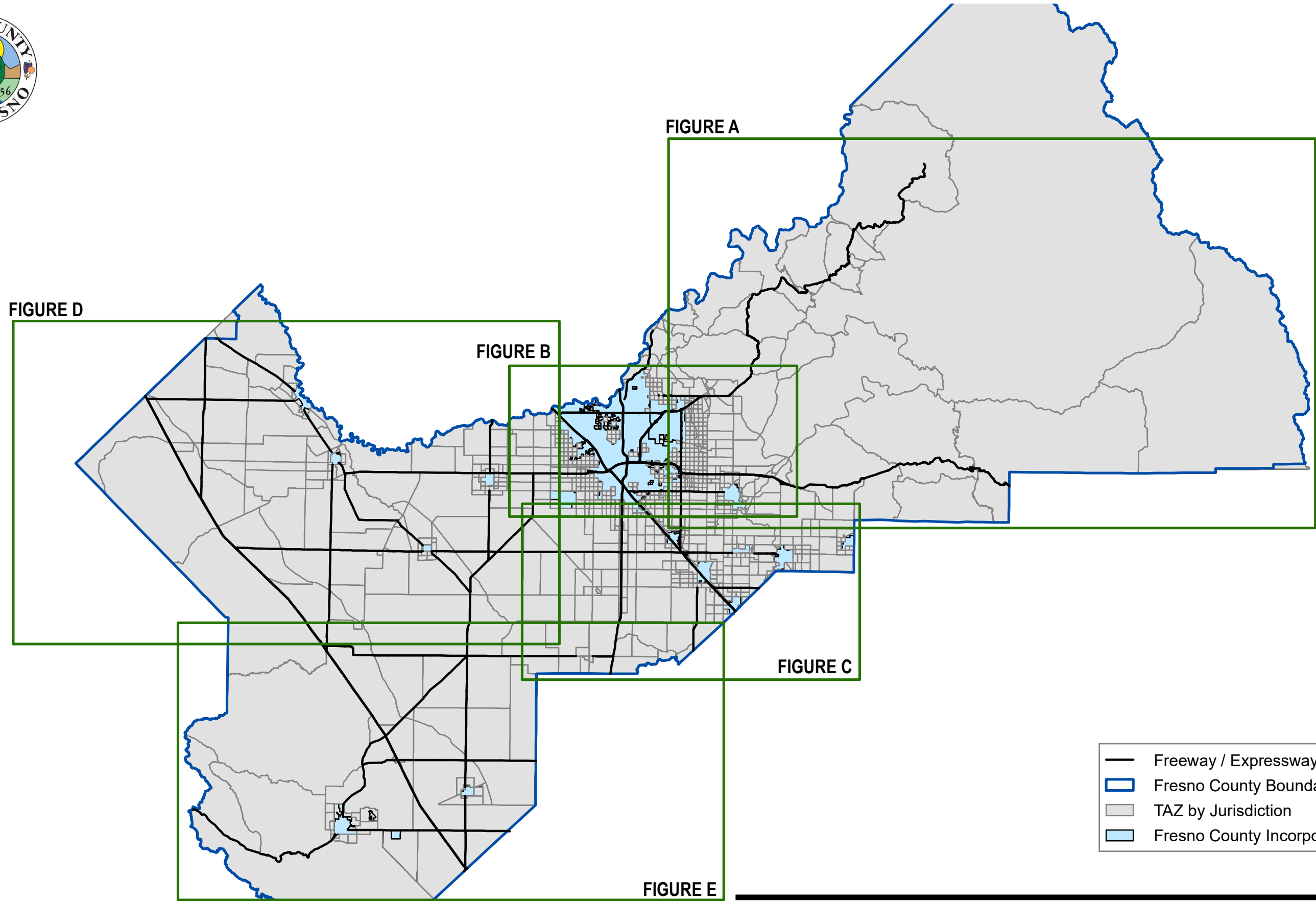
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## Appendices

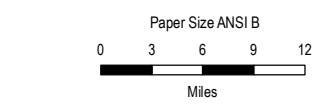
- Fresno County Key Map Identifying Traffic Analysis Zones and Subsequent Household and Employment Data
- 2019 & 2042 Traffic Analysis
- 2019 Household Data
- 2042 Household Data
- 2019 – 2042 Household Growth Data (%)
- 2019 Employment Data
- 2042 Employment Data
- 2019 – 2042 Employment Growth Data (%)

# Appendices

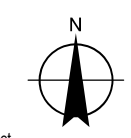
**Fresno County Key Map**  
**Identifying Traffic Analysis Zones and Subsequent**  
**Household and Employment Data**



- Freeway / Expressway
- ▭ Fresno County Boundary
- ▭ TAZ by Jurisdiction
- ▭ Fresno County Incorporated Cities



Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet



FRESNO COUNTY  
GENERAL PLAN  
Traffic Analysis Zones (TAZ)  
KEY MAP

Project No. 11180407  
Revision No. -  
Date April 2022

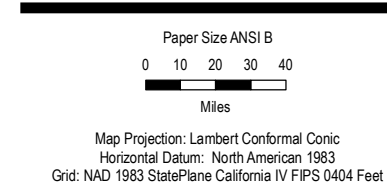
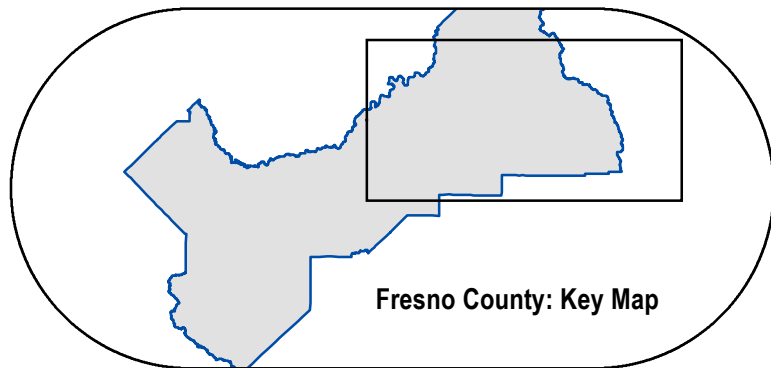
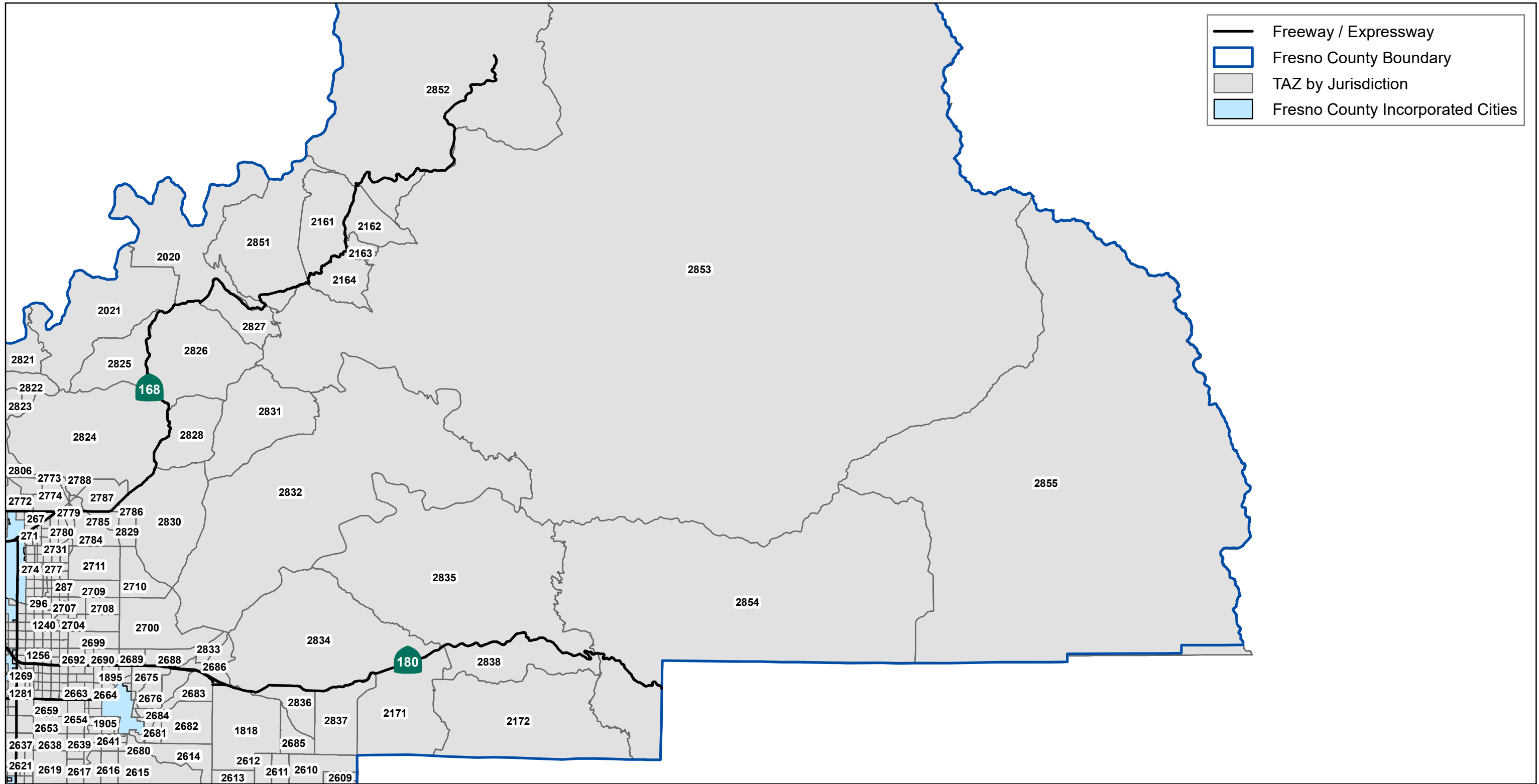
**FIGURE 1**

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# **2019 & 2042 Traffic Analysis Zones (TAZ)**

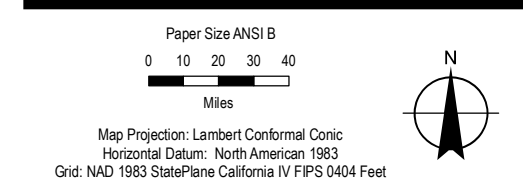
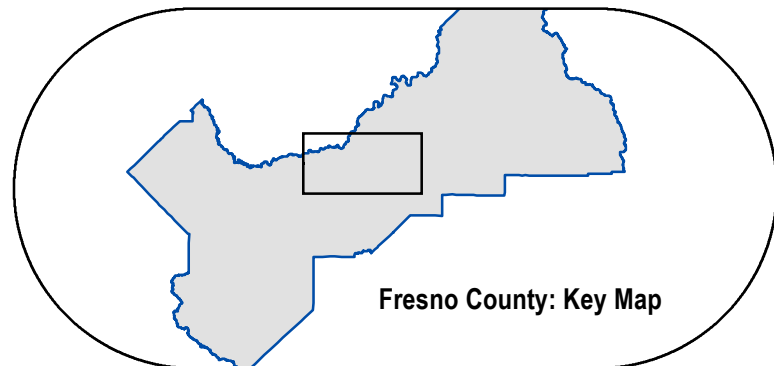
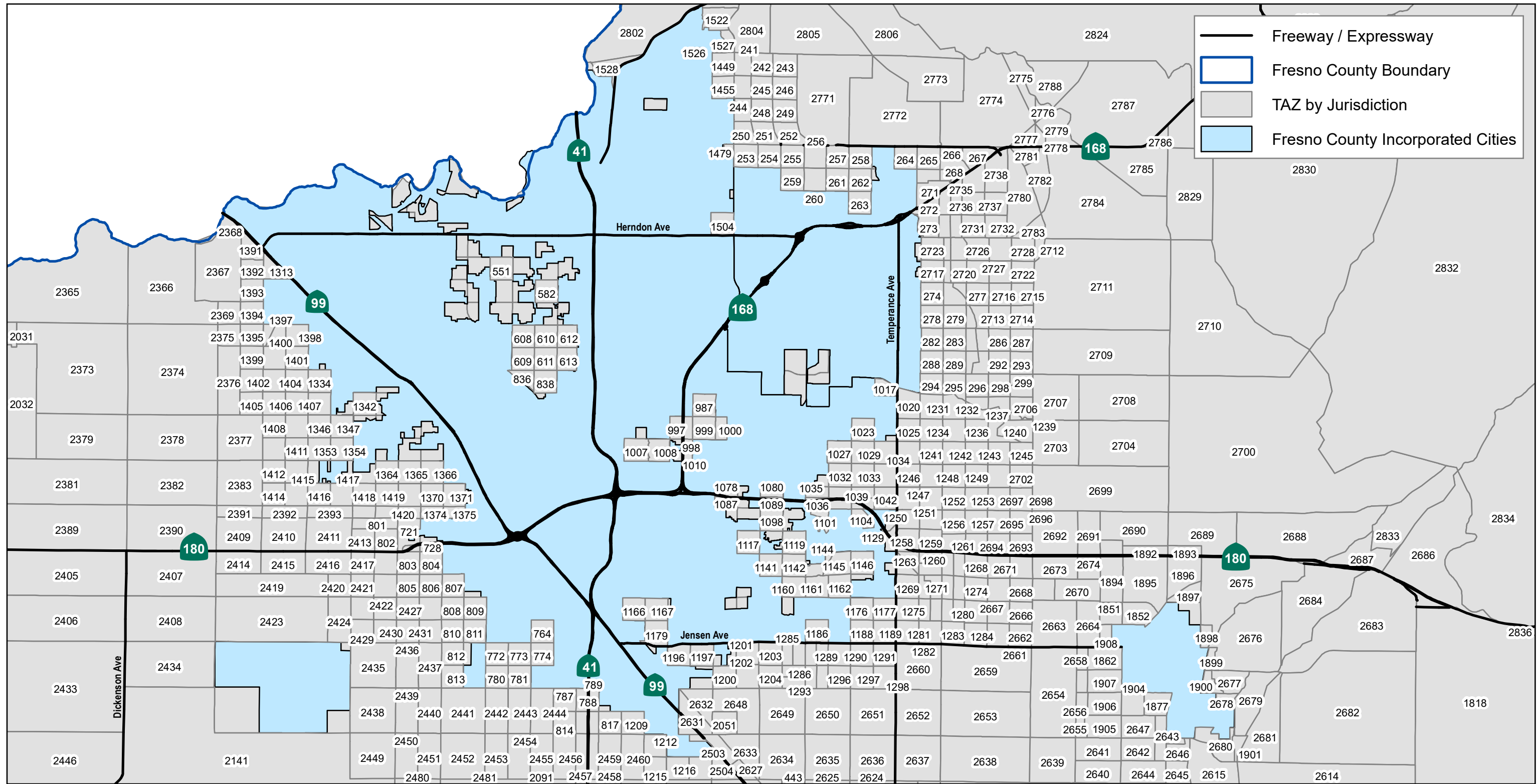




FRESNO COUNTY  
GENERAL PLAN  
Traffic Analysis Zones  
(TAZ)

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE A.1**

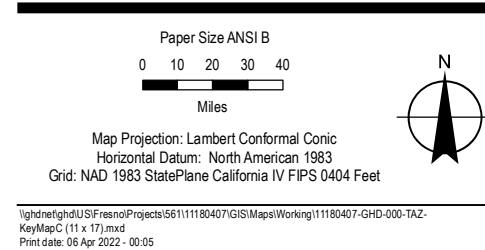
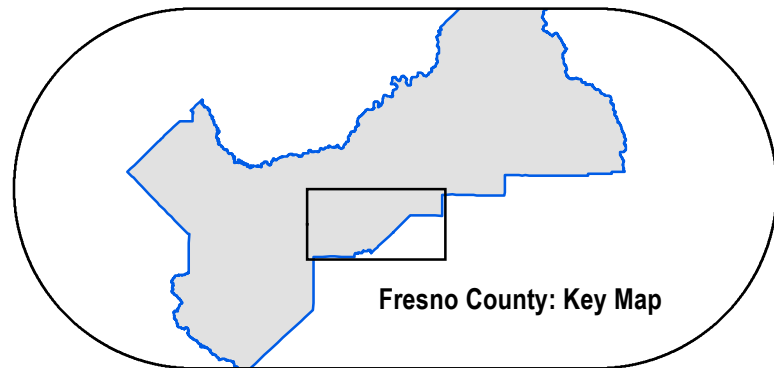
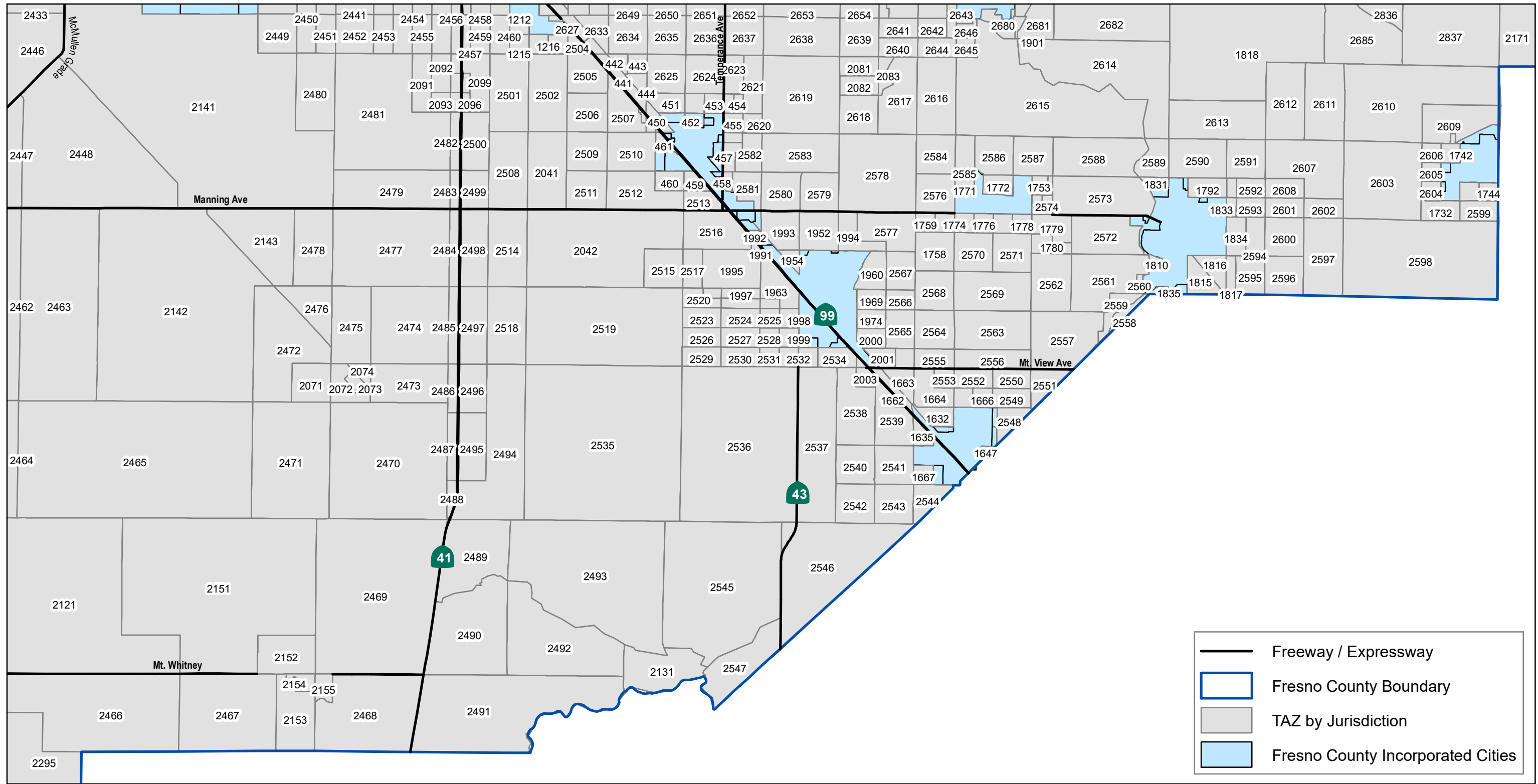


FRESNO COUNTY  
GENERAL PLAN  
Traffic Analysis Zones  
(TAZ)

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE B.1**

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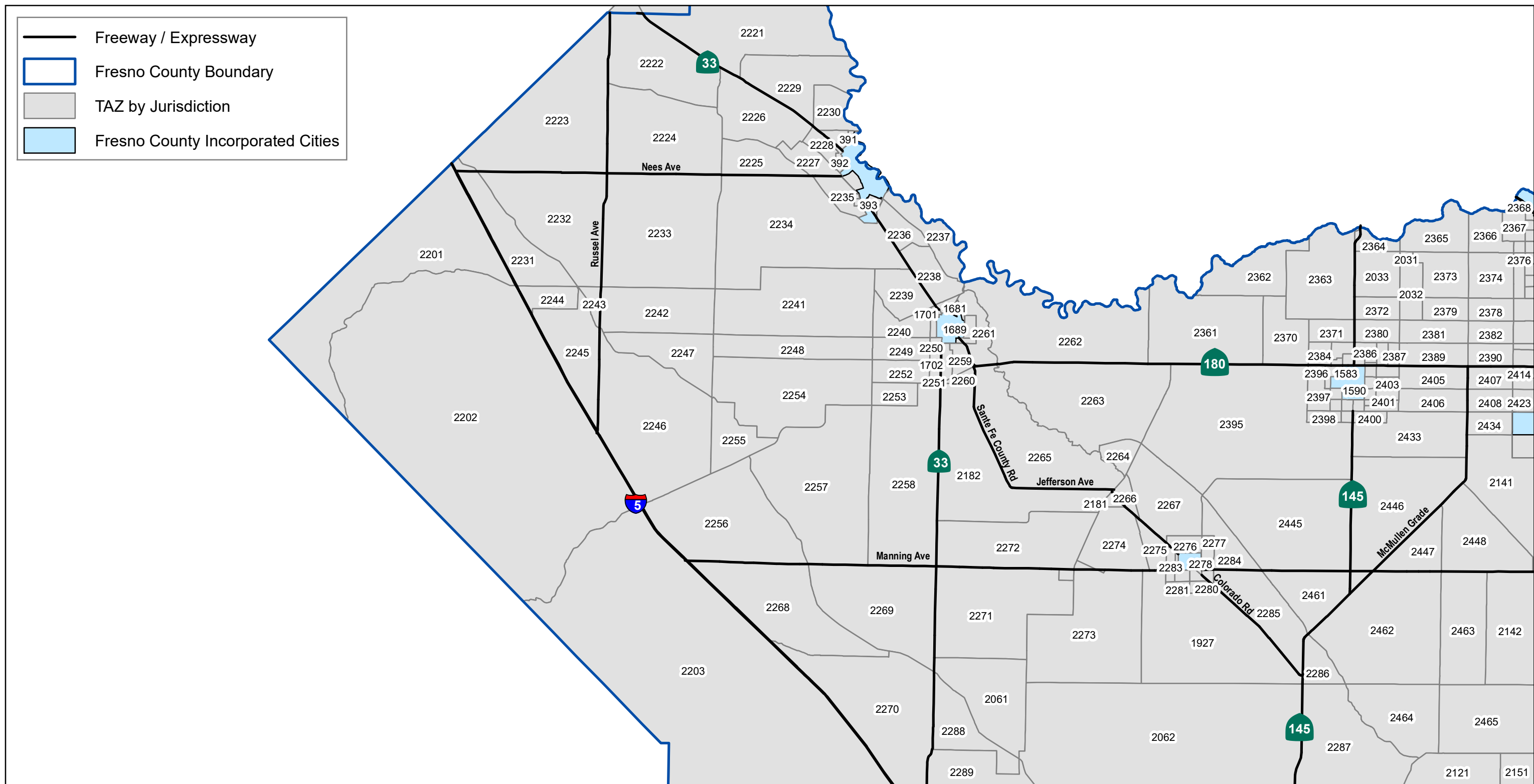
FRESNO COUNTY  
GENERAL PLAN  
Traffic Analysis Zones  
(TAZ)

