

# **Tulare County 2022 RTP/SCS**

**Environmental Justice +**

**Health Impact Assessment Analyses**

**Final Report**

**Draft - May 12, 2022**

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# Chapter 1: Existing Conditions Analysis

## Introduction

This Existing Conditions Report (ECR), prepared as part of the Environmental Justice (EJ) Analysis and Health Impact Assessment (HIA), addresses three primary objectives for the 2022 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS): (1) Compliance with regulatory requirements; (2) Analysis of existing conditions related to demographic patterns, public health, and environmental justice issues that may be impacted by the RTP/SCS; and (3) Identification of Environmental Justice (EJ) Disadvantaged Communities (DACs) for analysis in the Environmental Justice and Health Impact Assessment (EJ/HIA) report. This introduction provides more detail on the three objectives, including discussion of the regulatory framework and key concepts in EJ/HIA methods.

### **Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)**

Every Metropolitan Planning Organization (MPO), including the Tulare County Association of Governments (TCAG), is required by federal statute (Title 23 U.S.C. Section 134) to prepare a long-range plan, which is referred to as a Regional Transportation Plan (RTP). The RTP is a region's plan for future investments in the transportation system. Specifically, the RTP engages stakeholders and communities, establishes regional transportation and land use goals, determines future demand for transportation services, analyzes potential transportation projects, estimates costs and available funding sources, and proposes transportation policies and investments for the region. Pursuant to California Government Code Section 65080 the RTP must include the following chapters: a policy element, an action element, a financial element, and an SCS. In addition, the RTP is required to be an internally consistent document in that the objective and policy statements shall be consistent with the funding estimates of the financial element.

Since 2008, the addition of the SCS to the RTP has promoted sustainable land use practices in regional planning by requiring the RTP to include measures and policies that will reduce greenhouse gas (GHG) emissions from transportation in order to achieve, if feasible, the GHG reduction target for the region established by the Air Resources Board (ARB). The SCS must also consider the state's housing goals and identify areas sufficient to house an eight-year projection of the regional housing need for Tulare County established by the Department of Housing and Community Development (HCD). This emphasis on housing and sustainability heightens TCAG's role as the regional leader in convening local governments in a collaborative discussion about alternate scenarios for the region's future.



## Objectives

Consistent with federal and state laws, TCAG will conduct an EJ/HIA report as part of the development of the 2022 RTP/SCS. As an MPO that receives federal funding, TCAG is required by the existing regulatory framework, including Title VI of the Civil Rights Act of 1964 and Executive Order 12898 on environmental justice, to plan for and implement transportation improvements that provide an equitable share of benefits and burdens to all residents in the region.

TCAG must evaluate whether transportation and land use changes identified in the 2022 RTP/SCS cause disparate impacts, including disproportionately high and adverse human health or environmental effects, to low-income and minority communities. The 2022 RTP/SCS must consider environmental justice, which is defined by the U.S. Environmental Protection Agency as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Moreover, fair treatment is “the principle that no group of people, including a racial, ethnic or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies...but the distribution of benefits as well.”

The analyses conducted for the ECR will inform TCAG's understanding of existing conditions for environmental justice, public health, and socioeconomic patterns in the region. More specifically, the results of this analysis will be used to identify the location of disadvantaged communities in Tulare County, which is where TCAG will conduct targeted stakeholder engagement related to environmental justice and health. In addition, the EJ/HIA report will measure both the benefits and burdens associated with the transportation investments included in the 2022 RTP/SCS. To complete this analysis, TCAG will use the findings and recommendations from the ECR to designate EJ DAC areas and then conduct analyses to ensure Tulare County's DACs share equitably in the benefits of the RTP/SCS's investments without bearing a disproportionate share of the burdens.

## Regulatory Framework

Laws and Regulations	Regulatory Topics		
	Benefits and Burdens	Public Participation	Public Health Impacts
Civil Rights Act of 1964 (Title VI)	✓	✓	
Executive Order 12898	✓	✓	✓
Federal Regulations	✓	✓	✓

Laws and Regulations	Regulatory Topics		
	Benefits and Burdens	Public Participation	Public Health Impacts
California Environmental Quality Act	✓	✓	✓
SB 375, The Sustainable Communities and Climate Protection Act of 2008	✓	✓	
SB 1000, The Planning for Healthy Communities Act of 2016	✓	✓	✓
AB 441, Promoting Health Equity in RTPs			✓
2017 RTP Guidelines for MPOs	✓	✓	✓

### Civil Rights Act of 1964 (Title VI)

The primary federal law guiding environmental justice in transportation planning is Title VI of the Civil Rights Act of 1964 (Title VI), which states that "No person...shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Since metropolitan planning organizations and transportation agencies receive federal financial assistance, Title VI establishes the basis for TCAG to disclose to the public the benefits and burdens of proposed projects on minority populations. Since 1964, civil rights have expanded to include sex, age, and disability through the Federal-Aid Highway Act of 1973, the Age Discrimination Act of 1975, the Rehabilitation Act of 1973, and the Americans with Disability Act of 1990. In 1987, Title VI was further amended to extend non-discrimination requirements for federal aid recipients to all of their programs and activities, not just those funded with federal funds.

California law has several additional protected classes beyond the protected classes listed under Title VI. Specifically, California Government Code 11135 prohibits discrimination "on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation" by any agency receiving state funding. Since TCAG receives state funds, it is subject to this law.

### Executive Order 12898

The second federal directive guiding environmental justice in transportation planning is Executive Order 12898. This Executive Order directed every federal agency to make environmental justice part of its mission by identifying and addressing the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. Specifically, Executive Order 12898 requires that "each federal agency shall conduct its programs, policies, and

activities that substantially affect human health or the environment, in a manner that ensures such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin." Therefore, Executive Order 12898 ensures that every federally funded transportation project nationwide considers environmental justice when undertaking the planning and decision-making process.

Title VI and Executive Order 12898 are often paired because there is an overlap between the statutory obligation under Title VI to ensure nondiscrimination in federally assisted programs and the administrative directive under this Executive Order to address disproportionate adverse environmental impacts on minority and low-income populations. Given these federal requirements, TCAG has a clear objective to promote and enforce nondiscrimination as a way of achieving environmental justice.

### Federal Regulations

At the federal level, in addition to Title VI of the Civil Rights Act and Executive Order 12898, there are several federal department and agency level rules and regulations guiding the implementation of environmental justice in transportation planning. The U.S. Department of Transportation's (DOT) Order 5610.2, the Federal Highway Administration's (FHWA) Order 6640.23, and the Federal Transit Administration (FTA) Circulars 4702.1B and 4703.1 expand on Title VI and Executive Order 12898 and they provide guidance to transportation agencies in incorporating environmental justice into their respective departments' programs, policies, and activities.

In FTA's Circular 4702.1B – Title VI Requirements and Guidelines for Federal Transit Administration Recipients, a minority person is specifically defined as any of the following:

1. American Indian and Alaska Native, which refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment.
2. Asian, which refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
3. Black or African American, which refers to people having origins in any of the Black racial groups of Africa.
4. Hispanic or Latino, which includes persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

5. Native Hawaiian or Other Pacific Islander, which refers to people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.<sup>1</sup>

In addition, DOT's Title VI regulations not only bar intentional discrimination, but also unjustified disparate impact discrimination. Disparate impacts result from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination), but have the effect of discrimination on protected groups.

Moreover, in Circular 4703.1, the FTA recommends that MPOs conduct robust community engagement, and especially in disadvantaged communities, as part of the RTP's existing conditions analysis. The FTA Circular 4703.1 specifically identifies that if an adverse effect is "predominantly borne by an EJ population, or will be suffered by the EJ population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-EJ population", engagement with an affected community can help to identify an appropriate strategy to mitigate, reduce, avoid, and/or offset adverse effects. Thus, community engagement is an essential component of an MPO's environmental justice efforts, and they should employ strategies to increase engagement from low income and minority populations as part of the RTP process.

#### SB 375, The Sustainable Communities and Climate Protection Act of 2008

At the state level, the primary law guiding RTP/SCS planning in California is Senate Bill 375 (SB 375), also known as the Sustainable Communities and Climate Protection Act of 2008. SB 375 coordinates regional transportation planning with the state's climate goals through five main components:

1. Requires the ARB to develop regional GHG emission reduction targets for the transportation sector for each MPO in California. If the target cannot be met, then an Alternative Planning Strategy (APS) must be prepared.
2. Requires MPOs to prepare a SCS that specifies how they will achieve their 2020 and 2035 GHG emissions reduction targets. Each MPO must adopt and implement a public participation plan for the development of their SCS.
3. Provides streamlining of California Environmental Quality Act requirements to residential and mixed-use developments that are consistent with the SCS.
4. Synchronizes California's Regional Housing Needs Assessment (RHNA) process with the RTP process to promote infill development and socioeconomic equity.
5. Requires the California Transportation Commission (CTC) to maintain updated guidelines on travel demand models used in the preparation of RTPs.

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<sup>1</sup> In this report, the term "minority" is only used when referring to the official federal or state regulatory framework. Otherwise, this report uses the terms "people of color" or "communities of color".

SB 375's dual emphasis on housing and sustainability in transportation planning heightened the role of MPOs as regional leaders in convening local governments in a collaborative discussion about alternate scenarios for their region's future.

### California Environmental Quality Act (CEQA)

Another major law driving environmental justice, and more broadly environmental protection, in California is CEQA. Broadly, CEQA requires public agencies to consider the environmental consequences of their discretionary actions. Under California state law, the "environment" is defined broadly to include people, because human beings are considered an integral part of the "environment." In fact, as part of an Environmental Impact Report, an agency is required to find that a project may have a "significant effect on the environment" if the "environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]" (Pub. Res. Code, § 21083, subd. (b)(3)<sup>2</sup>. Therefore, in the cases of projects with adverse human health impacts, CEQA requires that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects ...." (Public Resources Code, § 21002). Furthermore, CEQA requires that agencies assess whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (Pub. Res. Code, § 21083, subd. (b)(3). This cumulative impact analysis is important for environmental justice as many low-income communities and communities of color already have a high existing pollution burden. Any additional, unmitigated pollution to environmental justice communities is more likely to be considered an environmental effect under CEQA as a result of the cumulative impact analysis; thus, requiring mitigation measures to new projects. Finally, from the perspective of health and environmental justice, CEQA mandates an effective public outreach process and a transparent access to information.

### SB 1000, The Planning for Healthy Communities Act of 2016

In California, the primary state law specifically guiding environmental justice in planning is Senate Bill 1000 (SB 1000), also known as the Planning for Healthy Communities Act of 2016. SB 1000 requires jurisdictions that have disadvantaged communities to incorporate environmental justice policies into their general plans, either in a separate environmental justice element or by integrating related goals, policies, and objectives throughout the other elements. As part of this law, jurisdictions must identify disadvantaged communities, which are defined in State law as "a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation." Although SB 1000 is not applicable to TCAG and the RTP/SCS, TCAG's nine member agencies are subject to SB 1000 and, thus, benefit from a regional environmental justice analysis and identification of disadvantaged communities.

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<sup>2</sup> The CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15000, et seq.) are available at <http://ceres.ca.gov/ceqa/>.

### AB 441, Promoting Health Equity in RTPs

Passed in 2012, Assembly Bill 441 (AB 441) requires the CTC to include public health and health equity criteria as part of the state's RTP Guidelines for MPOs. The RTP Guidelines now provide voluntary guidance that highlight cutting-edge examples of policies, programs, projects, and tools that MPOs are employing to address public health and health equity in the regional transportation planning process.

### 2017 RTP Guidelines for MPOs

Pursuant to Government Code Section 14522, the CTC is authorized to develop RTP guidelines for MPOs. Although the guidelines include both federal and state requirements, such as the laws previously described in this section, they also provide transportation best practices and recommendations. Given the wide range of population and geographic sizes across MPOs in California, each MPO has the flexibility to select transportation planning options that best fit their regional needs. However, at a minimum, the RTP must:

- Be updated, adopted, and submitted to the CTC and the DOT every four years;
- Identify a forecasted development pattern and transportation network that, if implemented, will meet GHG emission reduction targets specified by the ARB through their RTP planning processes;
- Include a financial element that summarizes the cost of plan implementation constrained by a realistic projection of available revenues;
- Include an objective, policy statements, and an action element consistent with the funding estimates outlined in the financial element;
- Consult and coordinate with all interested parties, including seeking out and considering "the needs of those traditionally underserved by existing transportation systems, such as low income and minority households as well as people with limited English proficiency, who may face challenges accessing employment and other services;" (as outlined in the Public Participation Plan)
- Ensure that planned regional transportation improvements do not have a disproportionately high and adverse impact on low income or minority populations, and that the plan will not result in the denial of, reduction in, or significant delay in the receipt of benefits by minority or low-income populations (based on a social equity analysis).

The RTP Guidelines specifically identify the inclusion of the entire range of community interests in the development of the RTP as a key and required element in the process. The RTP process is designed to foster involvement by all interested stakeholders, including the Native American community, walking and bicycling representatives, public health departments and

public health non-governmental organizations, affordable housing advocates, transportation advocates, environmental advocates, neighborhood and community groups, home builder representatives, broad-based business organizations, landowners, commercial property interests and homeowner associations, neighboring MPOs, and the general public. Each MPO is encouraged to use visioning tools during the RTP/SCS development process enabling the public and policy makers to clearly see social equity impacts of various transportation planning scenarios. A few examples of social equity impacts include air quality, access to transit, access to electric vehicle charging, household transportation costs, housing costs, and overall housing supply. The RTP Guidelines also encourage MPOs to identify disadvantaged communities by using data and metrics related to public health, social equity, and environmental justice.

Furthermore, the RTP Guidelines also identify the consideration of rural communities as a key element in the RTP process in order to ensure that regional GHG reductions and associated co-benefits are not achieved at the expense of small towns and rural communities where high frequency transit and/or high density development is not feasible. Specifically, MPOs should consider policies and programs for investments in rural communities that improve sustainability and access to jobs and services while protecting resource areas, farmland, and agricultural economies. In recognition of the limited regional financial resources, MPOs are encouraged to pursue and assist their partner agencies in the pursuit of discretionary state and other funding sources to address resource areas, farmland, and rural sustainability in the RTP process.

### **Review of Other Equity Analyses and Indices**

In accordance with the existing regulatory framework of civil rights and environmental justice, TCAG must ensure that proposed transportation investments do not have disproportionately high and adverse human health or environmental effects on minority and low-income populations, and that the RTP achieves an equitable distribution of benefits and burdens. To accomplish these goals, TCAG is called upon to: (1) identify which populations and communities are low income or minority, (2) determine what metrics will be used to measure the benefits and burdens to those populations and communities, (3) conduct an appropriate social equity analysis, and (4) administer public participation to ensure that the RTP planning process succeeds in "seeking out and considering the needs of low-income and minority households."

Over time, various federal and state programs have created unique screening methodologies to identify disadvantaged communities. One particular approach developed by the U.S. Department of Housing and Urban Development (HUD) is known as a racially/ethnically concentrated area of poverty (R/ECAPs), which is defined as "a geographic area with significant concentrations of poverty and minority populations." The methodology contains two parts: 1) a racial/ethnic concentration threshold, and 2) a poverty test. To be defined as a R/ECAP, a community must have at least 50% of their population identify as

non-White and have a significant concentration of poverty. Given the wide range in cost of living across the country, the income threshold is flexible, dependent on a region's area median income, and can be readily adapted to local conditions. For example, in Minnesota's Twin City region, concentrated poverty is defined as census tracts where at least 40% of residents live in households with incomes below 185% of the federal poverty line.

A second approach developed by HUD is its methodology for implementing the Affirmatively Furthering Fair Housing (AFFH) rule. HUD's AFFH rule requires grant recipients to take meaningful actions to overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity. The basic methodology for HUD's AFFH rule includes the following steps: 1) identify, with robust community engagement, current patterns and conditions of segregation, racially concentrated poverty, disparities in access to opportunity, and disproportionate housing needs; 2) identify key contributing factors of the patterns and conditions identified; 3) prioritize the most significant contributing factors and set goals that will meaningfully address the high priority factors, with "metrics and milestones" for each goal; 4) tailor near-term actions and investments consistent with those goals; and 5) measure progress over the near term. DOT encourages MPOs to integrate AFFH principles and goals into their decision-making by identifying transportation impediments to accessing opportunity and by coordinating regional efforts to address segregation and opportunity.

Moreover, one approach to assist with RTP analyses developed by the San Diego Association of Governments in partnership with Caltrans and other regional transportation agencies is the Social Equity Analysis Method (SEAM). This project produced the Social Equity Analysis Tool (SEAT) which MPOs can use when assessing benefits and burdens on various populations (e.g., low income and minority groups) that are expected to occur if an RTP's programs and projects are implemented. The SEAT includes nine performance measures – some of which measure relative benefits and others that measure relative burdens.

In California, disadvantaged communities are often identified through the California Environmental Health Screening Tool (CalEnviroScreen or CES). It was developed in 2010 by the Office of Environmental Health Hazards Assessment (OEHHA) and California's Environmental Protection Agency (CalEPA), and is updated every few years to account for newly available datasets and advances in public health research. In 2021, OEHHA and CalEPA released version 4.0 of CES. As a statewide index of data from several verified sources of information on pollutant exposures and environmental effects at the census tract level, CalEnviroScreen helps jurisdictions to identify communities disproportionately burdened by multiple sources of pollution. Overall index scores and pollution burden scores are calculated relative to all census tracts in California and are not on an absolute numeric basis. Based on guidance from the Governor's Office of Planning and Research, disadvantaged communities are identified as the top 25% scoring census tracts in comparison to all other census tracts in the state. Since most of Tulare



County is identified as disadvantaged in comparison to the rest of California, CalEnviroScreen is not a sufficient enough tool to support with TCAG's prioritization of transportation investments. Therefore, TCAG requires a tailored screening methodology to capture the geographic communities in Tulare County that experience the most overall pollution burden, transportation challenges, and racial and economic inequities.

Although there is some federal and state guidance on which indicators to include as part of the existing conditions analysis, the specific indicators vary by region based on unique regional goals. Some examples of indicators include air quality, share of population within  $\frac{1}{4}$  or  $\frac{1}{2}$  mile of transit, distribution of investments, and access to employment, education, and other amenities. Based on technical capabilities and input from the RTP/SCS community engagement process, each MPO can select measures and analyses that best illustrate and identify the historical and current conditions of transportation and land use for disadvantaged communities to ensure future transportation investments will not further cause disproportionate impacts to those communities.

### **Overview of Existing Conditions Analysis**

As part of the ECR, TCAG reviewed over fifty indicators to assess for health, environmental justice, and other racial and economic inequities in Tulare County. These indicators were organized into one of four categories (i.e., Pollution and Climate Risks, Population Profile, Transportation Conditions, and Health Profile) and each with their own set of sub-categories (see table below). The following sections of the report provide maps and data for each of these indicators, in addition to a brief section displaying the county's geographic boundaries and population distribution.

## Indicators assessed in the HIA/EJ analysis

Pollution and Climate Risks	Population Profile	Transportation Conditions	Health Status
<b>CalEnviroScreen (CES) Overall Scores</b> <ul style="list-style-type: none"> <li>CES 3.0 Overall Score</li> <li>CES 4.0 Overall Score</li> </ul> <b>Cumulative/Aggregated Pollution Burden</b> <ul style="list-style-type: none"> <li>CES 4.0 Pollution Burden (75<sup>th</sup> and 95<sup>th</sup> Percentiles)</li> <li>Air Quality Index</li> <li>Sensitive Uses</li> </ul> <b>CalEnviroScreen Individual Pollution Burden Indicators</b> <ul style="list-style-type: none"> <li>Ozone</li> <li>Particulate Matter (PM2.5)</li> <li>Children's Lead Risk</li> <li>Diesel Particulate Matter</li> <li>Drinking Water Contaminants</li> <li>Pesticide Use</li> <li>Toxic Releases from Facilities</li> <li>Traffic Impacts</li> <li>Cleanup Sites</li> <li>Groundwater Threats</li> <li>Hazardous Waste Generators and Facilities</li> <li>Impaired Water Bodies</li> <li>Solid Waste Sites and Facilities</li> </ul> <b>Climate Hazards</b> <ul style="list-style-type: none"> <li>Projected Extreme Heat Days</li> <li>Flood Risk</li> <li>Wildfire Risk</li> <li>Evacuation Risk Analysis</li> </ul>	<b>Vulnerable Populations</b> <ul style="list-style-type: none"> <li>Infants and Toddlers</li> <li>Children and Youth</li> <li>Older Adults</li> <li>Linguistic Isolation</li> <li>Agricultural Workers</li> </ul> <b>Economic Conditions</b> <ul style="list-style-type: none"> <li>Median Household Income</li> <li>Severely Cost-Burdened Households</li> <li>Density of Severely Cost-Burdened Households</li> <li>Overcrowded Housing</li> </ul> <b>Racial Segregation</b> <ul style="list-style-type: none"> <li>Racially/Ethnically Concentrated Areas of Poverty</li> <li>Density of American Indian/Alaska Native Residents</li> <li>Percent Black/African American</li> <li>Density of Black/African American Residents</li> <li>Percent Hispanic/Latino</li> </ul>	<b>Transit-Dependent Households</b> <ul style="list-style-type: none"> <li>Density of Households without a Motor Vehicle</li> </ul> <b>Walk Time to Key Destinations</b> <ul style="list-style-type: none"> <li>Walk Time to Nearest School</li> <li>Walk Time to Nearest Park</li> </ul> <b>Public Transit Access to Health Facilities</b> <ul style="list-style-type: none"> <li>Regional</li> <li>Visalia</li> <li>Porterville</li> <li>South County</li> </ul>	<b>Population Health Status</b> <ul style="list-style-type: none"> <li>Countywide Health Outcomes</li> <li>Life Expectancy</li> <li>Healthy Places Index</li> </ul> <b>Traffic-Related Injuries and Fatalities</b> <ul style="list-style-type: none"> <li>Traffic Collisions by Severity of Injuries</li> <li>Collisions by Parties Involved (Road Users)</li> <li>Pedestrian Collisions in Proximity to Schools</li> </ul> <b>Healthcare Access and Utilization</b> <ul style="list-style-type: none"> <li>Access to Healthcare</li> <li>Asthma-Related Emergency Room (ER) Visits</li> <li>Cardiovascular Disease-Related ER Visits</li> <li>Healthcare Utilization</li> </ul> <b>Social Determinants of Health</b> <ul style="list-style-type: none"> <li>Supermarket Access</li> <li>Broadband Access</li> </ul>

## County Overview

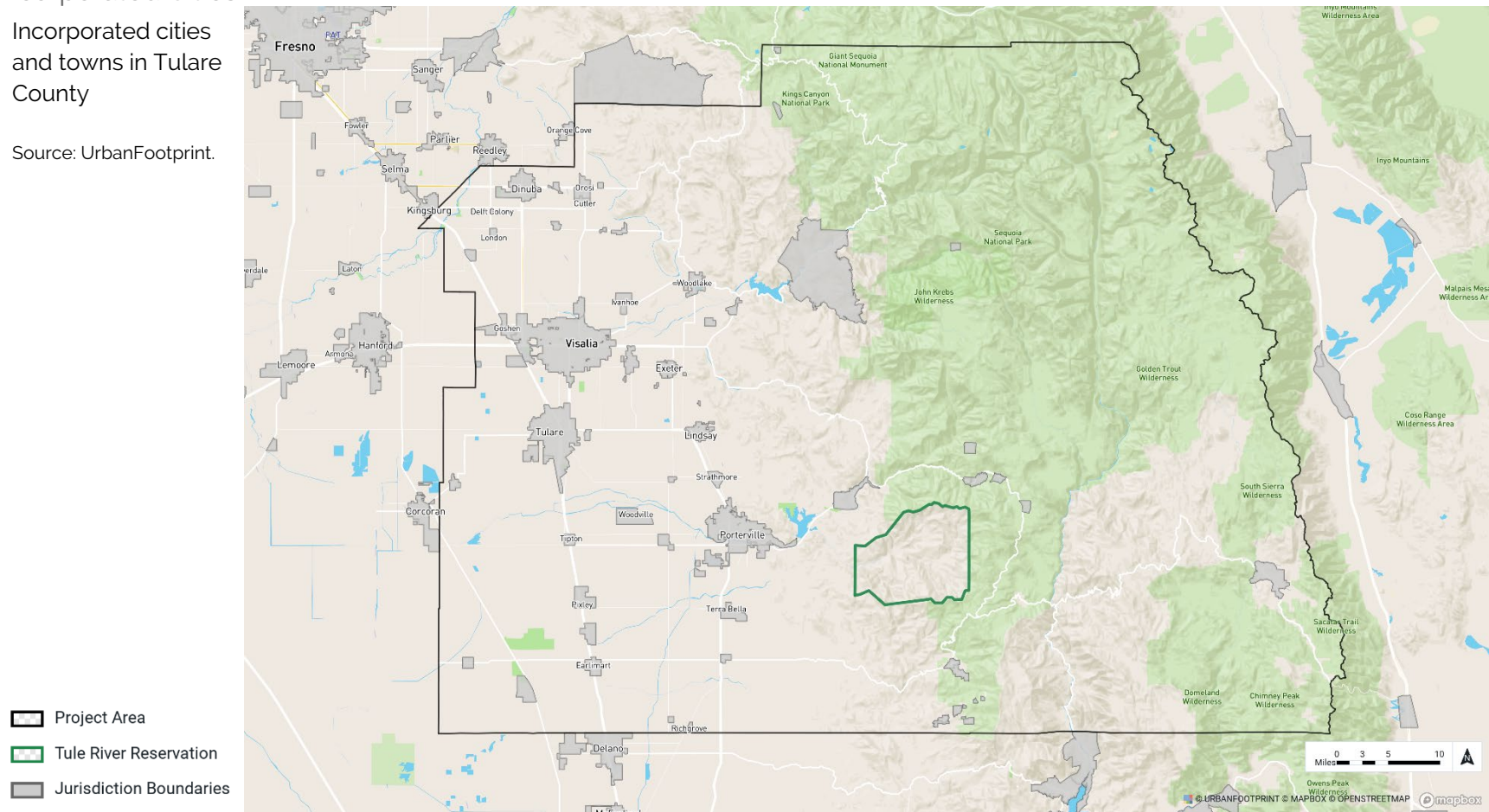
This section presents maps for Tulare County that display the geographic boundaries and transportation system, as well as population density.

### Geographies

#### Incorporated Cities

Incorporated cities and towns in Tulare County

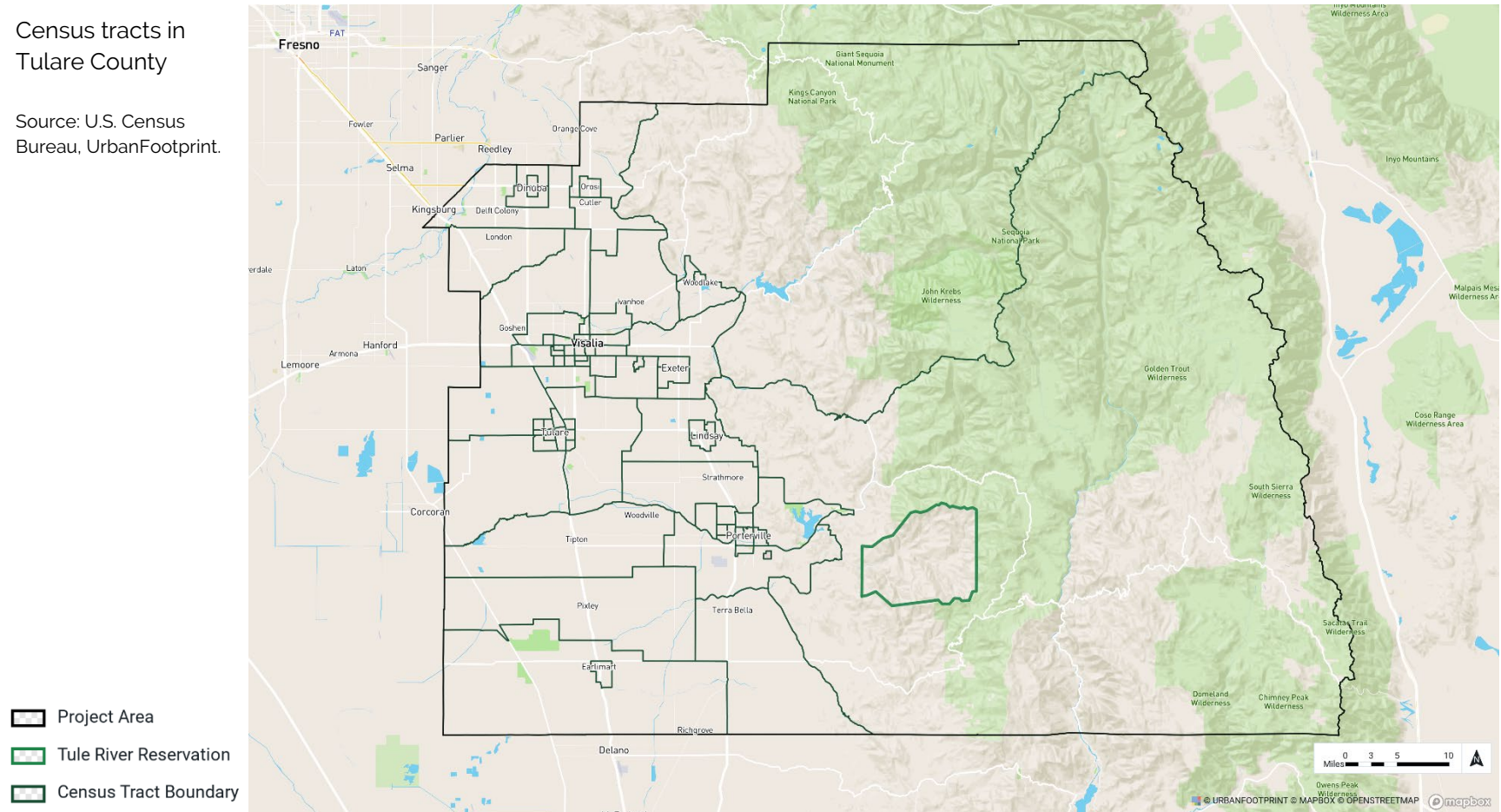
Source: UrbanFootprint.



## Tracts

### Census tracts in Tulare County

Source: U.S. Census  
Bureau, UrbanFootprint.