Project No. 11180407  
Revision No. -  
Date April 2022

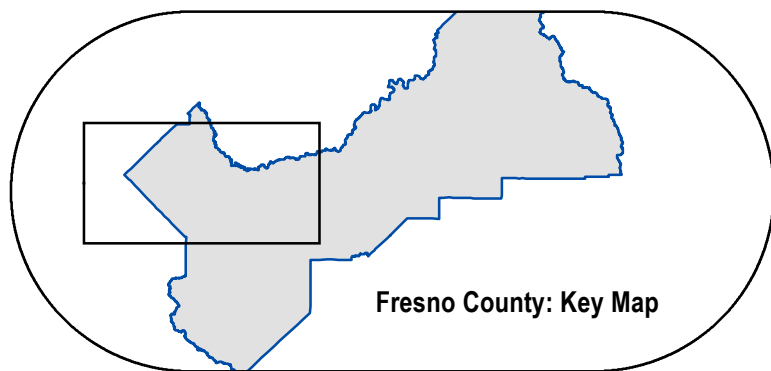
FIGURE C.1

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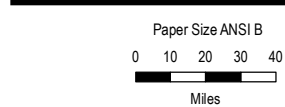
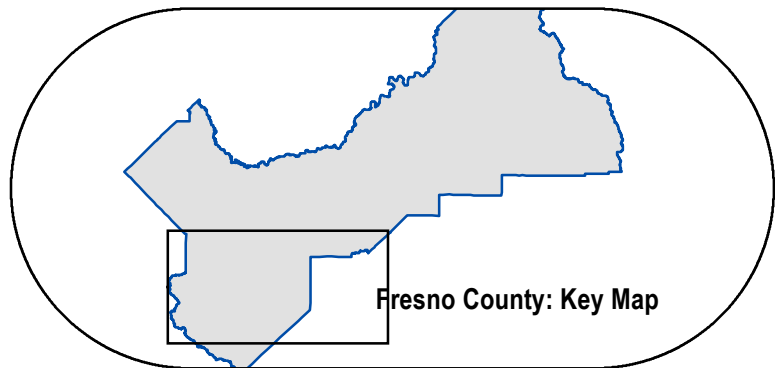
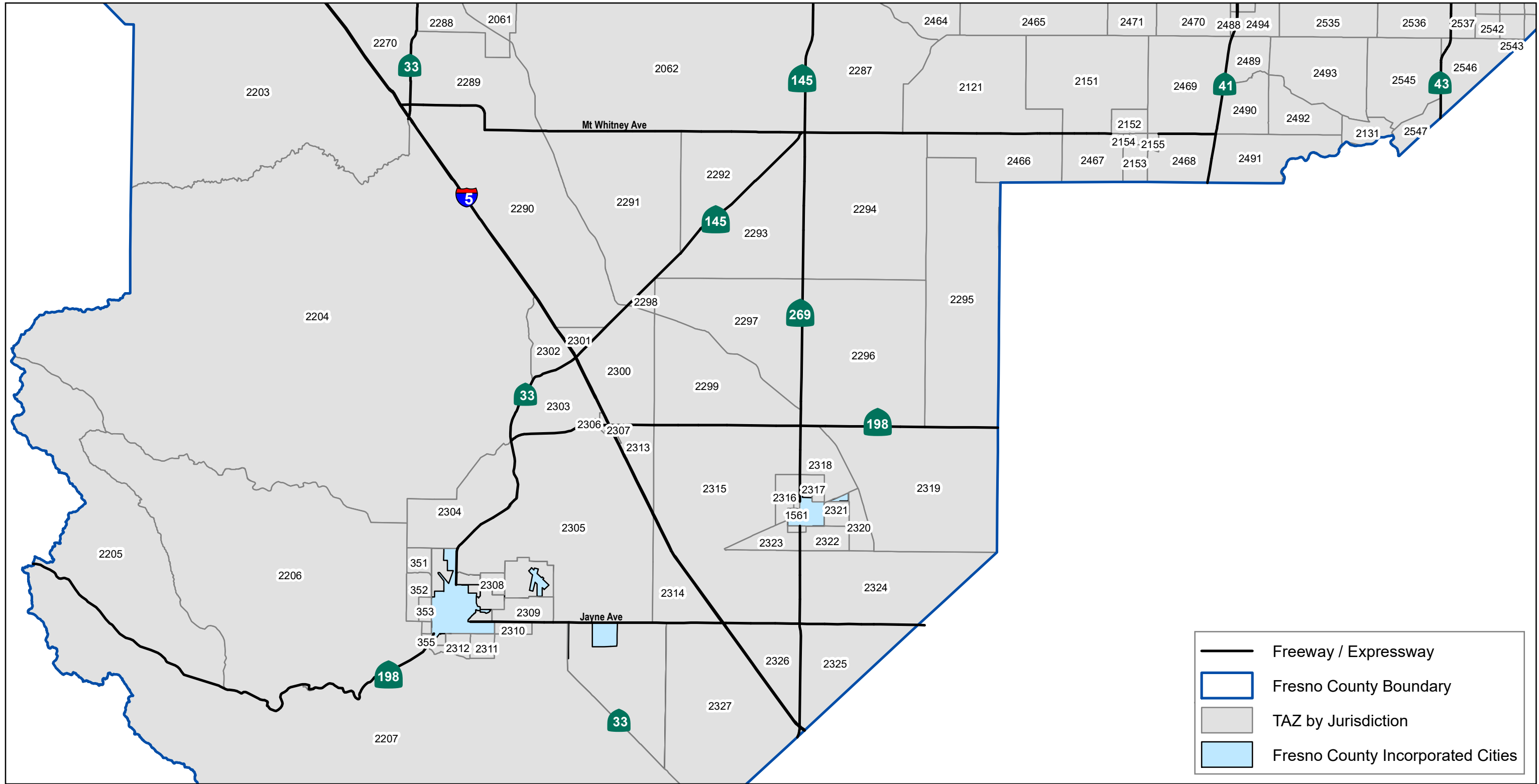
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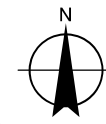
- Freeway / Expressway
- Fresno County Boundary
- TAZ by Jurisdiction
- Fresno County Incorporated Cities



<p>Paper Size ANSI B</p> <p>Miles</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet</p>			<p><b>FRESNO COUNTY GENERAL PLAN</b></p> <p><b>Traffic Analysis Zones (TAZ)</b></p>	<p>Project No. <b>11180407</b> Revision No. - Date <b>April 2022</b></p>
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Map Projection: Lambert Conformal Conic  
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FRESNO COUNTY  
 GENERAL PLAN  
 Traffic Analysis Zones  
 (TAZ)

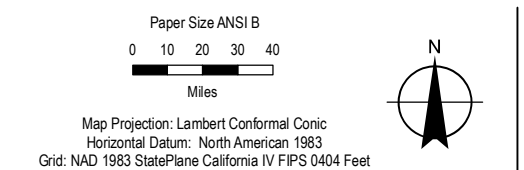
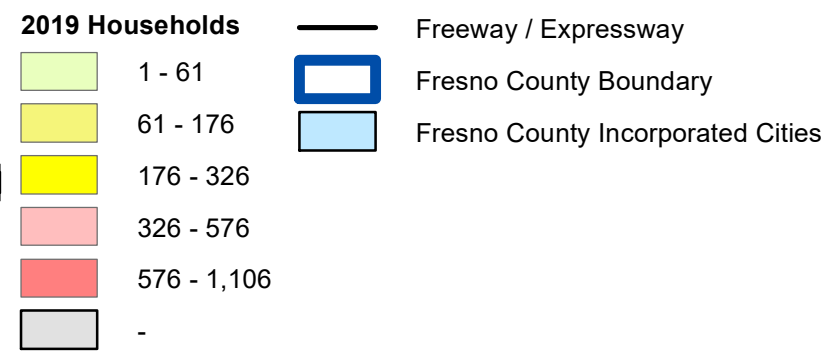
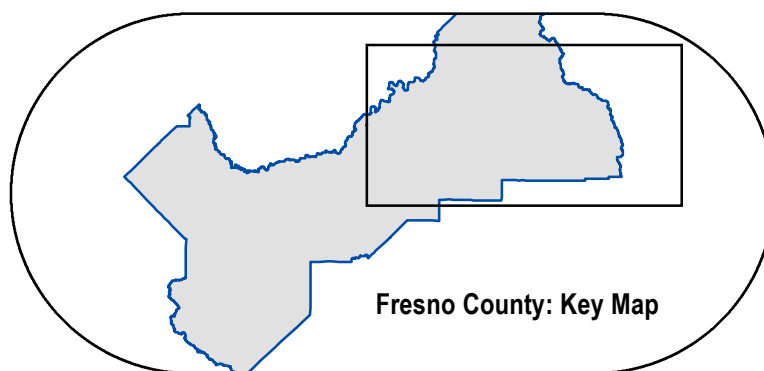
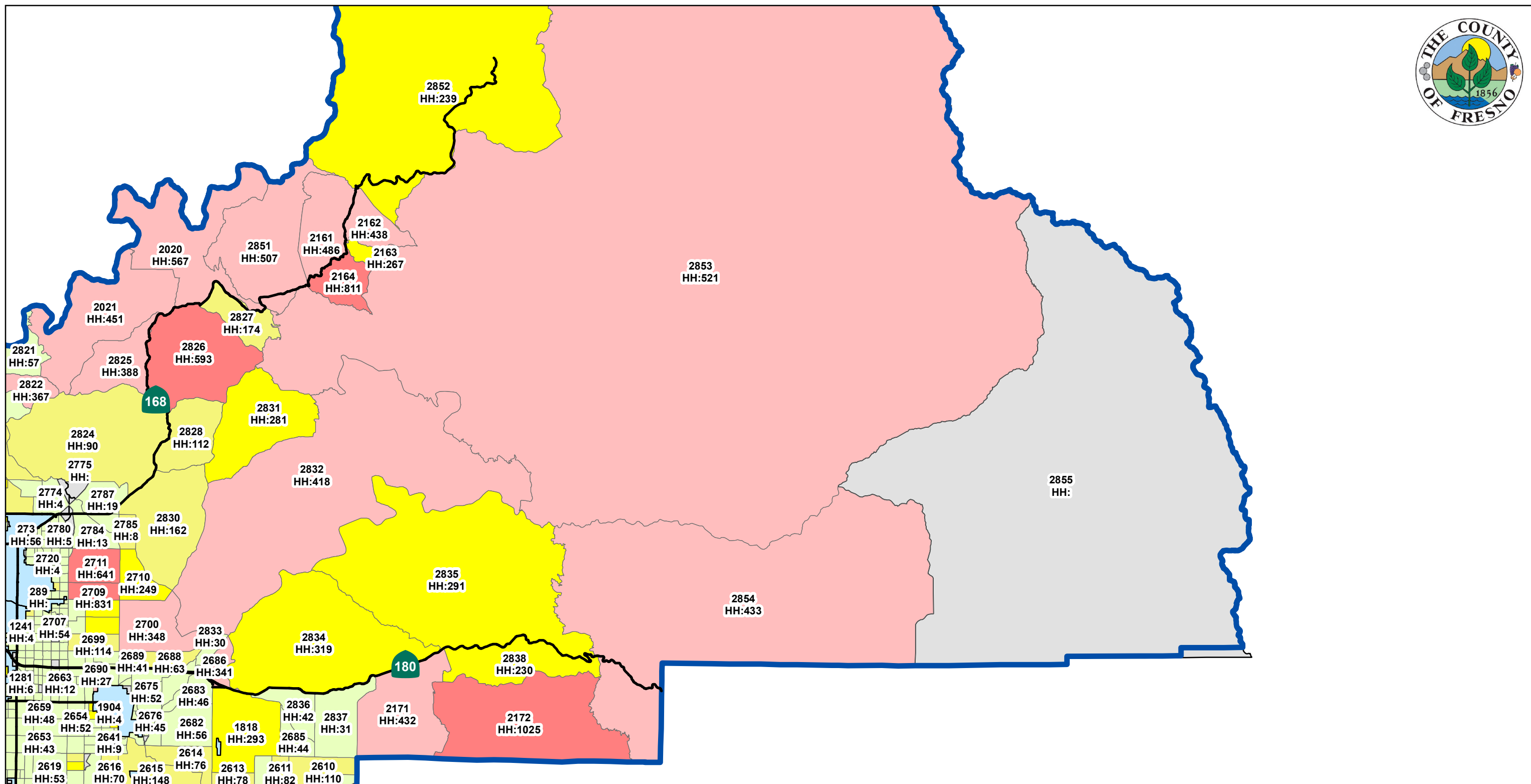
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 Date April 2022

**FIGURE E.1**

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# **2019 Household Data**



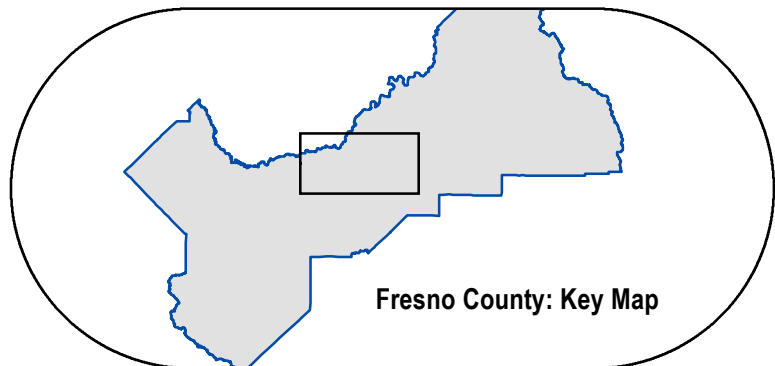
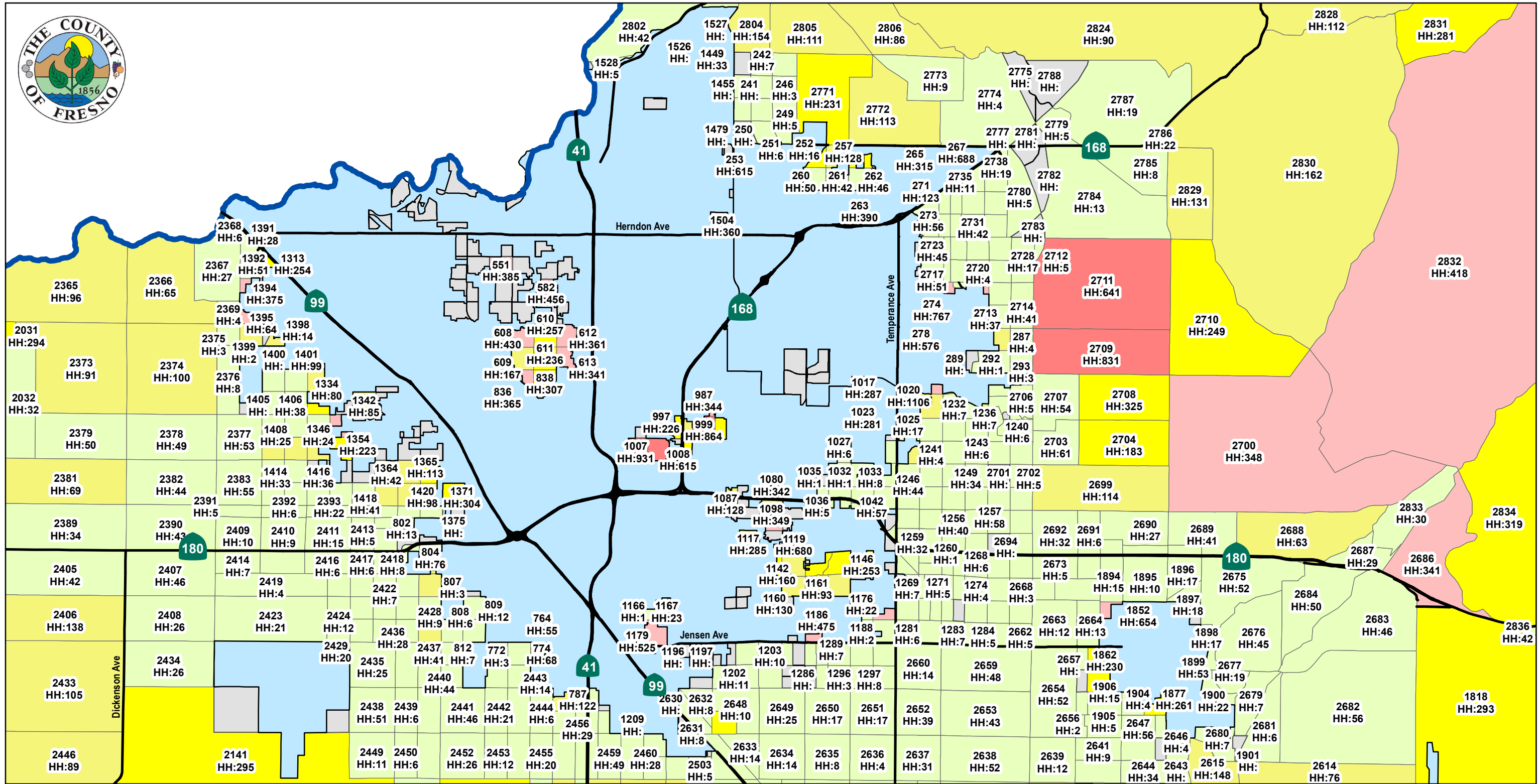
FRESNO COUNTY  
GENERAL PLAN  
**Total Household by  
TAZ**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE A.2**

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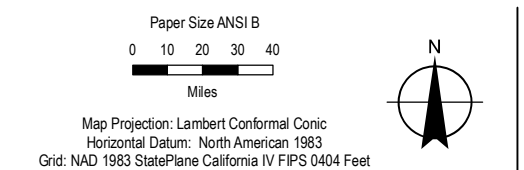
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**2019 Households**

Light Green	1 - 61
Yellow	61 - 176
Light Orange	176 - 326
Orange	326 - 576
Red	576 - 1,106
Grey	-

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



FRESNO COUNTY  
GENERAL PLAN  
**Total Household by  
TAZ**

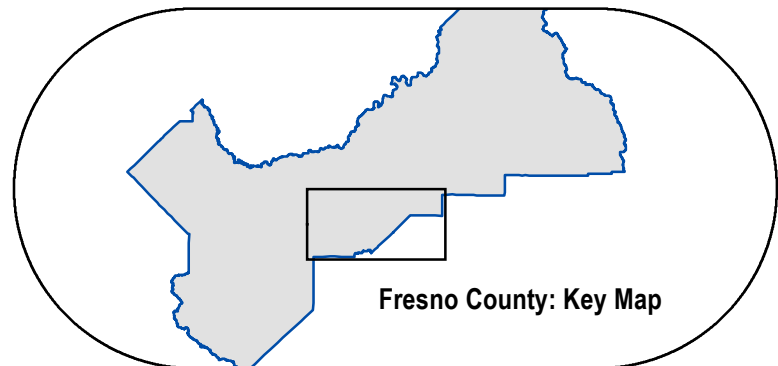
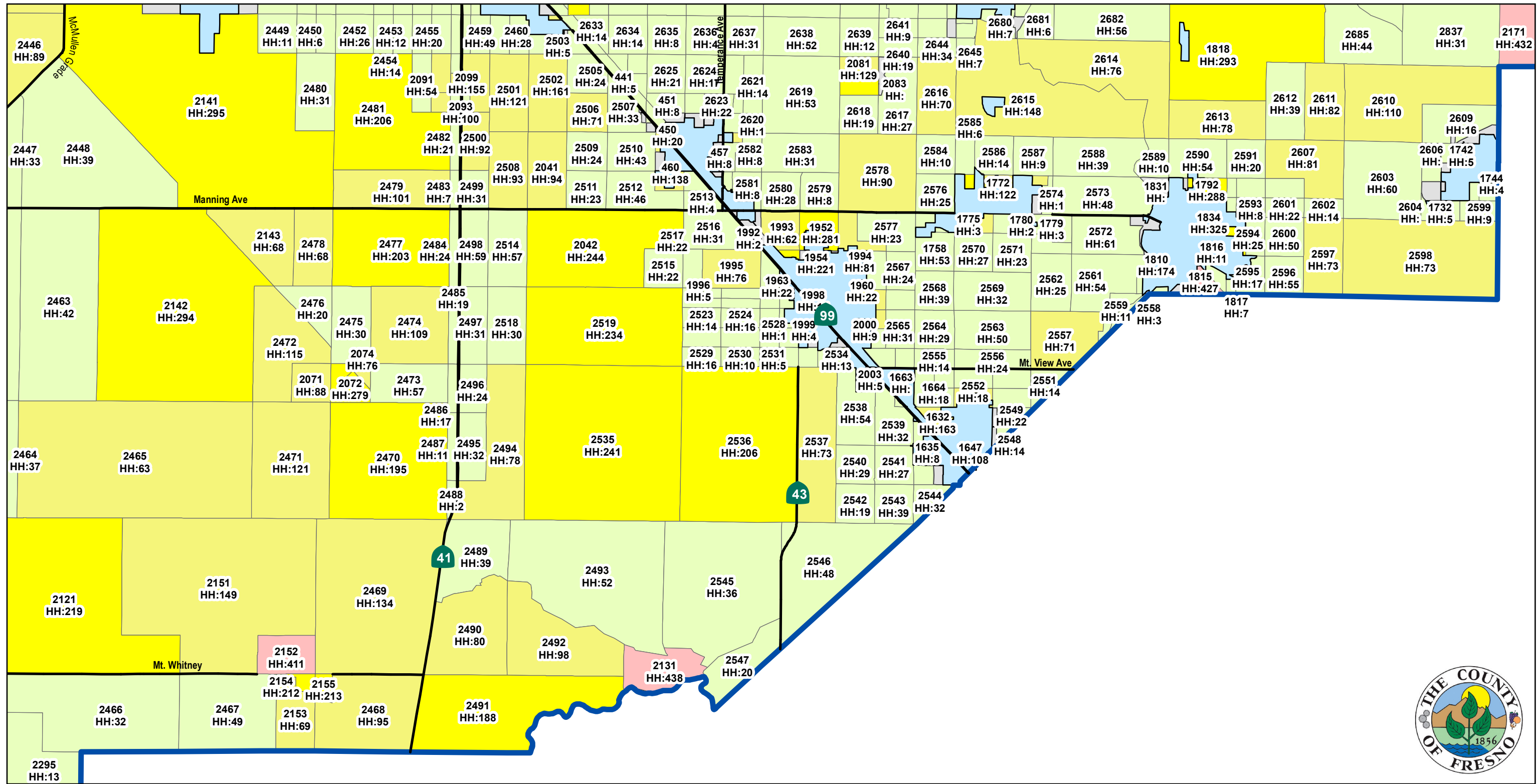
Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE B.2**

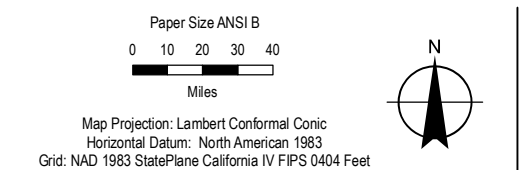
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- 2019 Households**
- 1 - 61
  - 61 - 176
  - 176 - 326
  - 326 - 576
  - 576 - 1,106
  -
- Freeway / Expressway
  - Fresno County Boundary
  - Fresno County Incorporated Cities

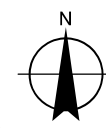
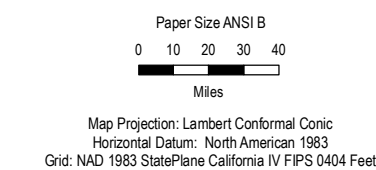
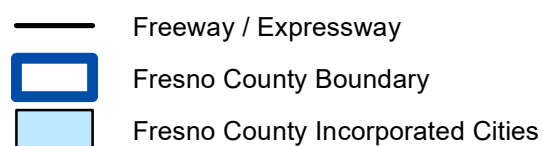
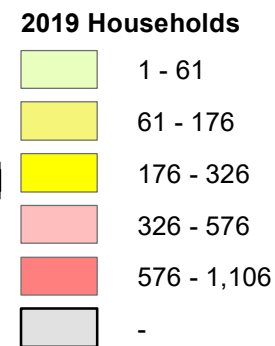
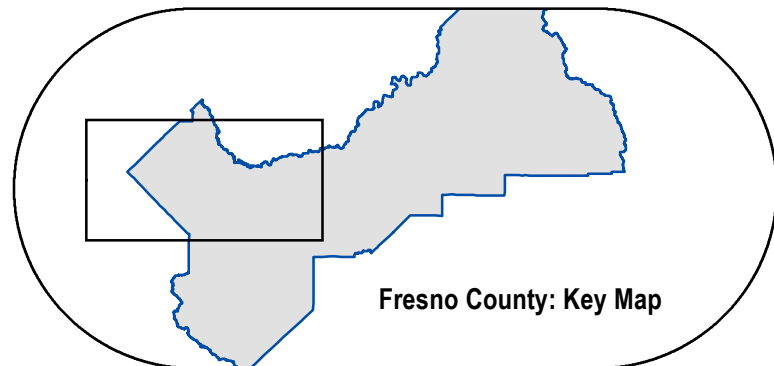
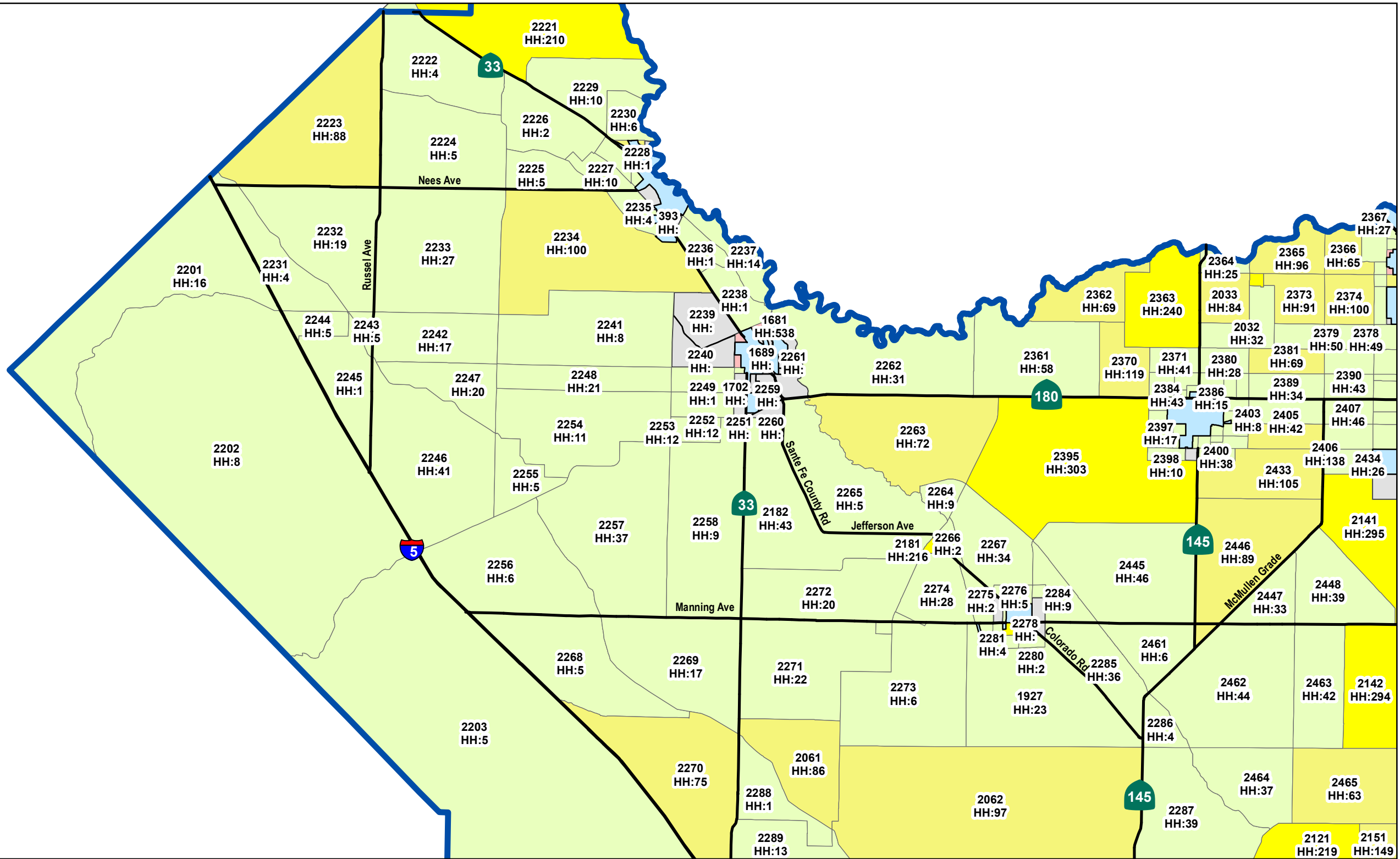


FRESNO COUNTY  
GENERAL PLAN  
**Total Household by  
TAZ**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE C.2**

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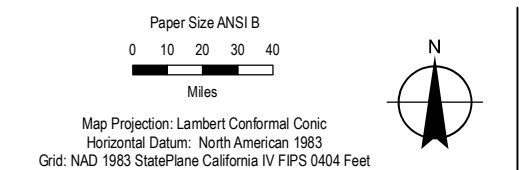
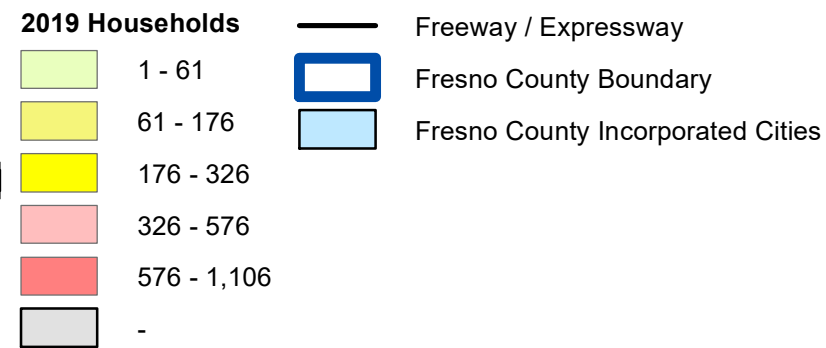
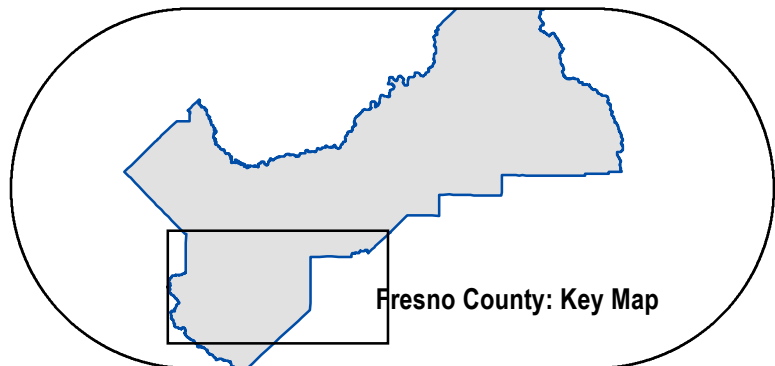
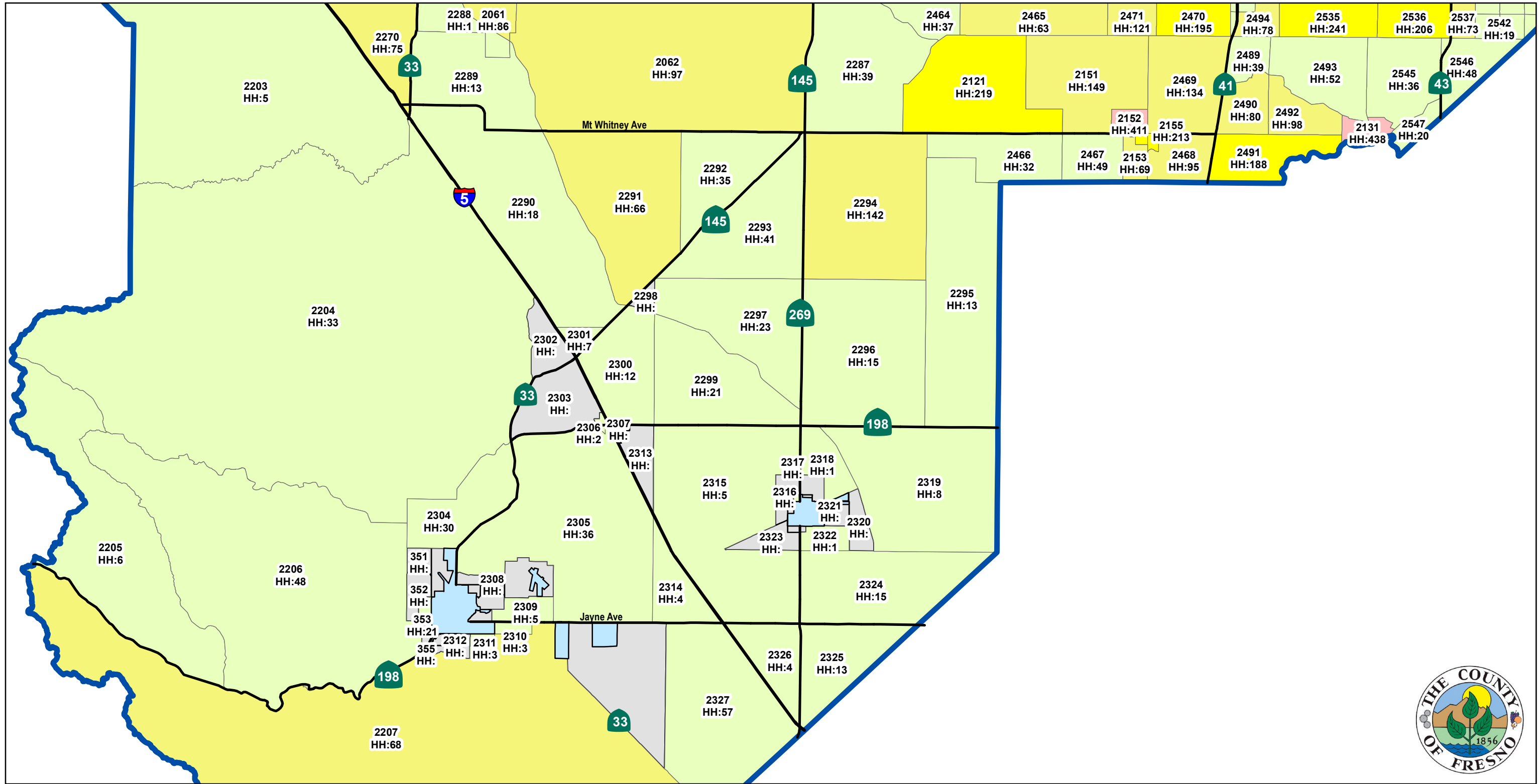


**FRESNO COUNTY  
GENERAL PLAN**

**Total Household by  
TAZ**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE D.2**



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet



FRESNO COUNTY  
 GENERAL PLAN  
 Total Household by  
 TAZ

Project No. 11180407  
 Revision No. -  
 Date April 2022

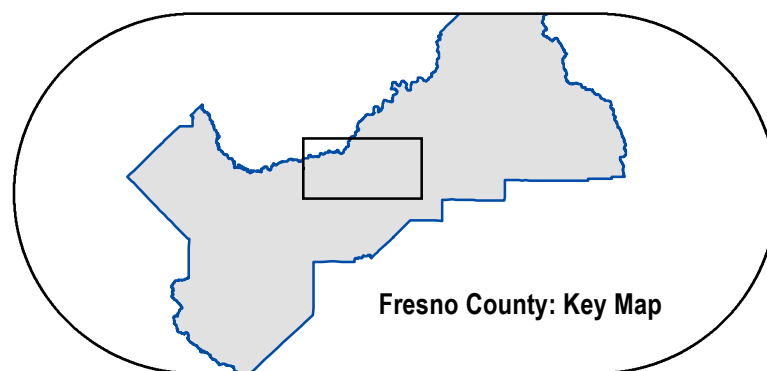
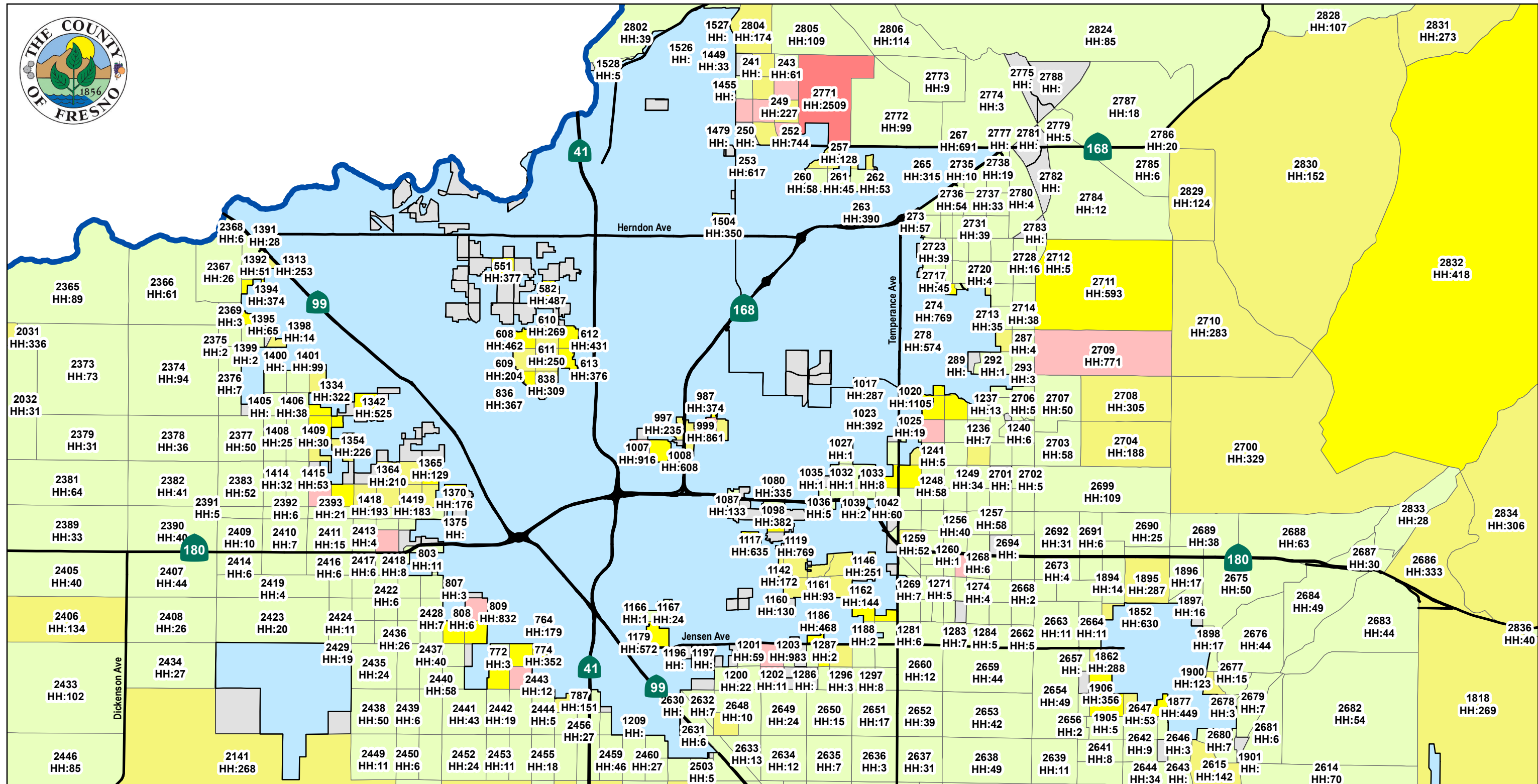
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# **2042 Household Data**

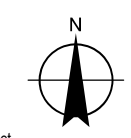
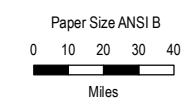




**2042 Households**

1 - 121
121 - 342
342 - 673
673 - 1,336
1,336 - 2,509
-

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



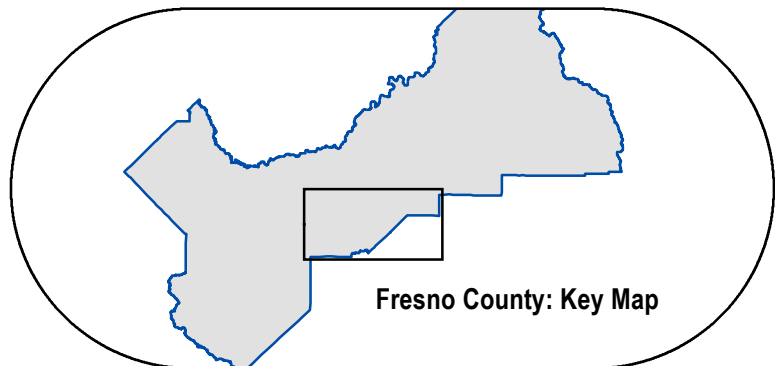
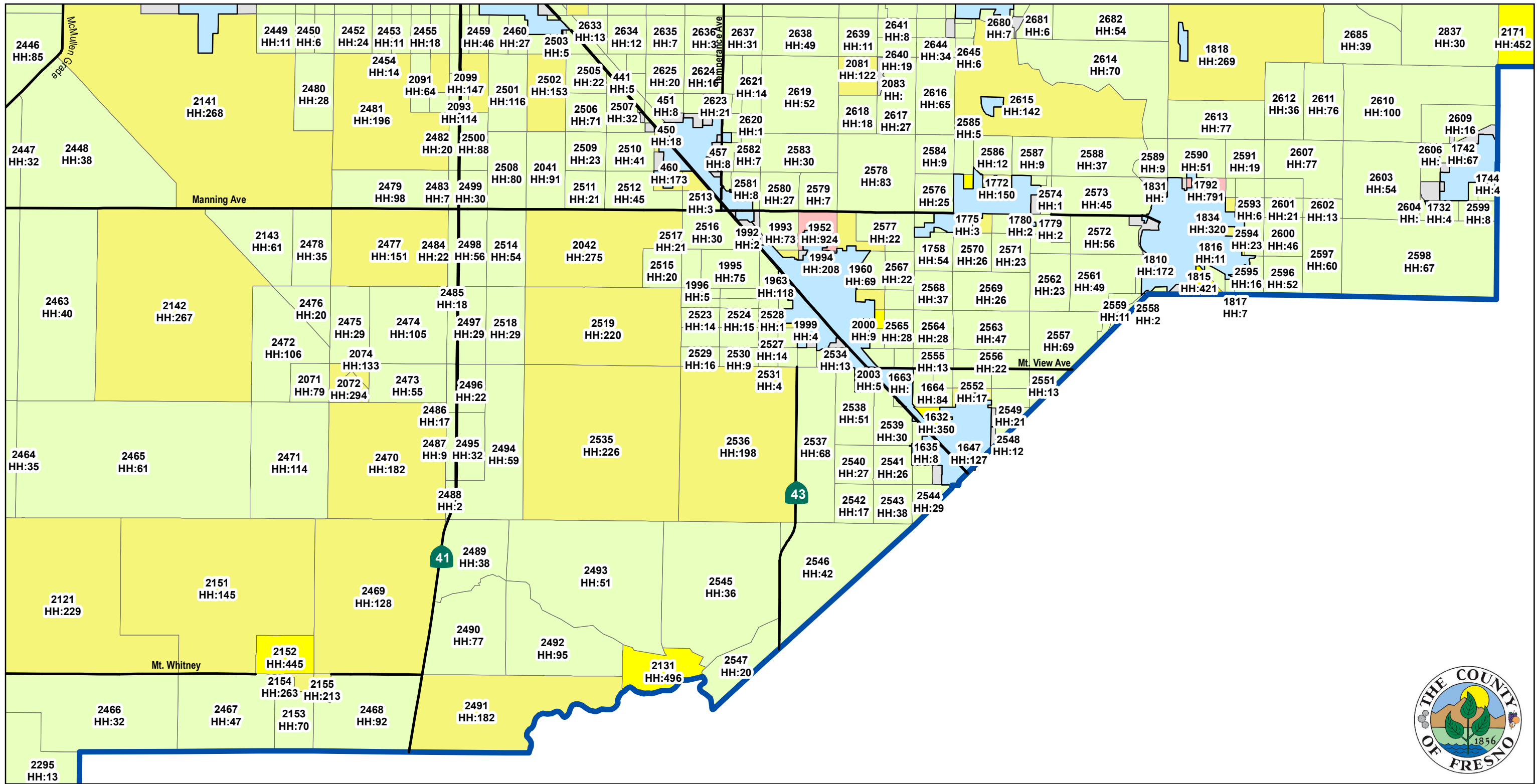
FRESNO COUNTY  
GENERAL PLAN  
**Total Household By  
TAZ  
(2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE B.3**

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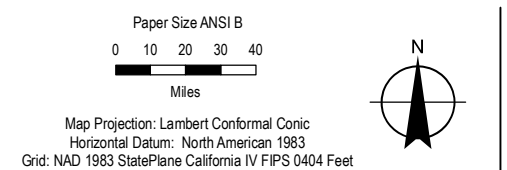
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**2042 Households**

Lightest Green	1 - 121
Light Green	121 - 342
Yellow	342 - 673
Orange	673 - 1,336
Red	1,336 - 2,509
Grey	-

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet



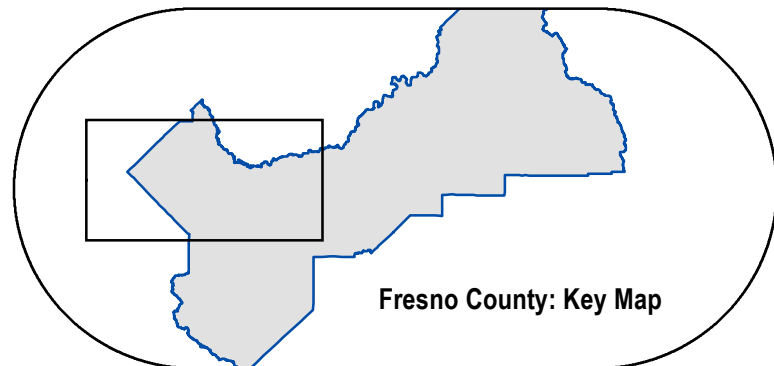
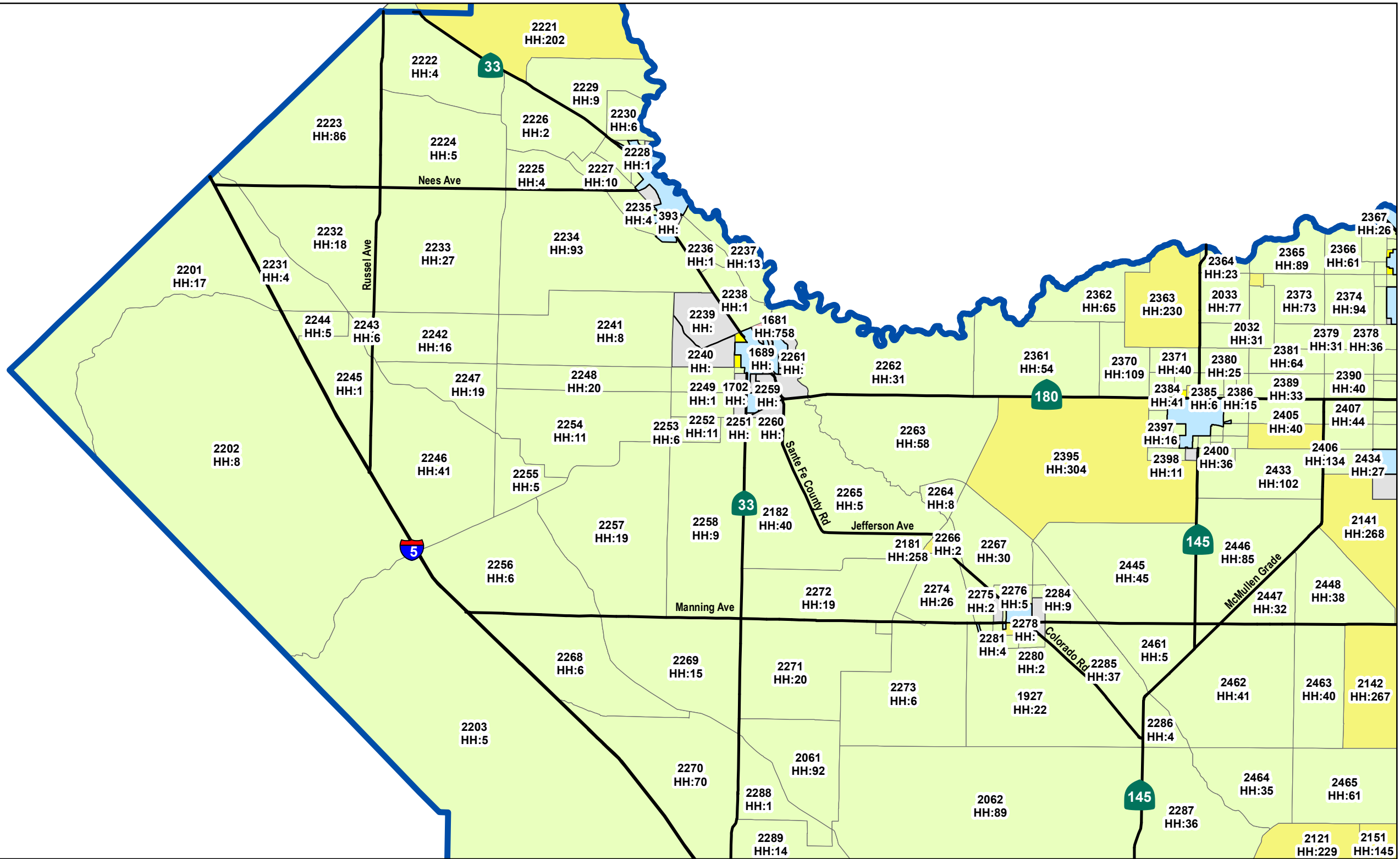
FRESNO COUNTY  
 GENERAL PLAN  
**Total Household By  
 TAZ  
 (2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