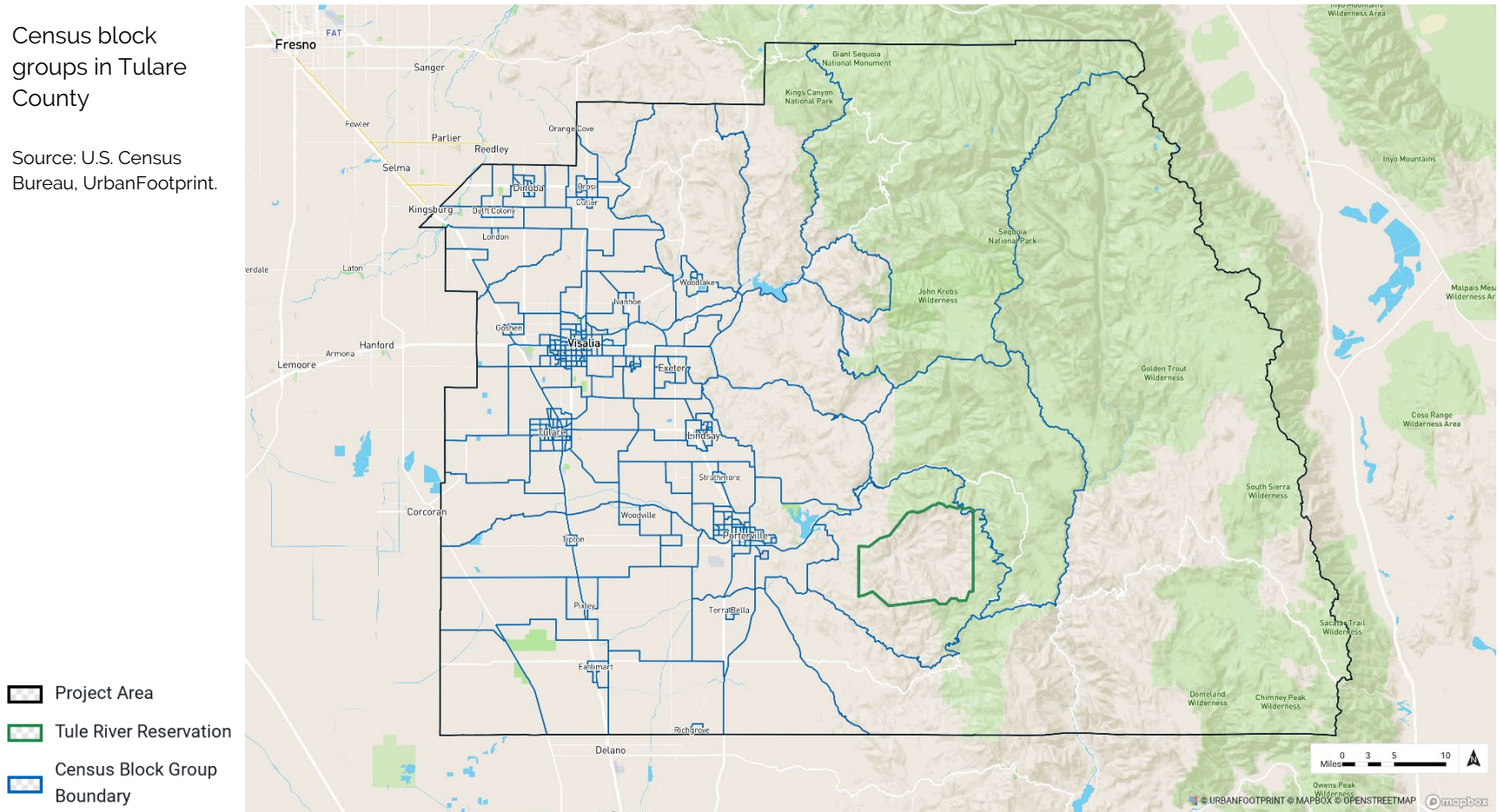




## Block Groups

### Census block groups in Tulare County

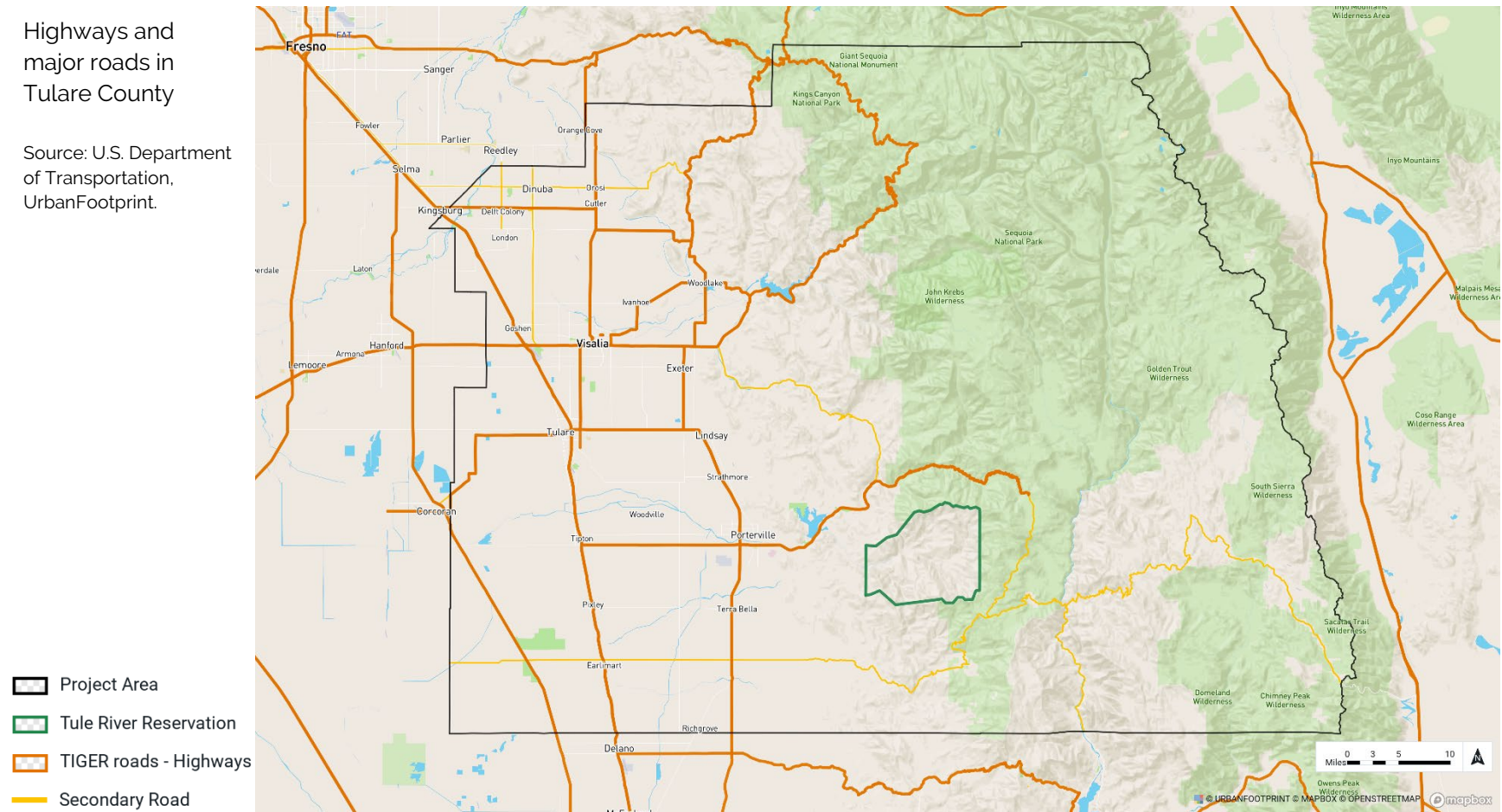
Source: U.S. Census Bureau, UrbanFootprint.



## Highways and Major Roads

### Highways and major roads in Tulare County

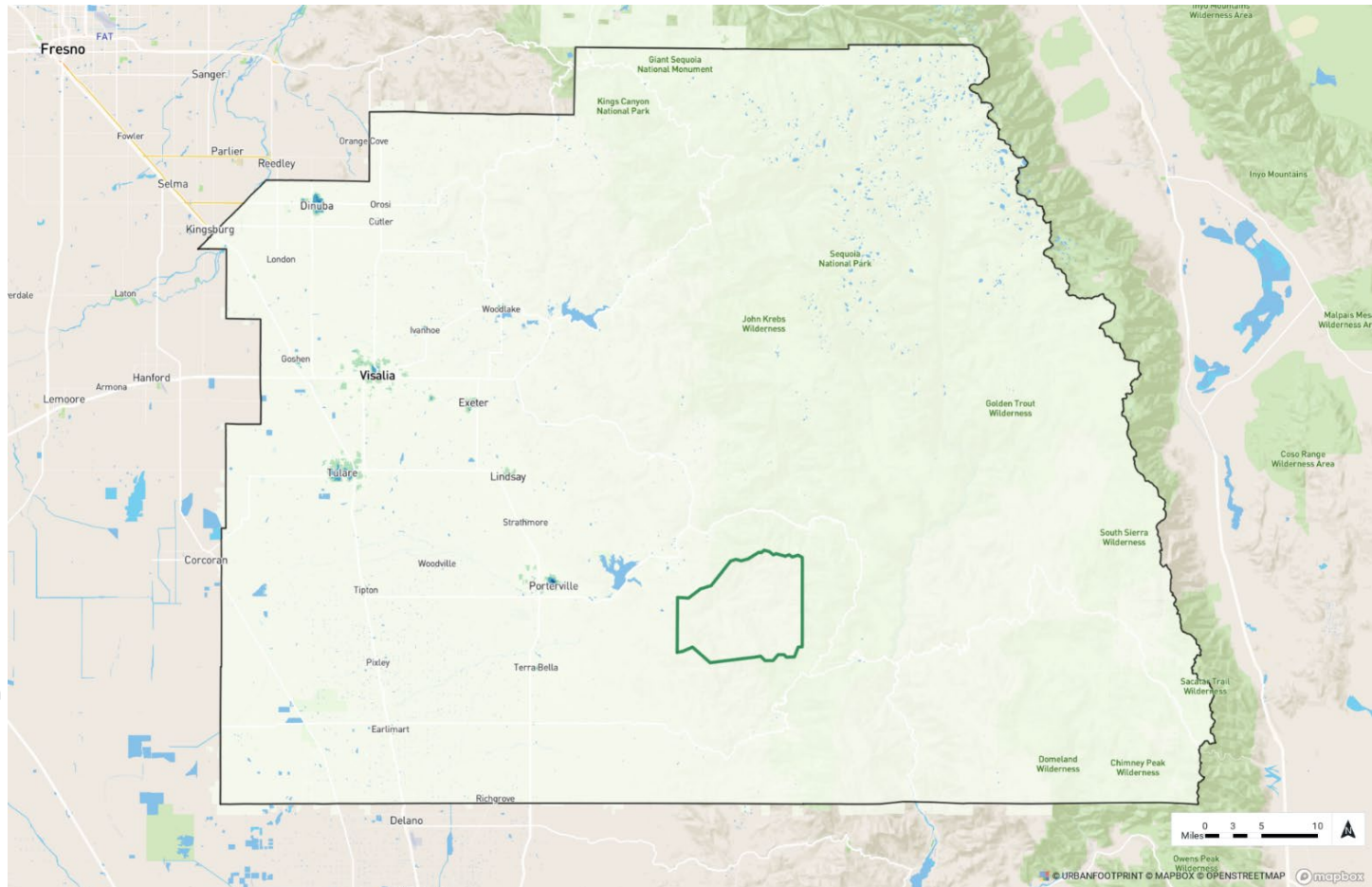
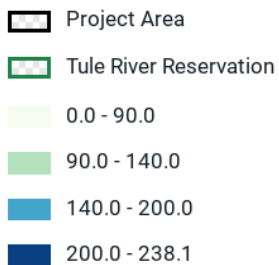
Source: U.S. Department of Transportation, UrbanFootprint.



## Intersection Density

Intersections per square mile. Within the County, Dinuba and Downtown Porterville have the highest intersection density; both with over 200 intersections per square mile. A few neighborhoods in Visalia and Tulare also scored high with 140-200 intersections per square mile.

Source: UrbanFootprint

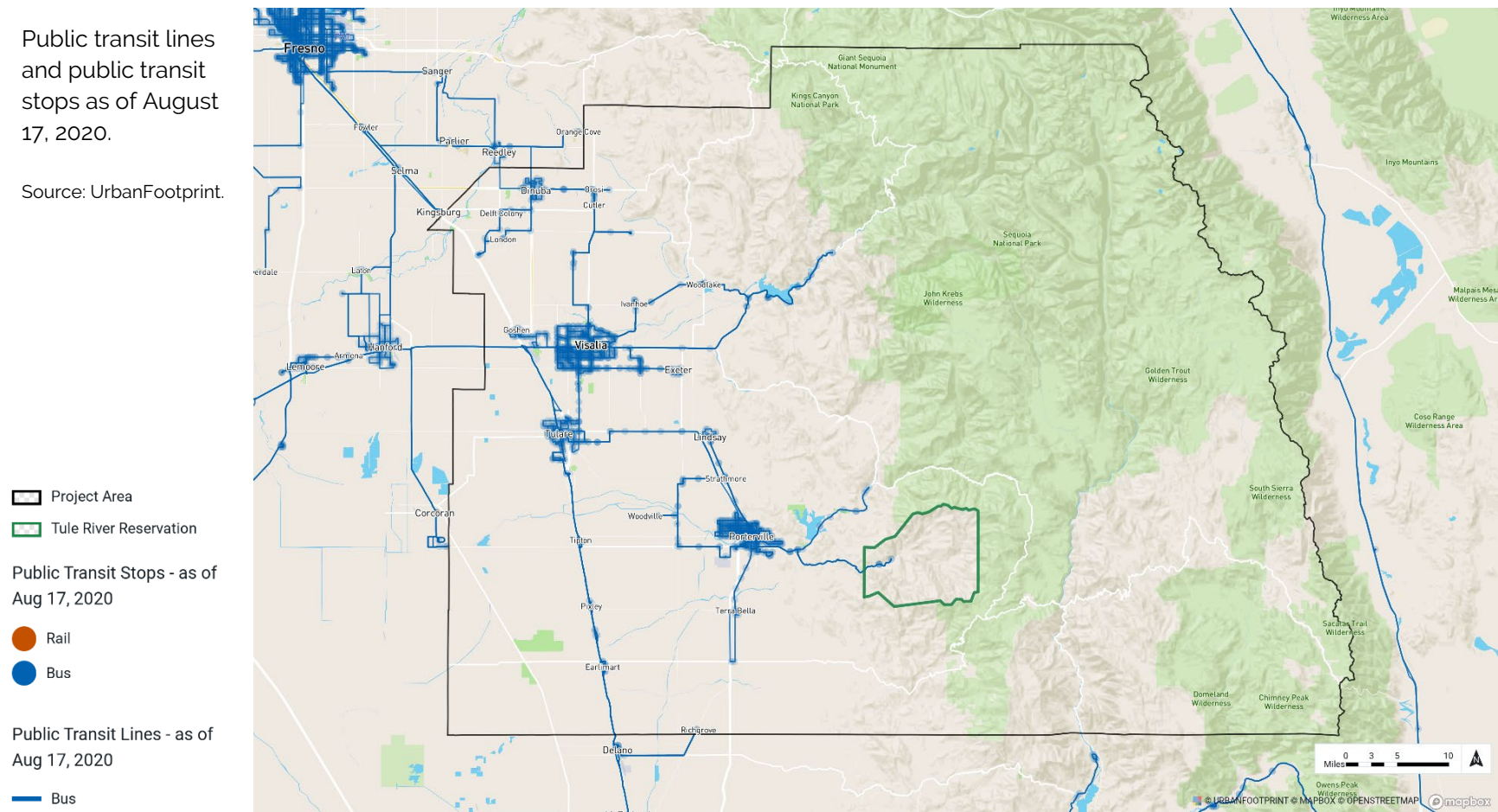




## Public Transit System

Public transit lines  
and public transit  
stops as of August  
17, 2020.

Source: UrbanFootprint.





## Population Distribution

### Population Dot Density by Race/Ethnicity

Population distribution of residents by race and ethnicity

Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-year estimates via UrbanFootprint.

#### Black

1 Dot = 7 Person

nh\_blk\_alone\_acs\_13\_17

#### Hispanic

1 Dot = 7 Person

hispanic\_acs\_13\_17

#### Asian

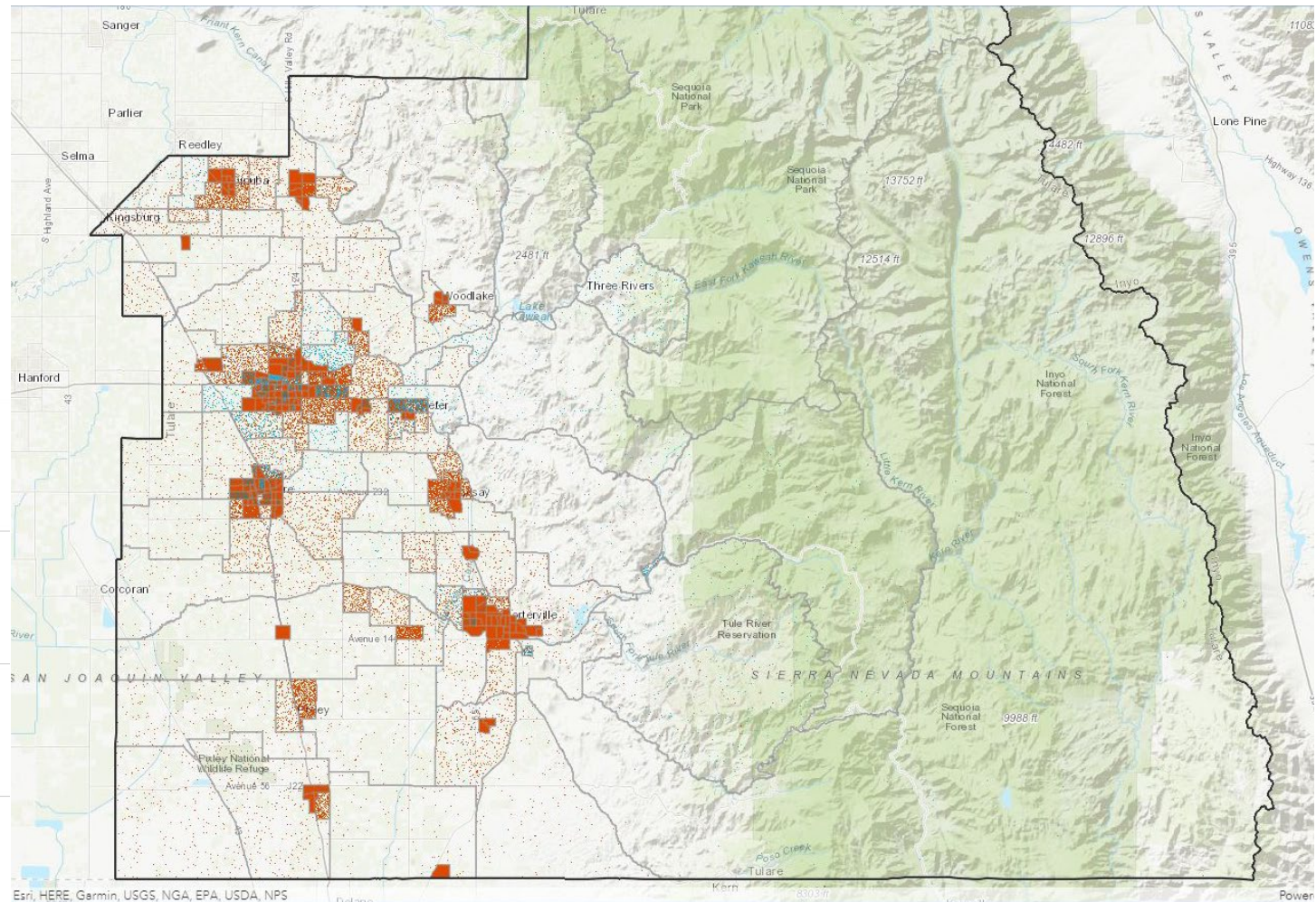
1 Dot = 7 Person

nh\_asian\_alone\_acs\_13\_17

#### White

1 Dot = 7 Person

nh\_white\_alone\_acs\_13\_17



## Pollution Burden and Climate Risks

This section presents data for Tulare County that display pollution burden and climate risks. The data is organized into four categories: overall CalEnviroScreen (CES) scores for Tulare County census tracts relative to all census tracts in California, CES cumulative pollution burden scores, CES individual pollution burden scores for specific pollutant exposures and environmental effects, and risk of climate hazards (natural hazards made more frequent and more severe by climate change, these include wildfires, extreme heat, and flooding).

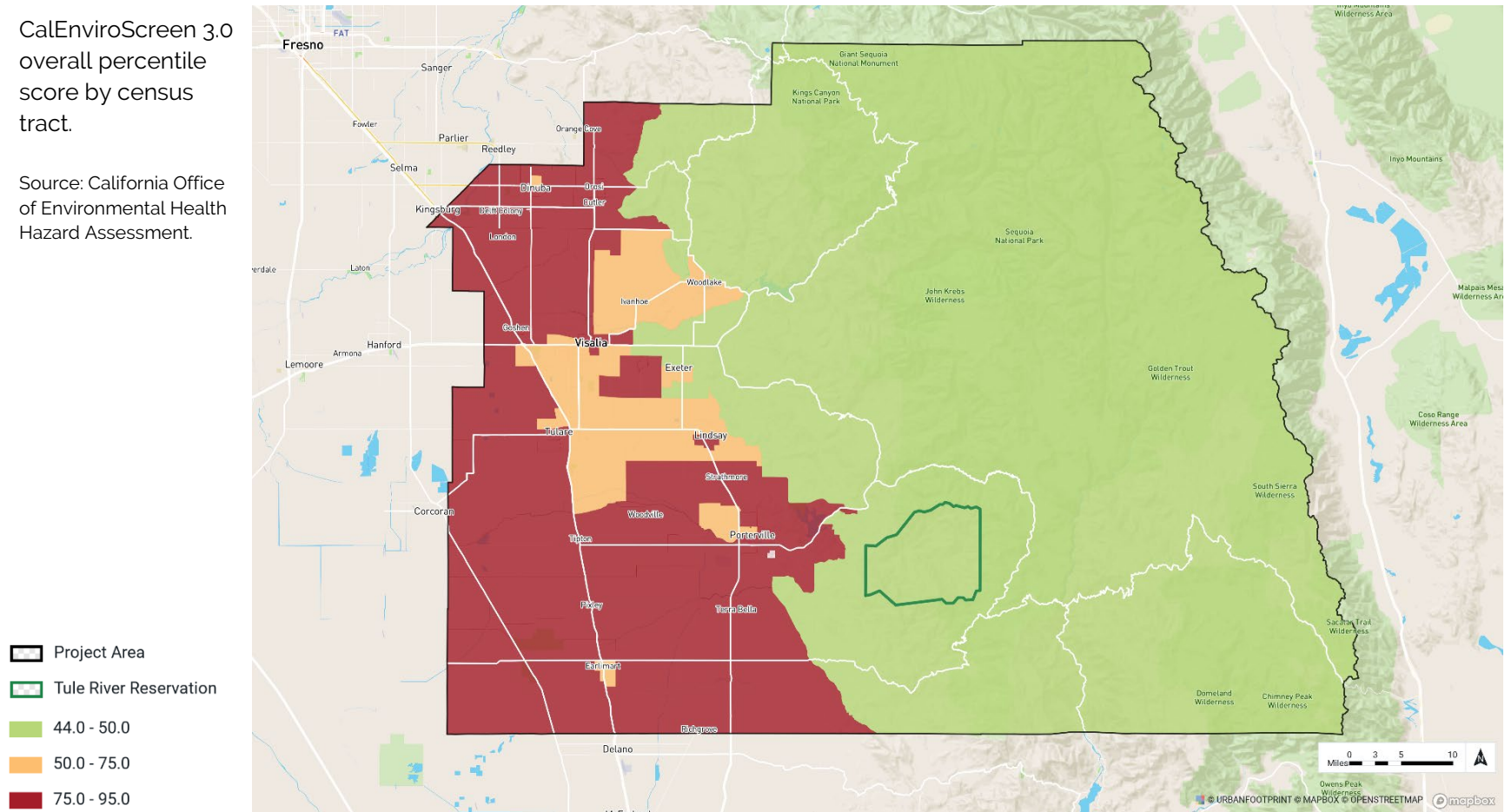
As described in the Introduction section, CalEnviroScreen is a statewide index of data from several verified sources of information on pollutant exposures and environmental effects at the census tract level. It was developed in 2010 by the Office of Environmental Health Hazards Assessment (OEHHA) and California's Environmental Protection Agency (CalEPA), and is updated every few years to account for newly available datasets and advances in public health research. In 2021, OEHHA and CalEPA released version 4.0 of CES. CES helps jurisdictions to identify communities disproportionately burdened by multiple sources of pollution. Overall index scores and pollution burden scores are calculated relative to all census tracts in California and are not on an absolute numeric basis. Based on guidance from the Governor's Office of Planning and Research, disadvantaged communities are identified as the top 25% scoring census tracts in comparison to all other census tracts in the state.

## CalEnviroScreen Overall Scores

### CalEnviroScreen 3.0 Overall Score

CalEnviroScreen 3.0 overall percentile score by census tract.

Source: California Office of Environmental Health Hazard Assessment.

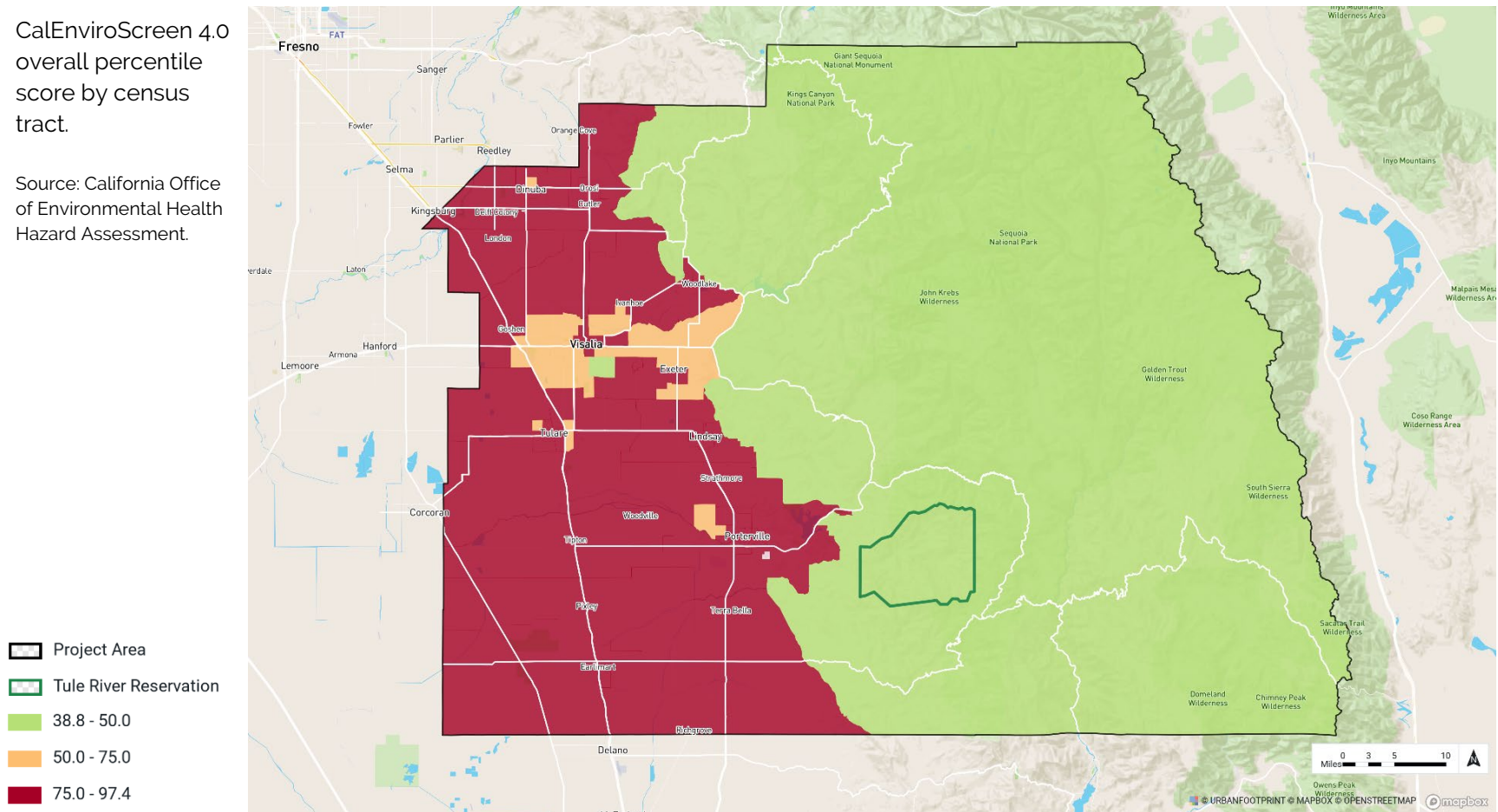




## CalEnviroScreen 4.0 Overall Score

CalEnviroScreen 4.0  
overall percentile  
score by census  
tract.

Source: California Office  
of Environmental Health  
Hazard Assessment.

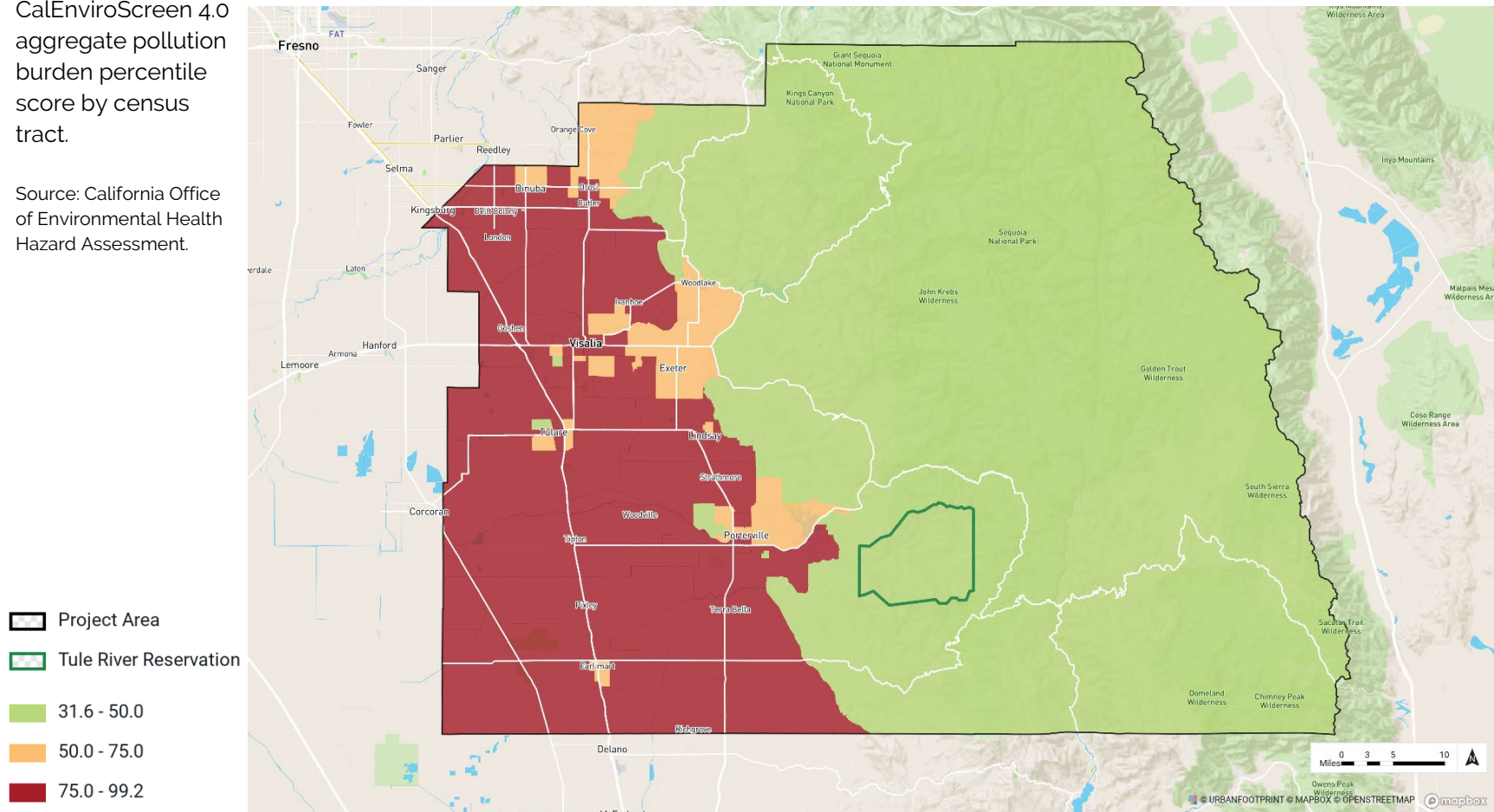


## Cumulative/Aggregated Pollution Burden

### CalEnviroScreen 4.0 Pollution Burden (75<sup>th</sup> Percentile)

CalEnviroScreen 4.0 aggregate pollution burden percentile score by census tract.