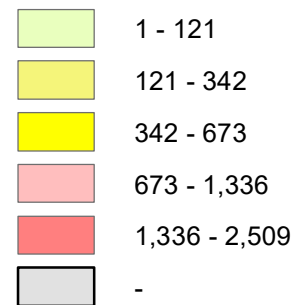
**FIGURE C.3**

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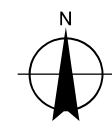
**2042 Households**



- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities

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 Miles

Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
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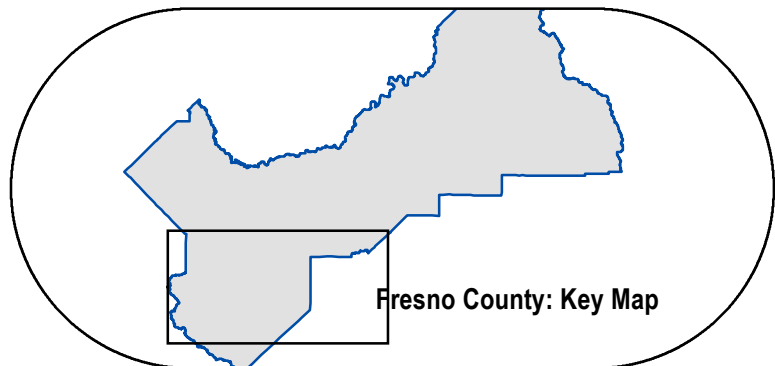
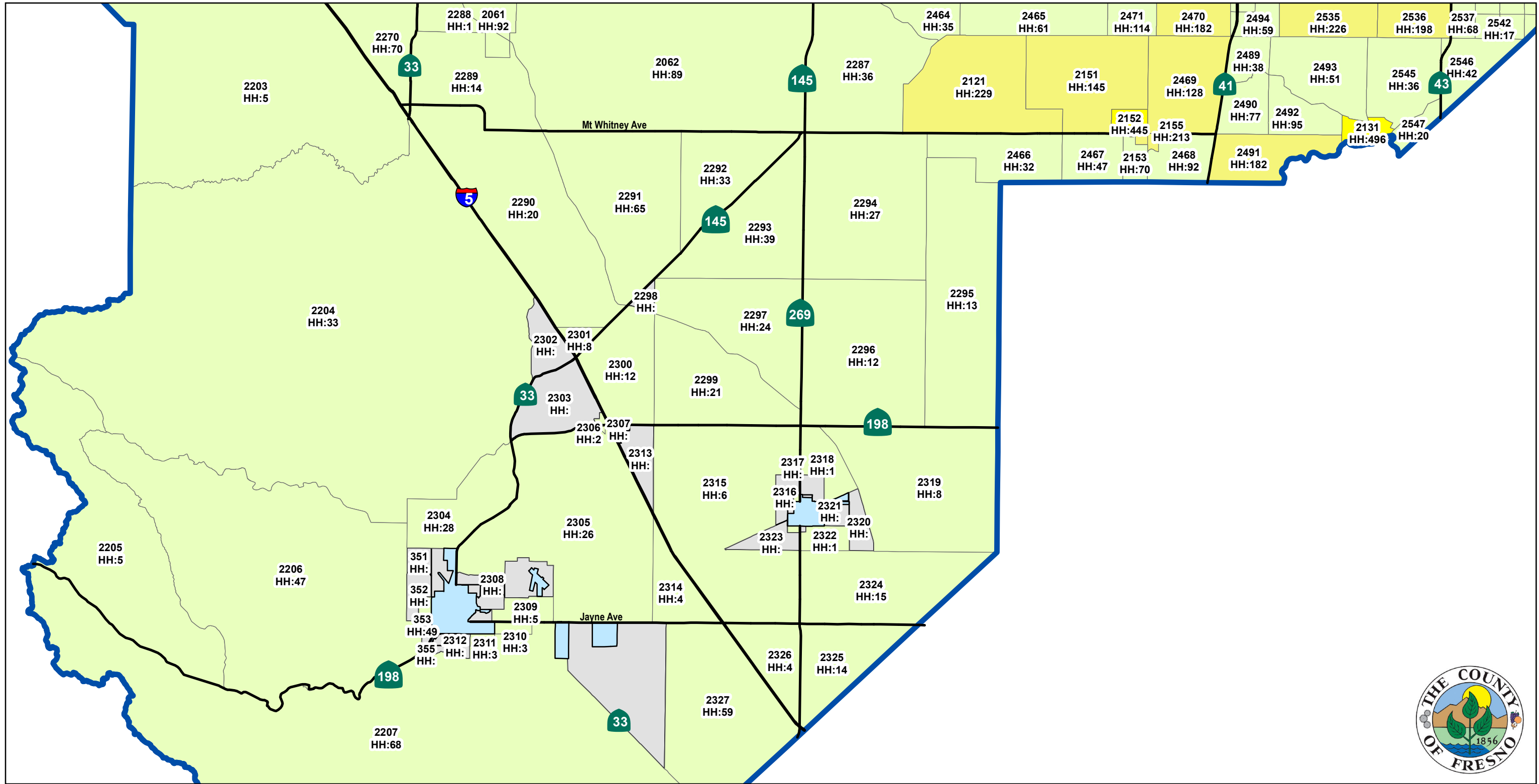


FRESNO COUNTY  
 GENERAL PLAN  
**Total Household By  
 TAZ  
 (2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE D.3**





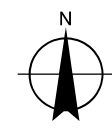
**2042 Households**

Light Green	1 - 121
Yellow	121 - 342
Light Orange	342 - 673
Orange	673 - 1,336
Red	1,336 - 2,509
Grey	-

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities

Paper Size ANSI B  
0 10 20 30 40  
Miles

Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet



FRESNO COUNTY  
GENERAL PLAN  
**Total Household By  
TAZ  
(2042)**

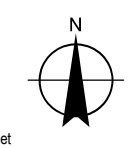
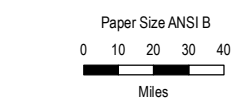
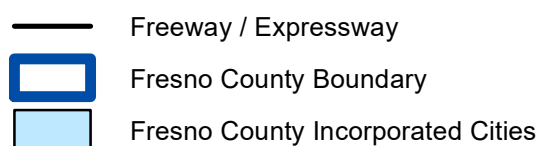
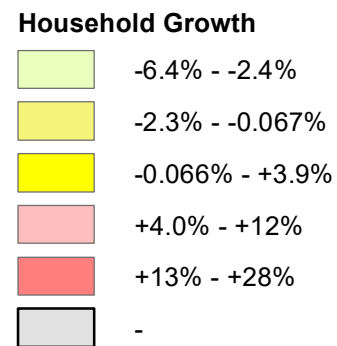
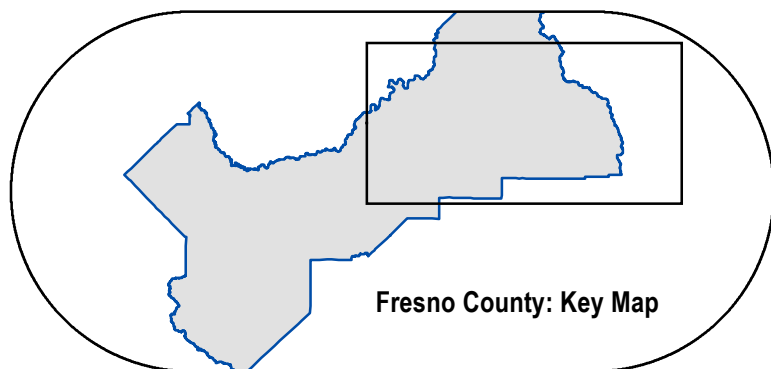
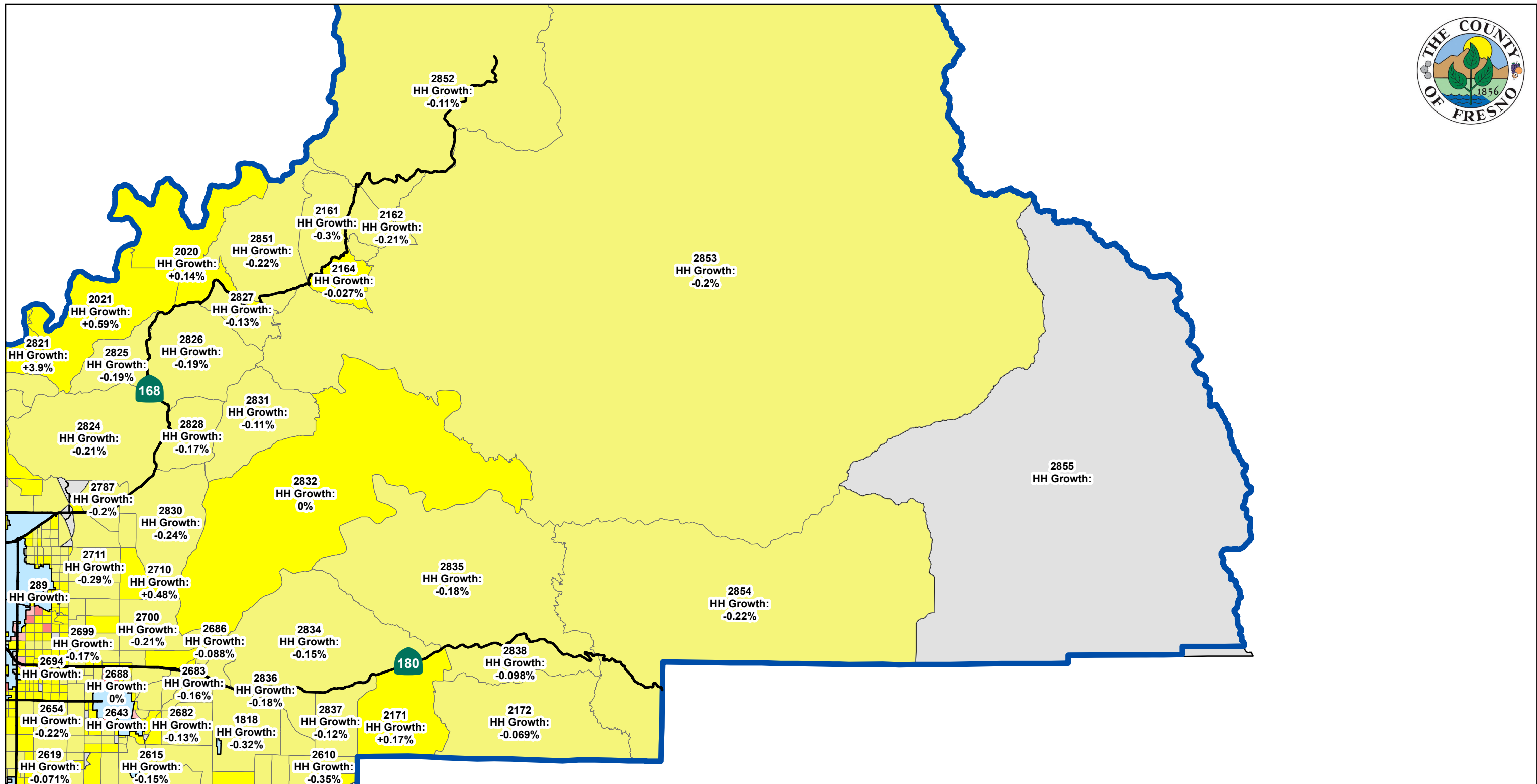
Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE E.3**

Data source: FCOG - Created by: jramirez2

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Print date: 06 Apr 2022 - 11:04

## **2019 - 2042 Household - Growth Data (%)**



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Vertical Datum: NAD 1983 StatePlane California IV FIPS 0404 Feet



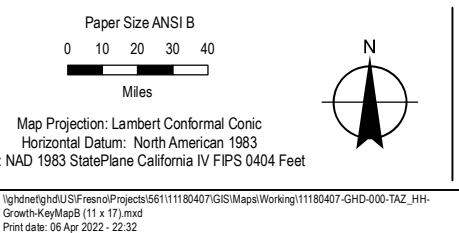
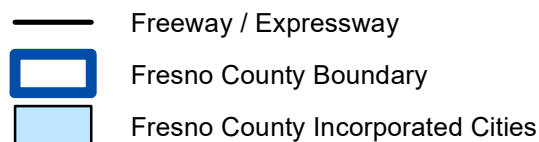
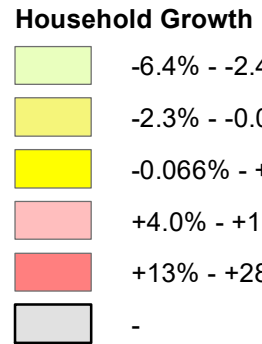
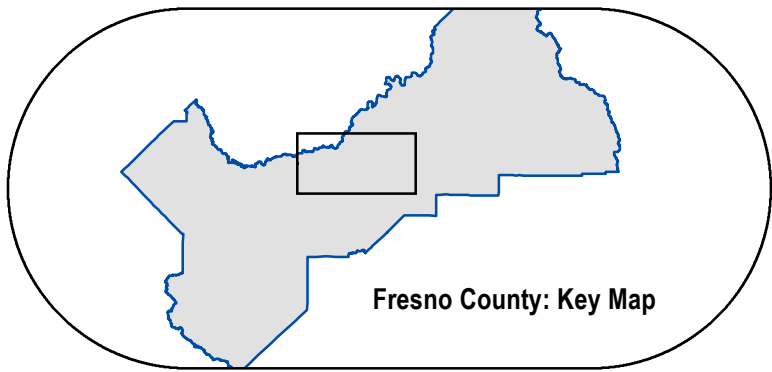
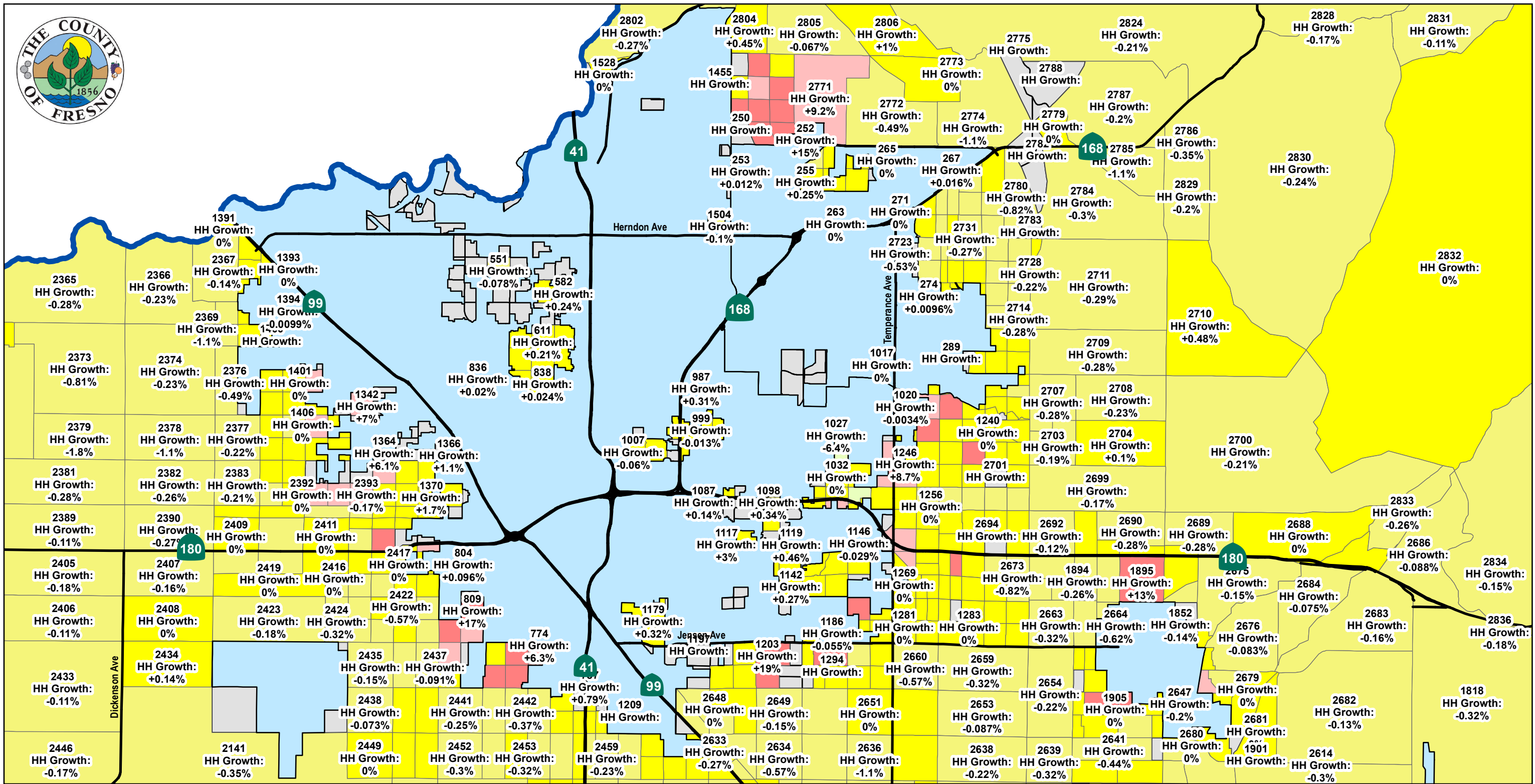
FRESNO COUNTY  
 GENERAL PLAN  
**Total Household Growth By TAZ**  
 (2019 - 2042)

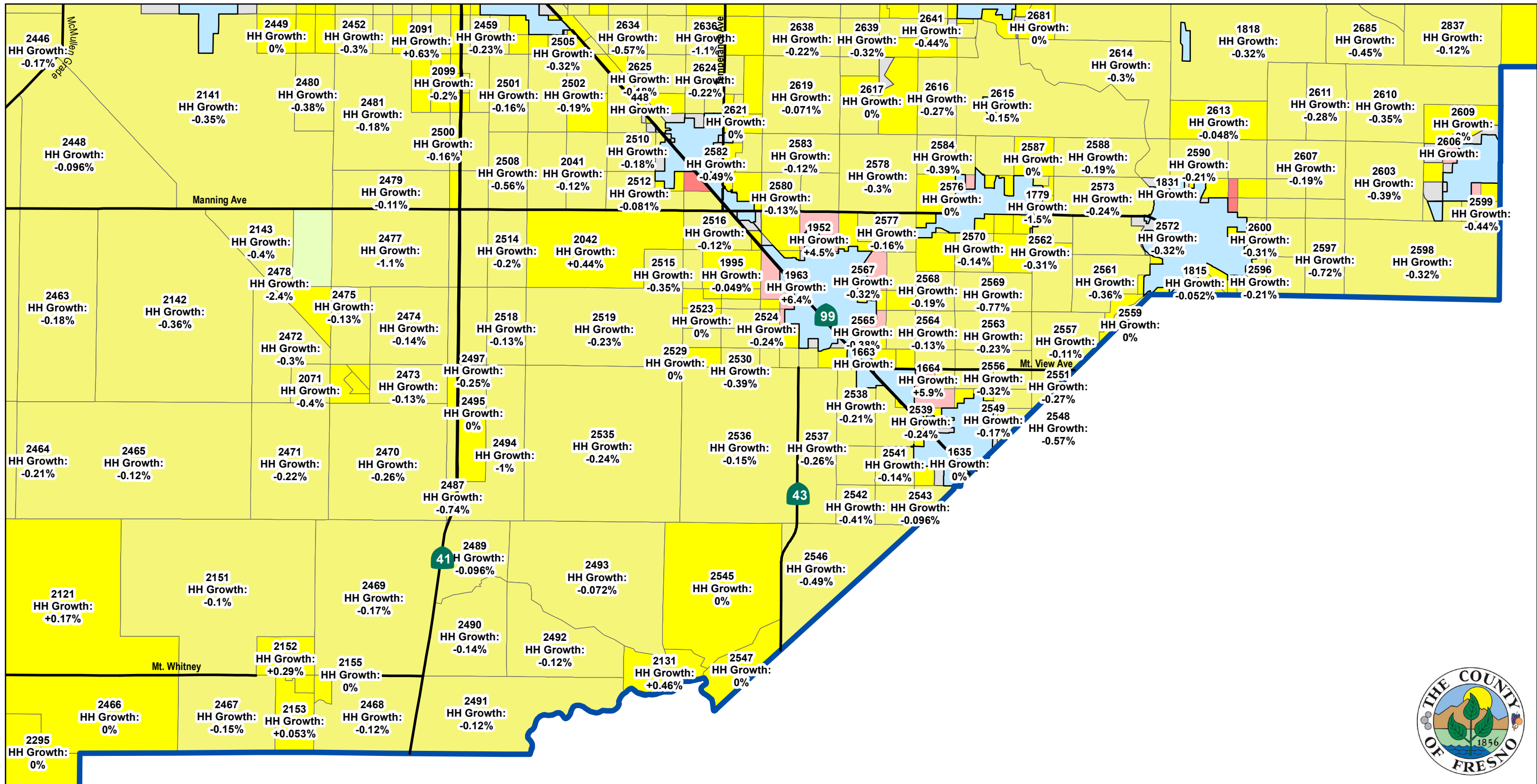
Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE A.4**

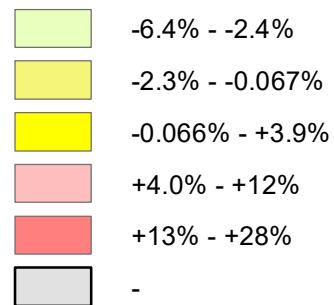
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Data source: FCOG - Created by: jramirez2

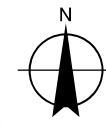
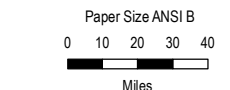




**Household Growth**



- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Vertical Datum: NAD 1983 StatePlane California IV FIPS 0404 Feet