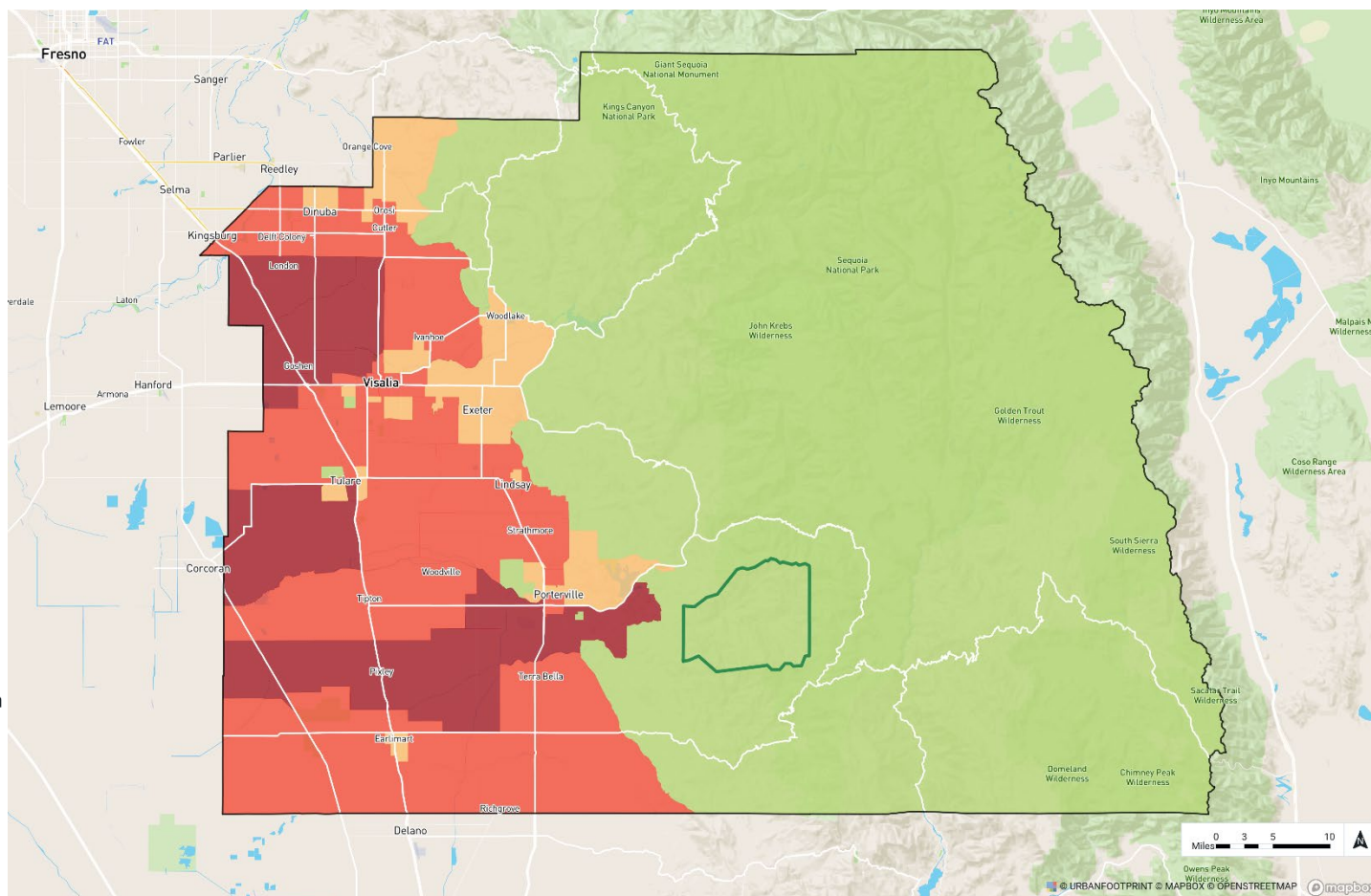
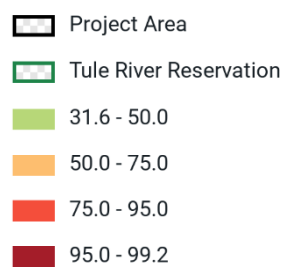
Source: California Office of Environmental Health Hazard Assessment.



### CalEnviroScreen 4.0 Pollution Burden (95<sup>th</sup> Percentile)

CalEnviroScreen 4.0  
aggregate pollution  
burden percentile  
score by census  
tract.

Source: California Office of Environmental Health Hazard Assessment.




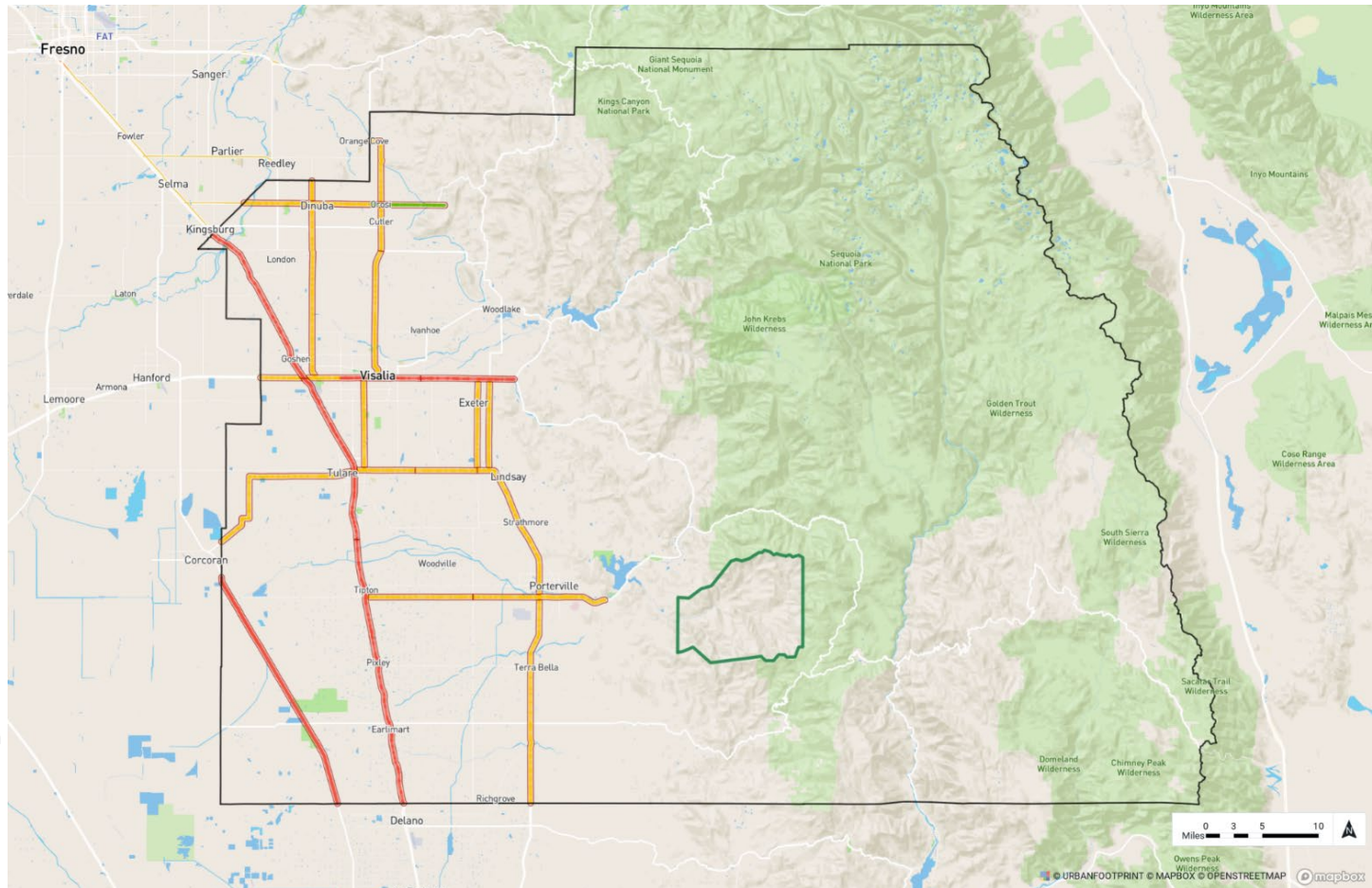


## Air Quality Index

Air quality index along major roads and highways in Tulare County.

Source: Tulare County Association of Governments









-  Tule River Reservation
-  High Aqi Roads
-  Medium Aqi Roads
-  Low Aqi Roads

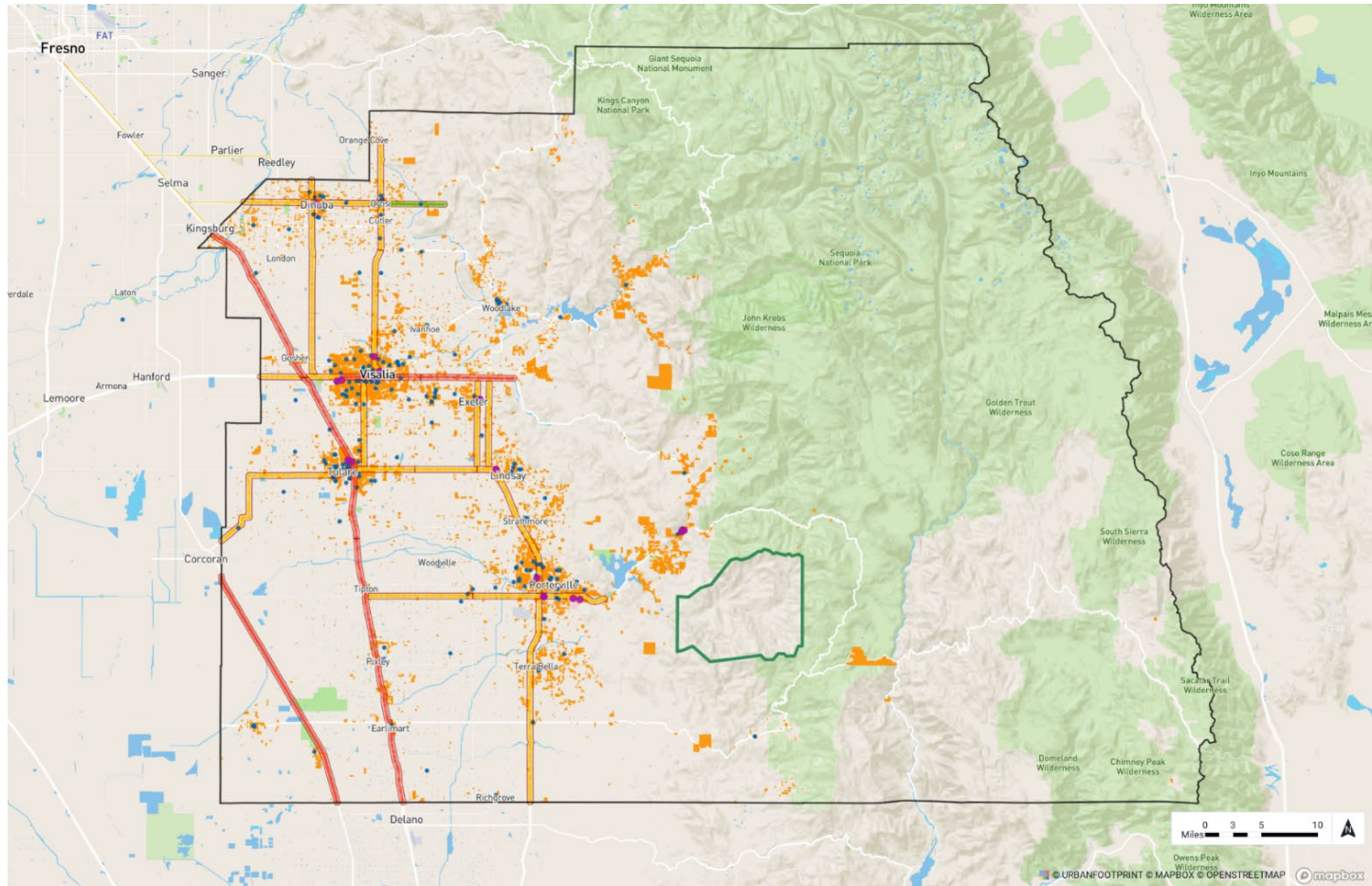


## Sensitive Uses

Sensitive uses to pollution exposure throughout Tulare County.

Source: Tulare County Association of Governments

-  Tule River Reservation
-  Pt All Hospitals
-  Aqi Buff Quartermile
-  Sensitive Use - All Schools
-  High Aqi Roads
-  Medium Aqi Roads
-  Low Aqi Roads
-  All Resi Parcels



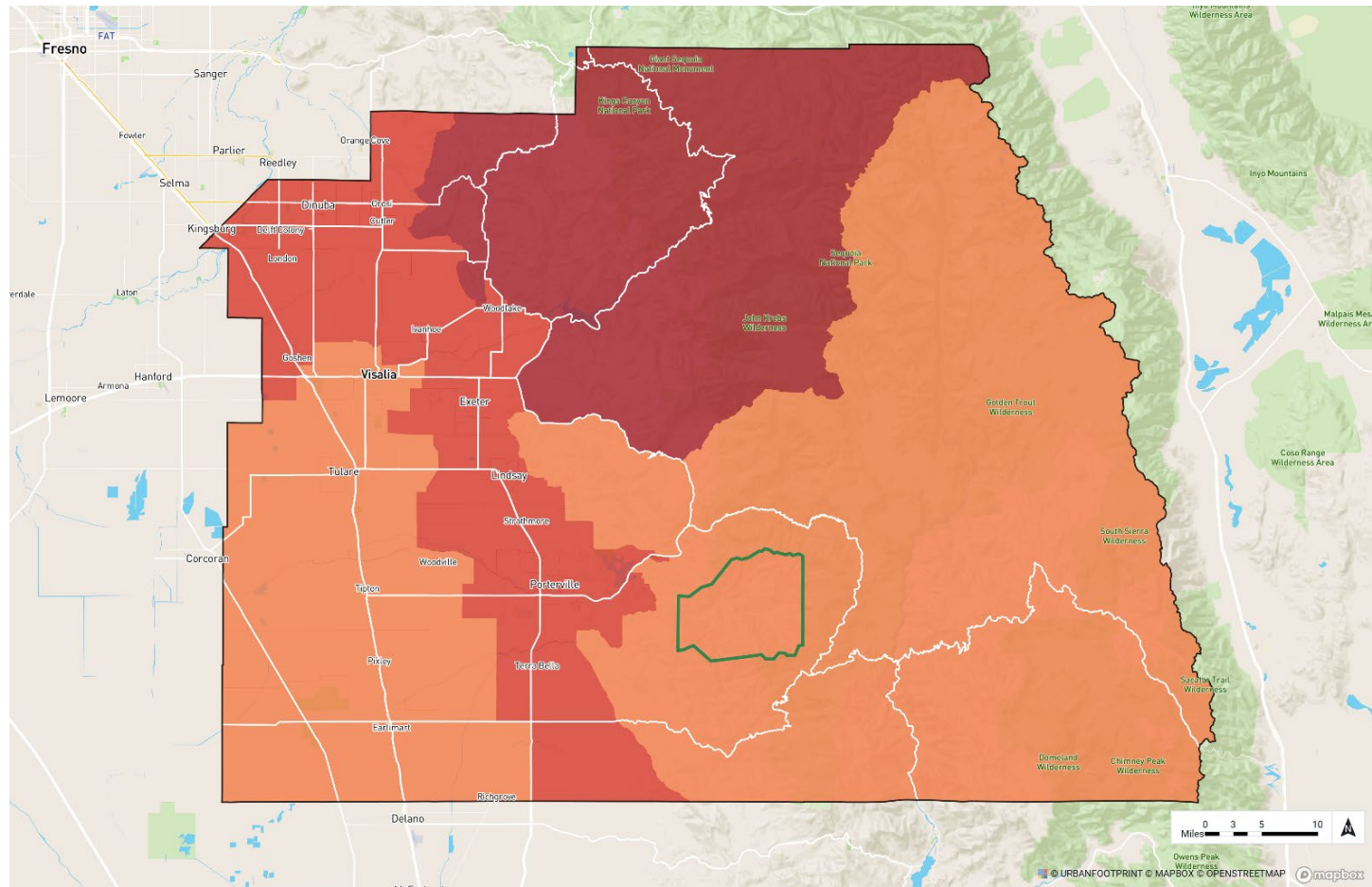
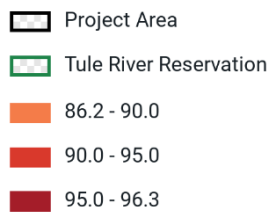


## CalEnviroScreen Individual Pollution Burden Indicators

### Ozone

CalEnviroScreen  
4.0: ozone  
percentile score by  
census tract

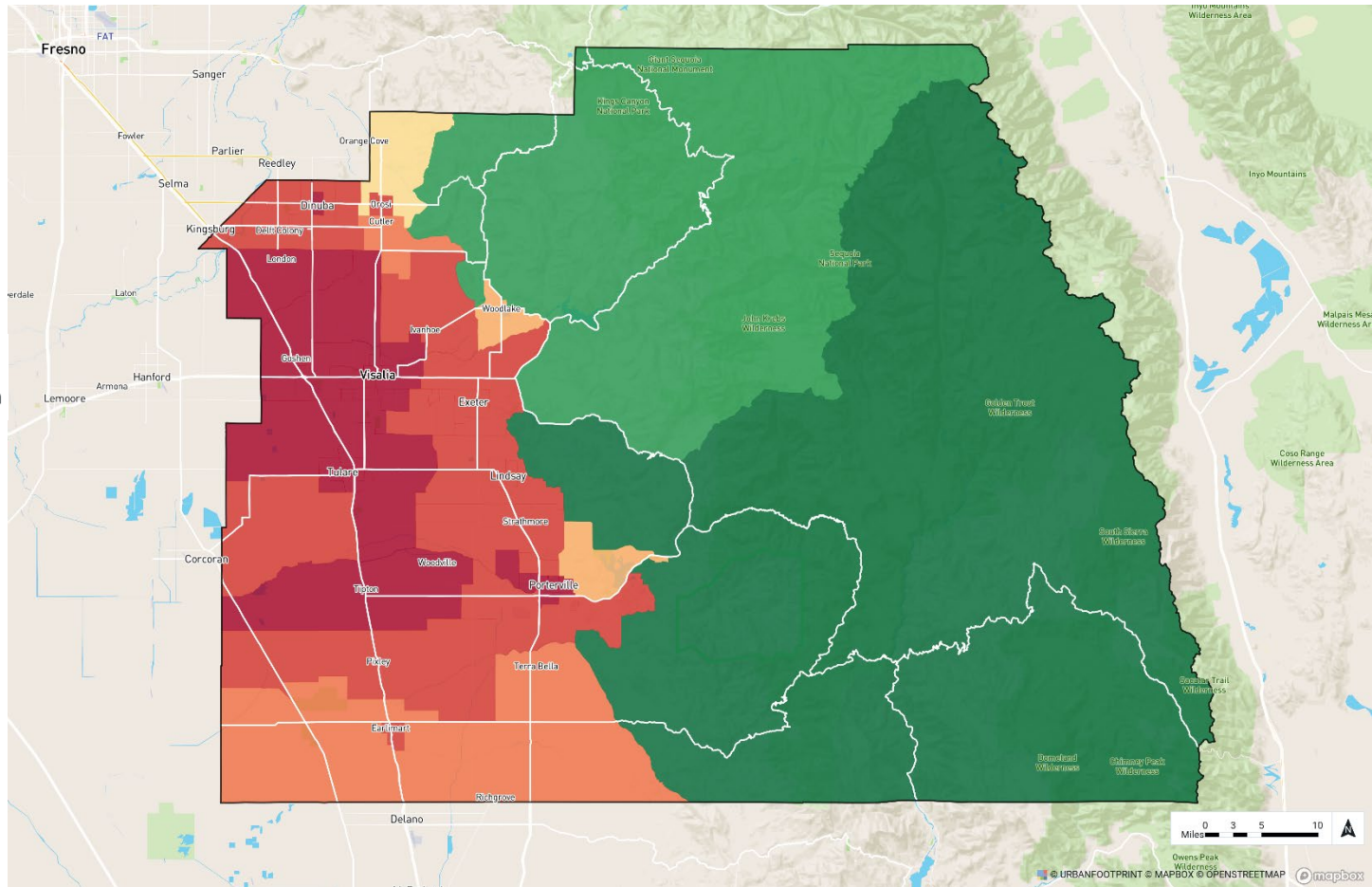
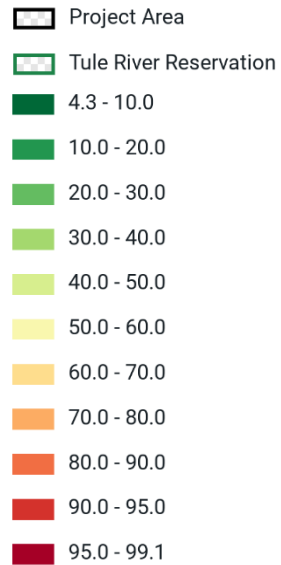
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Particulate Matter (PM2.5)

CalEnviroScreen  
4.0: PM2.5  
percentile score by  
census tract.

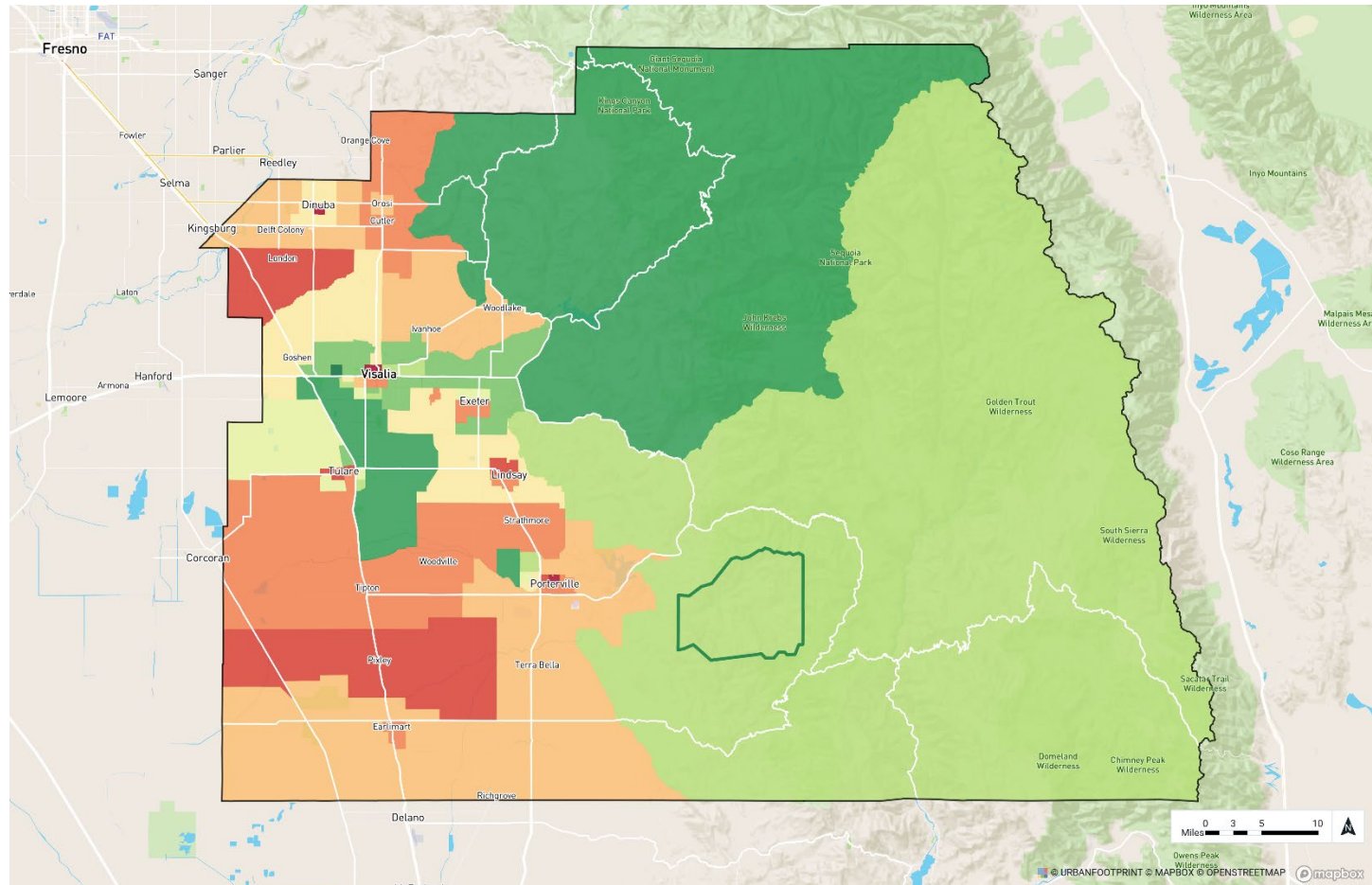
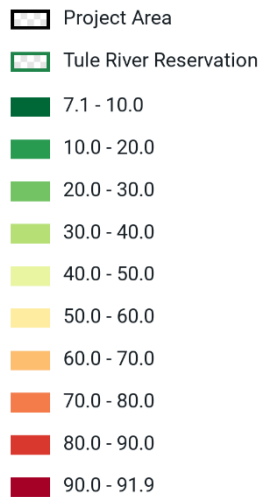
Source: California Office  
of Environmental Health  
Hazard Assessment via  
UrbanFootprint.



## Children's Lead Risk

CalEnviroScreen  
4.0: children's lead  
risk percentile  
score by census  
tract.

Source: California Office  
of Environmental Health  
Hazard Assessment via  
UrbanFootprint.

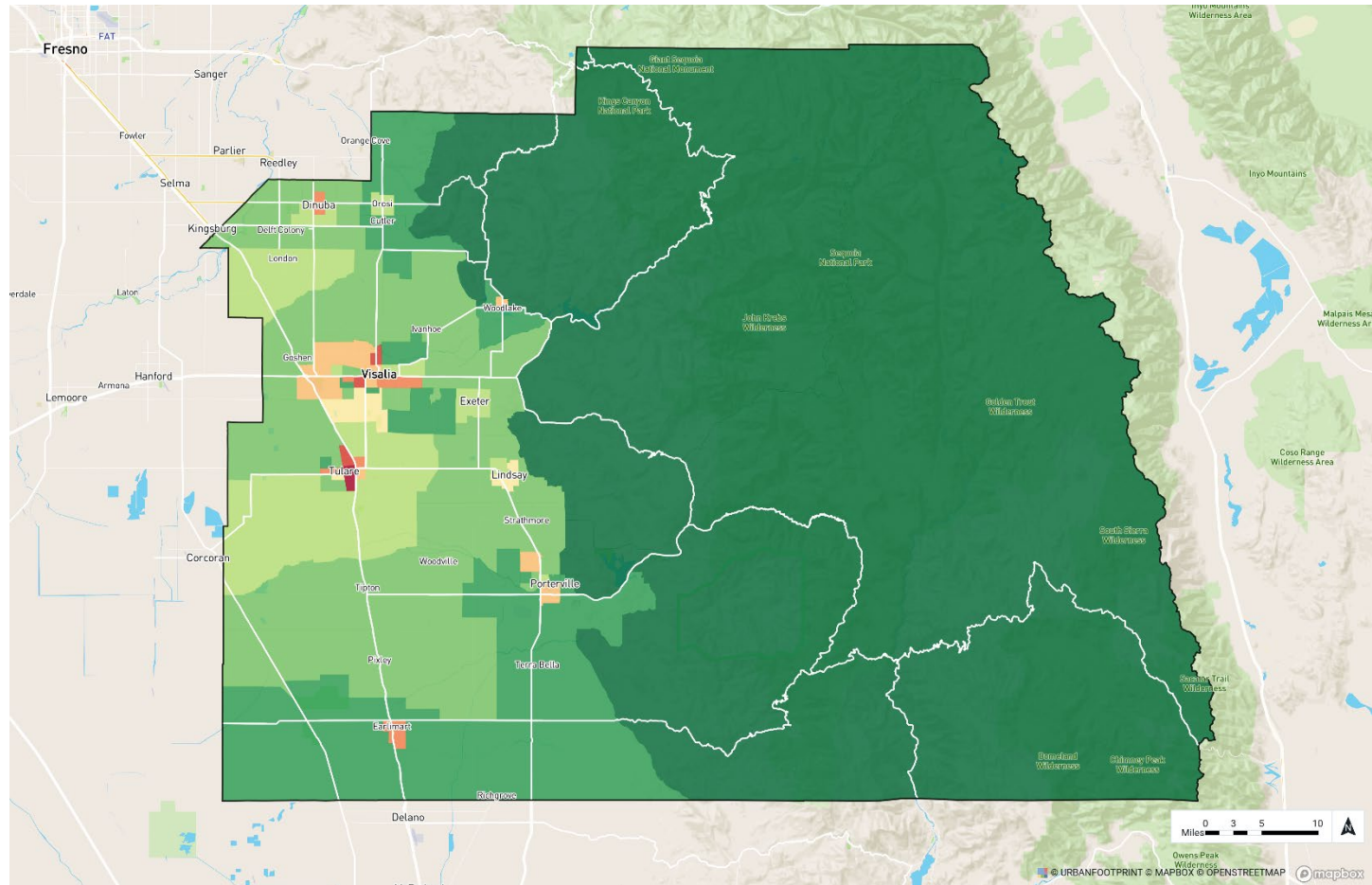
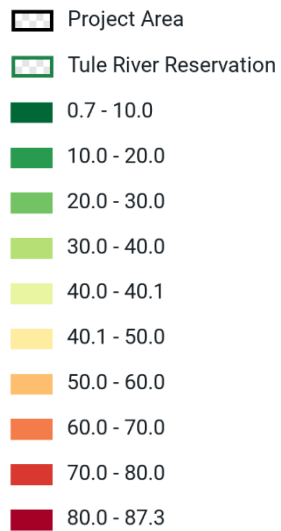




## Diesel PM

CalEnviroScreen  
4.0: diesel  
particulate matter  
percentile score by  
census tract.

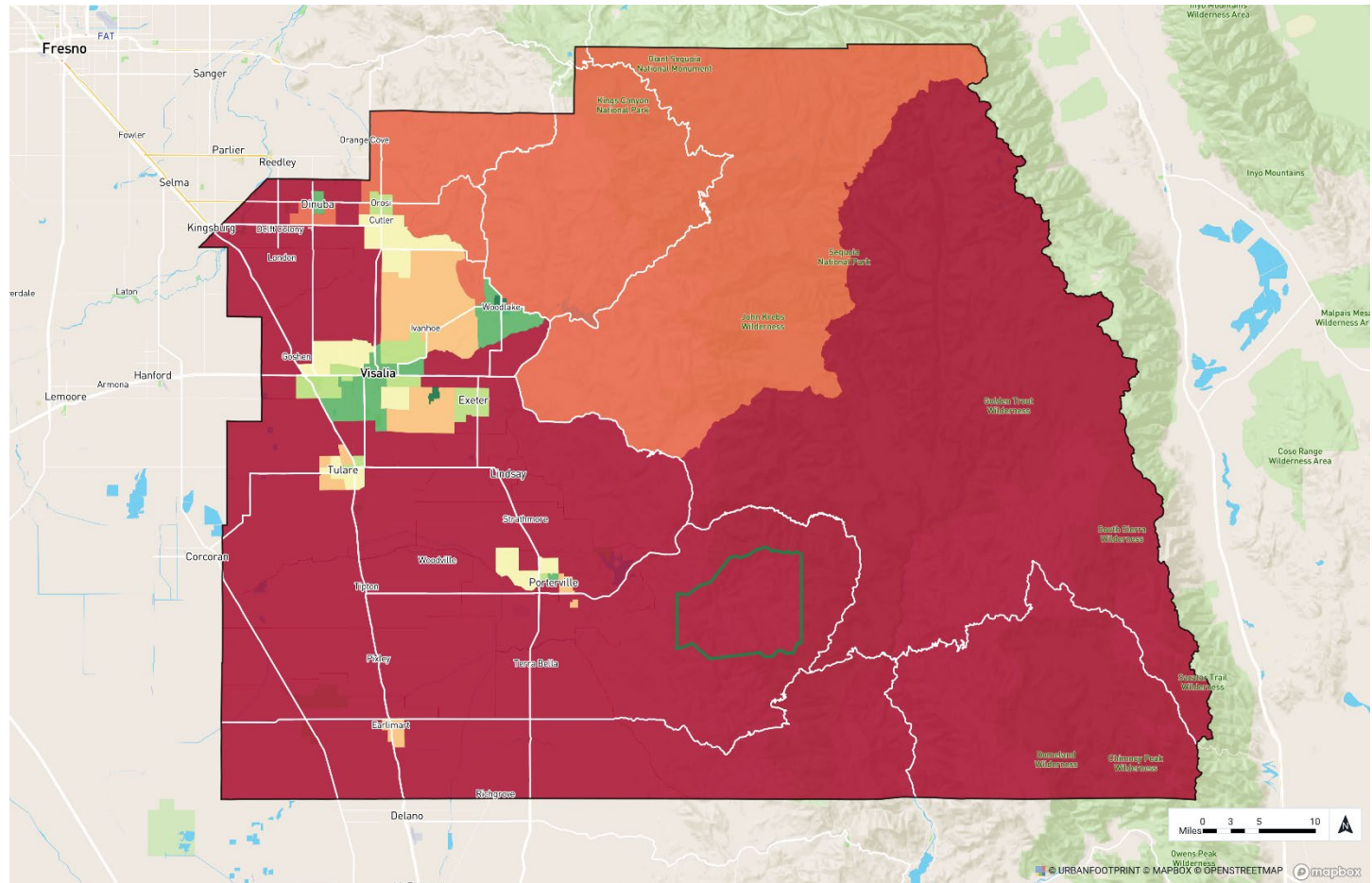
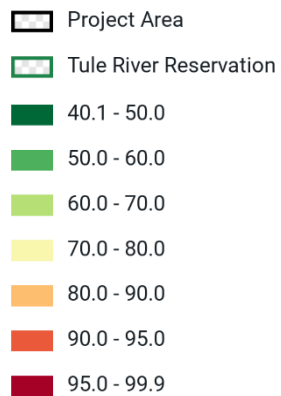
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Drinking Water Contaminants

CalEnviroScreen  
4.0: drinking water  
contaminants  
percentile score by  
census tract.

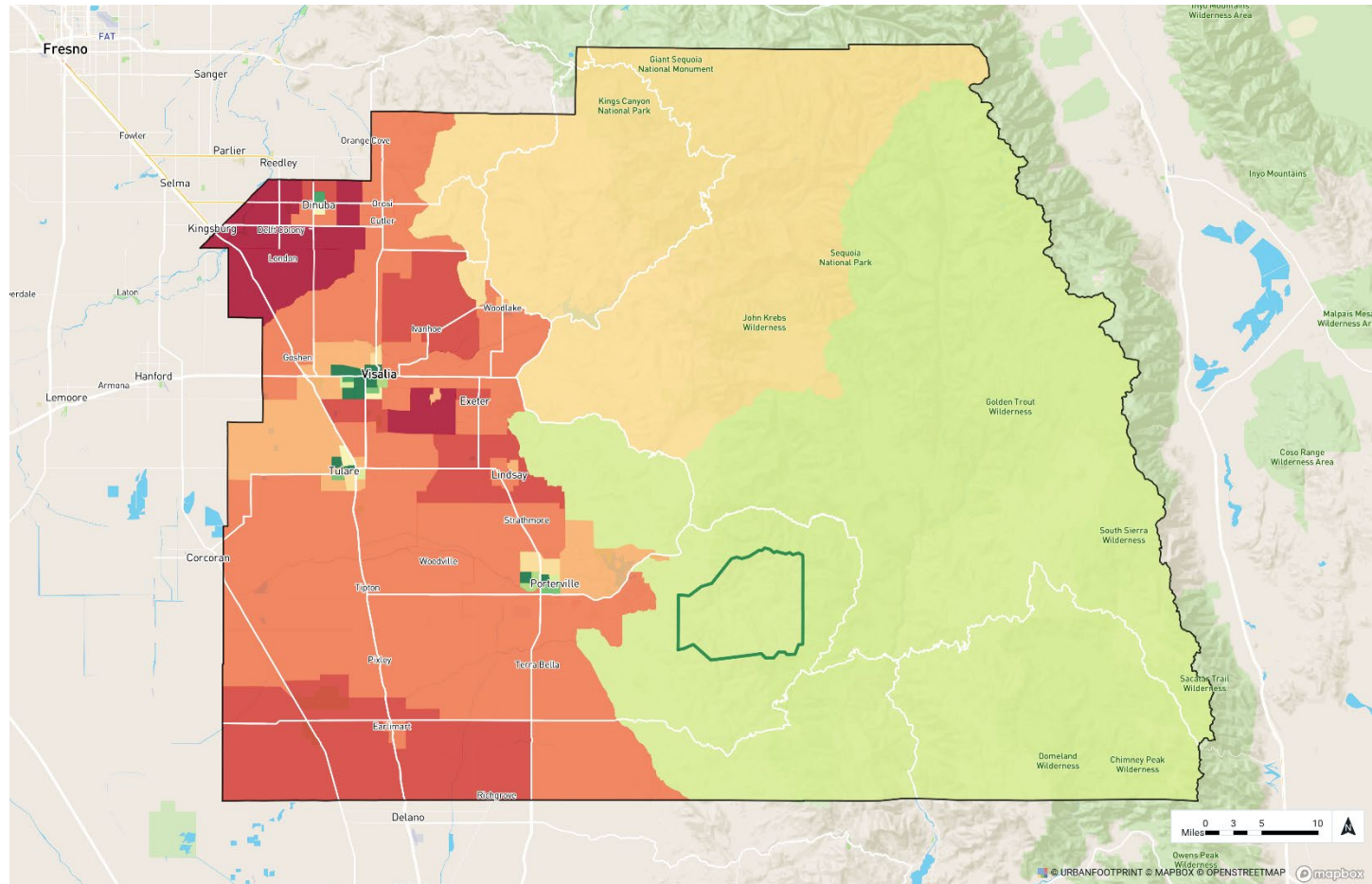
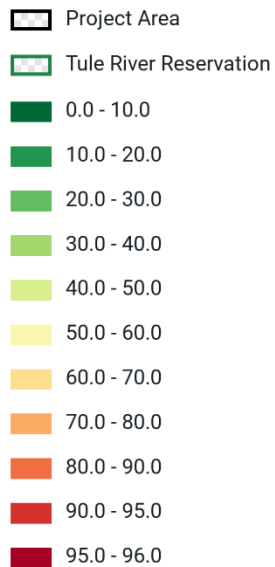
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Pesticide Use

CalEnviroScreen  
4.0: pesticides use  
percentile score by  
census tract.

Source: California Office  
of Environmental Health  
Hazard Assessment.

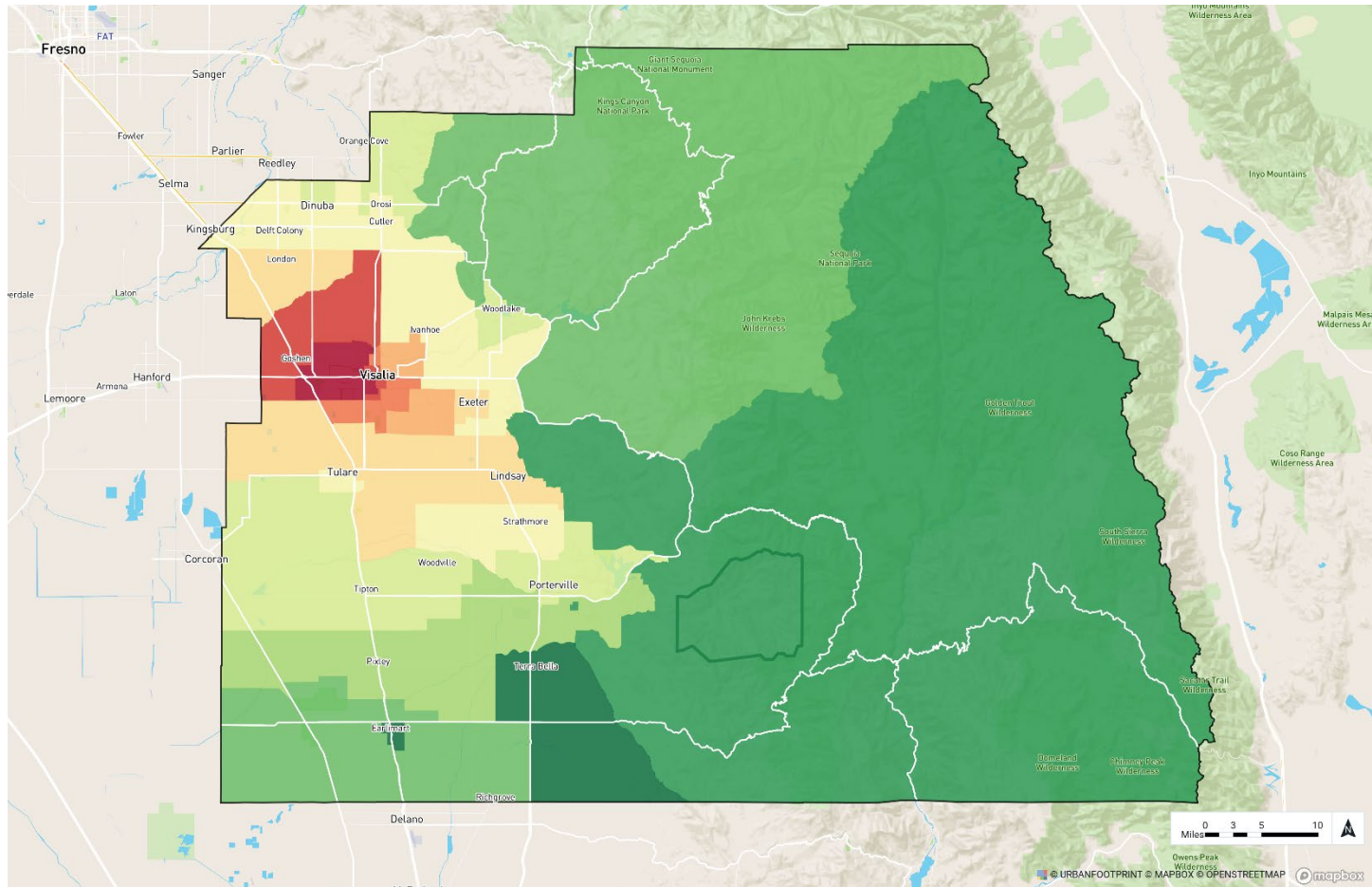
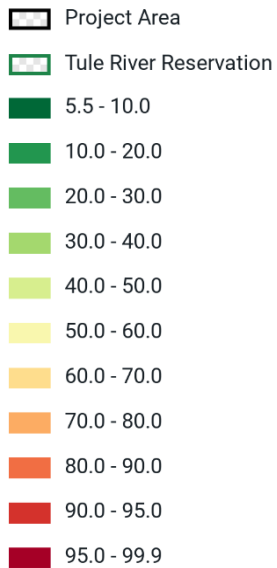




## Toxic Releases from Facilities

CalEnviroScreen  
4.0: toxic releases  
from facilities  
percentile score by  
census tract.

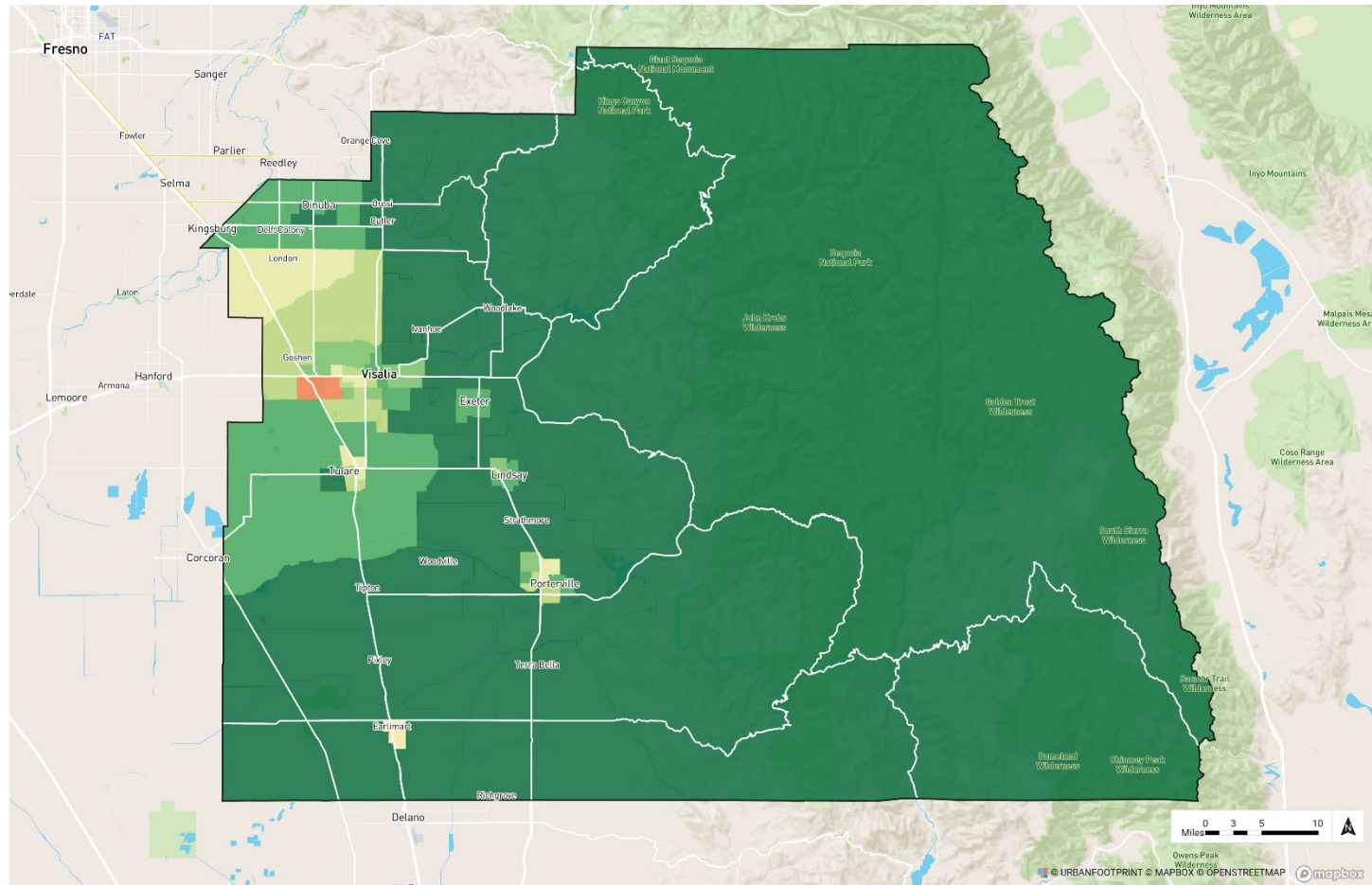
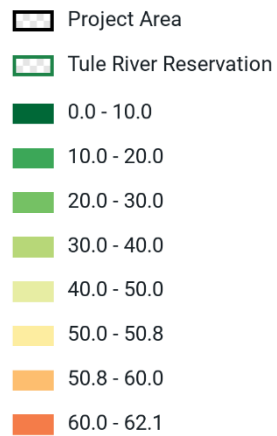
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Traffic Impacts

CalEnviroScreen  
4.0: traffic impacts  
percentile score by  
census tract.

Source: California Office  
of Environmental Health  
Hazard Assessment.

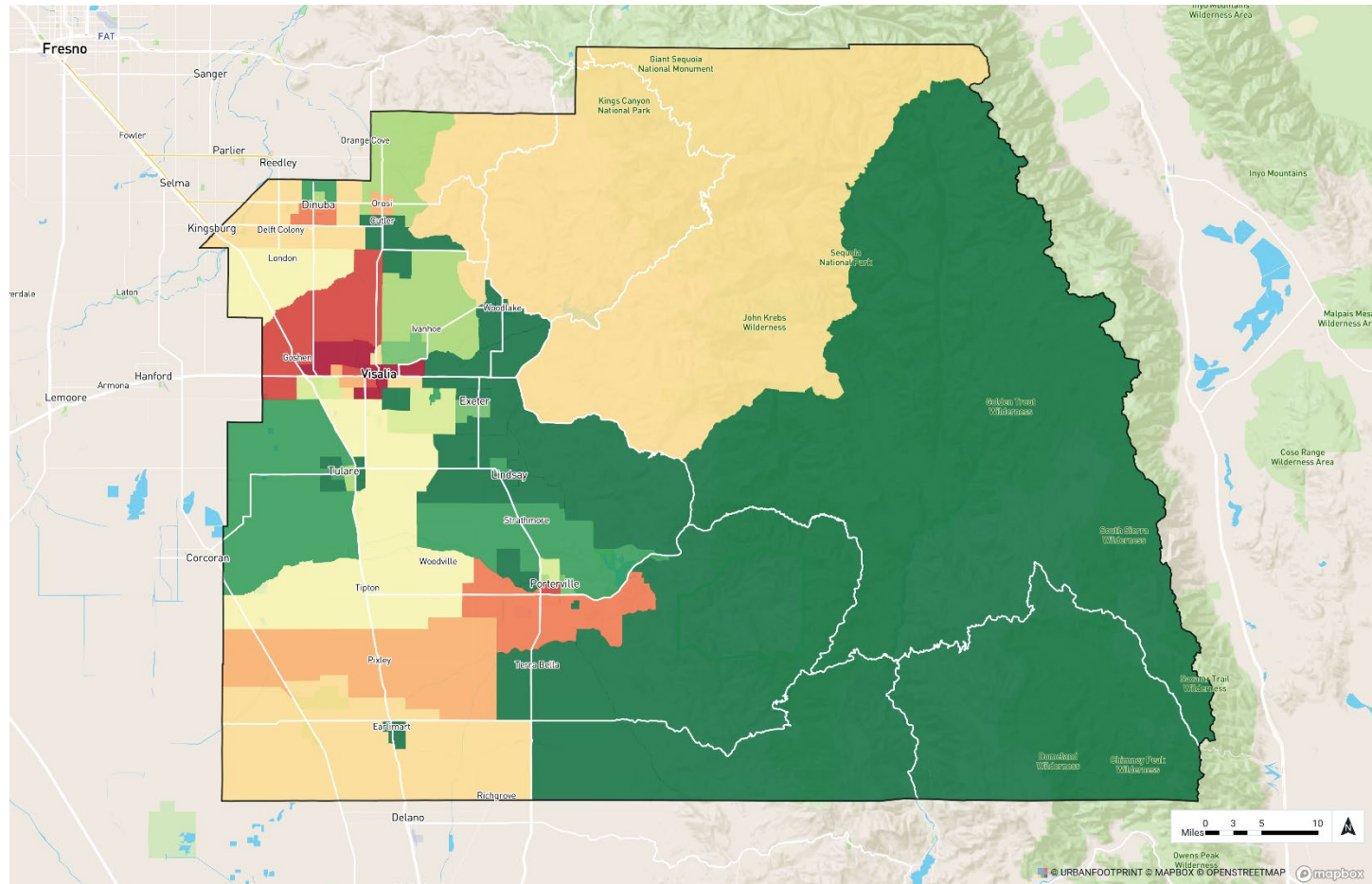
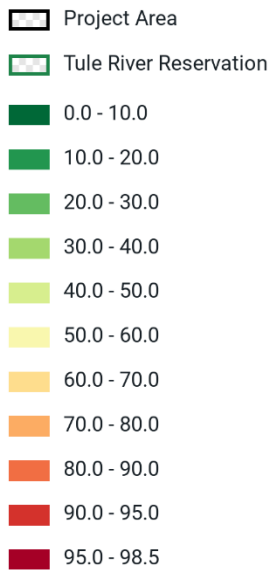




## Cleanup Sites

CalEnviroScreen  
4.0: cleanup sites  
percentile score by  
census tract.

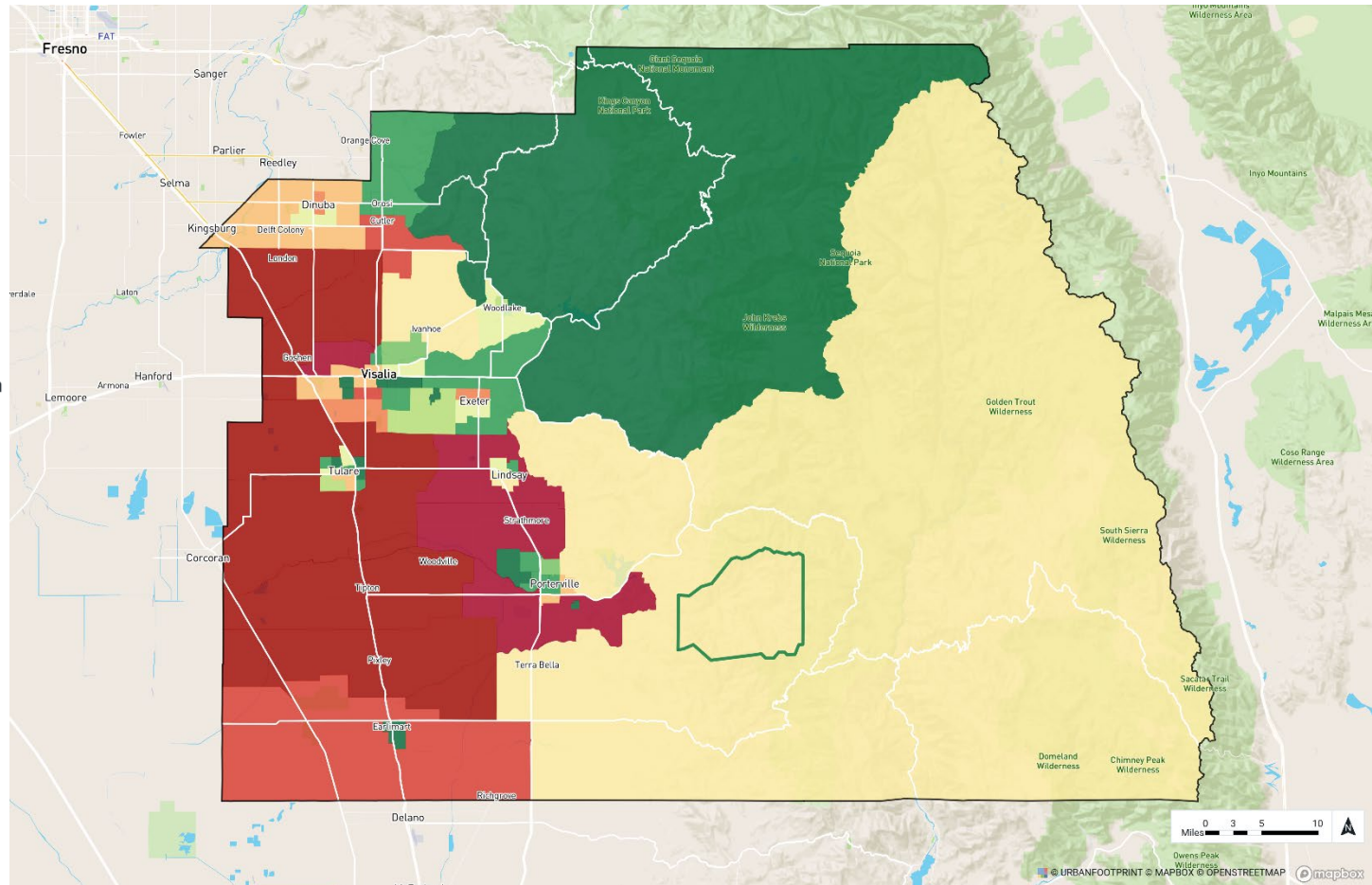
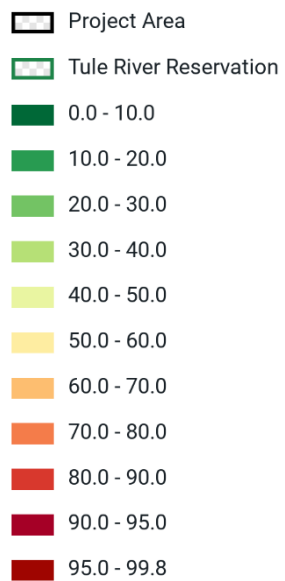
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Groundwater Threats

CalEnviroScreen  
4.0: groundwater  
threats percentile  
score by census  
tract.

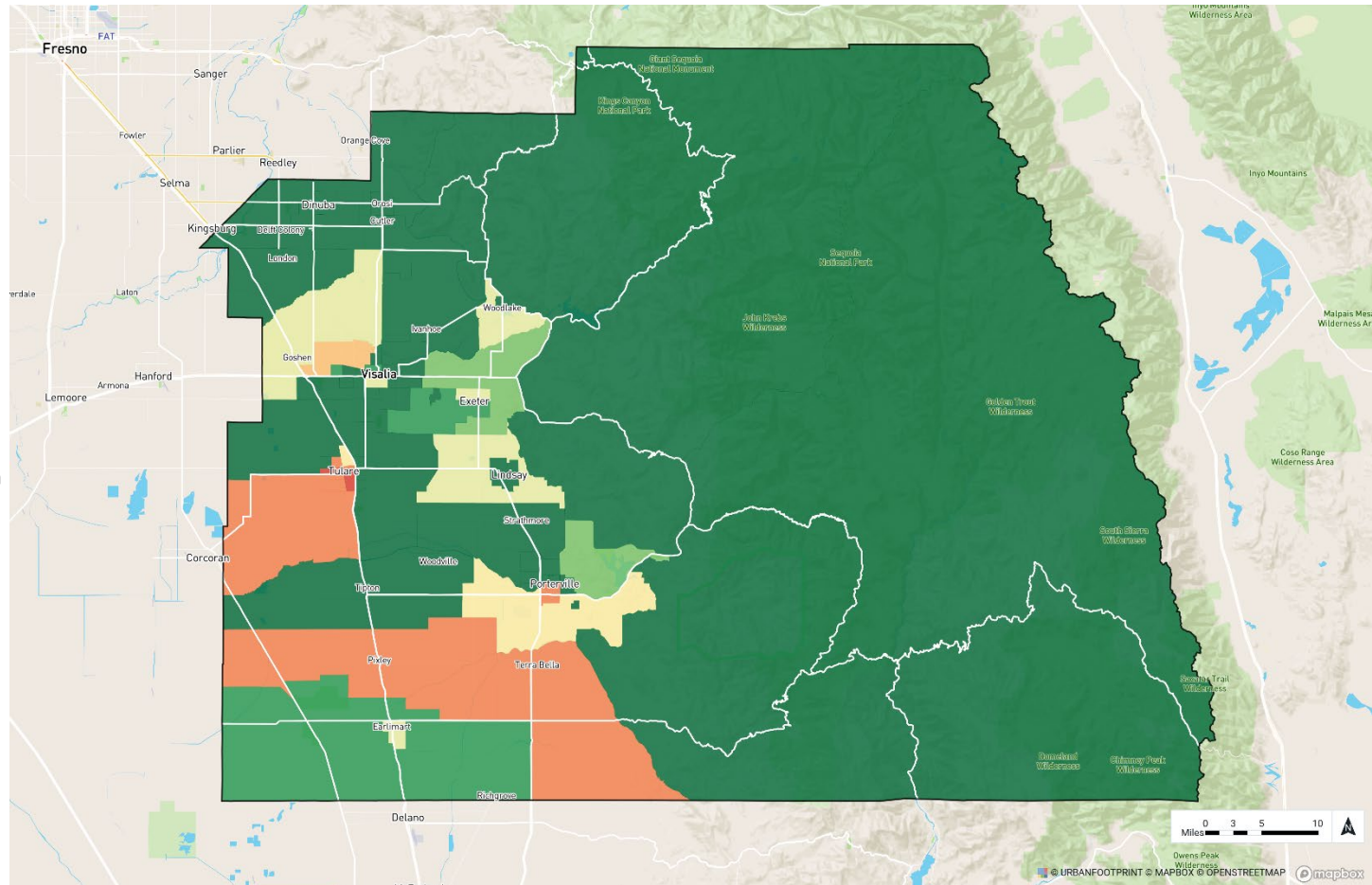
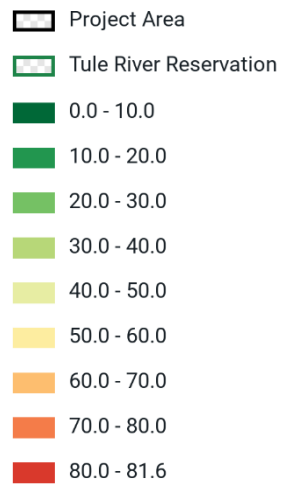
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Hazardous Waste Generators and Facilities

CalEnviroScreen  
4.0: hazardous  
waste generators  
and facilities  
percentile score by  
census tract.

Source: California Office of Environmental Health Hazard Assessment.

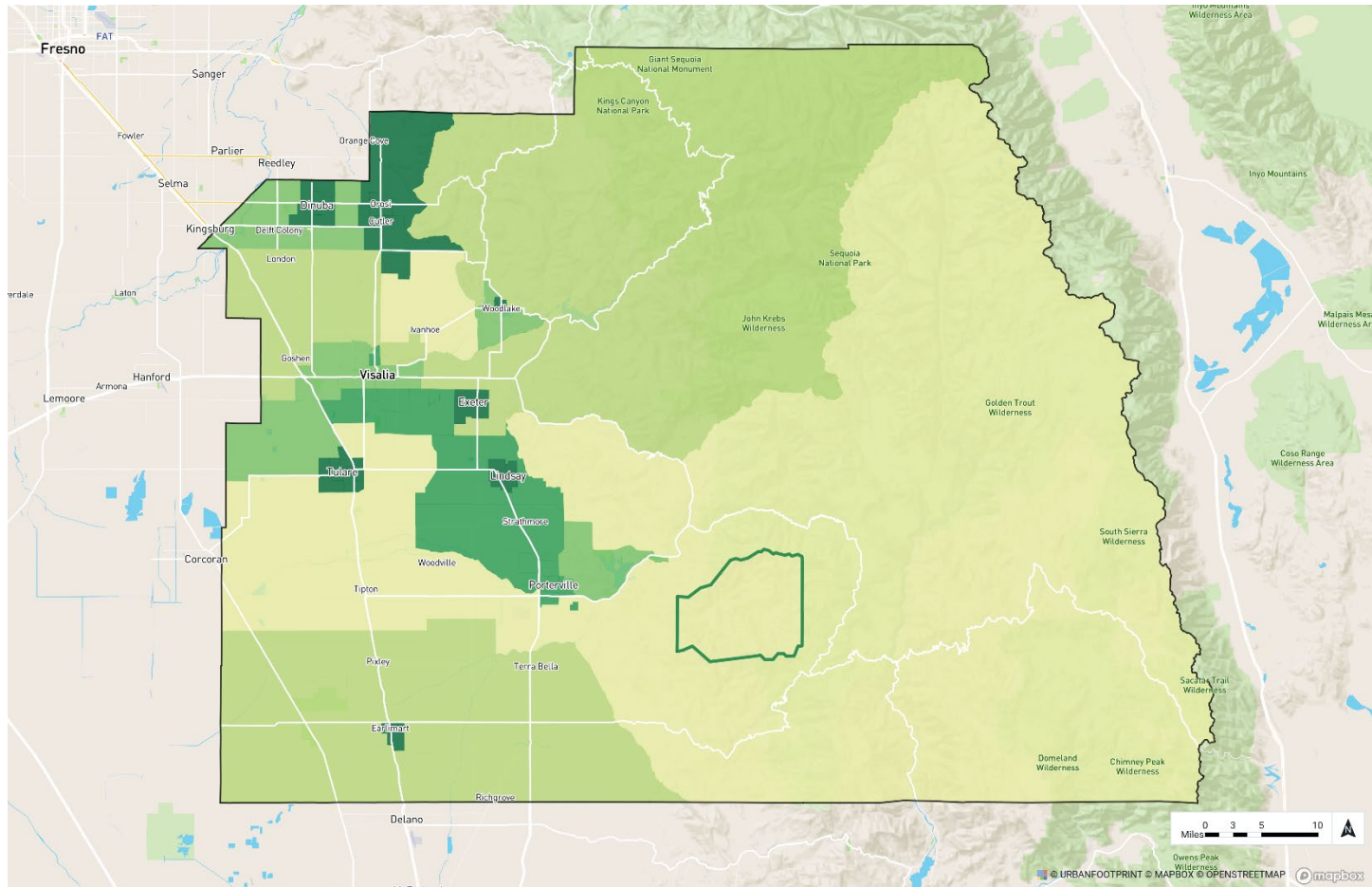
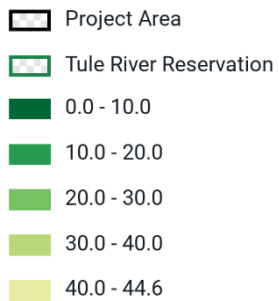




## Impaired Water Bodies

CalEnviroScreen  
4.0: impaired water  
bodies percentile  
score by census  
tract.