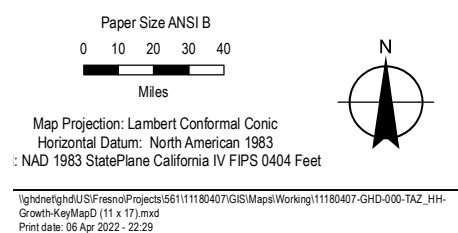
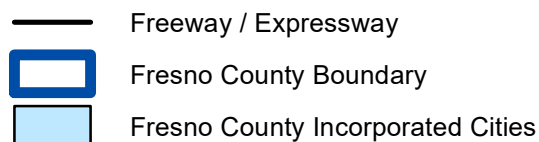
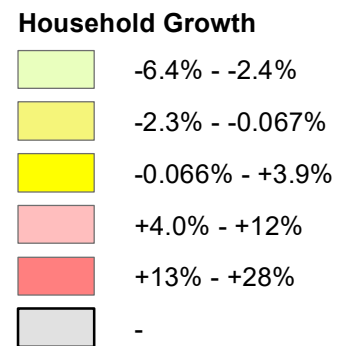
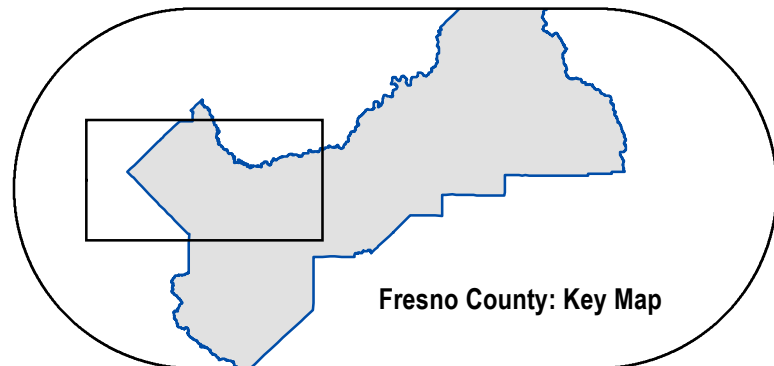
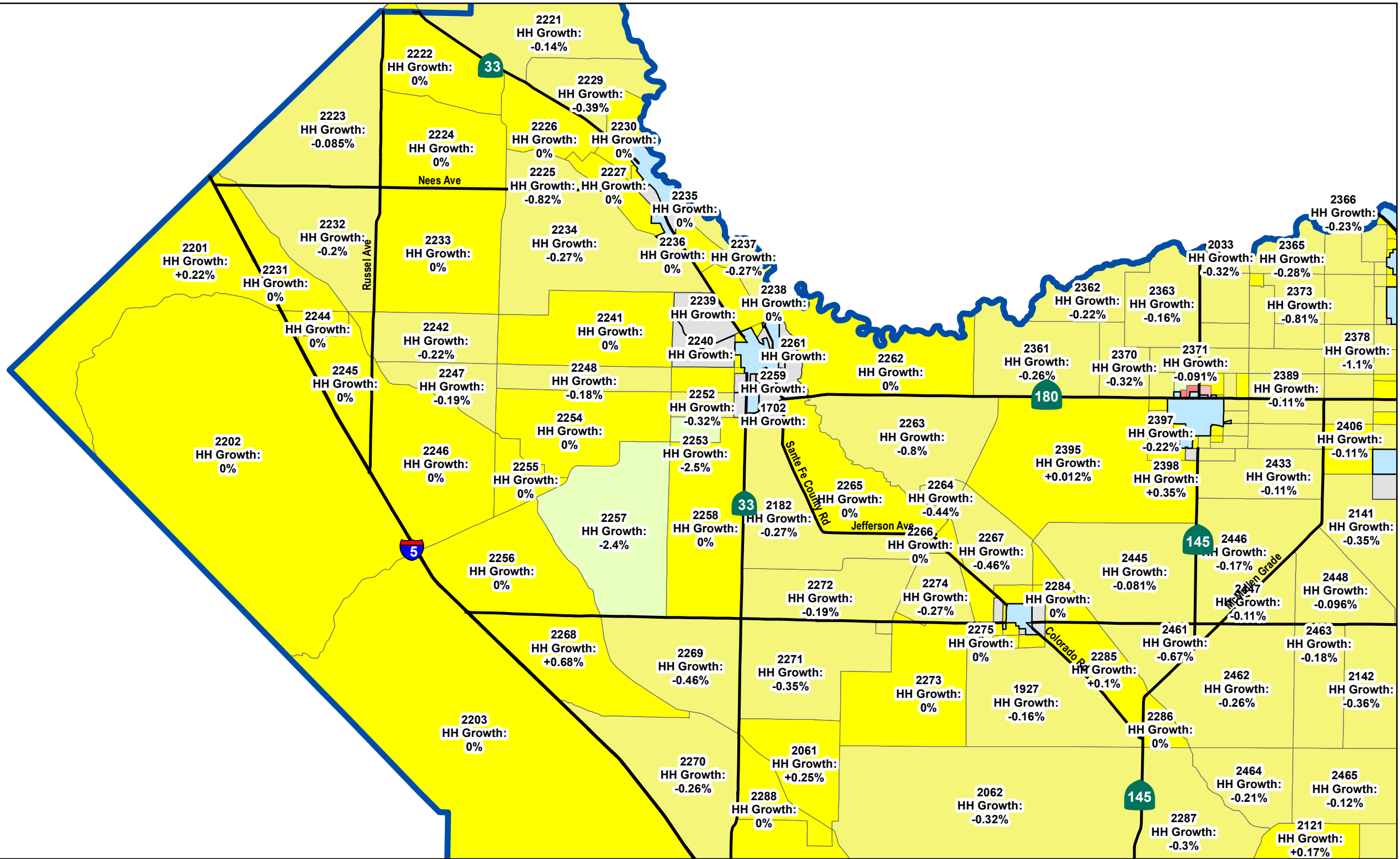
FRESNO COUNTY  
GENERAL PLAN  
**Total Household Growth By TAZ  
(2019 - 2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE C.4**

Data source: FCOG. Created by: jramirez2

\\ghdnet\ghd\GIS\Fresno\Projects\11180407\GIS\Map\Working\11180407-GHD-000-TAZ\_HH-Growth-KeyMapC (11 x 17).mxd  
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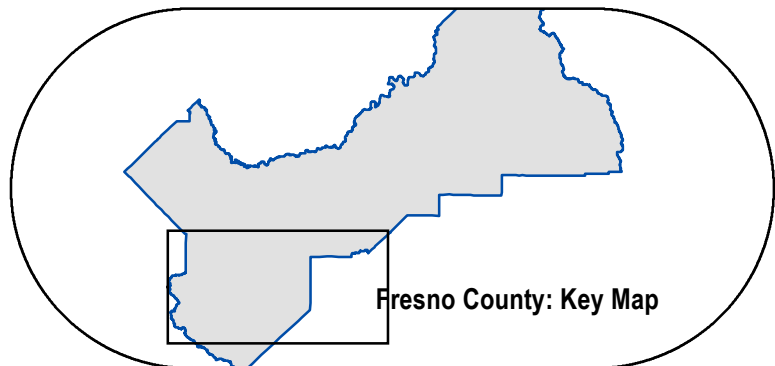
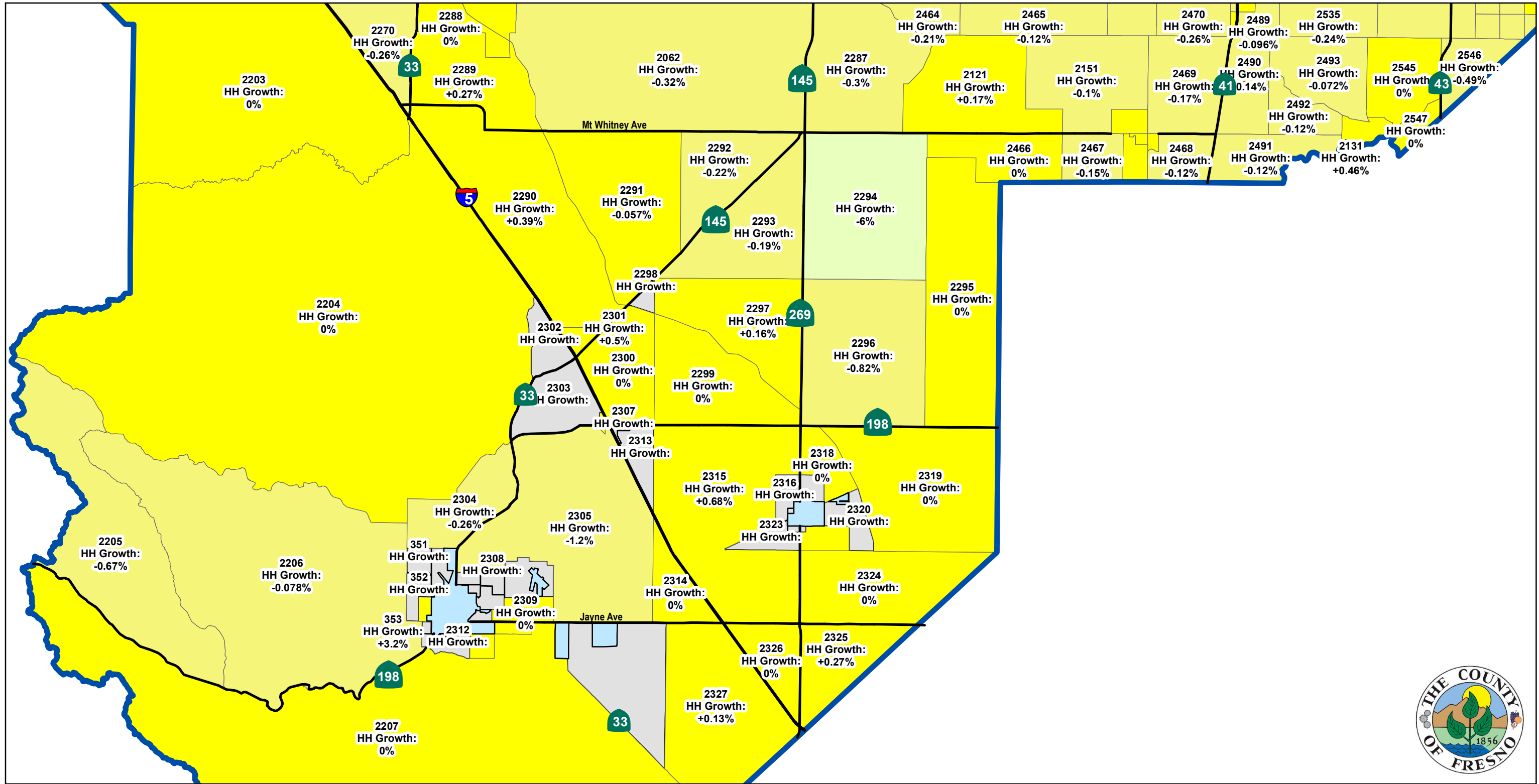


FRESNO COUNTY  
GENERAL PLAN  
**Total Household Growth By TAZ  
(2019 - 2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE D.4**

Data source: FCOG - Created by: jramirez2



**Household Growth**

- 6.4% - -2.4%
- 2.3% - -0.067%
- 0.066% - +3.9%
- 

— Freeway / Expressway  
 Fresno County Boundary  
 Fresno County Incorporated Cities

Paper Size ANSI B  
 0 10 20 30 40  
 Miles

Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 : NAD 1983 StatePlane California IV FIPS 0404 Feet

North Arrow

**GHD**

FRESNO COUNTY  
 GENERAL PLAN

**Total Household Growth By TAZ  
 (2019 - 2042)**

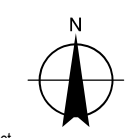
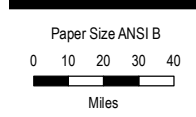
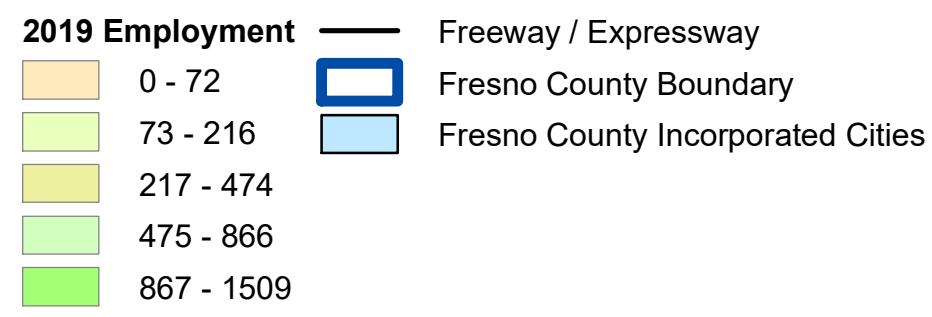
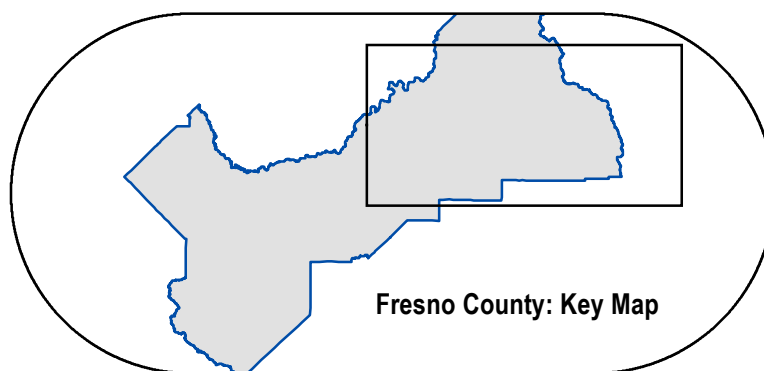
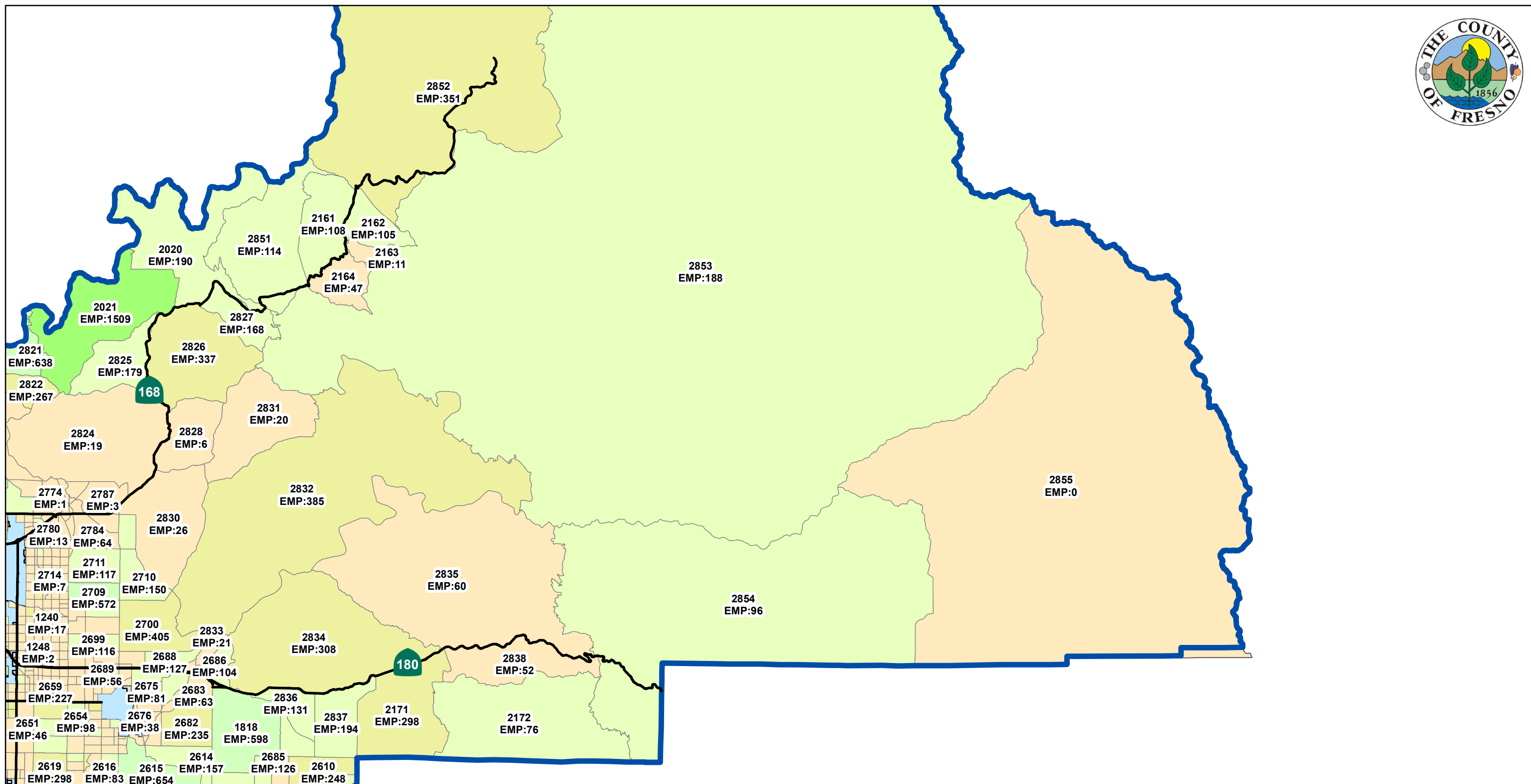
Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE E.4**

Data source: FCOG. Created by: jramirez2

# **2019 Employment Data**



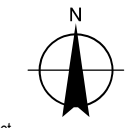
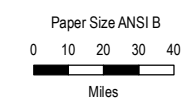
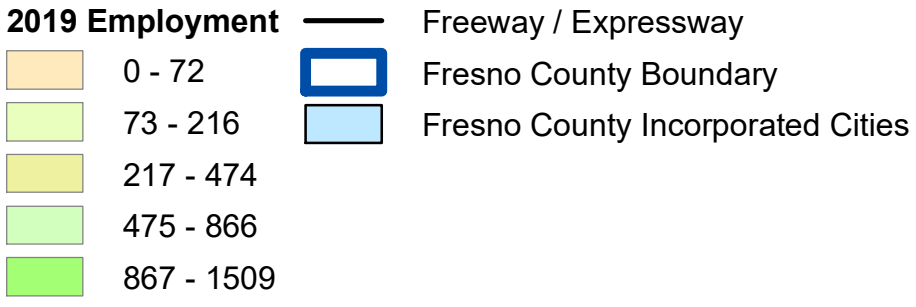
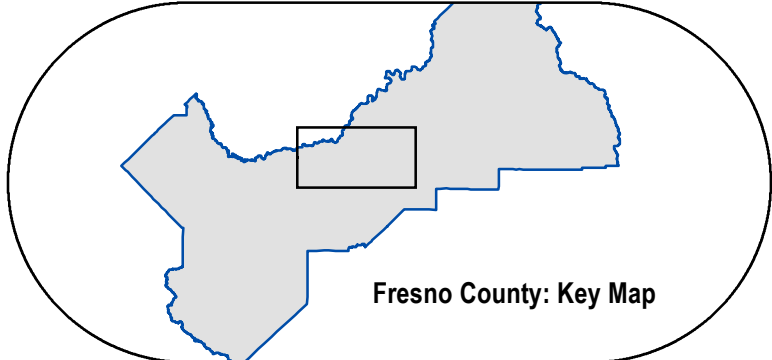
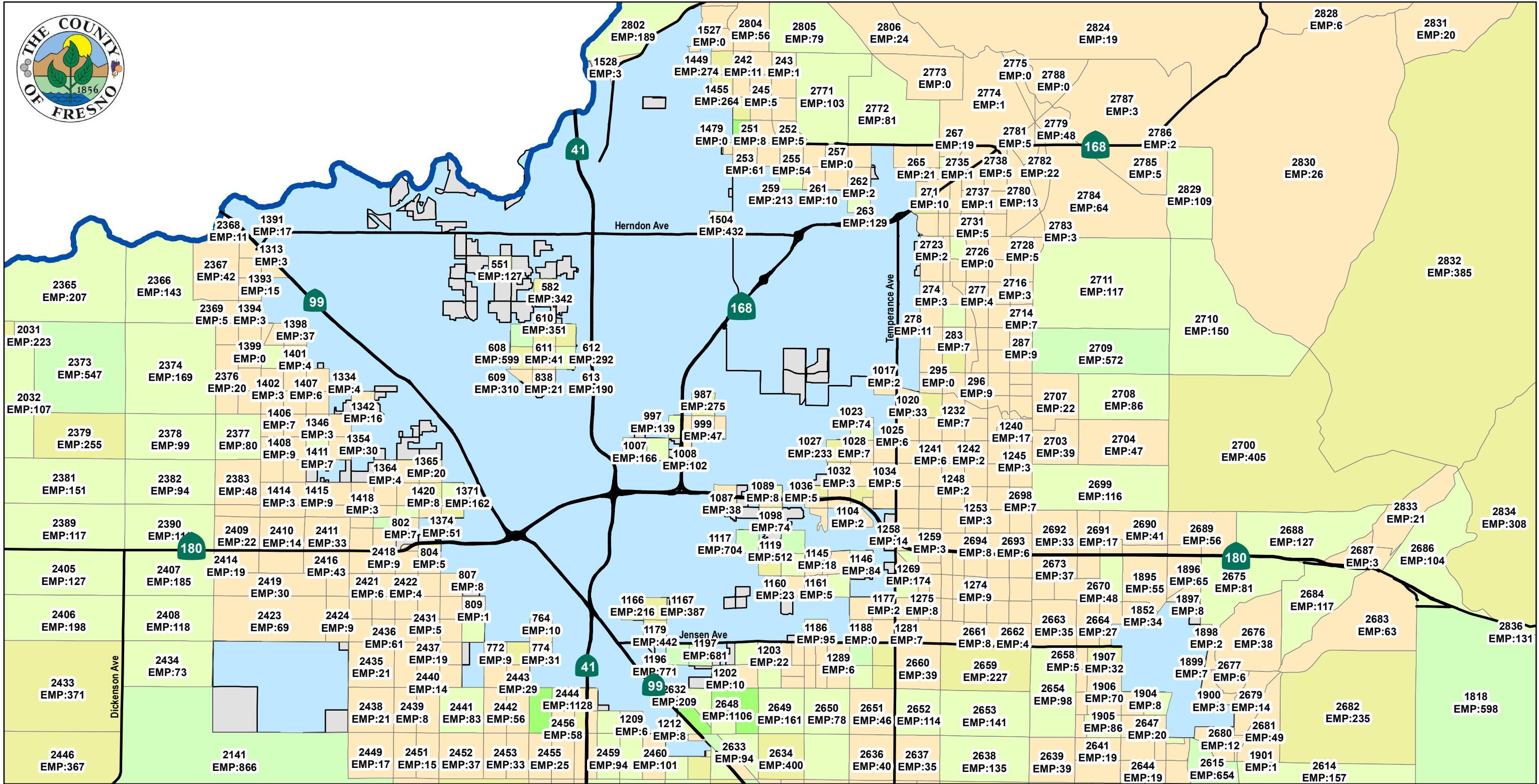


FRESNO COUNTY  
GENERAL PLAN  
Total Employment By  
TAZ

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE A.5**  
Data source: - Created by: jramirez2

g:\Projects\56111180407\GIS\Maps\Working\11180407-GHD-000-TAZ\_EMP-  
Print date: 06 Apr 2022 - 09:45

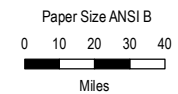
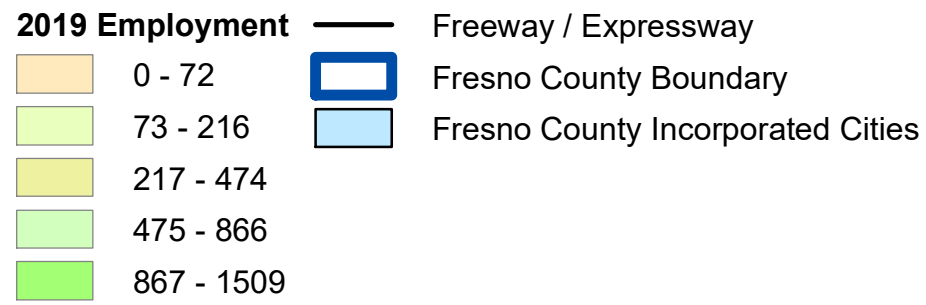
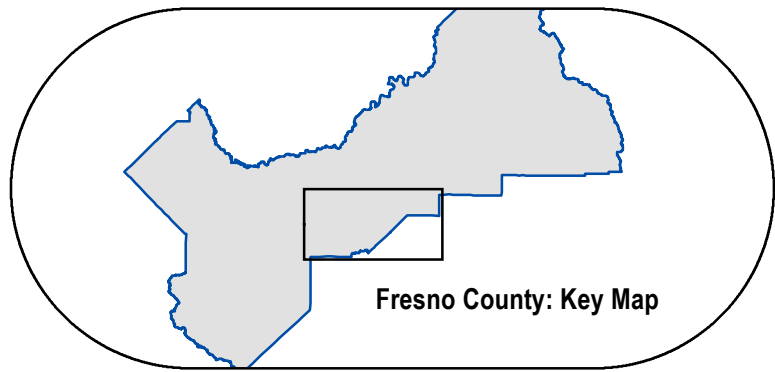
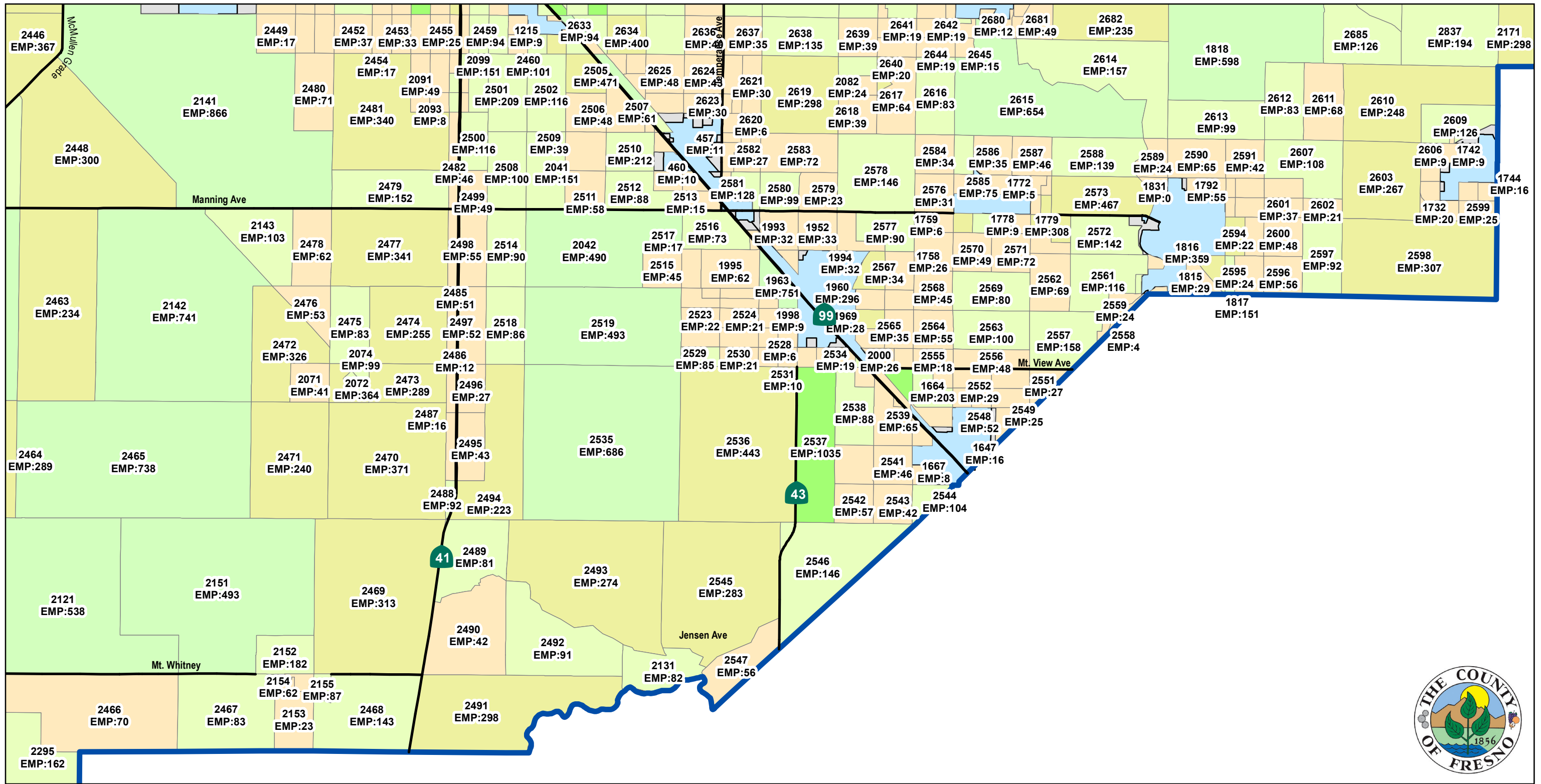


FRESNO COUNTY  
GENERAL PLAN  
**Total Employment By  
TAZ**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE B.5**

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Print date: 06 Apr 2022 - 09:52  
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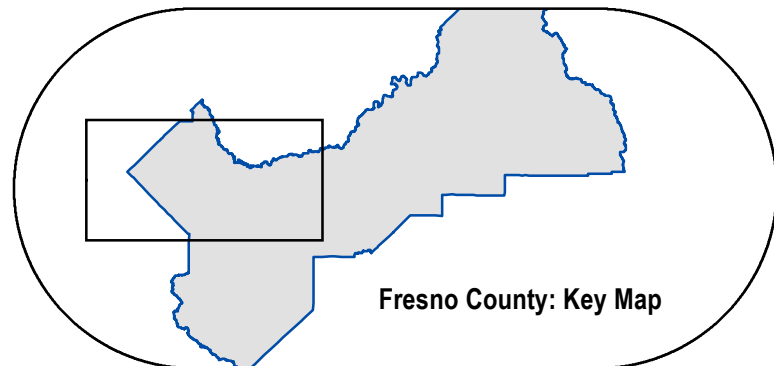
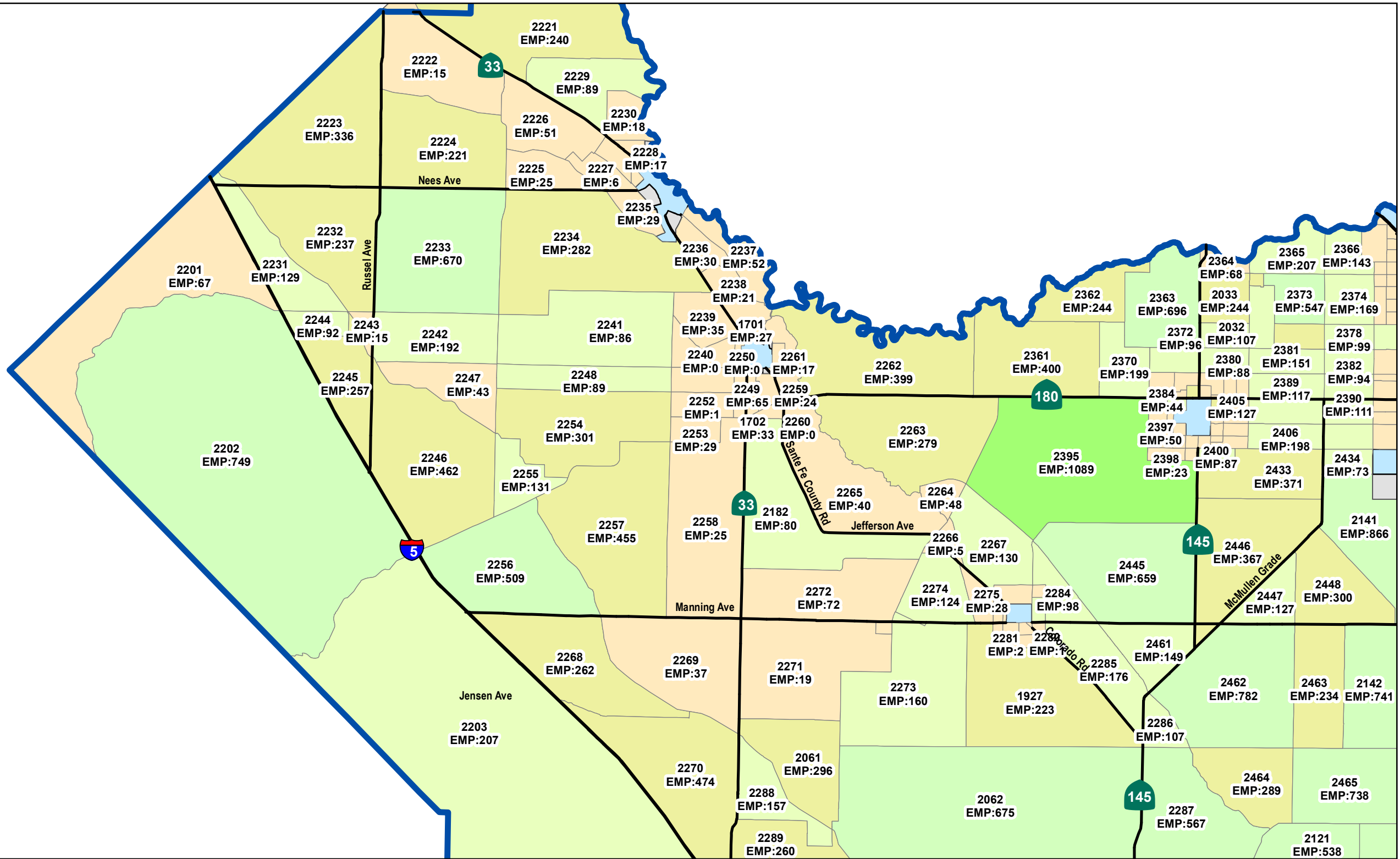
FRESNO COUNTY  
GENERAL PLAN  
**Total Employment By  
TAZ**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE C.5**

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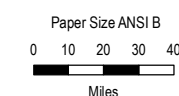
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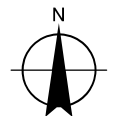
**2019 Employment**

- 0 - 72
- 73 - 216
- 217 - 474
- 475 - 866
- 867 - 1509

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 983 StatePlane California IV FIPS 0404 Feet



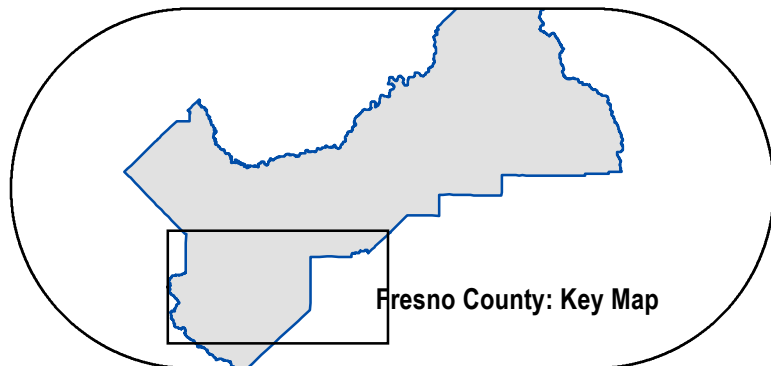
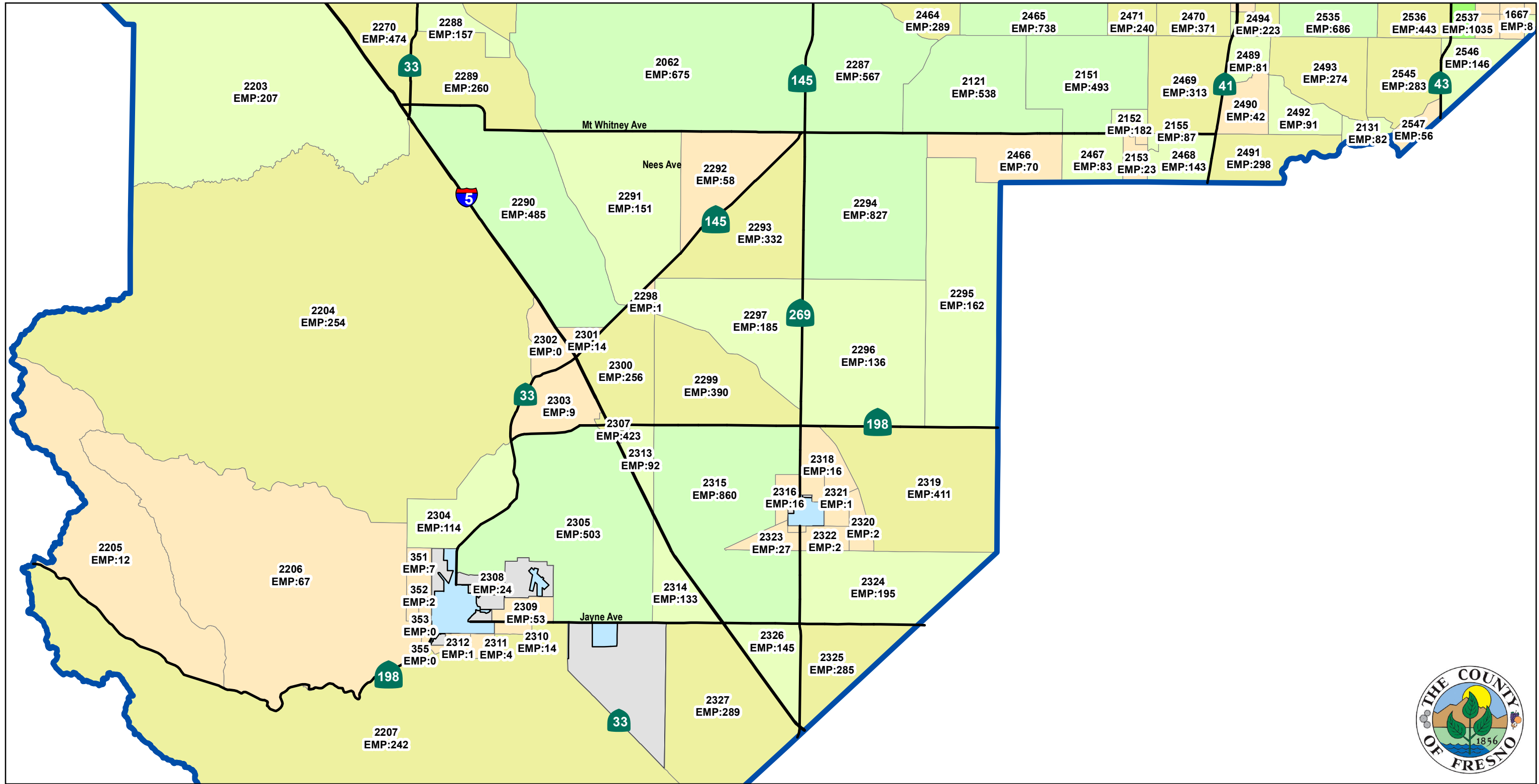
FRESNO COUNTY  
 GENERAL PLAN  
**Total Employment By  
 TAZ**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE D.5**

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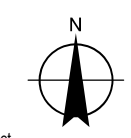
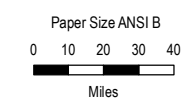
Data source: FCOG - Created by: jramirez2



**2019 Employment**

- 0 - 72
- 73 - 216
- 217 - 474
- 475 - 866
- 867 - 1509

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities



Projection: Lambert Conformal Conic  
 izontal Datum: North American 1983  
 983 StatePlane California IV FIPS 0404 Feet

FRESNO COUNTY  
 GENERAL PLAN  
 Total Employment By  
 TAZ

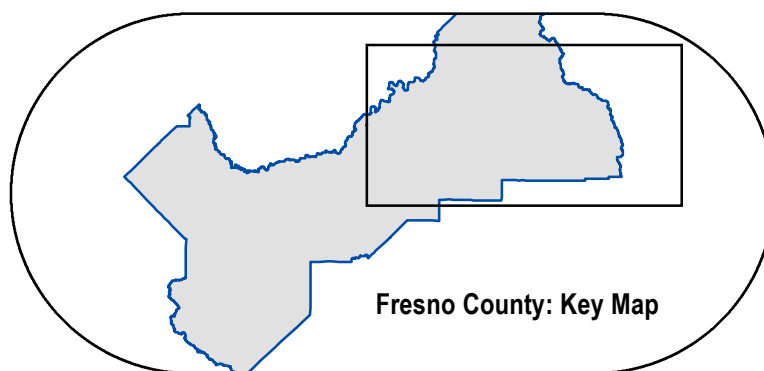
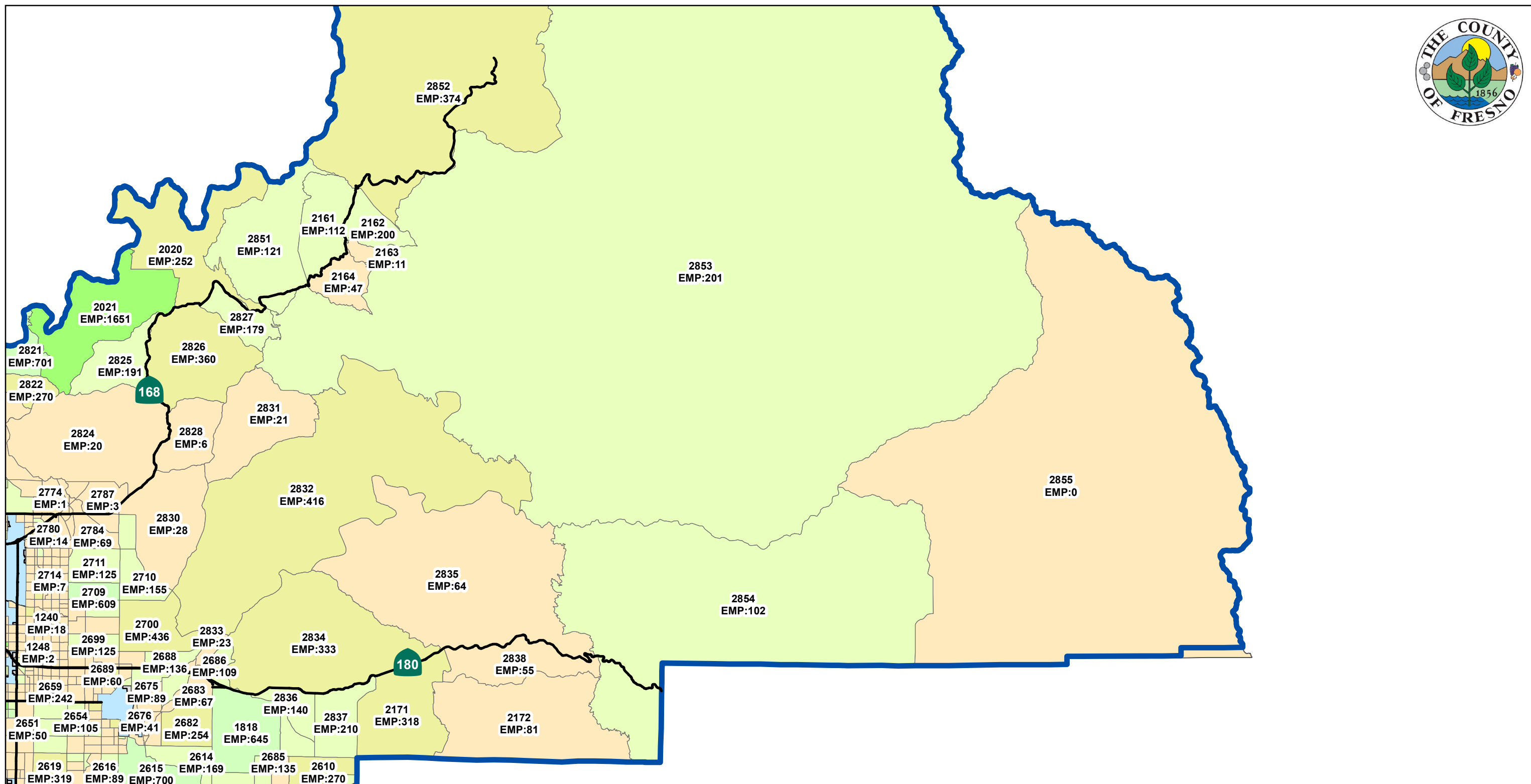
Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE E.5**

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Data source: FCOG - Created by: jramirez2

# **2042 Employment Data**



**2042 Employment**

- 0 - 81
- 82 - 244
- 245 - 556
- 557 - 1105
- 1106 - 2246

- Freeway / Expressway
- Fresno County Boundary
- Fresno County Incorporated Cities

Paper Size ANSI B

Miles

projection: Lambert Conformal Conic  
 Central Datum: North American 1983  
 StatePlane California IV FIPS 0404 Feet

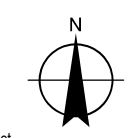
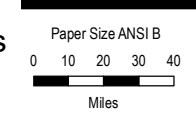
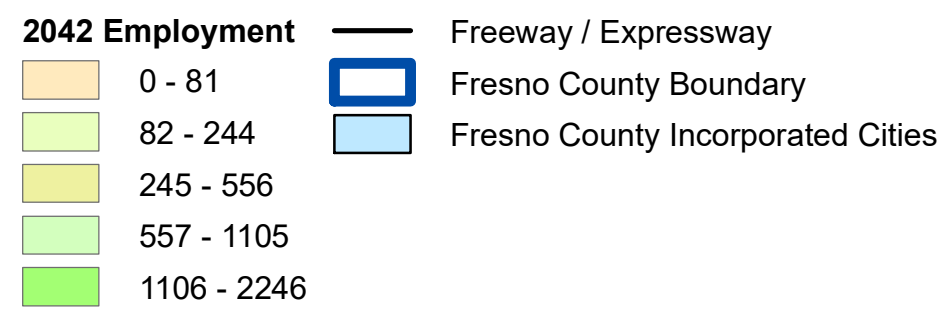
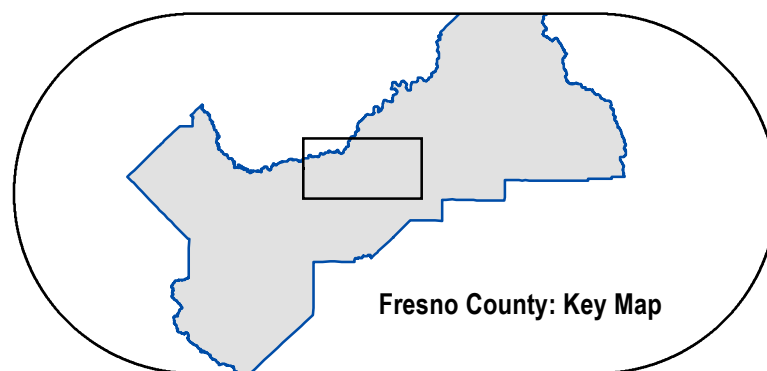
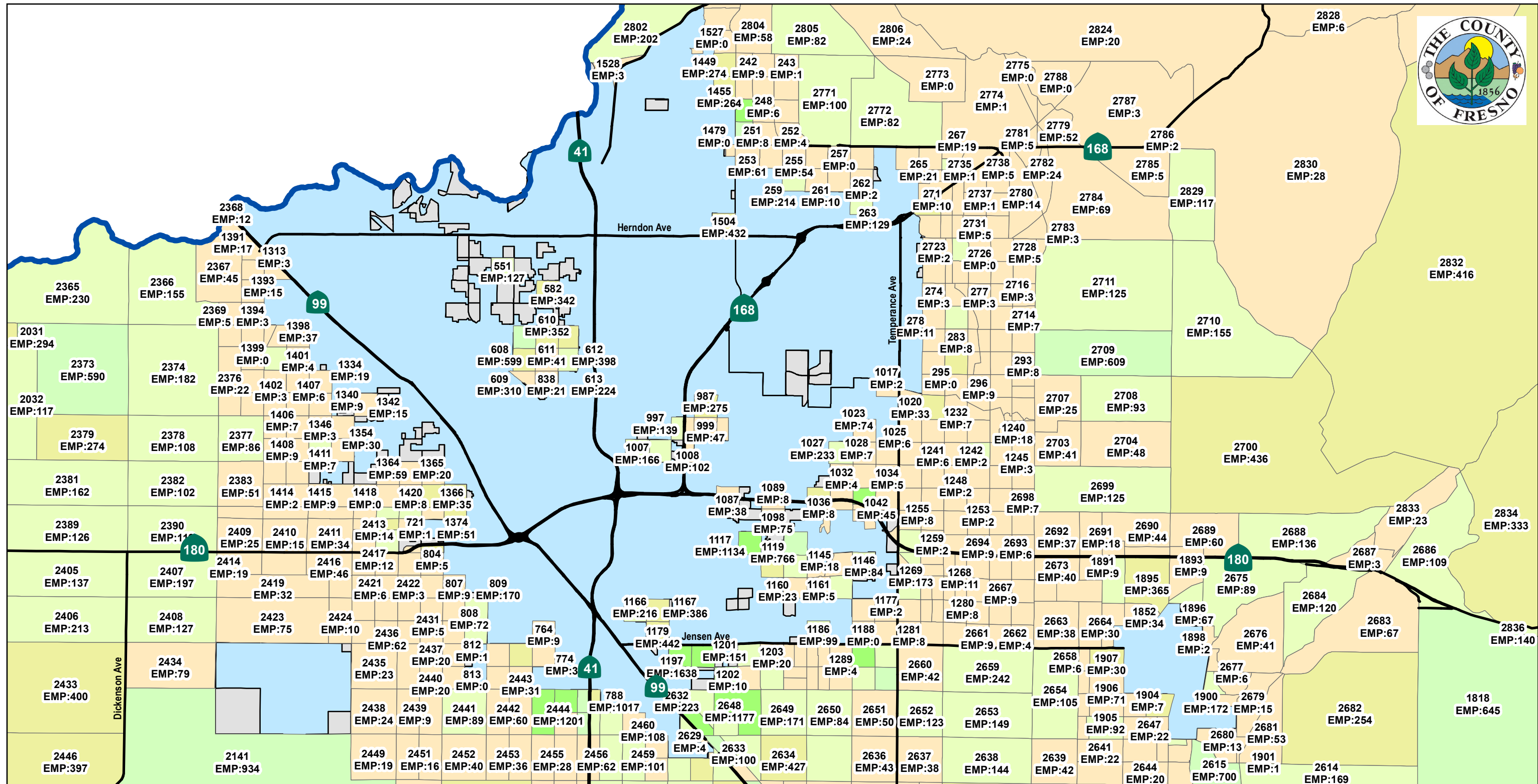
FRESNO COUNTY  
GENERAL PLAN