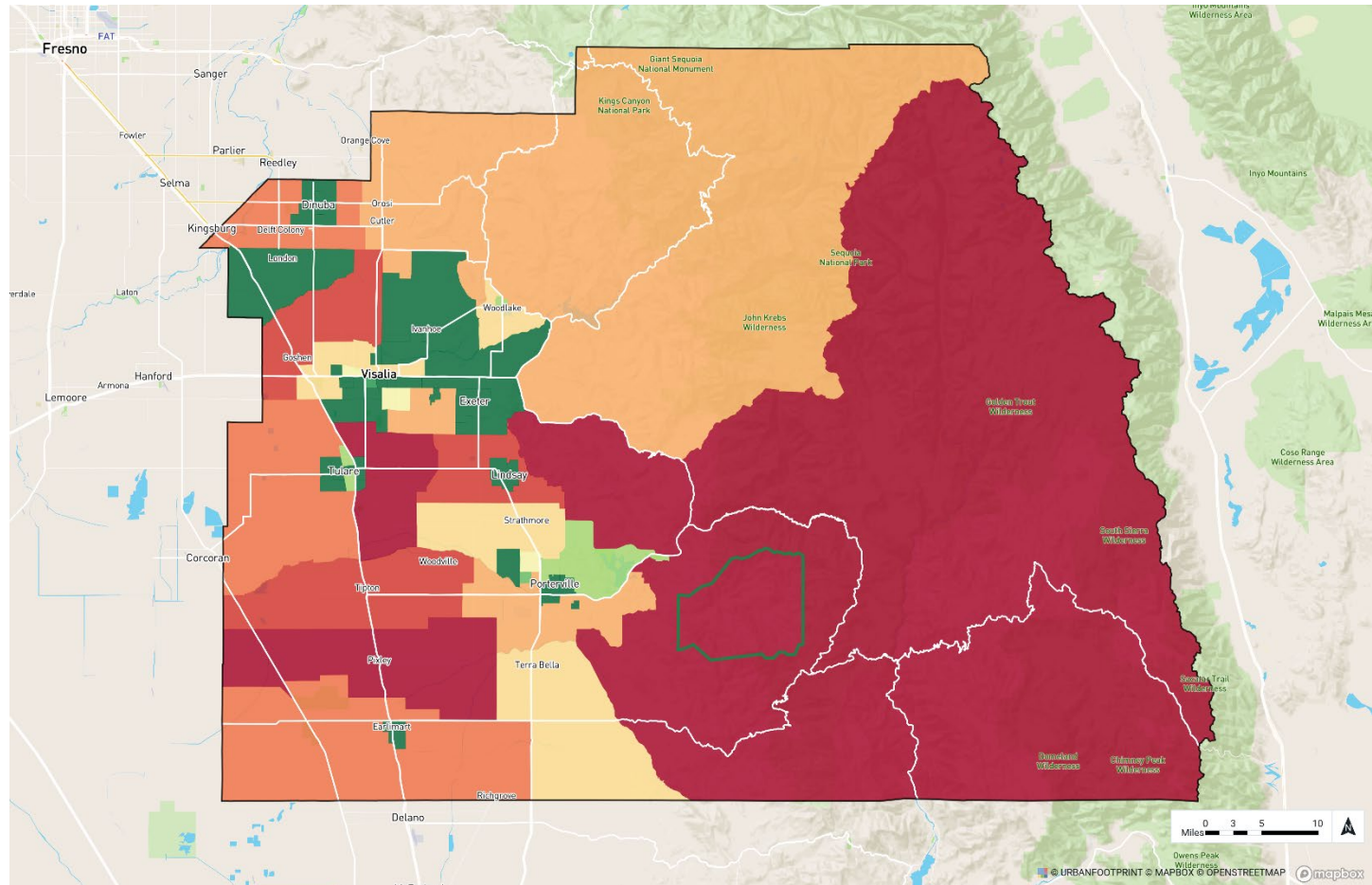
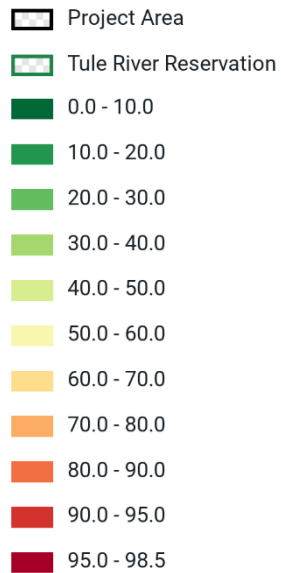
Source: California Office  
of Environmental Health  
Hazard Assessment.



## Solid Waste Sites and Facilities

CalEnviroScreen  
4.0: solid waste  
sites and facilities  
percentile score by  
census tract.

Source: California Office  
of Environmental Health  
Hazard Assessment.

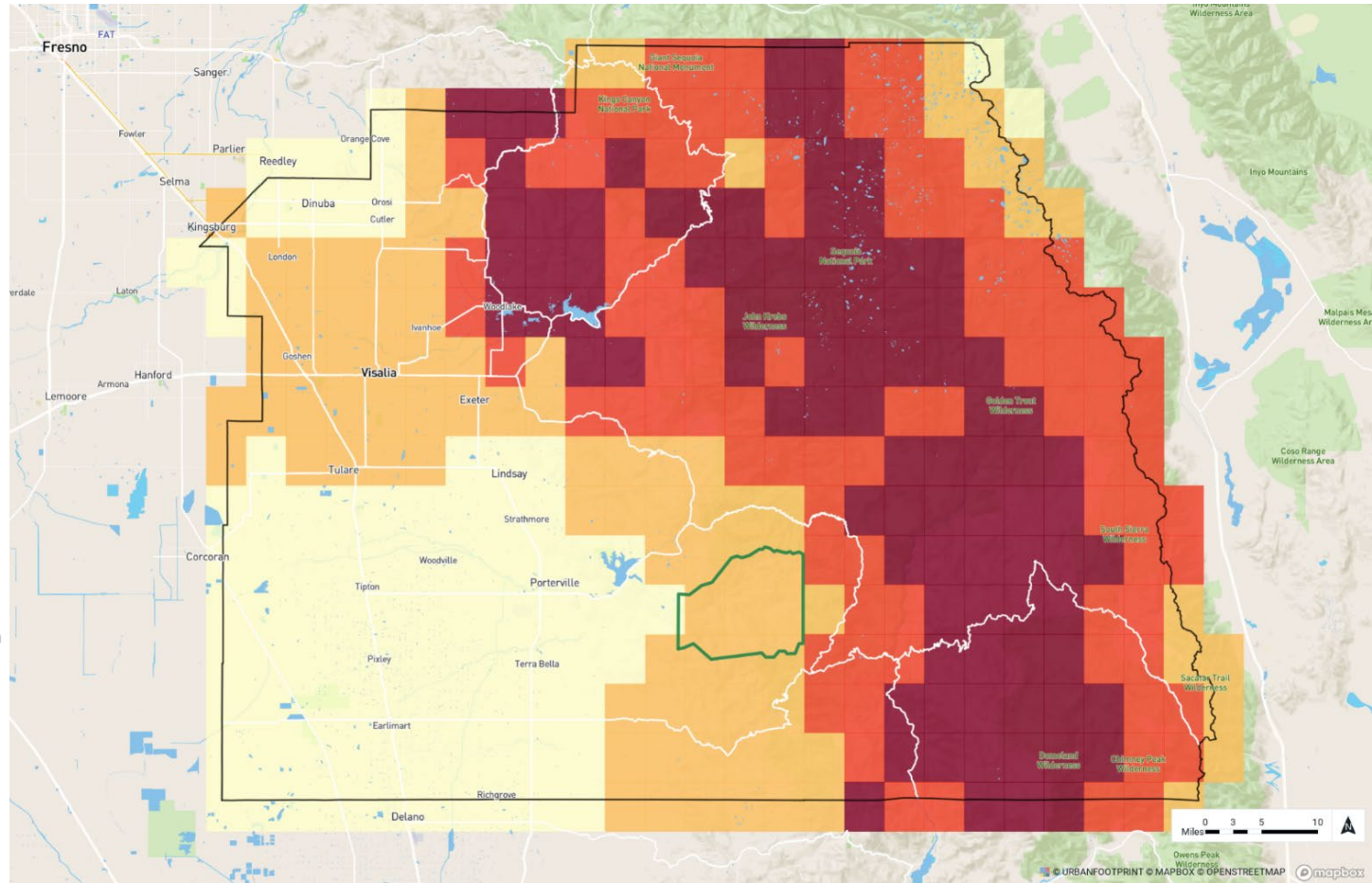
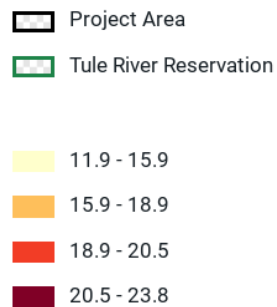


## Climate Hazards

### Projected Extreme Heat Days

Annual number of projected days exceeding the extreme heat threshold of 103.9°F aggregated for the decade of 2020-2029, under the RCP 8.5 scenario.

Source: Cal-Adapt.











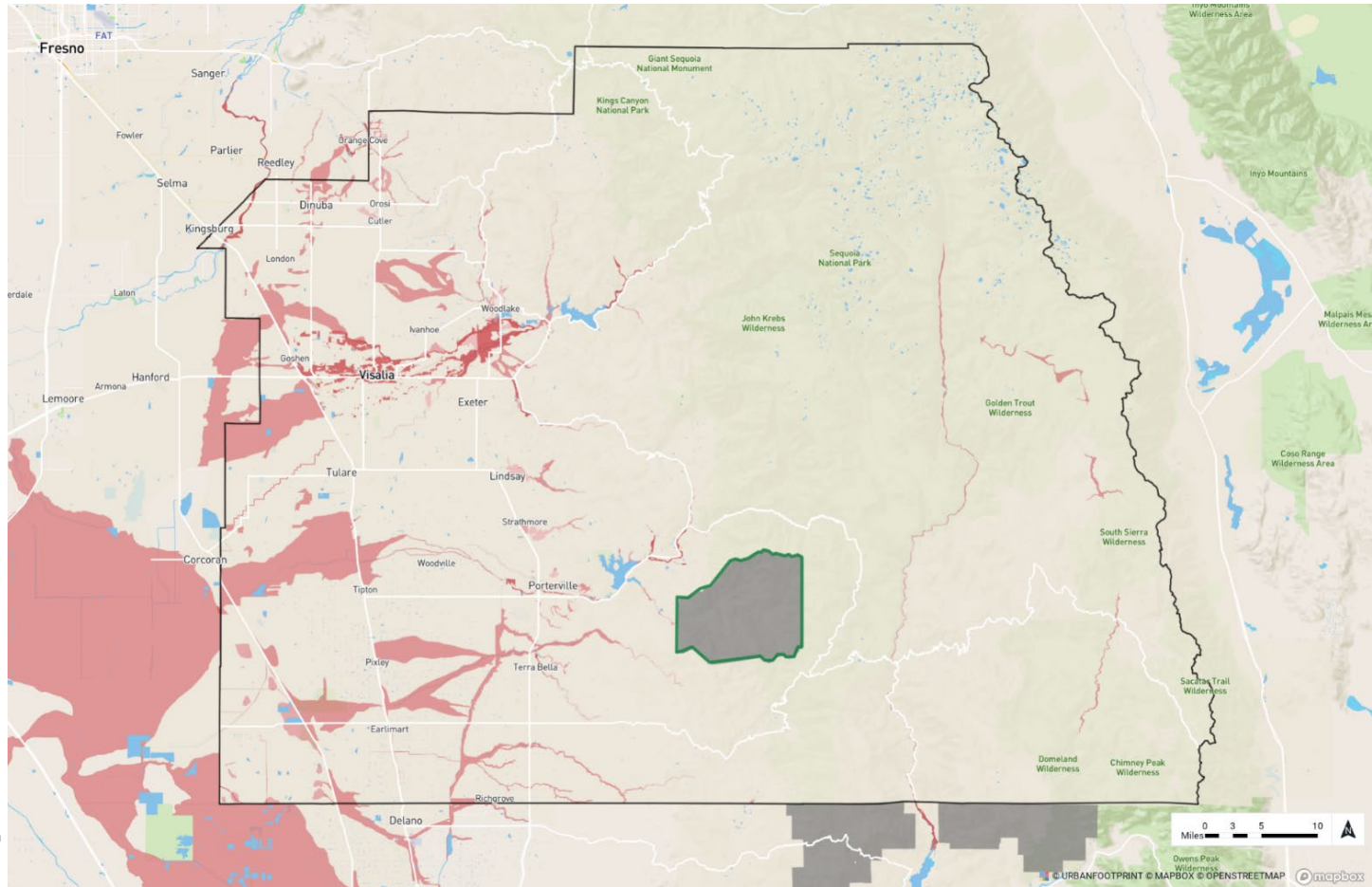


## Flood Risk

Flood hazard layer areas.

Source: Federal Emergency Management Agency (FEMA).

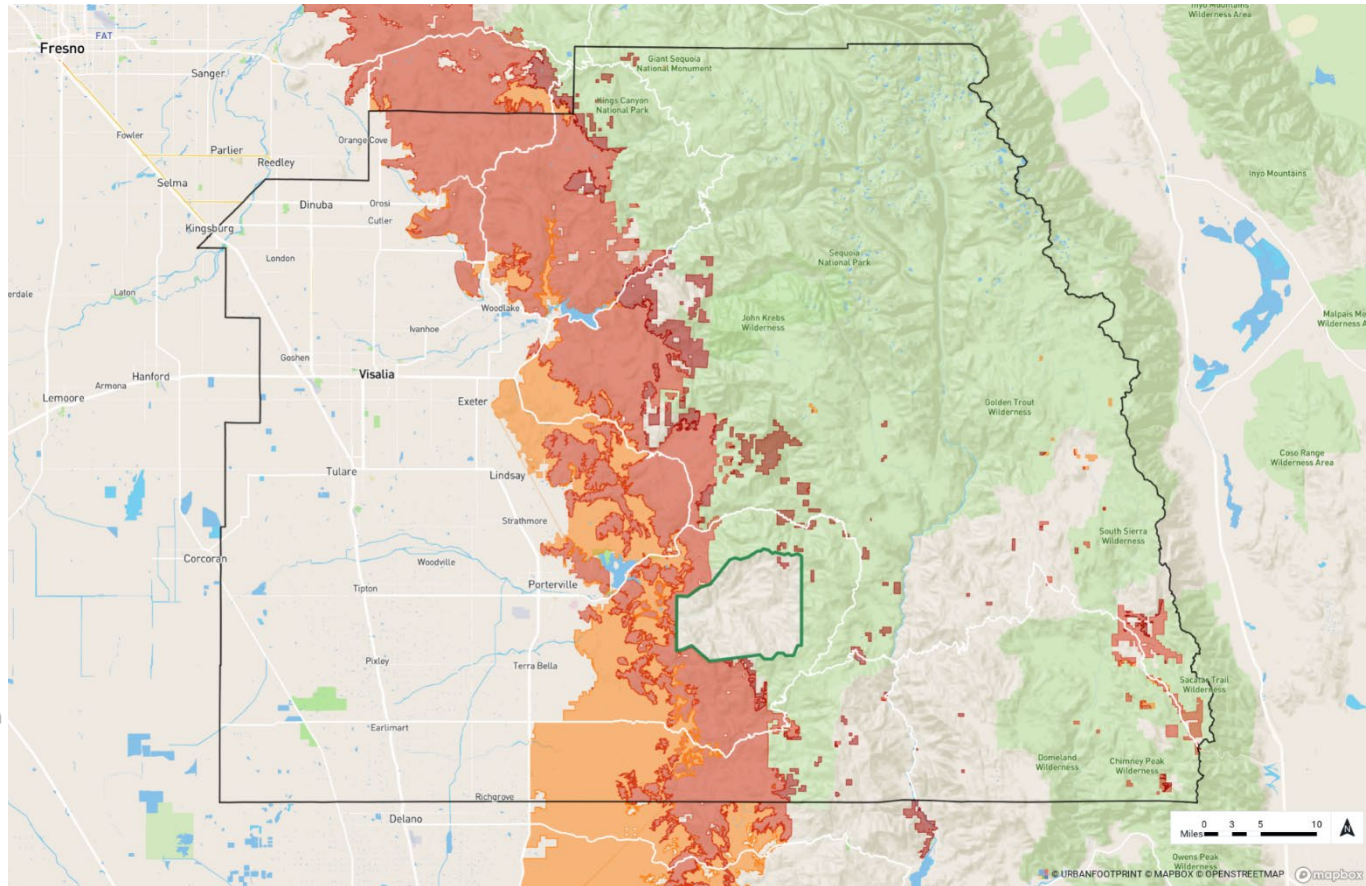
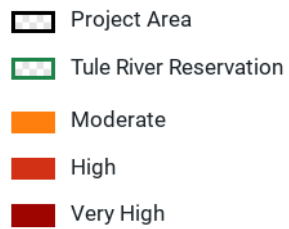
-  Project Area
-  Tule River Reservation
-  X - Area Of Minimal Flood Hazard
-  AH - Areas With A 1% Annual Chance Of Shallow Flooding
-  AO - River Or Stream Flood Hazard Areas
-  A - Areas With A 1% Annual Chance Of Flooding
-  AE - Base Floodplain Elevation
-  D - Undetermined Risk Area



## Wildfire Risk

Fire hazard severity zones.

Source: California Department of Forestry and Fire Protection (CalFire).



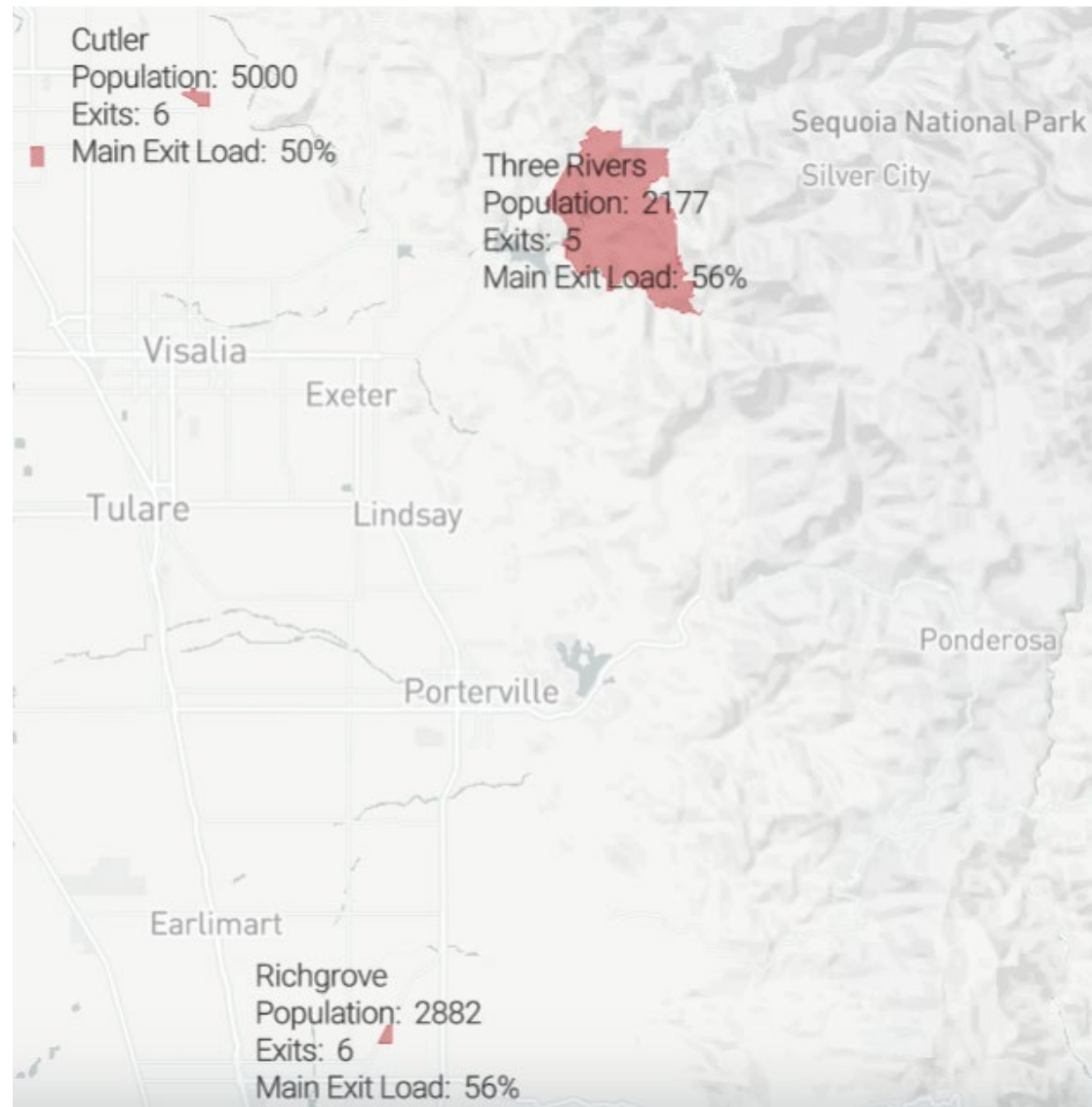


## Evacuation Risk Analysis

Pink areas indicate those U.S. communities that a StreetLight analysis identified as having limited evacuation routes based on population, the number of exits, and the main exit “load,” indicating the percentage of daily traffic using the main exit route. Analysis focused on towns in the U.S. with populations under 40,000 based on U.S. Census (approximately 30,000), and assigned each a score using a ratio of the number of roadway “exits” available in each town and the average “load” on the most-used exit, weighted by town population. The 675 U.S. communities that scored at least 3 times the average of all towns analyzed were included on the map, indicated as the pink areas.

The analysis identified four communities in Tulare County (listed in descending order by population):

- Cutler
  - Population: 5,000
  - Exits: 6; Main exit load: 50%
- Richgrove
  - Population: 2,882
  - Exits: 6; Main exit load: 56%
- Three Rivers
  - Population: 2,177
  - Exits: 5; Main exit load: 56%
- London
  - Population: 1,869
  - Exits: 4; Main exit load: 60%



Source: StreetLight.

## Population Profile

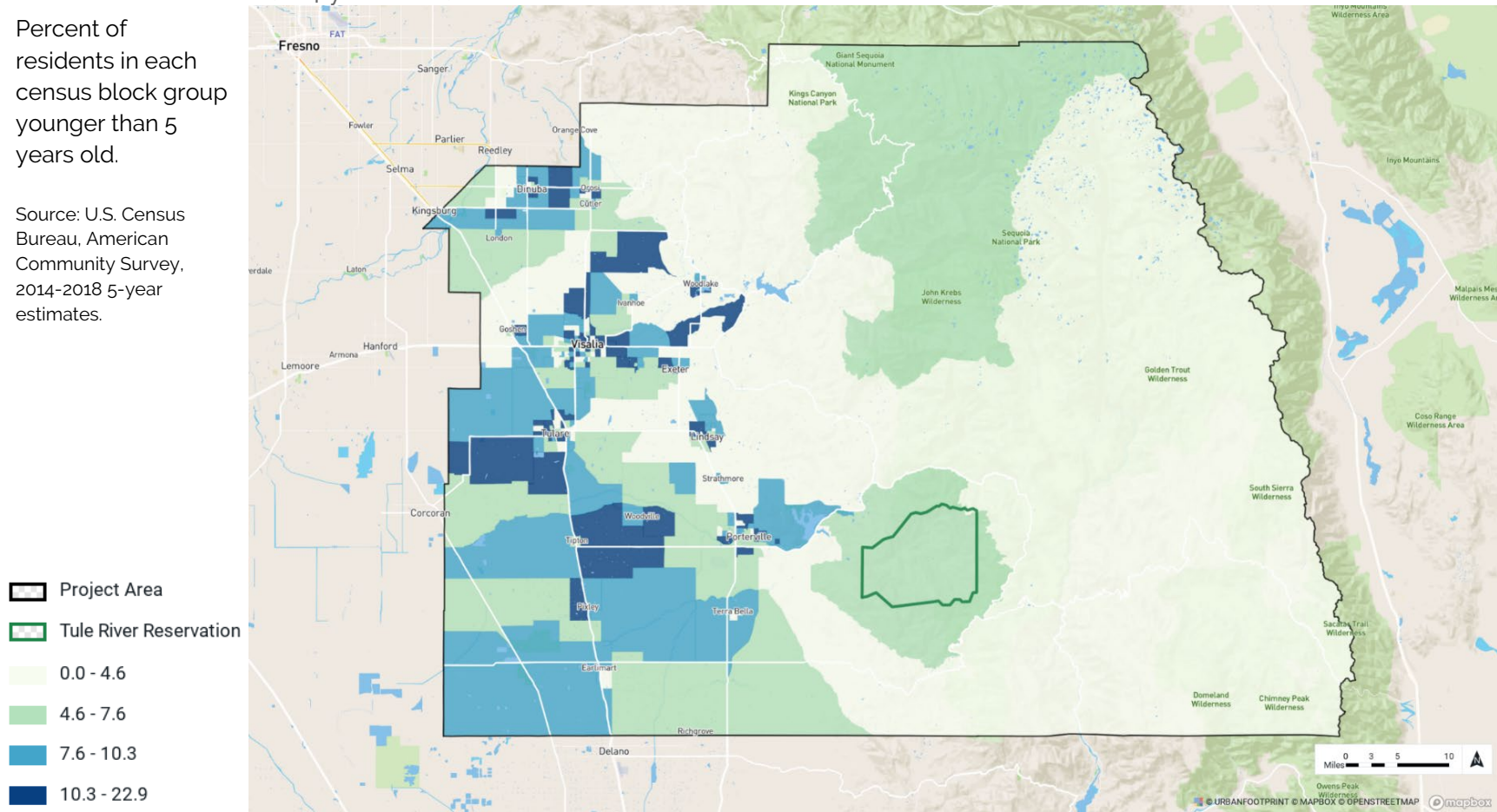
This section presents data for Tulare County that display the region's demographic distribution. The data is organized into three categories: vulnerable populations, economic conditions, and racial segregation.

## Vulnerable Populations

## Infants and Toddlers (0-4 years old)

Percent of residents in each census block group younger than 5 years old.

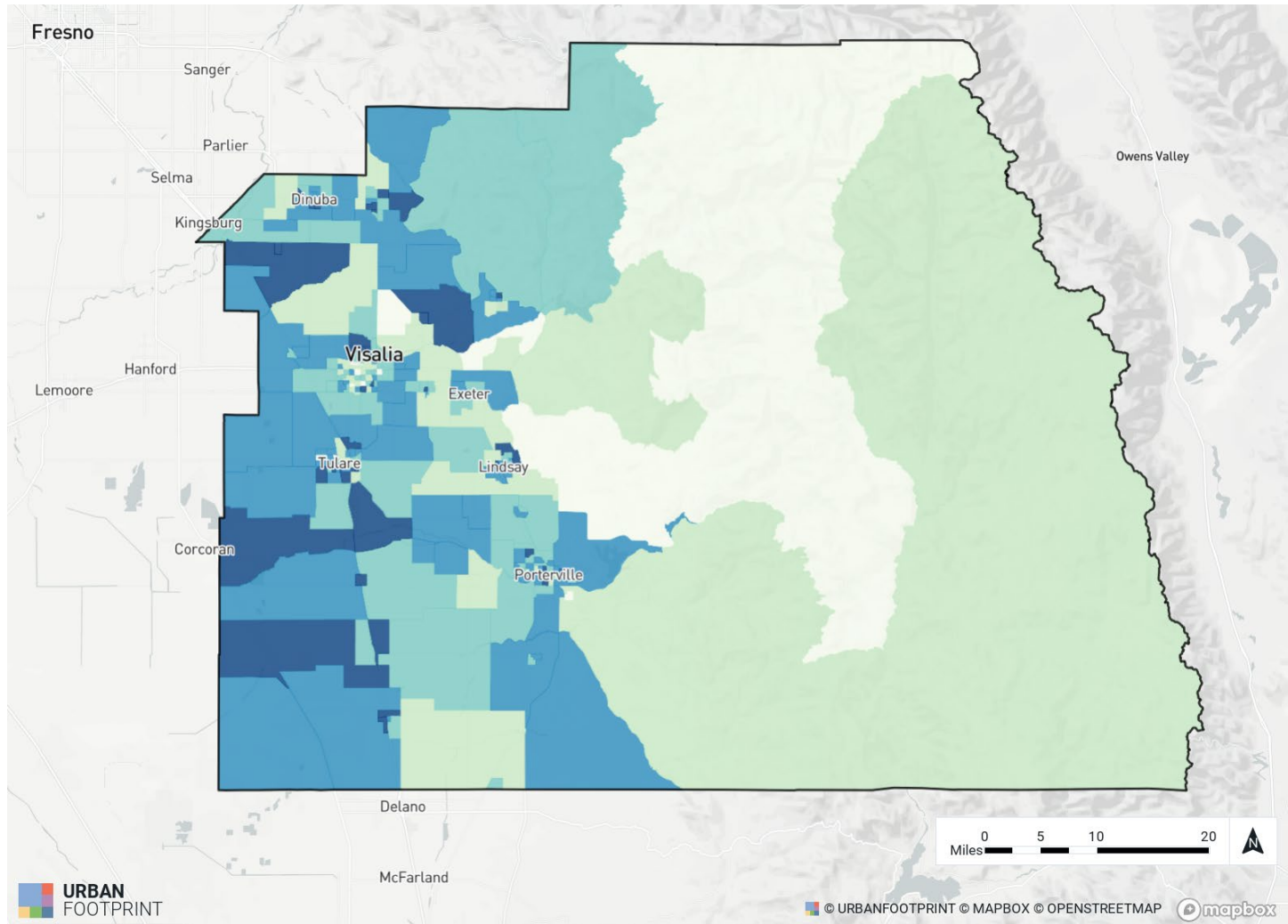
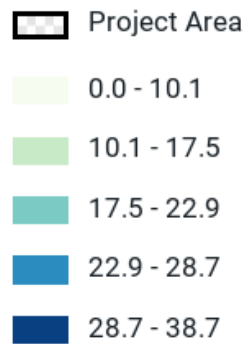
Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.



## Children and Youth (5-17 years old)

Percent of residents in each census block group between 5 and 17 years old.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.