**Total Employment By  
TAZ  
(2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

FIGURE A.6

Data source: FCOG - Created by: jramirez2



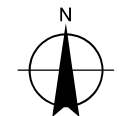
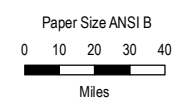
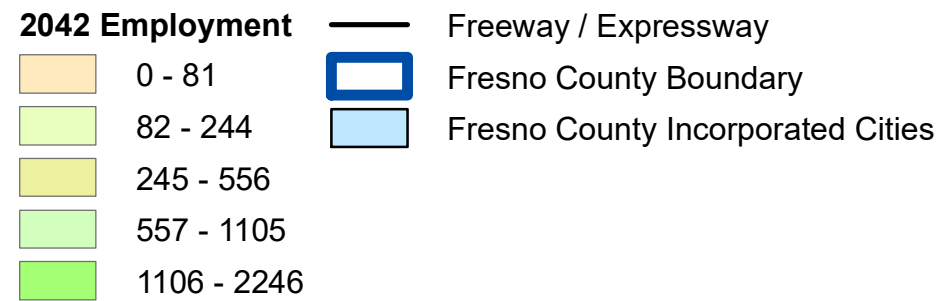
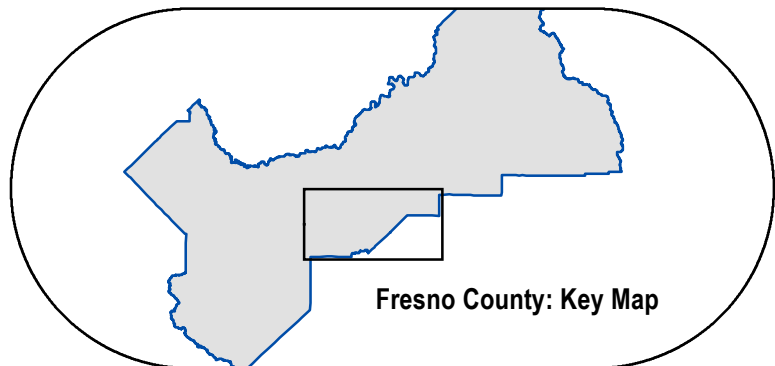
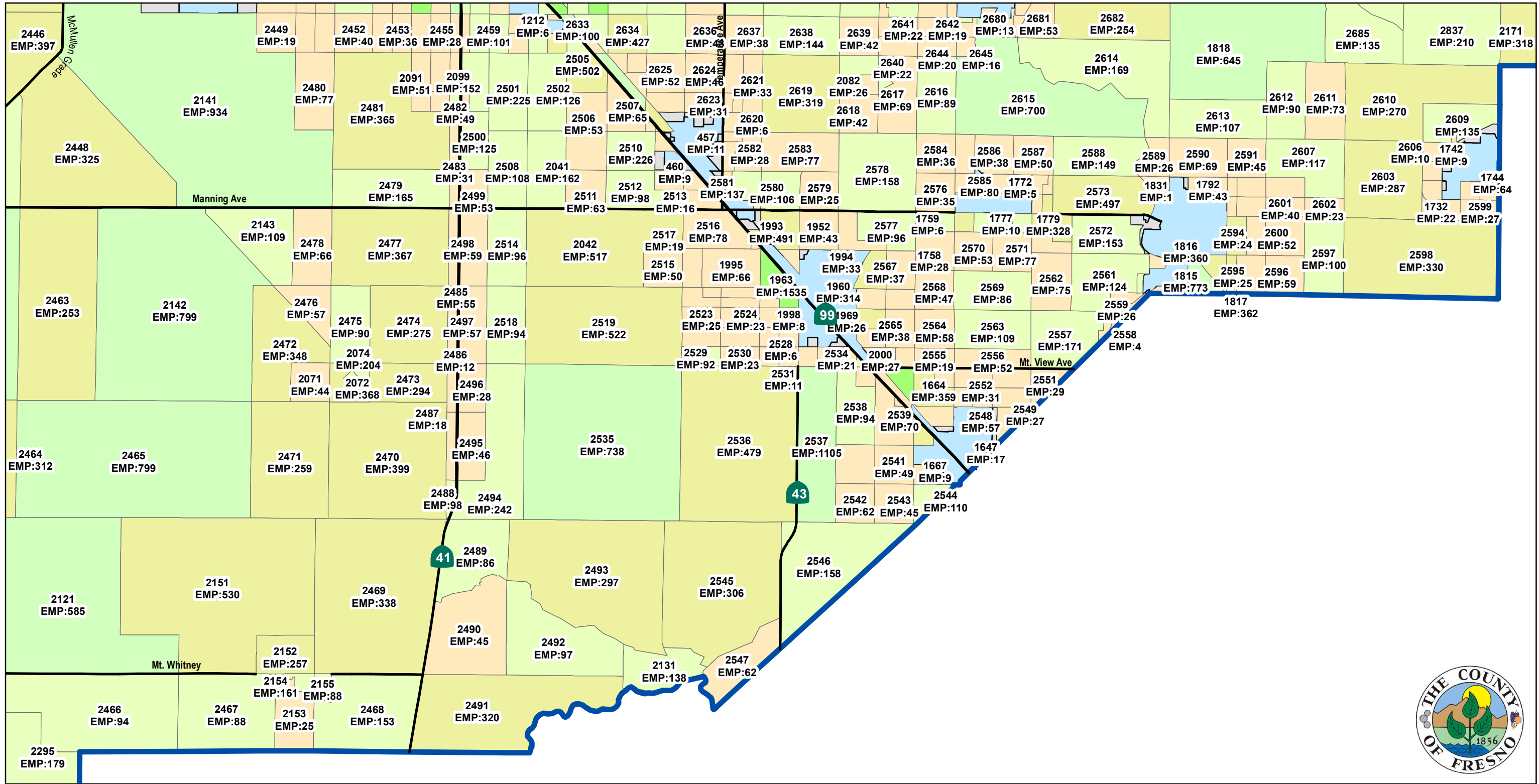
FRESNO COUNTY  
GENERAL PLAN  
**Total Employment By  
TAZ  
(2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE B.6**

Projects\56111180407\GIS\Map\Working\11180407-GHD-000-TAZ\_EMP-  
Print date: 06 Apr 2022 - 11:25  
Data source: FCOG - Created by: jramirez2





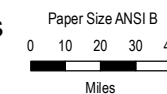
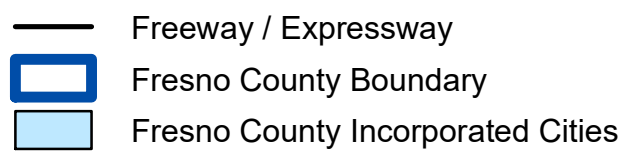
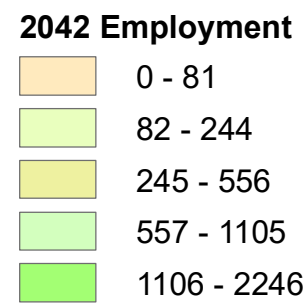
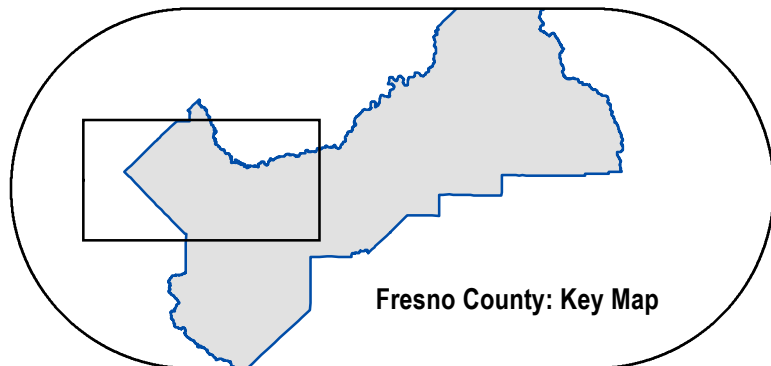
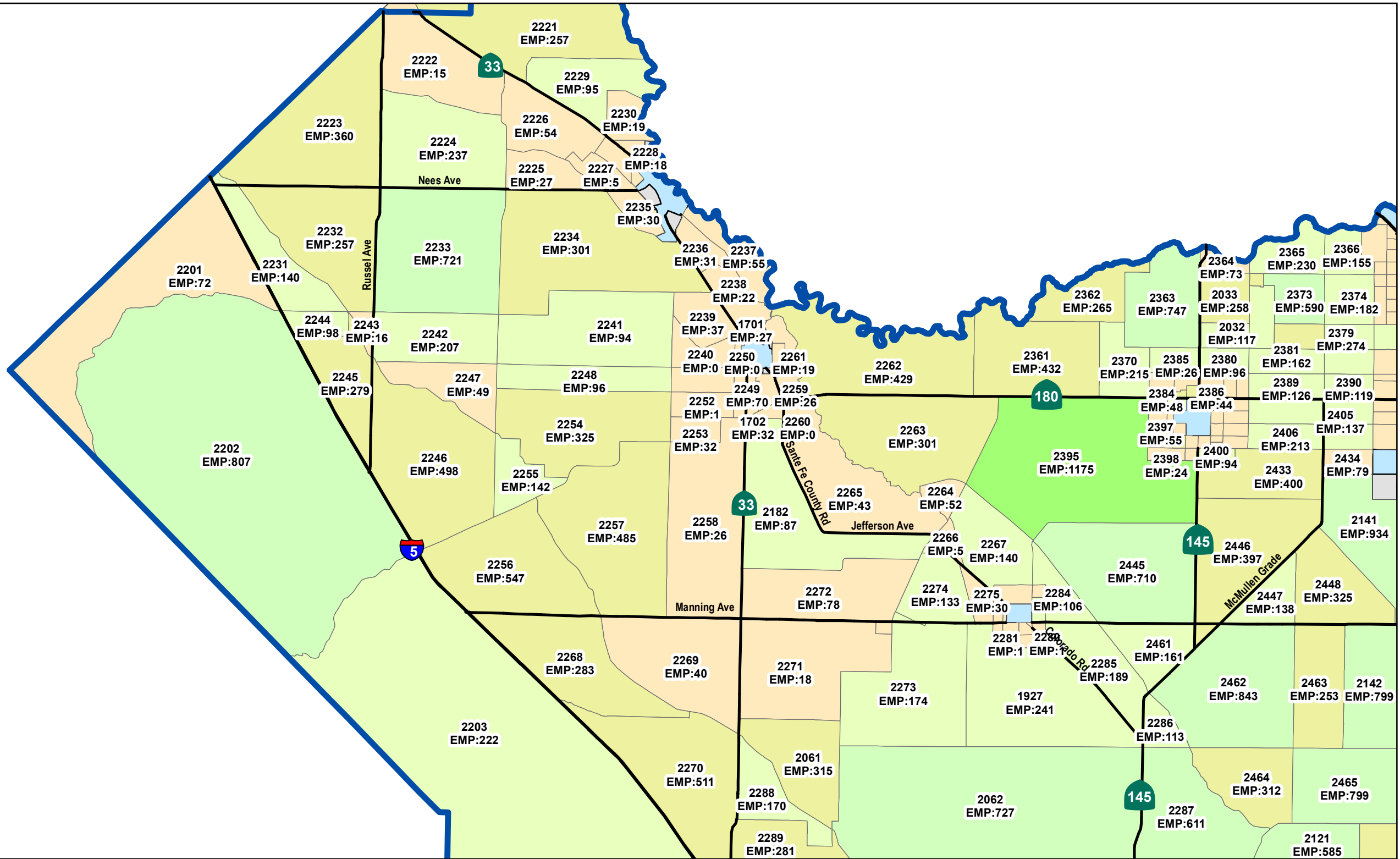
FRESNO COUNTY  
GENERAL PLAN  
**Total Employment By  
TAZ  
(2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

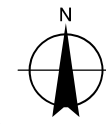
**FIGURE C.6**

Projection: Lambert Conformal Conic  
Central Datum: North American 1983  
33 StatePlane California IV FIPS 0404 Feet  
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Print date: 06 Apr 2022 - 11:31

Data source: FCOG - Created by: jramirez2



projection: Lambert Conformal Conic  
 spheroid: North American 1983  
 datum: StatePlane California IV FIPS 0404 Feet



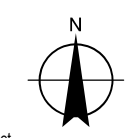
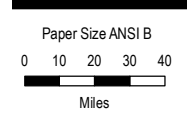
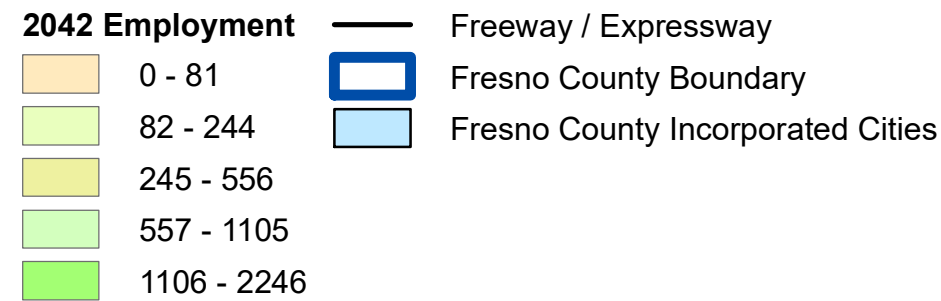
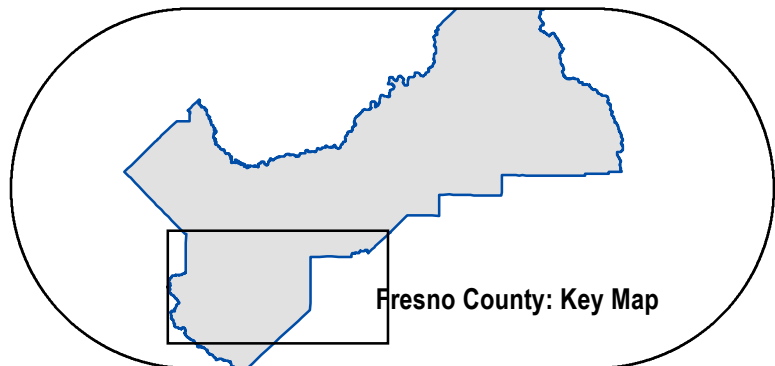
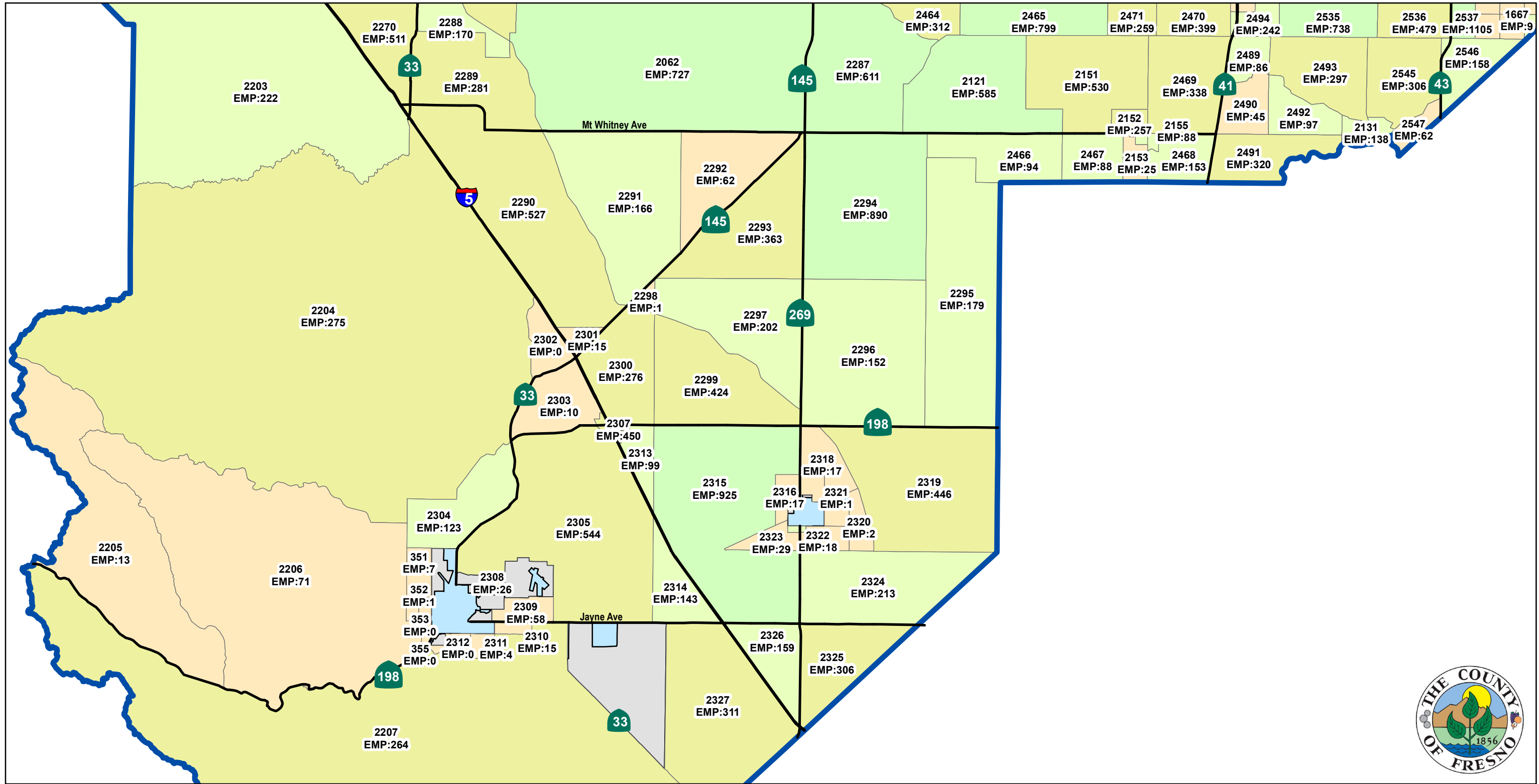
FRESNO COUNTY  
 GENERAL PLAN  
**Total Employment By  
 TAZ  
 (2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE D.6**

Data source: FCOG - Created by: jramirez2

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 Print date: 06 Apr 2022 - 11:35



projection: Lambert Conformal Conic  
 central Datum: North American 1983  
 33 StatePlane California IV FIPS 0404 Feet

FRESNO COUNTY  
 GENERAL PLAN  
**Total Employment By  
 TAZ  
 (2042)**

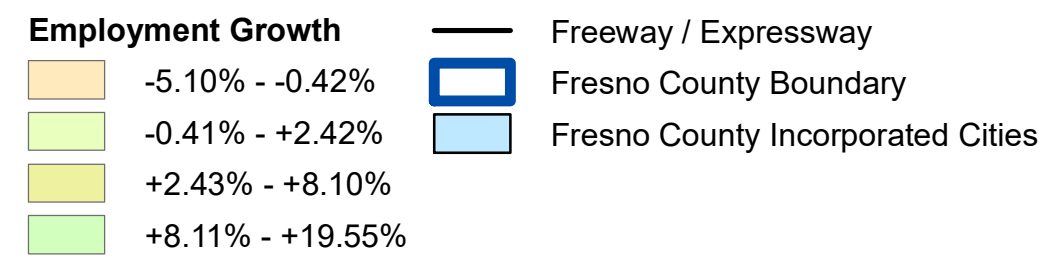
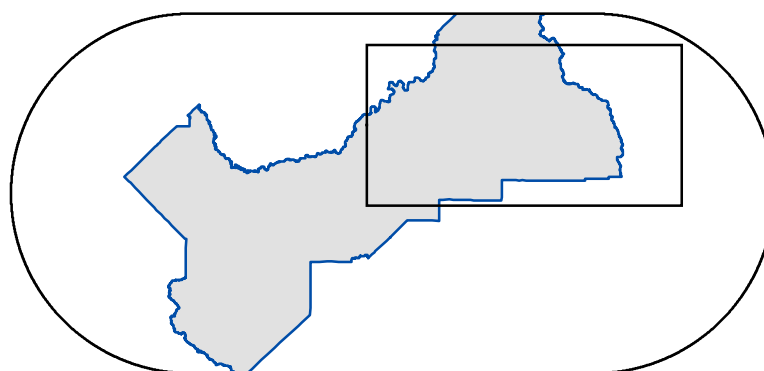
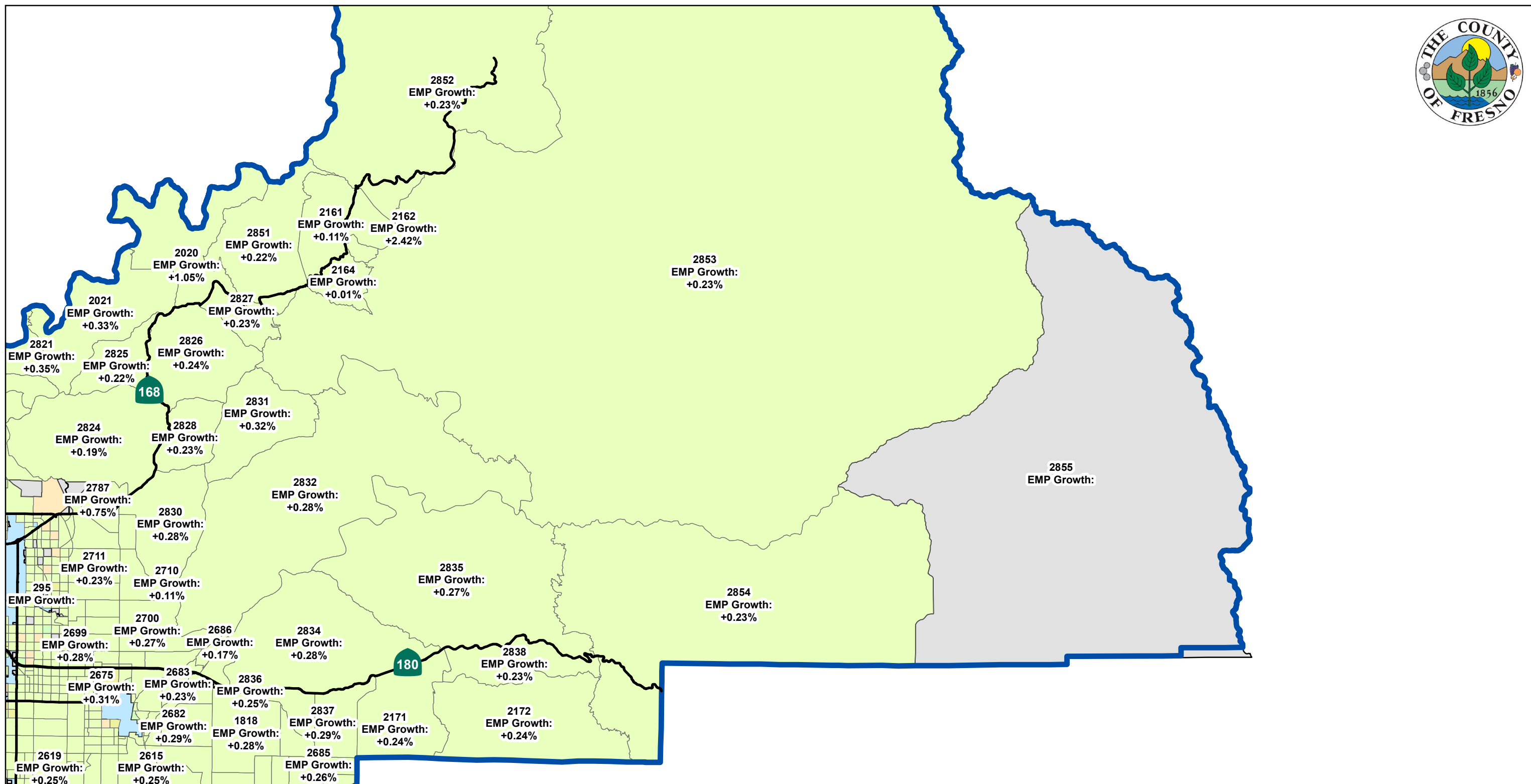
Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE E.6**