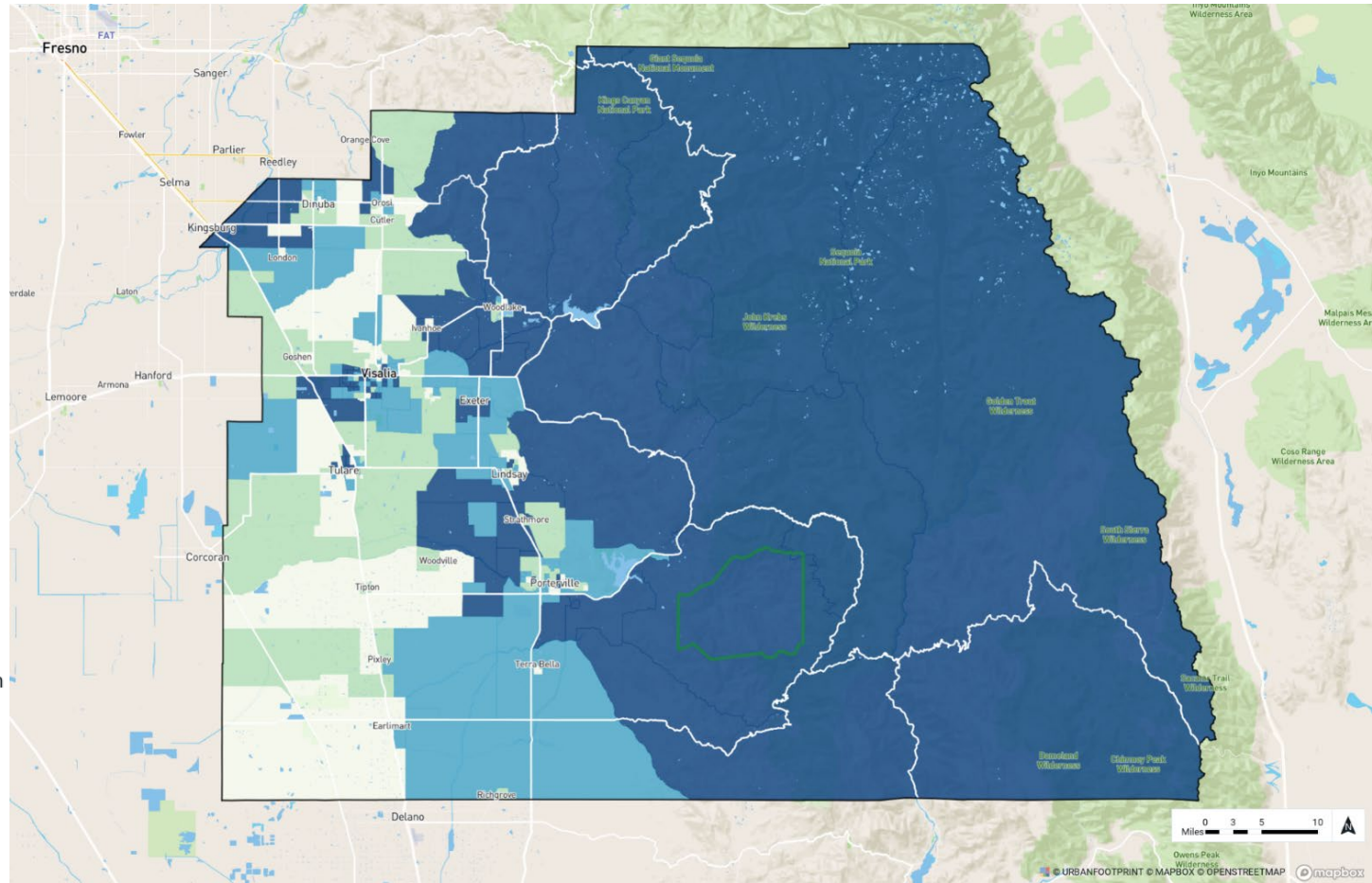
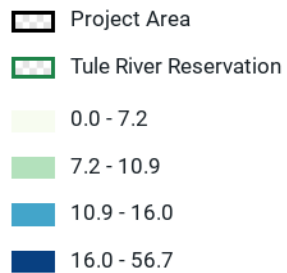




## Older Adults (65 and older)

Percent of residents in each census block group over 65 years old.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.

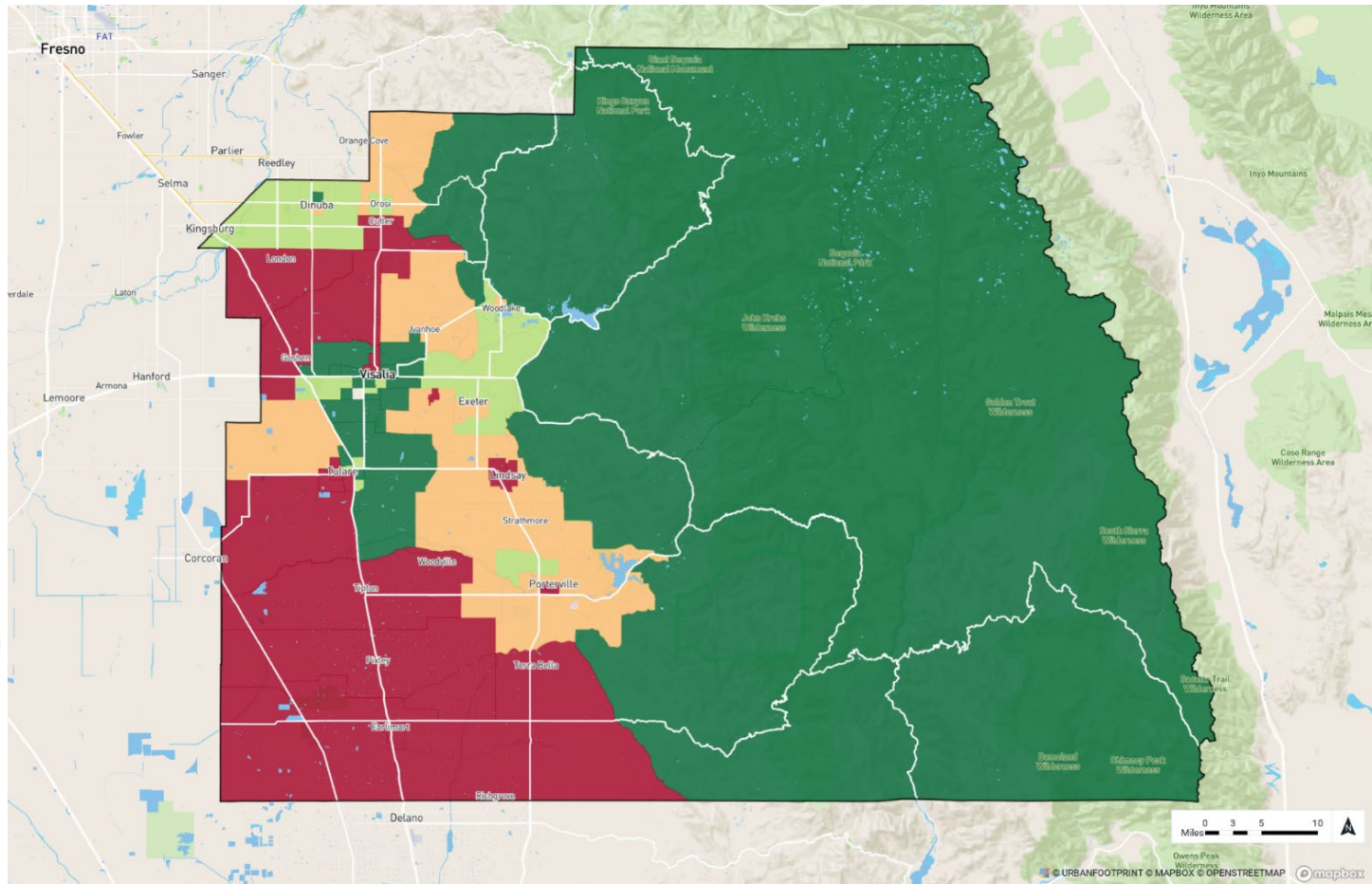
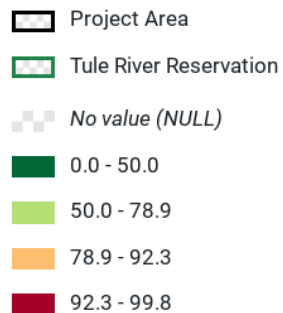




## Linguistic Isolation

Percent of limited English-speaking households in each census block group.

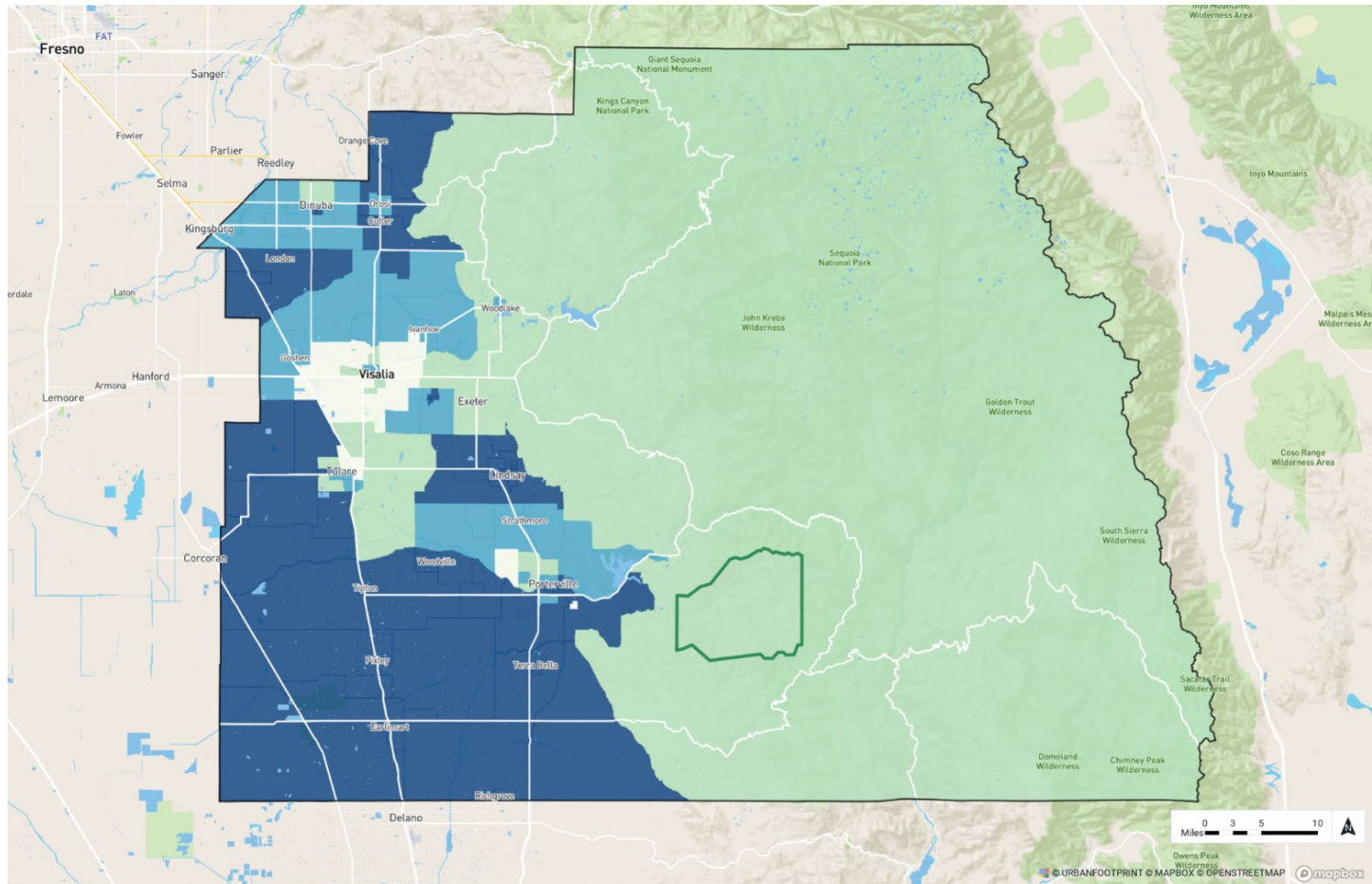
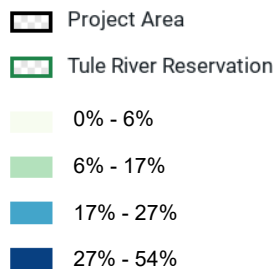
Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.



## Agricultural Workers

Percent of workers in each census block group who are employed in the agriculture, forestry, fishing and hunting, and mining industries.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table C24050.

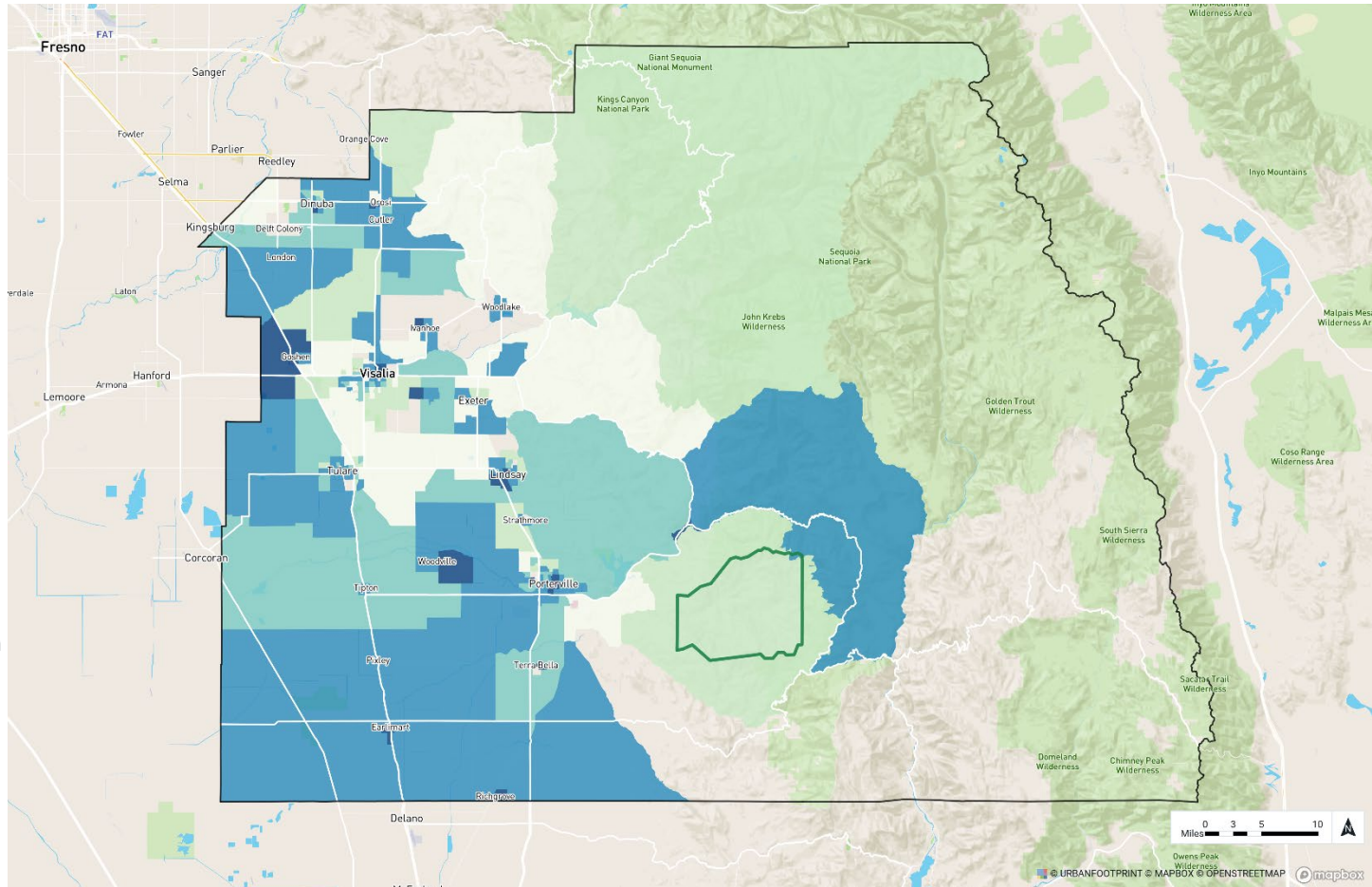
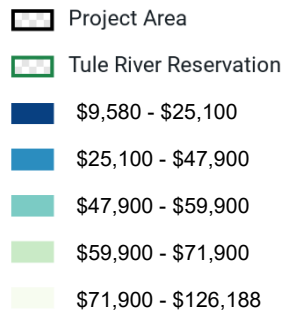


## Economic Conditions

### Median Household Income

Median household income in each census block group, categorized by the county's 2018 area median income (AMI).  
50% AMI = \$25,100  
80% AMI = \$47,900  
100% AMI = \$59,900  
120% AMI = \$71,900

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year Estimates.

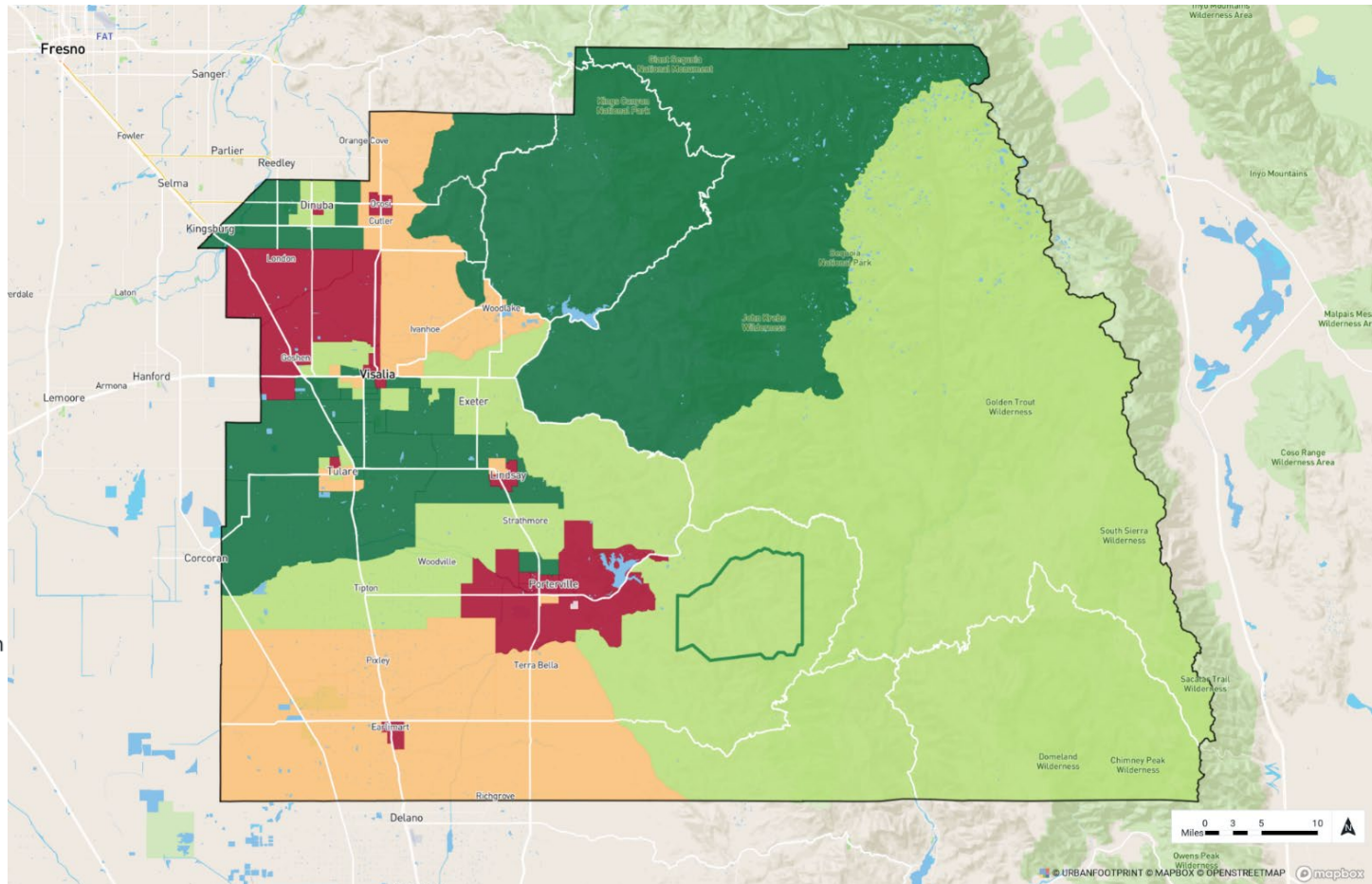
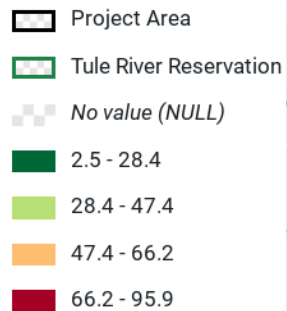




## Severely Cost-Burdened Households

Percent of households in each census block group paying more than 50% of their income on housing.

Source: U.S. Census Bureau, American Community Survey, 2012-2016 5-year estimates.

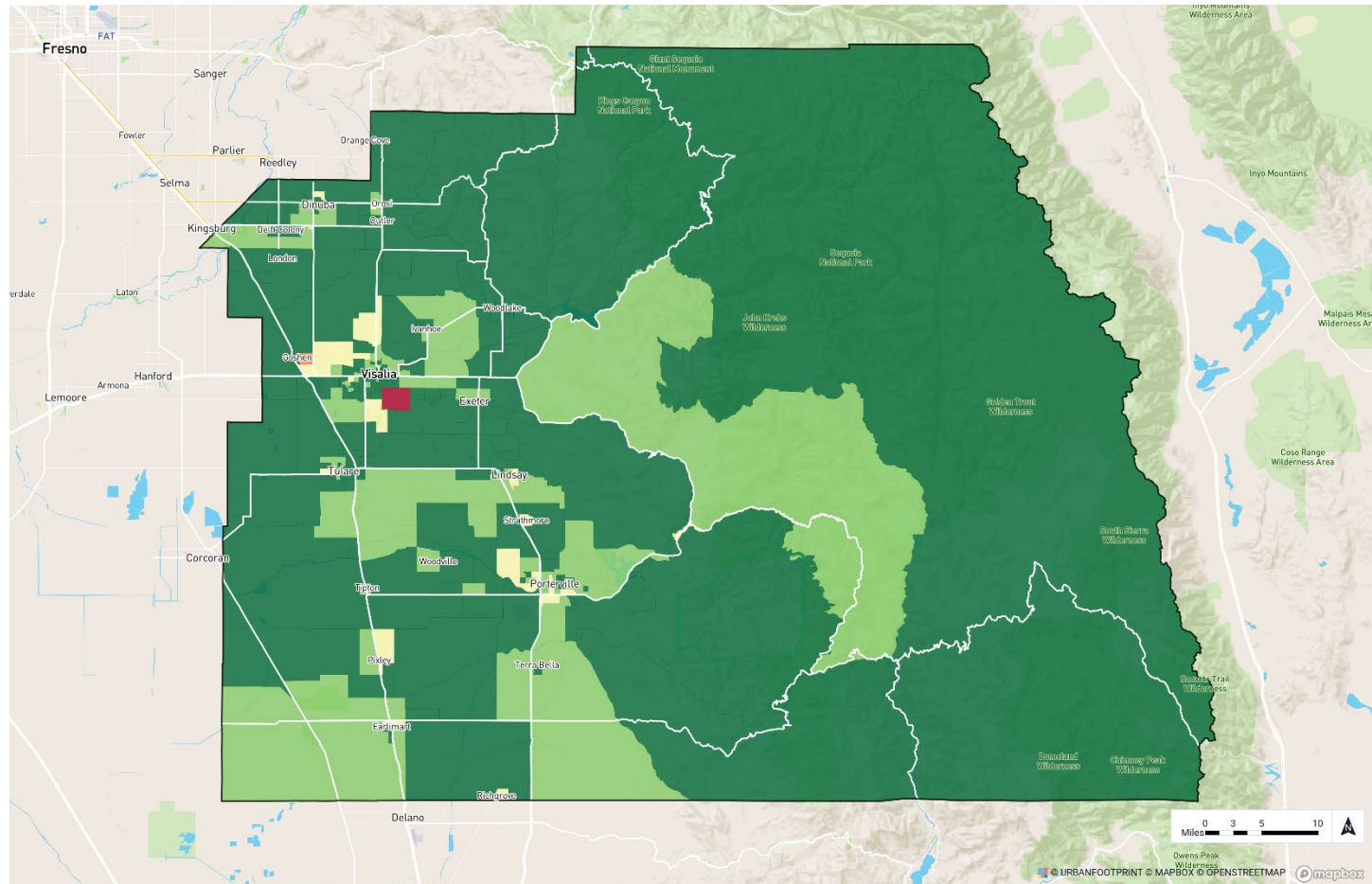
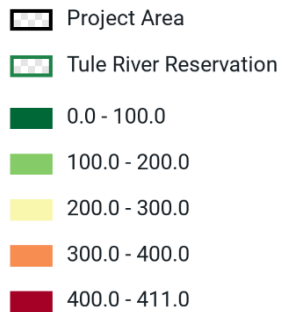




## Density of Severely Cost-Burdened Households

Number severely cost-burdened households by census block group. Goshen and Southeast Visalia have the highest concentration of severely cost-burdened households.




Source: U.S. Census Bureau, American Community Survey, 2012-2016 5-year estimates.

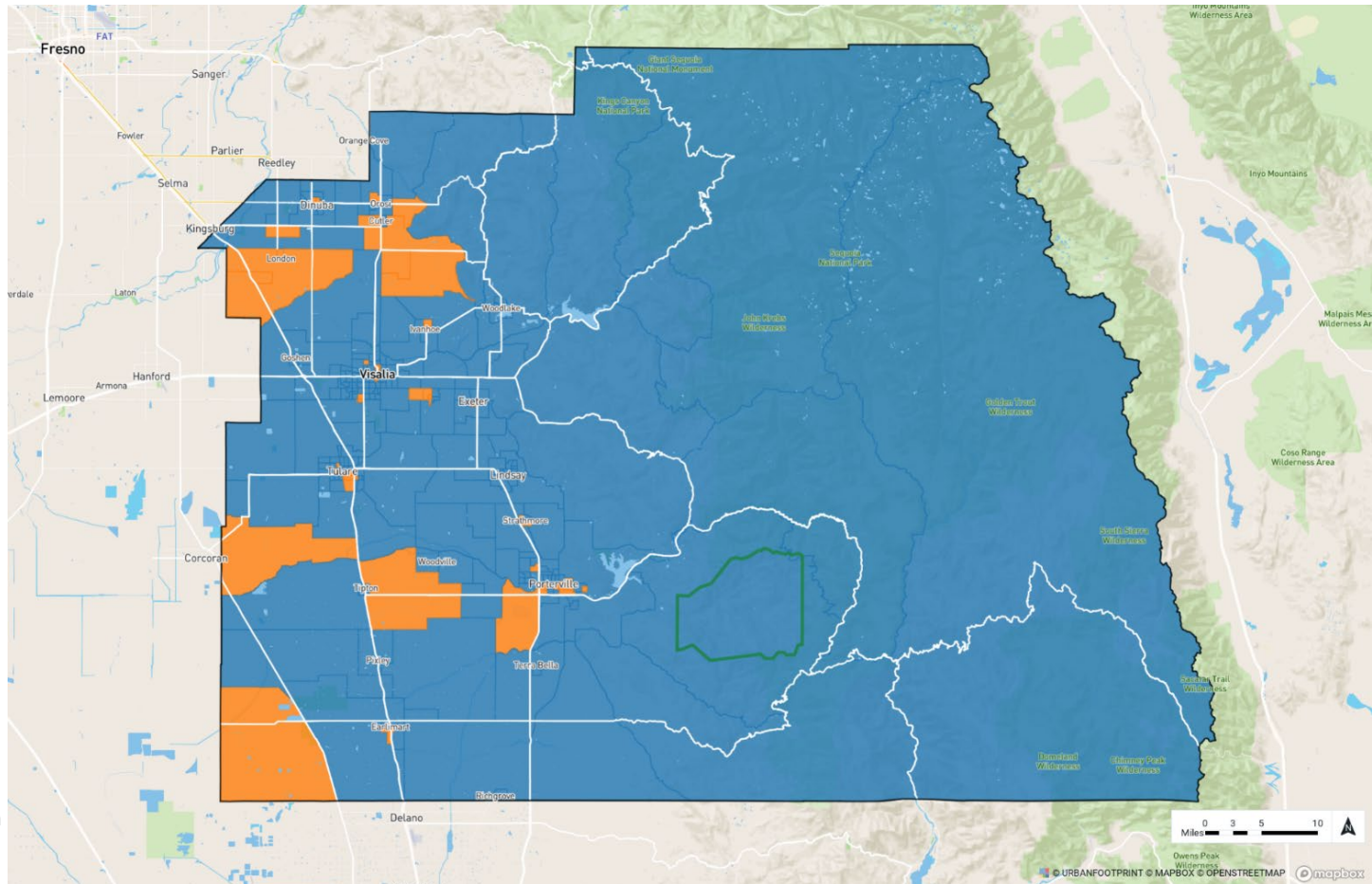


## Overcrowded Housing

Census block groups with more than 20% of households in overcrowded housing. Overcrowded households are defined as more than 1 person by room.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table B25014.

-  Project Area
-  Tule River Reservation
-  Overcrowding

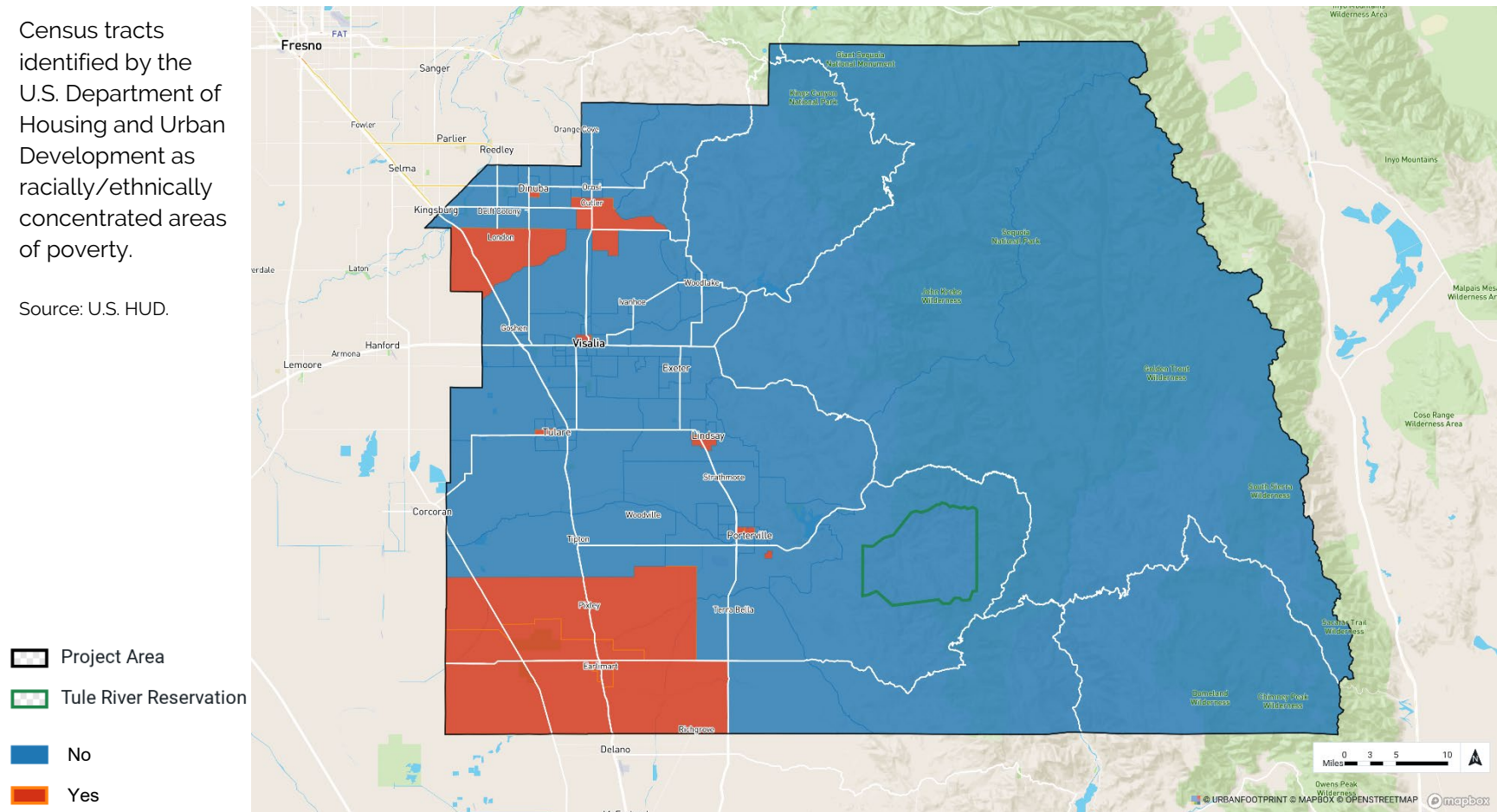


## Racial Segregation

### Racially/Ethnically Concentrated Areas of Poverty

Census tracts identified by the U.S. Department of Housing and Urban Development as racially/ethnically concentrated areas of poverty.