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 Print date: 06 Apr 2022 - 11:39

Data source: FCOG - Created by: jramirez2

# **2019 - 2042 Employment - Growth Data (%)**



Paper Size ANSI B  
 Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet

0 10 20 30 40  
Miles

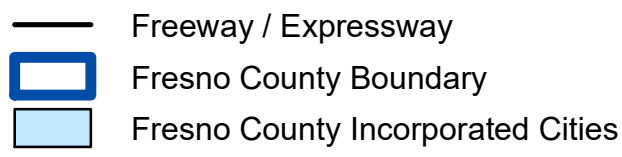
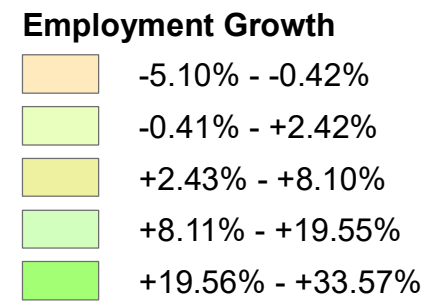
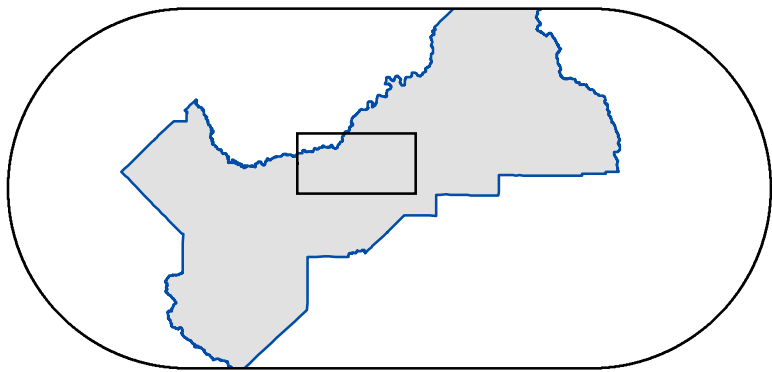
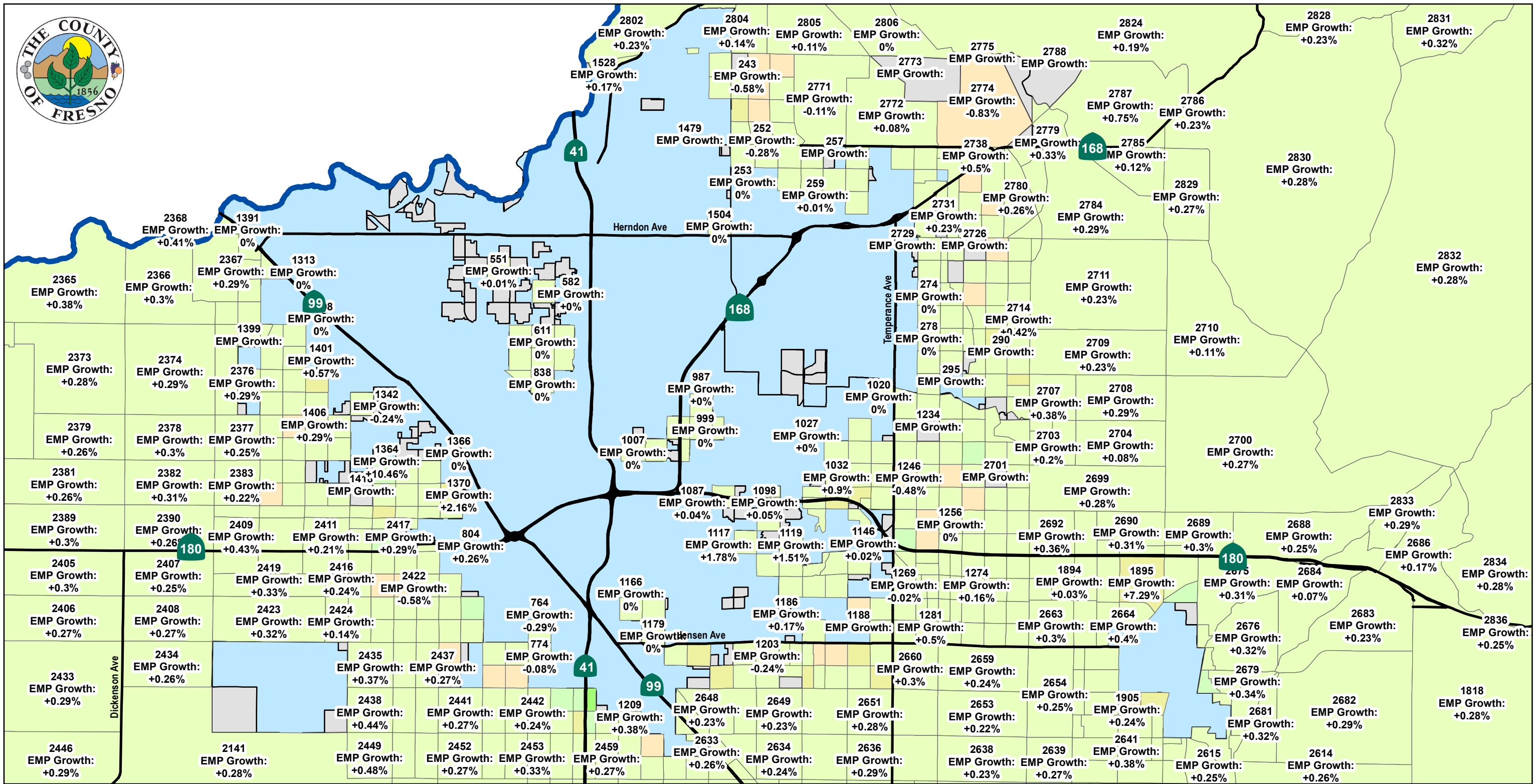
**FRESNO COUNTY GENERAL PLAN**  
**Total Employment Growth By TAZ (2019 - 2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE A.7**

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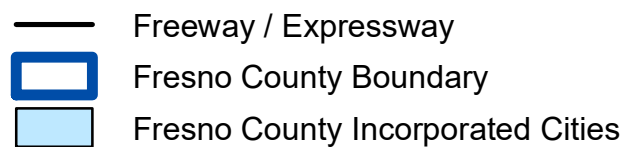
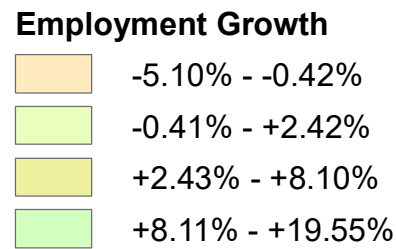
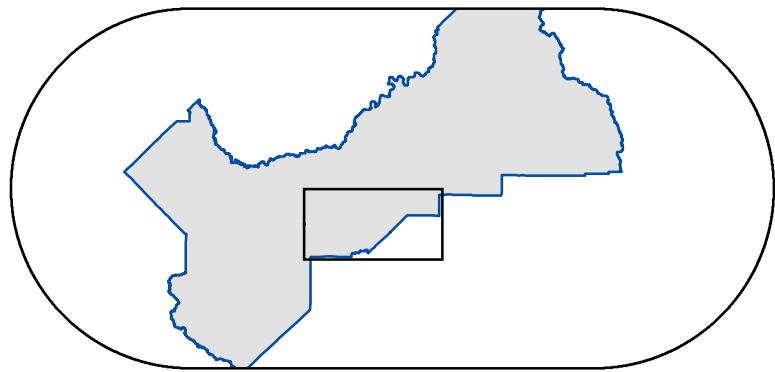
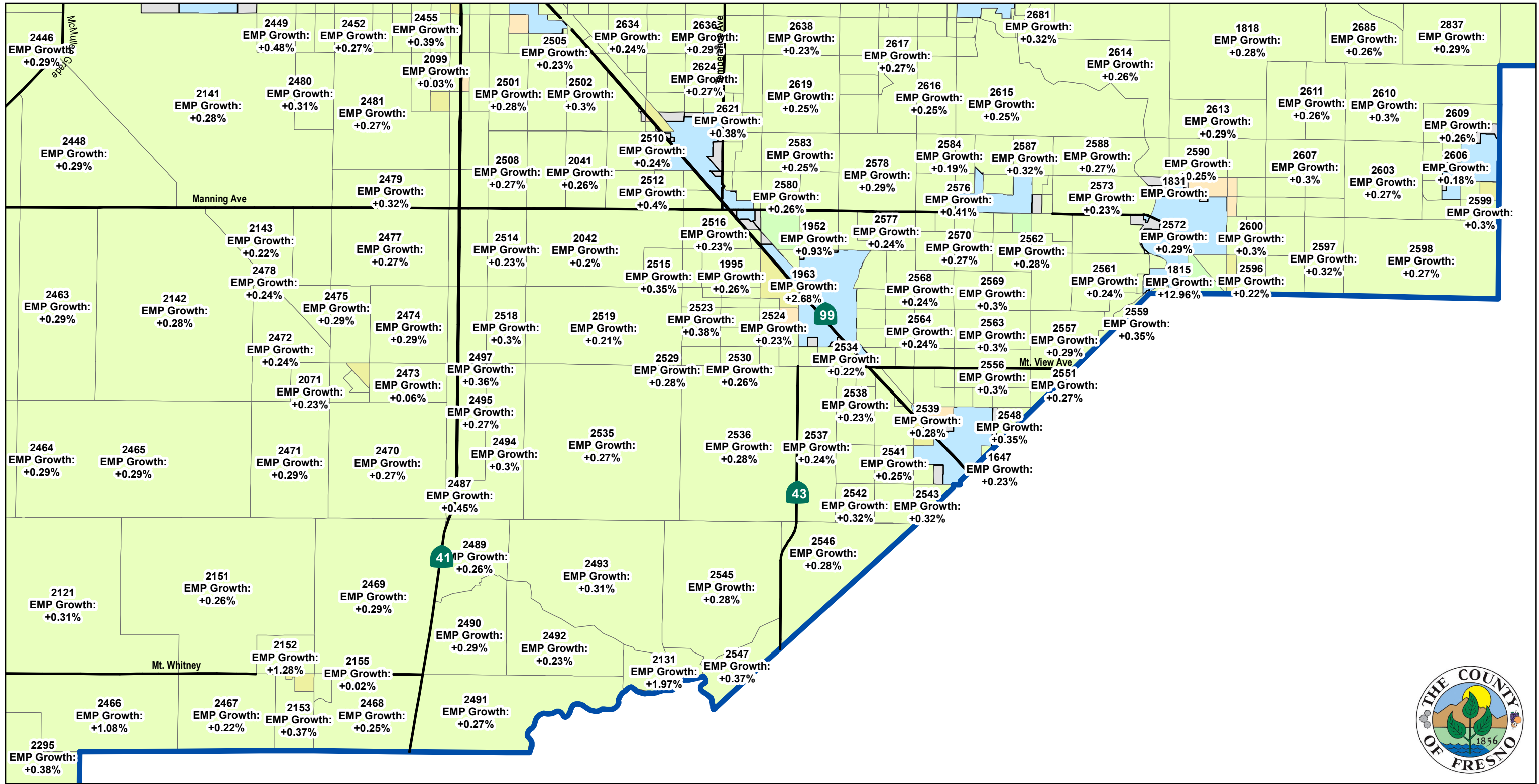
Paper Size ANSI B  
 Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet

**FRESNO COUNTY  
GENERAL PLAN**

**Total Employment Growth By TAZ  
(2019 - 2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE B.7**



Paper Size ANSI B  
 Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet  
 0 10 20 30 40 Miles

**FRESNO COUNTY  
GENERAL PLAN**

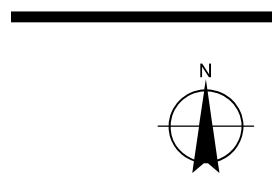
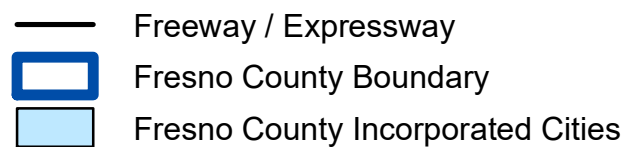
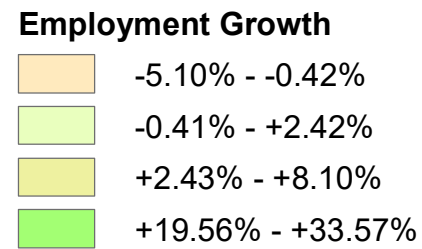
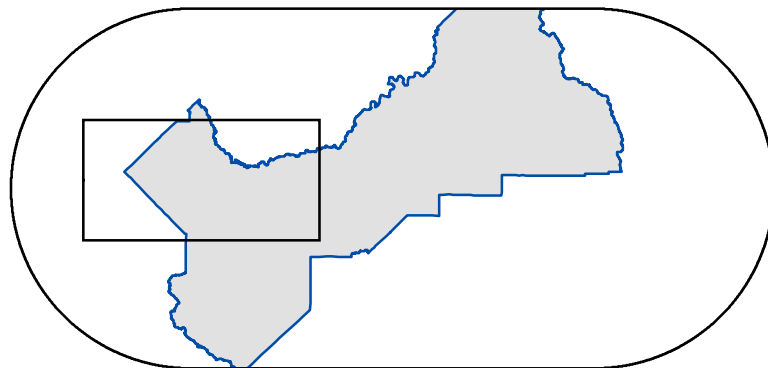
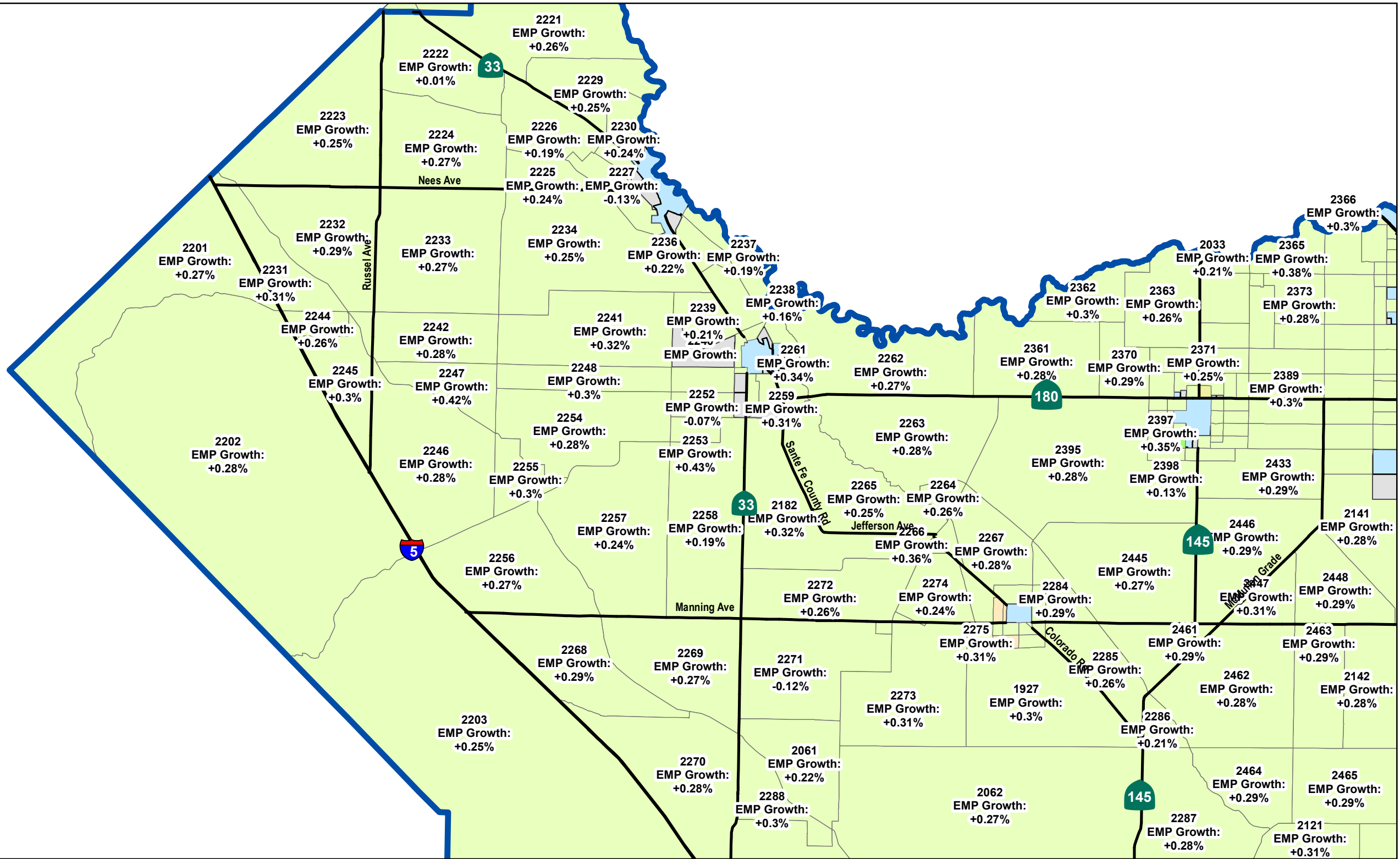
**Total Employment Growth By TAZ  
(2019 - 2042)**

Project No. 11180407  
 Revision No. -  
 Date April 2022

**FIGURE C.7**

Data source: FCOG - Created by: jramirez2

\\gdn\hghd\GIS\Fresno\Projects\6611180407\GIS\Map\Working\11180407-GHD-000-TAZ\_EMP\_Growth-KeyMapC (11 x 17).mxd  
 Print date: 07 Apr 2022 - 08:21



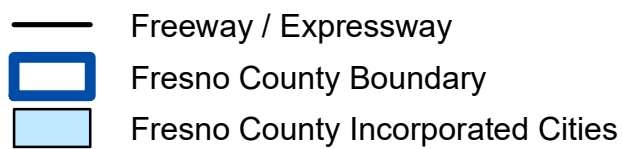
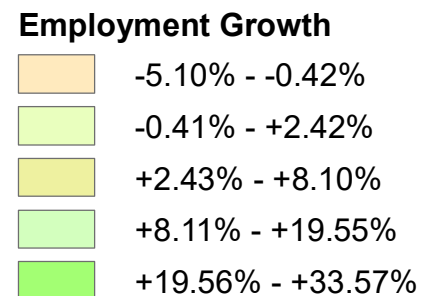
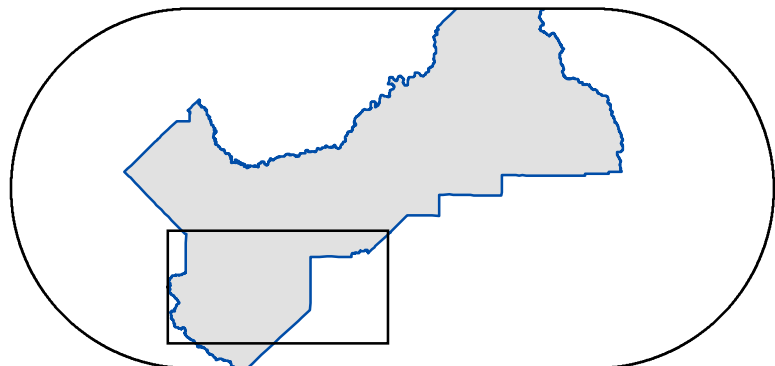
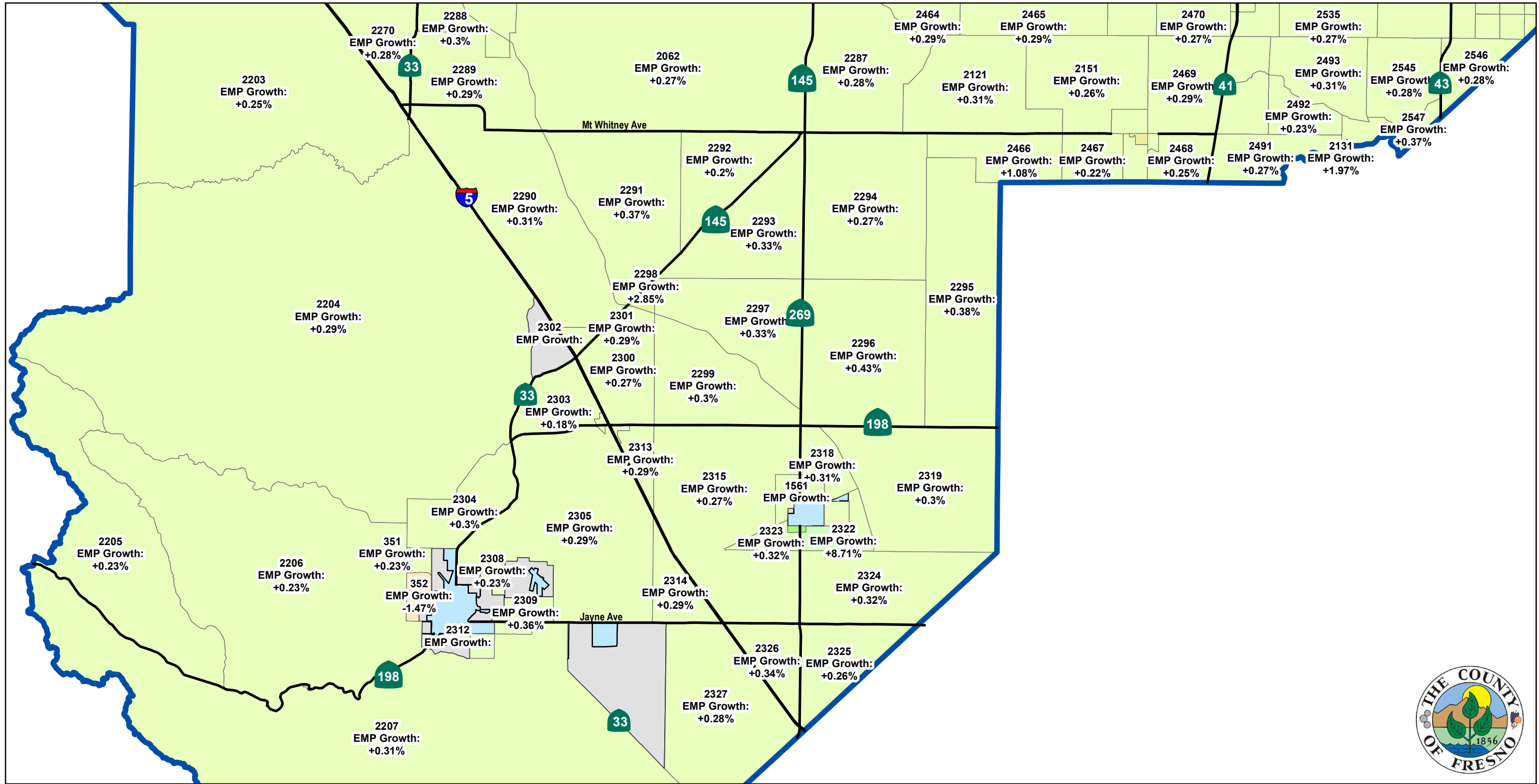
FRESNO COUNTY  
GENERAL PLAN  
**Total Employment Growth By TAZ  
(2019 - 2042)**

Project No. 11180407  
Revision No. -  
Date April 2022

**FIGURE D.7**

Paper Size ANSI B  
Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet  
0 10 20 30 40  
Miles





Paper Size ANSI B  
 Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet

 	<b>FRESNO COUNTY            GENERAL PLAN</b> <b>Total Employment Growth By TAZ            (2019 - 2042)</b>	Project No. 11180407 Revision No. - Date April 2022
	<b>FIGURE E.7</b>	