Source: U.S. HUD.

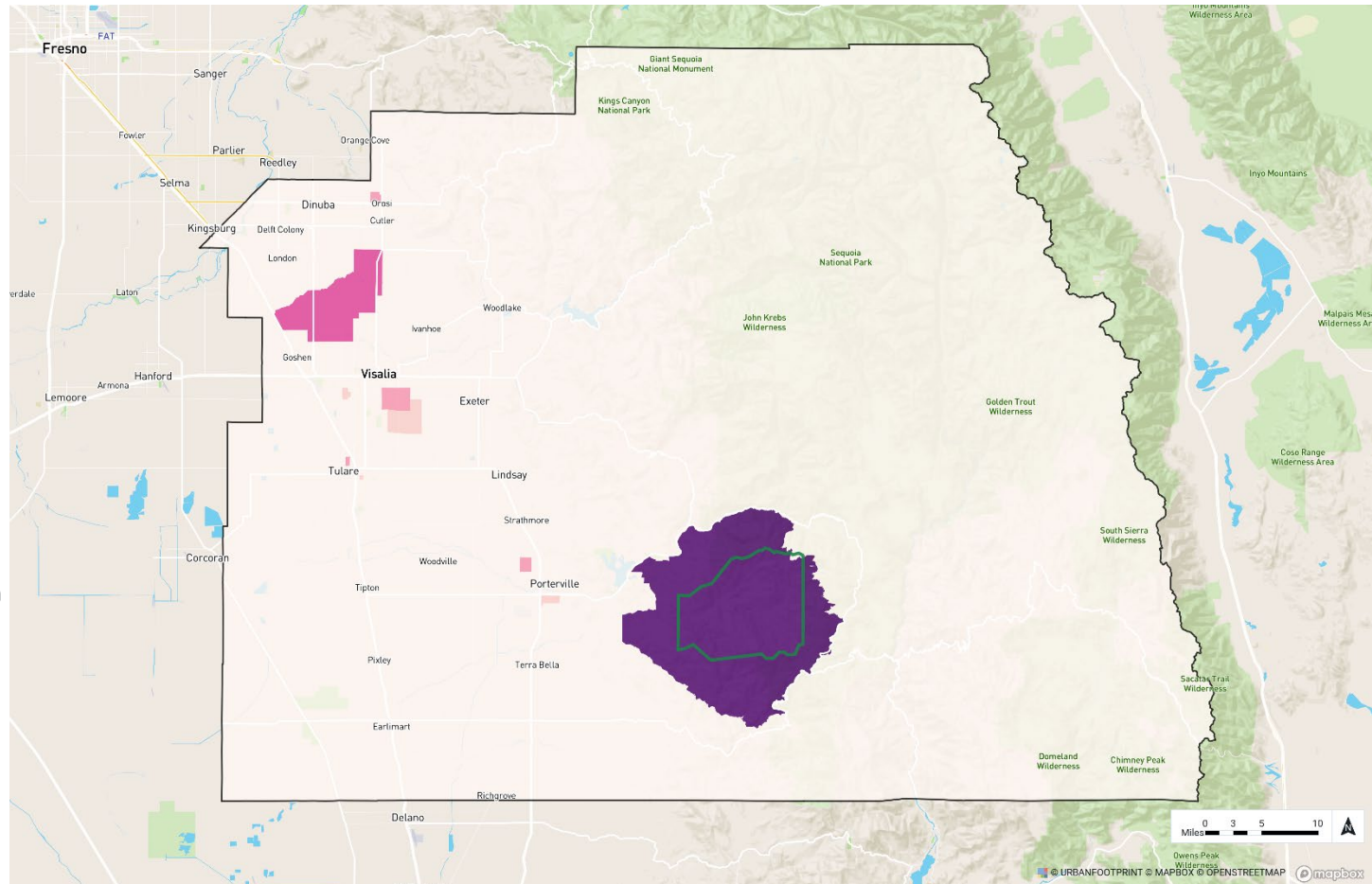
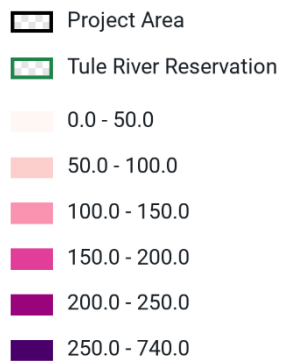




## Density of American Indian/Alaska Native Residents

Number of American Indian/Alaska Native residents by census block group.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table C24050.

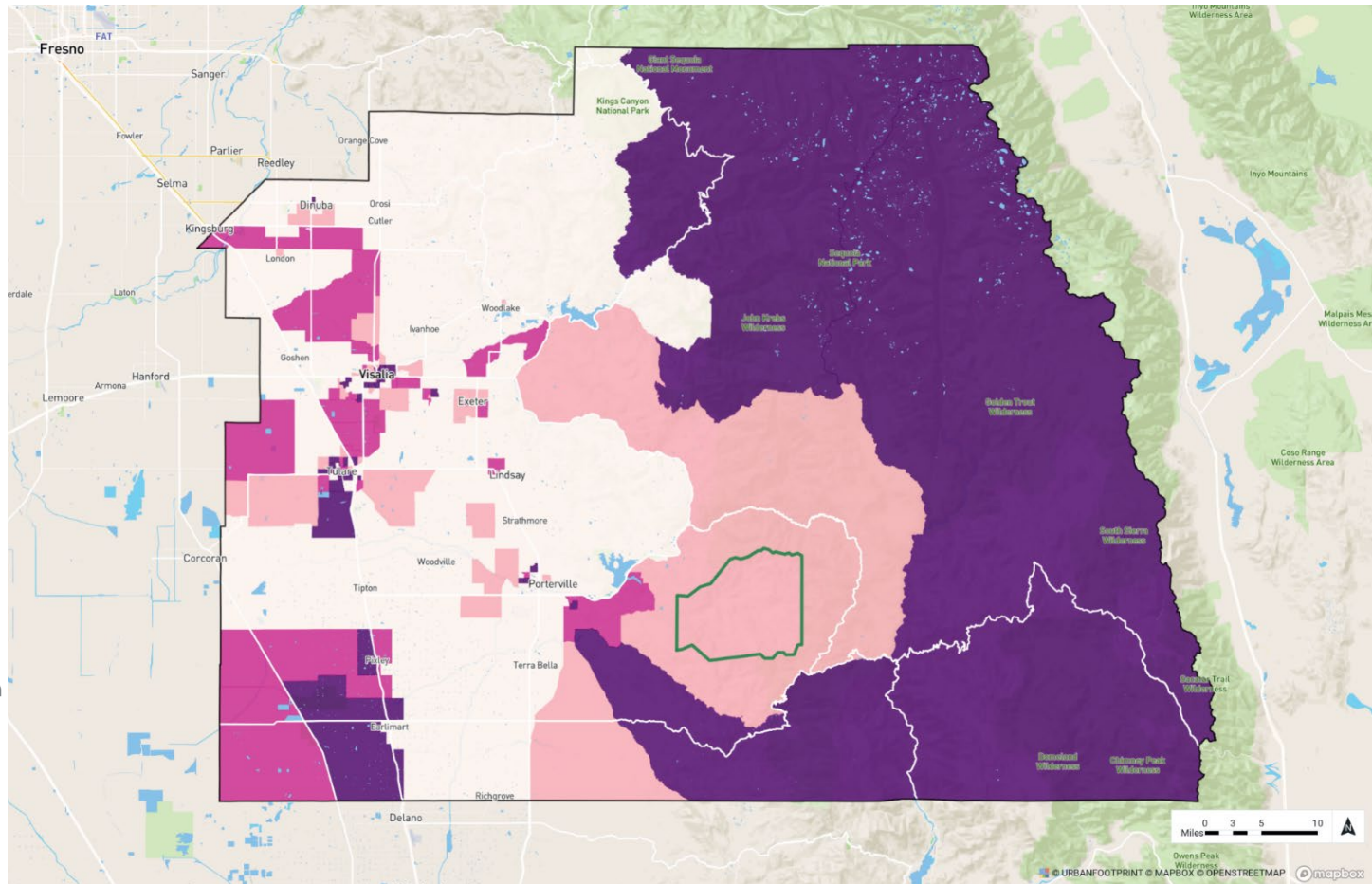
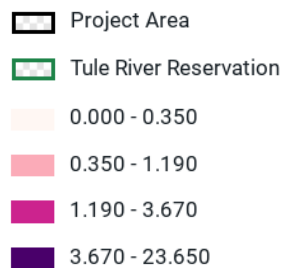




## Percent of Residents who are Black/African American

Percent of residents in each census block group who identify as Black or African American.

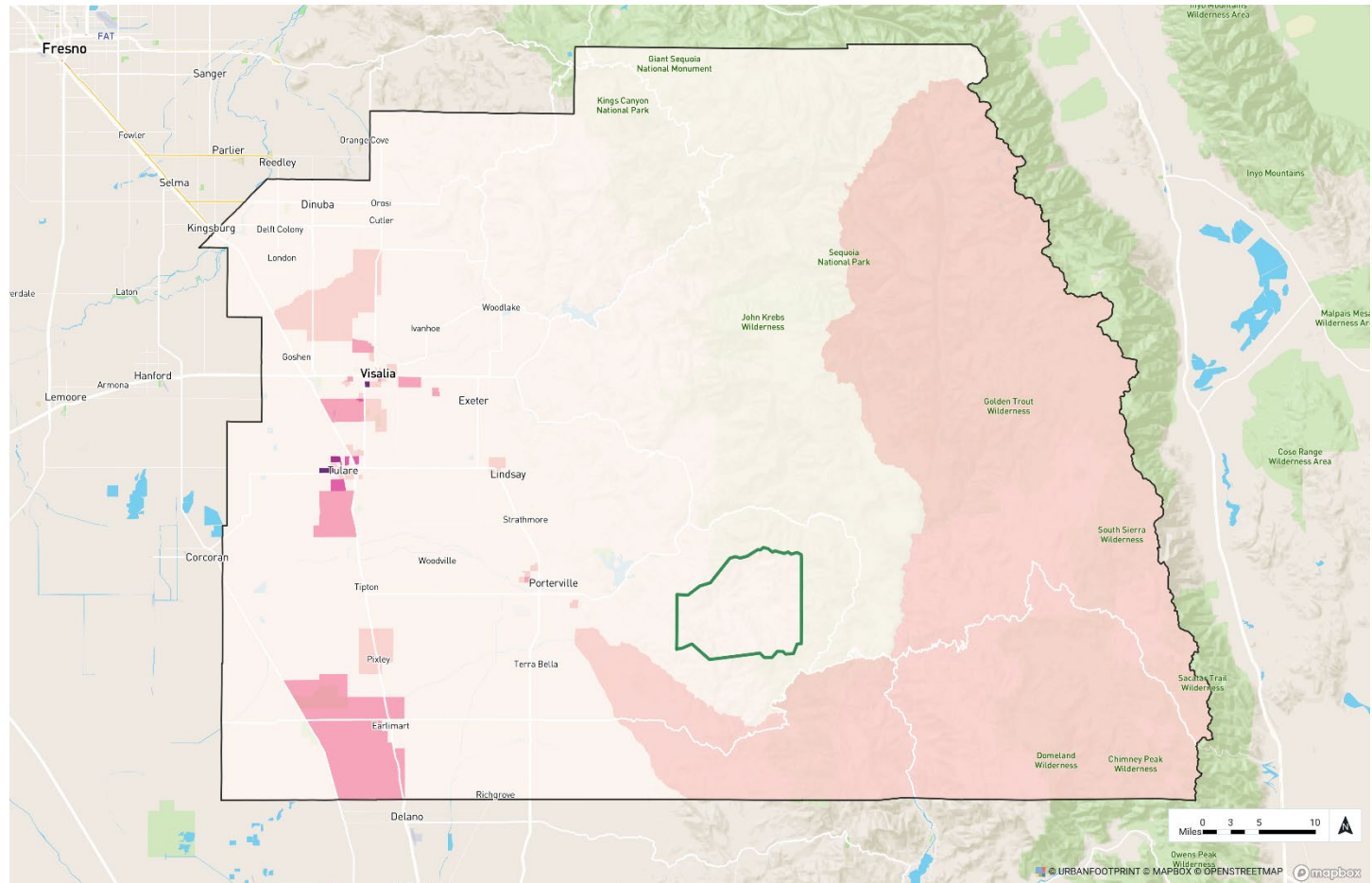
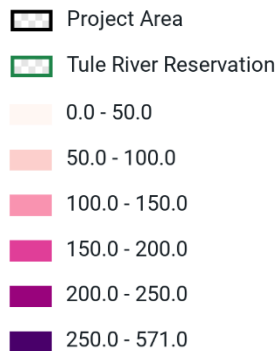
Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.



## Density of Black/African American Residents

Number of Black/African American residents by census block group.

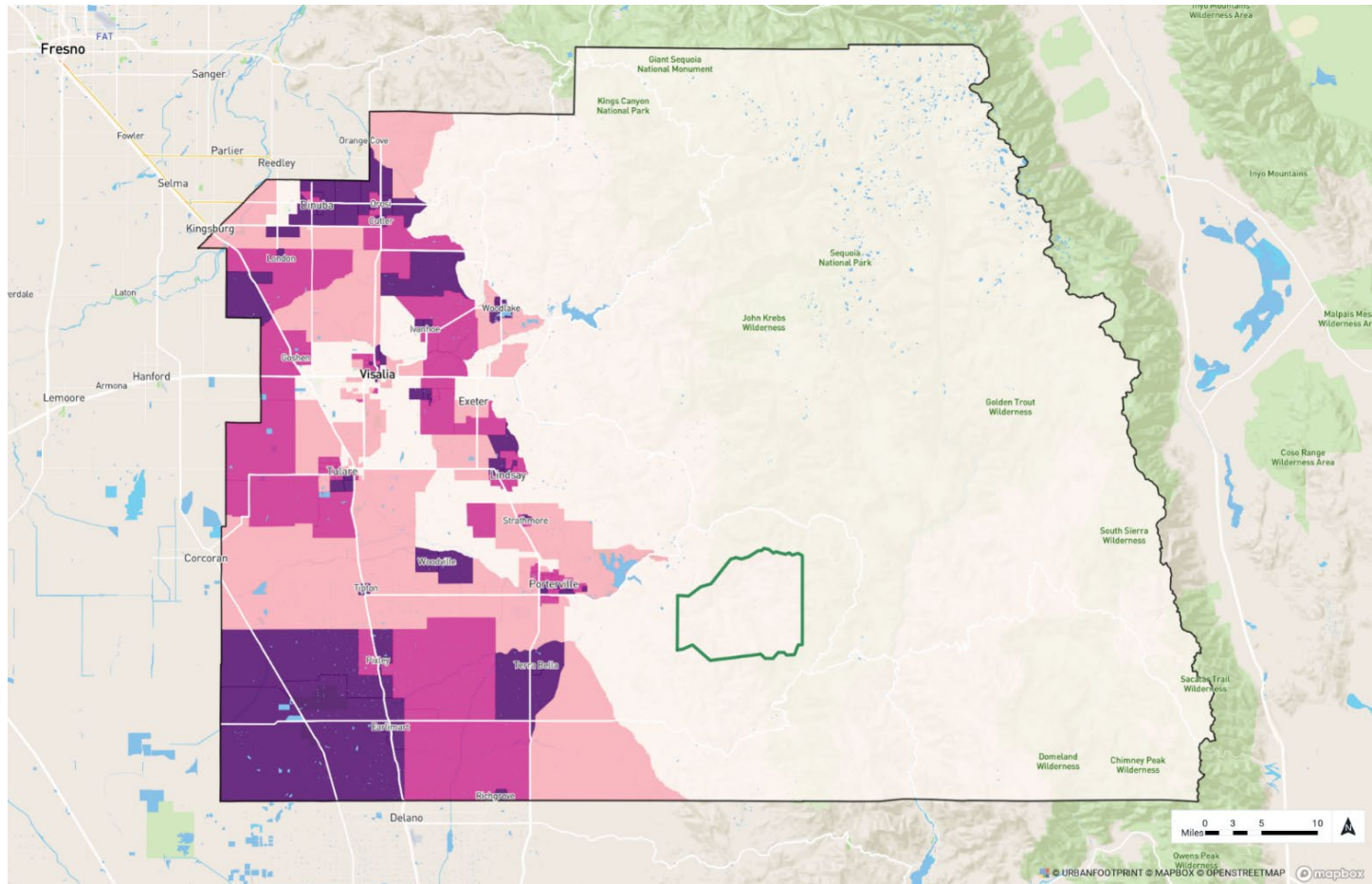
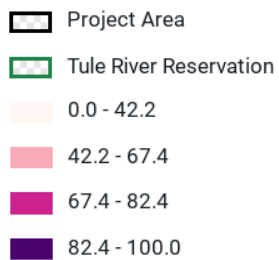
Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table C24050.



## Percent of Residents who are Hispanic/Latino

Percent of residents in each census block group who identify as Hispanic or Latino.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates.





## Transportation Conditions

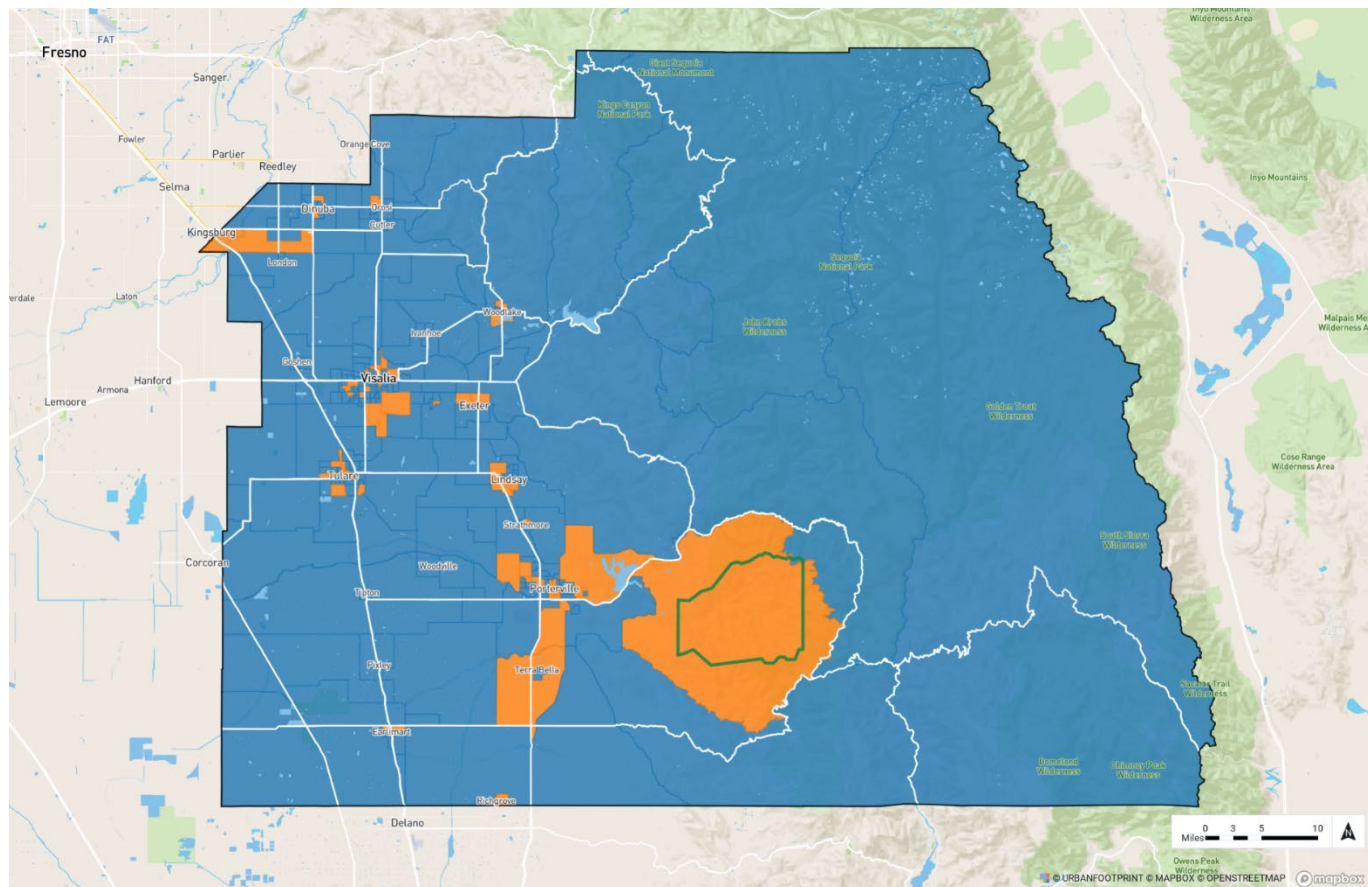
This section presents data for Tulare County that display the region's transportation conditions. The data is organized into four categories: transit-dependent households, walk time to key destinations, public transit access to health facilities, and pedestrian collisions and schools.

### Transit-Dependent Households

Density of Households without Any Motor Vehicles (Greater than 50 Households)

Census block groups with more than 50 households without a vehicle

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table B25044.

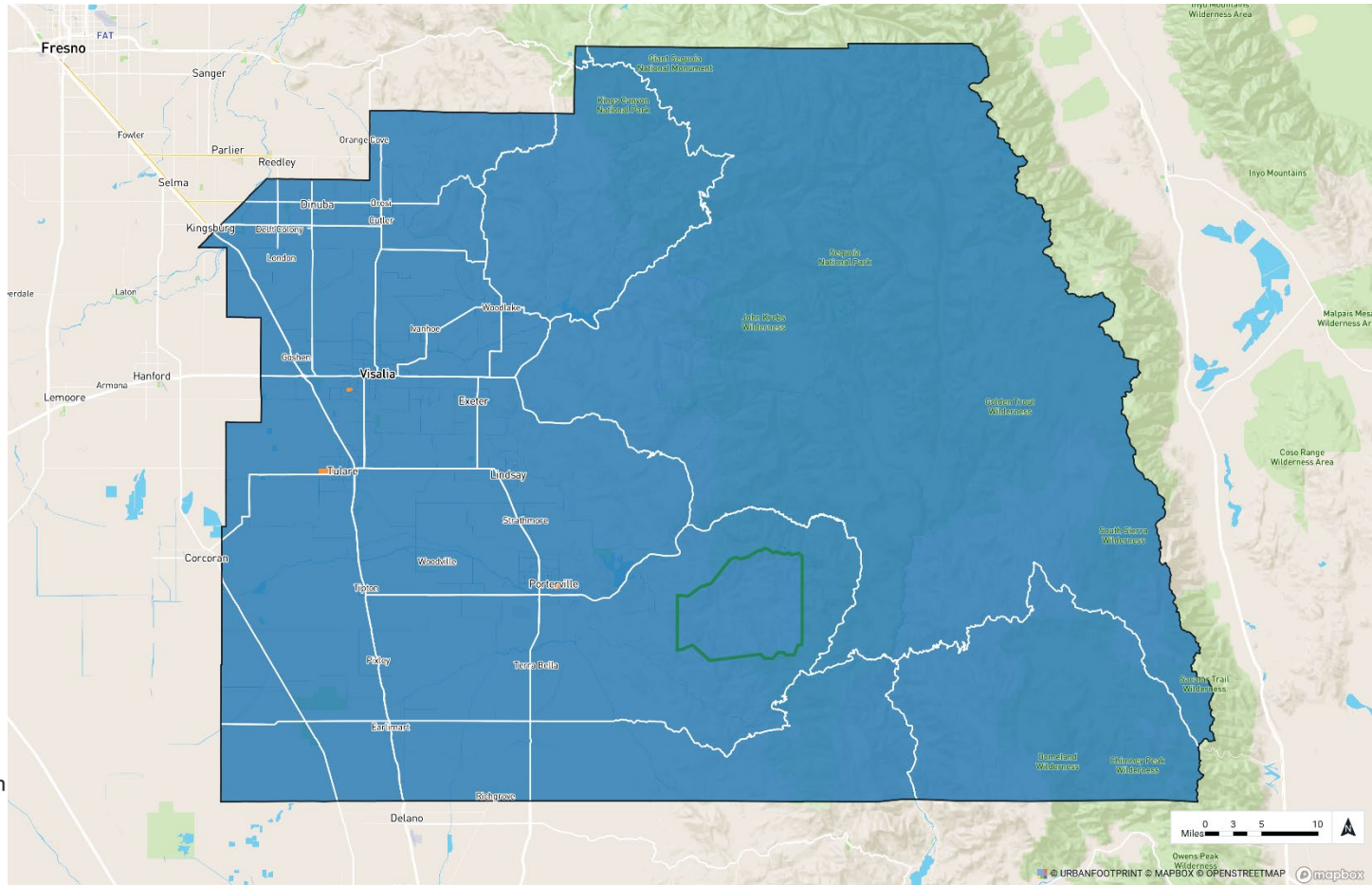
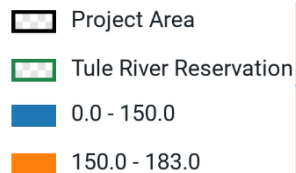




## Density of Households without Any Motor Vehicles (Greater than 150 Households)

Census block groups with more than 150 households without a vehicle. West Tulare, Downtown Porterville, Downtown Visalia, and Southwest Visalia have block groups where more than 150 households do not have access to a vehicle.

Source: U.S. Census Bureau, American Community Survey, 2014-2018 5-year estimates, Table B25044.

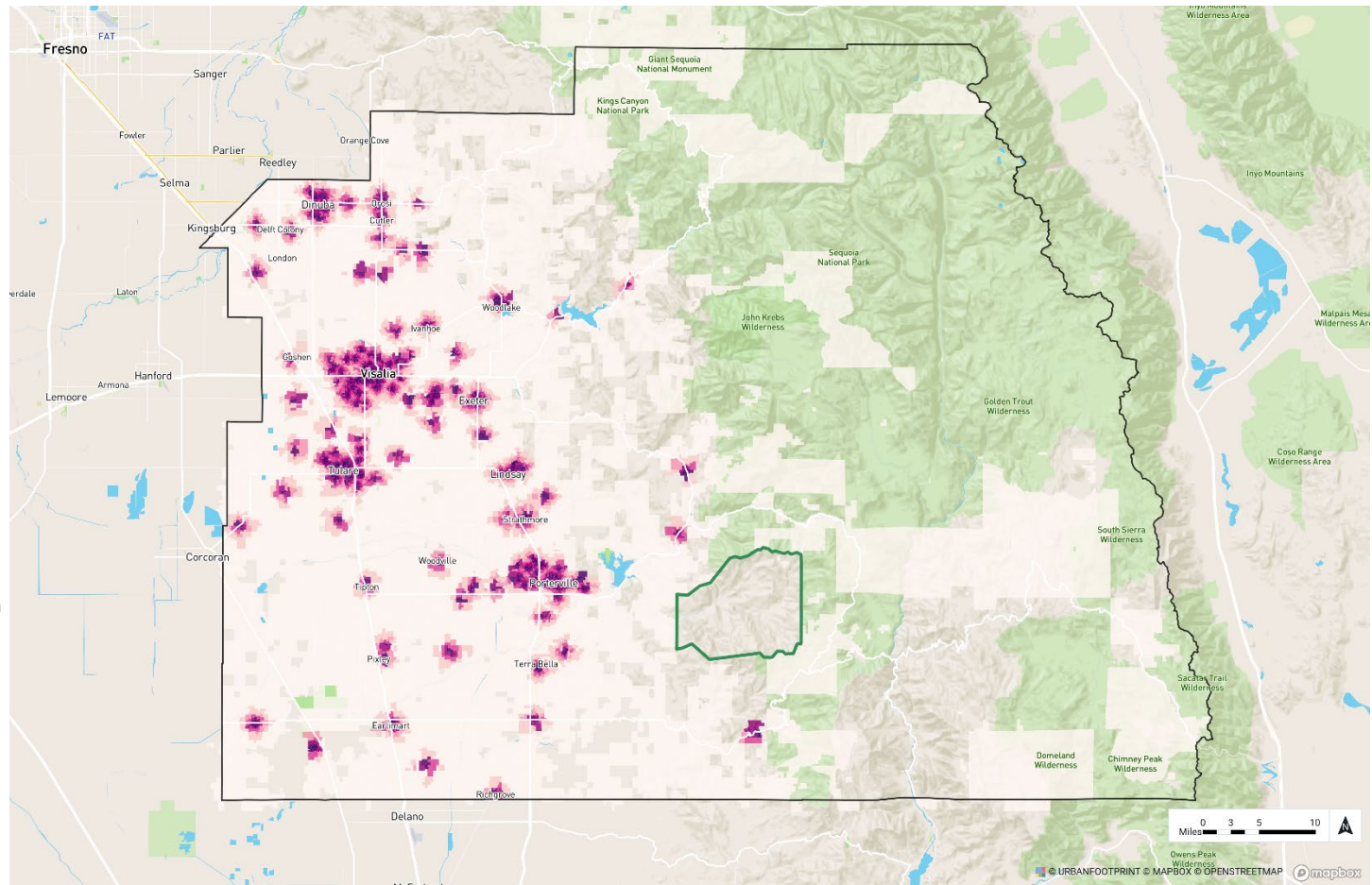
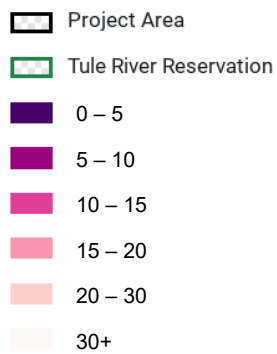


## Walk Time to Key Destinations









### Walk Time to Nearest School

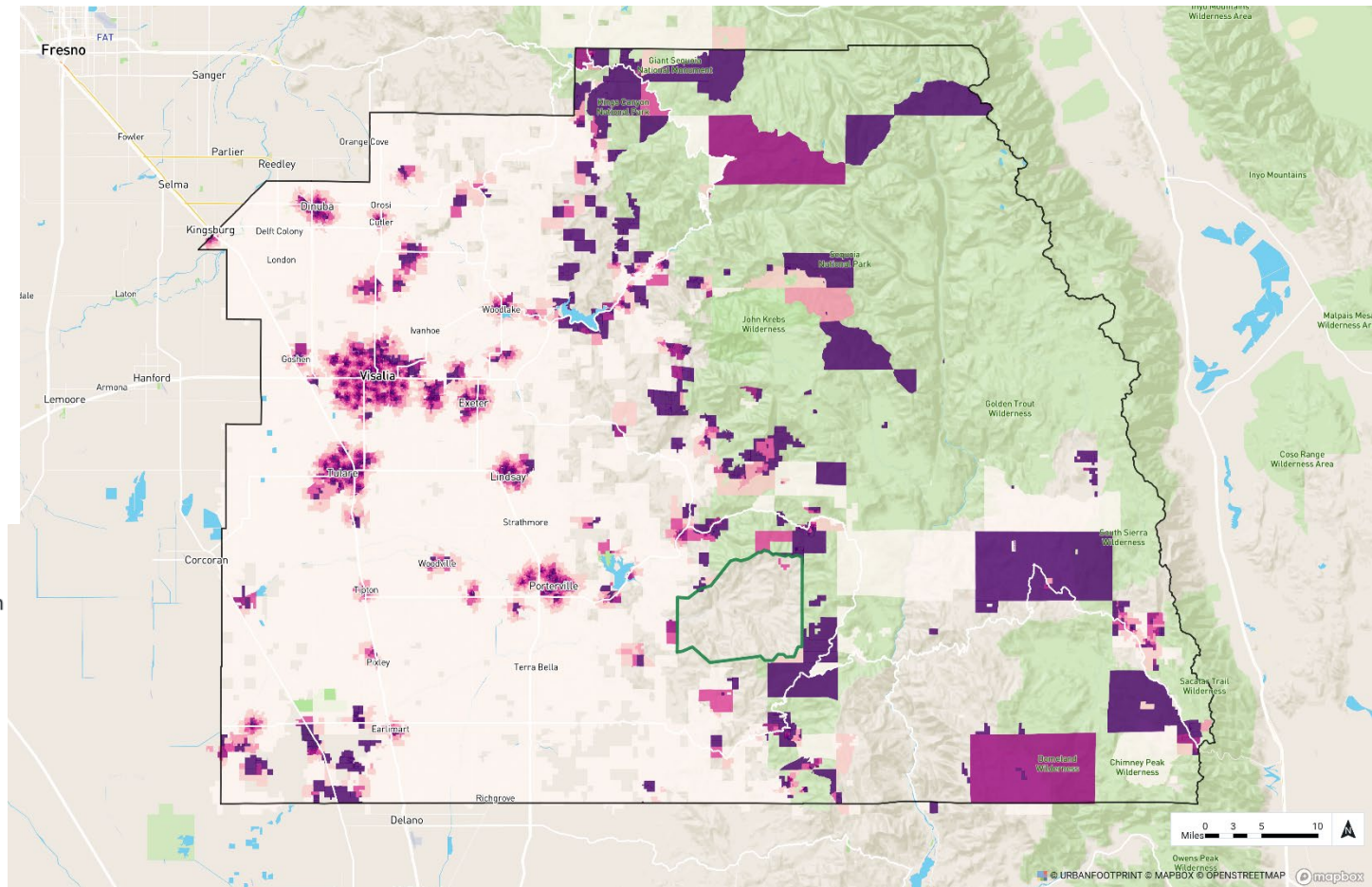
Walk time in minutes to nearest school.

Source: UrbanFootprint, walk access analysis.



Walk time in minutes to nearest park or open space according to the California Protected Areas Database (CPAD). CPAD inventories open space lands that have been protected for open space uses through fee ownerships.

 Project Area  
 Tule River Reservation  
 0 – 5  
 5 – 10  
 10 – 15  
 15 – 20  
 20 – 30  
 30+





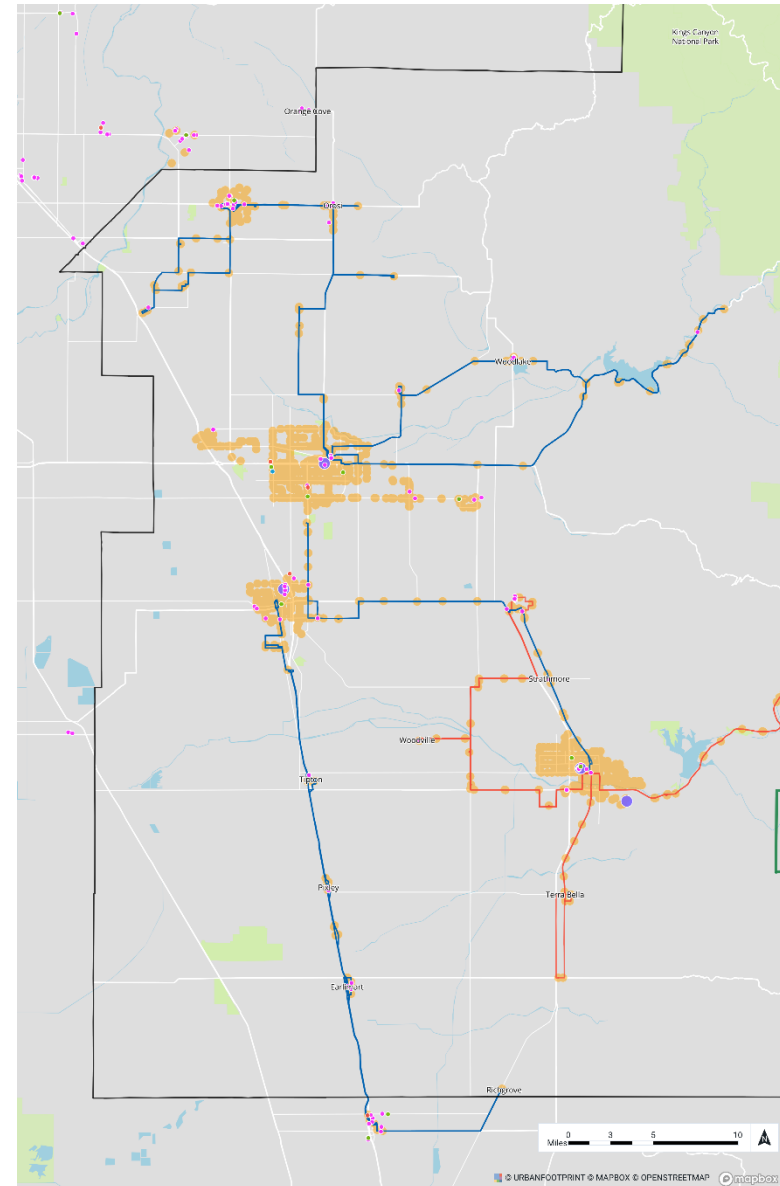
## Public Transit Access to Health Facilities

### Access to Health Facilities: Regional

Healthcare facilities and 5-minute walksheds from all public bus stops in the region.

Source: TCAG, CDPH, UrbanFootprint.

-  Project Area
-  Tule River Reservation
-  CDPH Healthcare Facilities 3  
Mental Health
-  CDPH Healthcare Facilities 4  
Dialysis
-  CDPH Healthcare Facilities 5  
Other Specialty Healthcare
-  CDPH Healthcare Facilities 2  
Primary Care
-  CDPH Healthcare Facilities 1  
Acute Hospitals
-  TRFR Bus Routes - Weekdays  
and Weekends
-  TRFR Bus Routes - Only  
Weekdays
-  Buffered: TRFR Bus  
Stops\_0.25mile



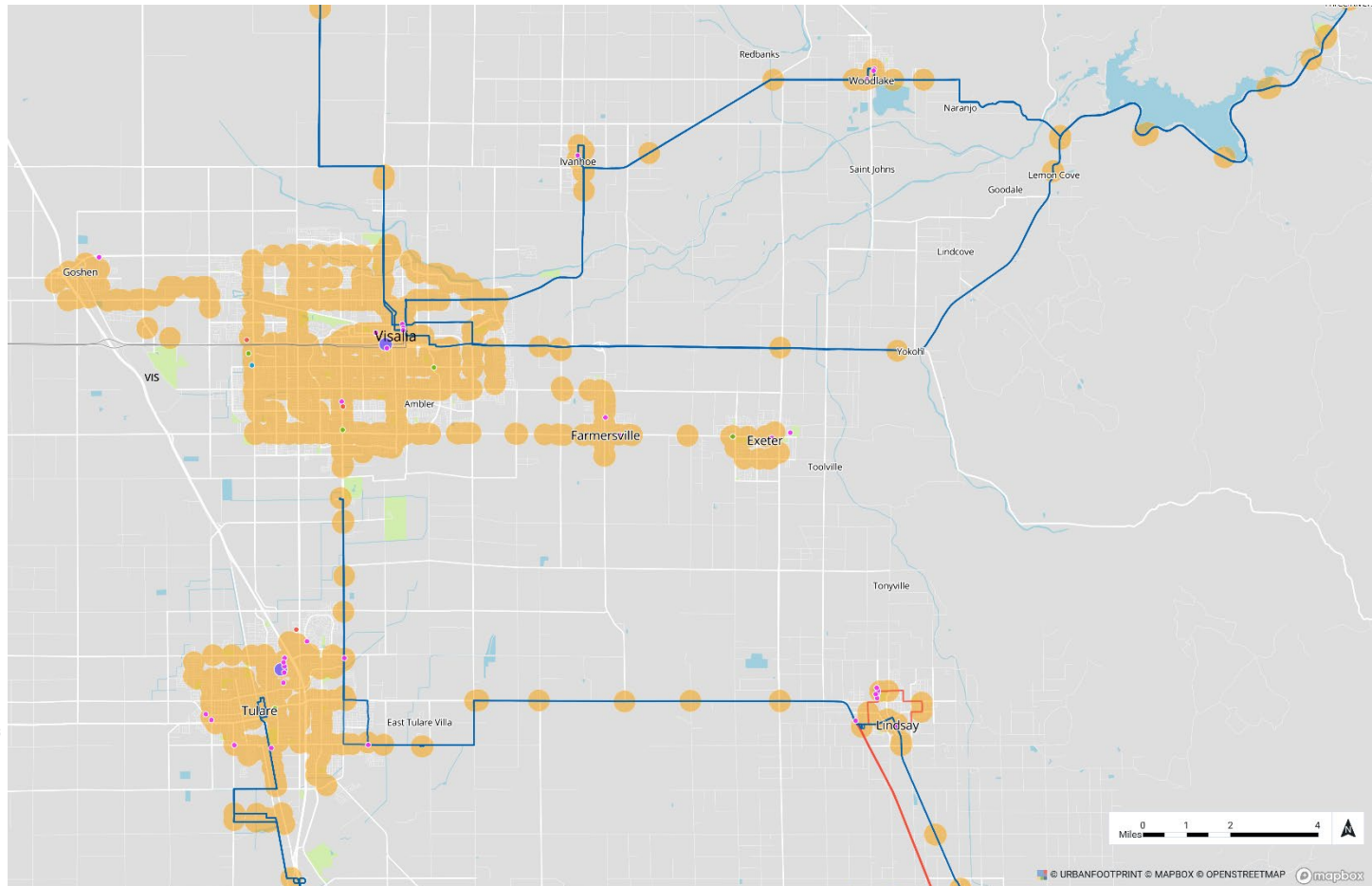


## Access to Health Facilities: Visalia

Healthcare facilities and 5-minute walksheds from all public bus stops in the Visalia and Tulare sub-region.

Source: TCAG, CDPH, UrbanFootprint.

-  Project Area
-  Tule River Reservation
-  CDPH Healthcare Facilities 3 Mental Health
-  CDPH Healthcare Facilities 4 Dialysis
-  CDPH Healthcare Facilities 5 Other Specialty Healthcare
-  CDPH Healthcare Facilities 2 Primary Care
-  CDPH Healthcare Facilities 1 Acute Hospitals
-  TRFR Bus Routes - Weekdays and Weekends
-  TRFR Bus Routes - Only Weekdays
-  Buffered: TRFR Bus Stops\_0.25mile

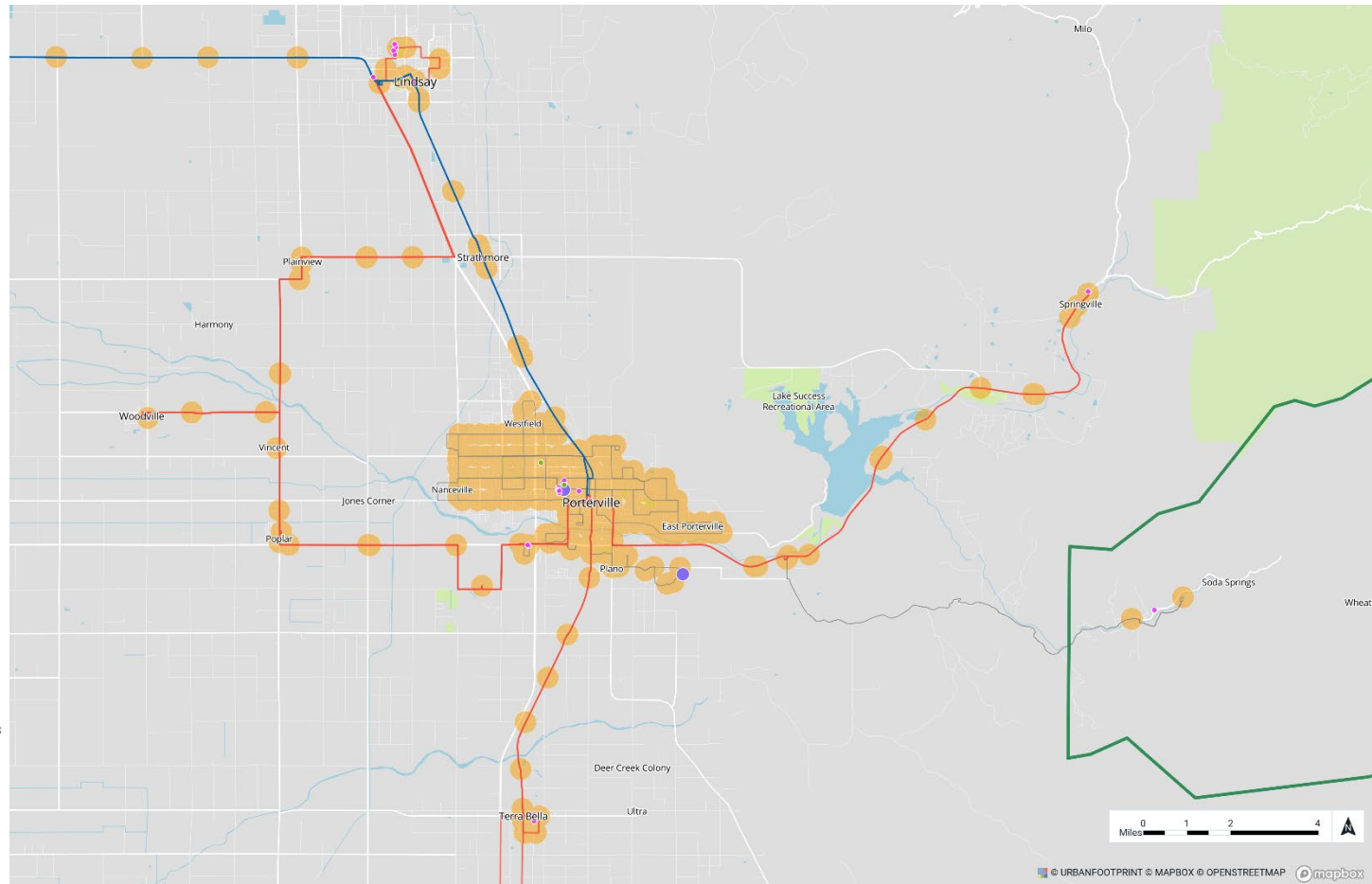


## Access to Health Facilities: Porterville

Healthcare facilities and 5-minute walksheds from all public bus stops in the Porterville sub-region.

Source: TCAG, CDPH, UrbanFootprint.

-  Project Area
-  Tule River Reservation
-  CDPH Healthcare Facilities 3 Mental Health
-  CDPH Healthcare Facilities 4 Dialysis
-  CDPH Healthcare Facilities 5 Other Specialty Healthcare
-  CDPH Healthcare Facilities 2 Primary Care
-  CDPH Healthcare Facilities 1 Acute Hospitals
-  TRFR Bus Routes - Weekdays and Weekends
-  TRFR Bus Routes - Only Weekdays
-  Buffered: TRFR Bus Stops\_0.25mile

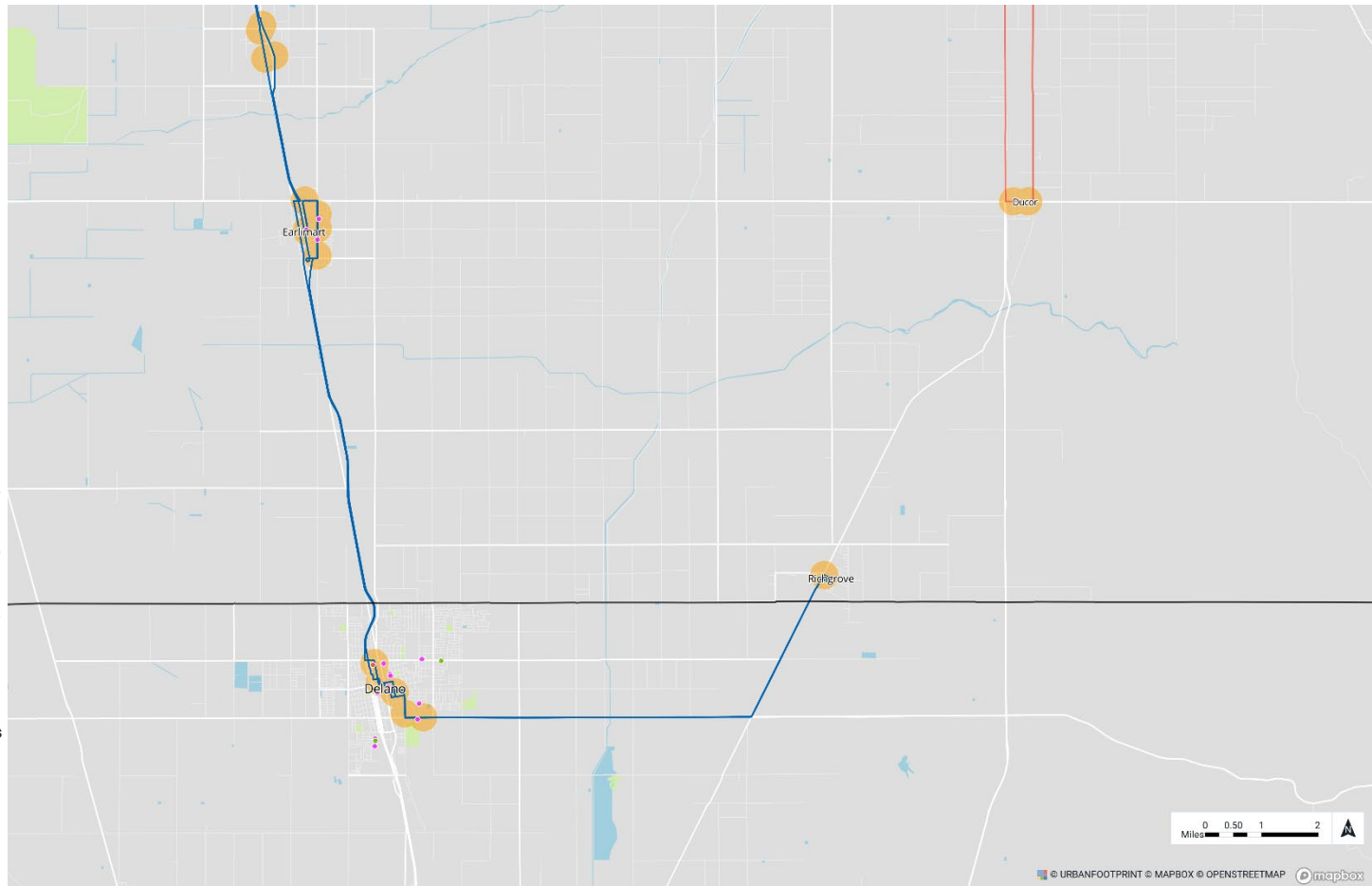


## Access to Health Facilities: South County

Healthcare facilities and 5-mile walksheds from all public bus stops in south county.

Source: TCAG, CDPH, UrbanFootprint.

-  Project Area
-  Tule River Reservation
-  CDPH Healthcare Facilities 3  
Mental Health
-  CDPH Healthcare Facilities 4  
Dialysis
-  CDPH Healthcare Facilities 5  
Other Specialty Healthcare
-  CDPH Healthcare Facilities 2  
Primary Care
-  CDPH Healthcare Facilities 1  
Acute Hospitals
-  TRFR Bus Routes - Weekdays  
and Weekends
-  TRFR Bus Routes - Only  
Weekdays
-  Buffered: TRFR Bus  
Stops\_0.25mile



## Health Profile

This section presents data for Tulare County that display information about the health status of residents as well as injuries and deaths resulting from motor vehicle collisions. The data is organized into 5 categories: population health status, traffic-related injuries and fatalities, pedestrian collisions and schools, healthcare access and utilization, and social determinants of health.

### Population Health Status

As part of the Central Valley region's 2019 Community Health Needs Assessment (CHNA)<sup>3</sup>, the county was assessed for a wide variety of public health indicators, including health behaviors, risk factors, and social determinants of health. For many of these indicators, Tulare County was found to have a lower health status and poorer health outcomes in comparison to the state and other counties in the region (see table below).

#### Indicators assessed in 2019 Community Health Needs Assessment

Worse than other counties in the region		Better than other counties in the region	Better than other counties <i>and</i> the state
<ul style="list-style-type: none"> <li>Population Age 25+ with No High School Diploma</li> <li>Uninsured Population</li> <li>Population Receiving SNAP Benefits</li> <li>Population Receiving Public Income Assistance</li> <li>Population below 100% Federal Poverty Line</li> <li>Teen Birth Rate</li> <li>Unemployment Rate</li> <li>Young People Not in School or Working</li> <li>Adults who are Current Smokers</li> </ul>	<ul style="list-style-type: none"> <li>High Blood Pressure</li> <li>Obesity</li> <li>Mortality—Diabetes</li> <li>Mortality—Coronary Heart Disease</li> <li>Mortality—Influenza/Pneumonia</li> <li>Mortality—Motor Vehicle Crashes</li> <li>Poor or Fair Health</li> <li>Poor Physical Health Days</li> <li>ACSC Discharge Rate</li> <li>Food Insecurity, Children</li> <li>Broadband Access</li> <li>Recreation and Fitness Facility Access</li> <li>Adults with No Leisure Time Physical Activity</li> </ul>	<ul style="list-style-type: none"> <li>Child Abuse Cases</li> <li>HIV Prevalence</li> <li>Rate of Federally Qualified Health Centers (FQHCs)</li> <li>Active Asthma Prevalence</li> <li>Asthma Emergency Department (ED) Visits</li> <li>Low Birth Weight</li> <li>Mortality—All Cancers</li> <li>Mortality—Alzheimer's Disease</li> <li>Mortality—Drug Induced Deaths</li> <li>SNAP Authorized Food Stores</li> </ul>	<ul style="list-style-type: none"> <li>HIV Prevalence</li> <li>Active Asthma Prevalence</li> <li>Asthma ED Visits</li> <li>Low Birth Rate</li> <li>Mortality—All Cancers</li> <li>Mortality—Alzheimer's Disease</li> </ul>

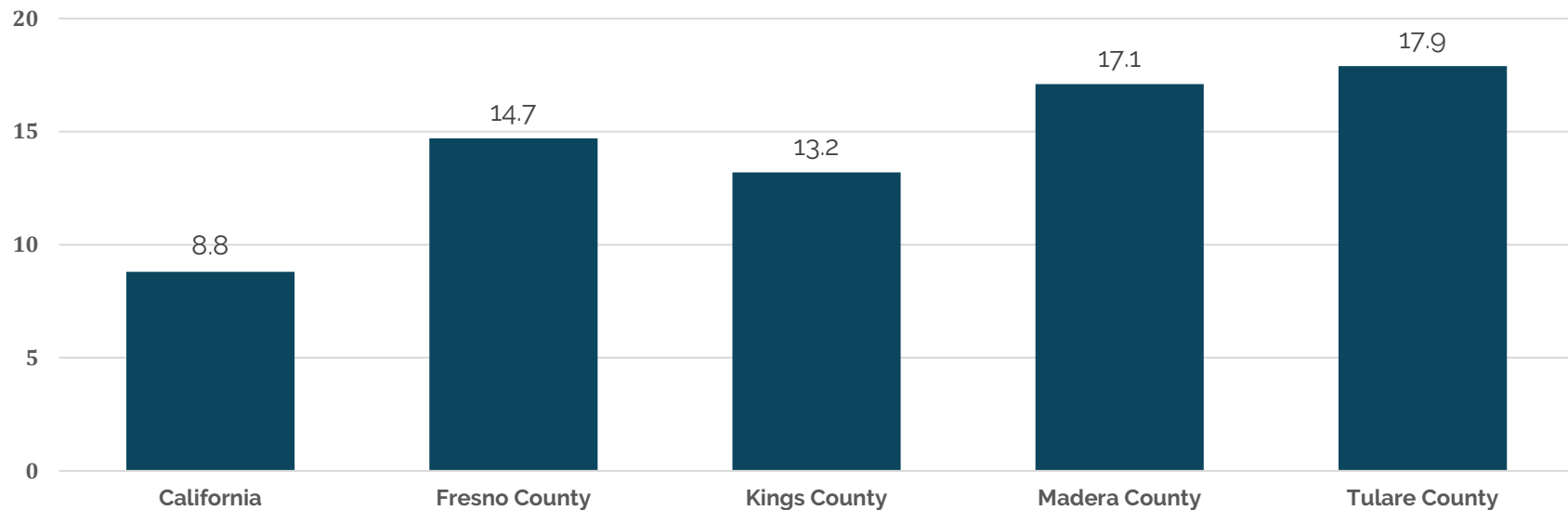
<sup>3</sup> Hospital Council of Northern & Central California. 2019 Community Health Needs Assessment: Central Valley Region. 2019. Retrieved from: [https://www.hospitalcouncil.org/sites/main/files/file-attachments/final\\_central\\_valley\\_chna\\_3.18.pdf?1553209460](https://www.hospitalcouncil.org/sites/main/files/file-attachments/final_central_valley_chna_3.18.pdf?1553209460).



According to the CHNA, the top three health needs for Tulare County were: 1) economic factors and homelessness, 2) access to care, and 3) obesity, diabetes, and health eating and active living. Within the economic factors category, stakeholders specifically identified transportation, affordable housing, employment opportunities, homelessness, and poverty as key health needs.

Furthermore, between 2011 and 2016, Tulare County had the highest age-adjusted mortality rate from motor vehicle traffic crashes in comparison to the state and other counties in the region. As shown in the chart below, Tulare County's mortality rate from motor vehicle traffic crashes is more than twice as high as the statewide average. During this same time period, motor vehicle traffic crashes represented the tenth leading cause of death in the county.

**Motor Vehicle Traffic Crashes, Age-Adjusted Death Rate per 100,000**



Source: Hospital Council of Northern & Central California, 2019.

## Countywide Health Outcomes

More recent data from County Health Rankings & Roadmaps' 2021 Rankings, which includes deaths through 2019, reinforces findings from the CHNA (see tables below and on the following pages)<sup>4</sup>. The County Health Rankings & Roadmaps is a nationwide database of local health data of multiple factors that influence community health and wellbeing.

	Tulare County	Error Margin	Top U.S. Performers ^	California
<b>Health Outcomes</b>				
<b>Length of Life</b>				
Premature death	7,000	6,700-7,200	5,400	5,300
<b>Quality of Life</b>				
Poor or fair health **	28%	25-31%	14%	18%
Poor physical health days **	5.2	4.8-5.6	3.4	3.9
Poor mental health days **	4.8	4.4-5.1	3.8	3.7
Low birthweight	7%	7-7%	6%	7%
<b>Additional Health Outcomes (not included in overall ranking)</b>				
Life expectancy	78.7	78.4-79.0	81.1	81.7
Premature age-adjusted mortality	360	350-370	280	270
Child mortality	50	40-50	40	40
Infant mortality	6	5-6	4	4
Frequent physical distress **	17%	16-18%	10%	12%
Frequent mental distress **	16%	14-17%	12%	11%
Diabetes prevalence	11%	8-14%	8%	9%
HIV prevalence	130		50	396

^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data

Source: County Health Rankings & Roadmaps. 2021.

<sup>4</sup> County Health Rankings & Roadmaps. 2021. Retrieved from: [https://www.countyhealthrankings.org/app/california/2021/compare/additional?counties=06\\_107](https://www.countyhealthrankings.org/app/california/2021/compare/additional?counties=06_107).

	Tulare County	Error Margin	Top U.S. Performers ^	California
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult smoking **	18%	16-19%	16%	11%
Adult obesity	37%	31-43%	26%	24%
Food environment index	7.0		8.7	8.8
Physical inactivity	26%	21-32%	19%	18%
Access to exercise opportunities	60%		91%	93%
Excessive drinking **	17%	17-18%	15%	18%
Alcohol-impaired driving deaths	32%	30-35%	11%	29%
Sexually transmitted infections	562.5		161.2	585.3
Teen births	34	33-35	12	17
<b>Additional Health Behaviors (not included in overall ranking)</b>				
Food insecurity	16%		9%	11%
Limited access to healthy foods	8%		2%	3%
Drug overdose deaths	9	8-11	11	14
Motor vehicle crash deaths	16	15-18	9	10
Insufficient sleep **	35%	34-36%	32%	35%

^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

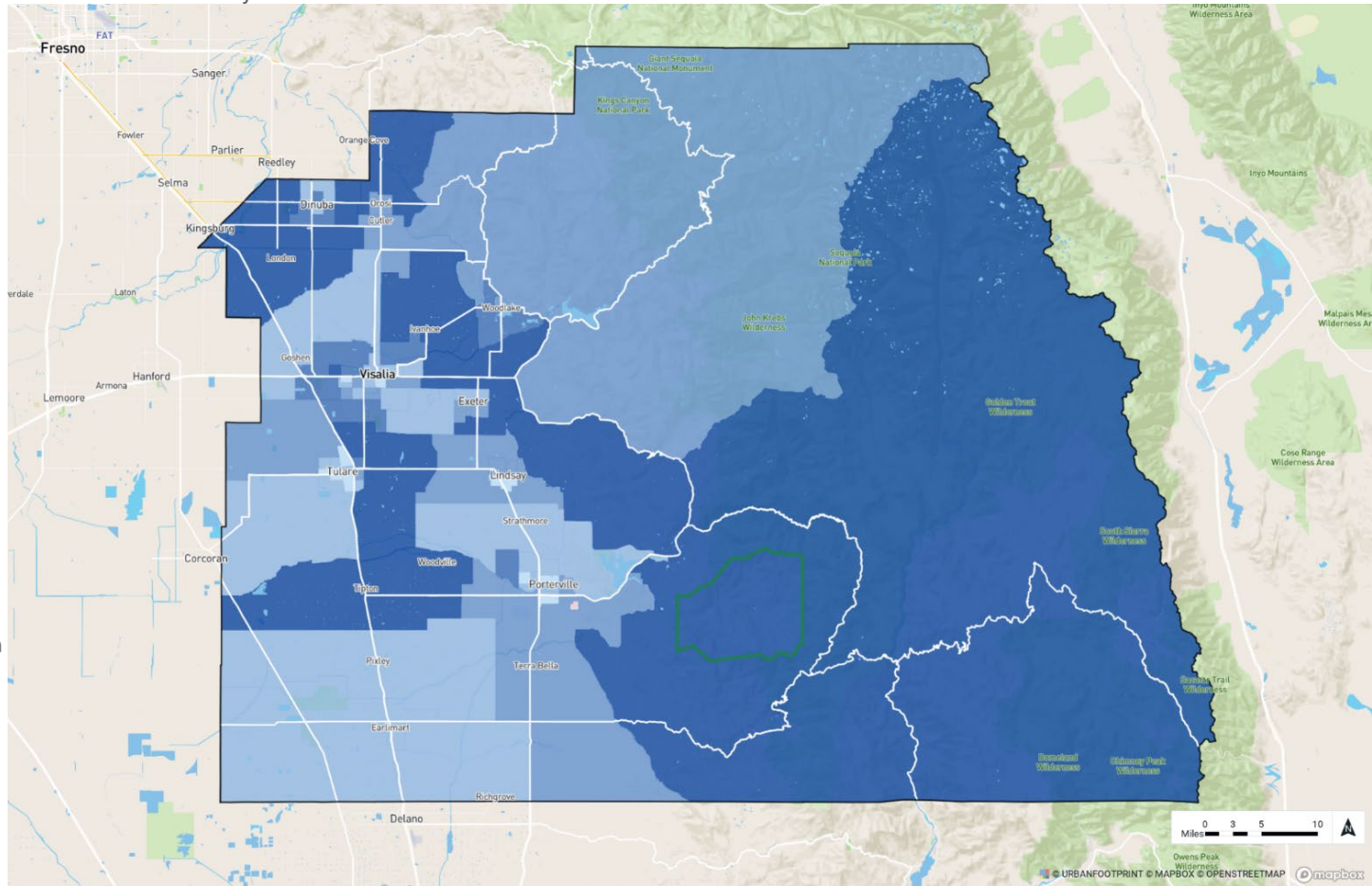
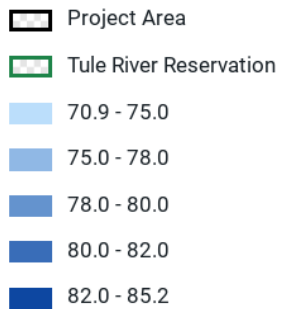
Note: Blank values reflect unreliable or missing data

Source: County Health Rankings & Roadmaps. 2021.

## Life Expectancy within Tulare County

Life expectancy in years by census tract.

Source: U.S. Small-area Life Expectancy Estimates Project.

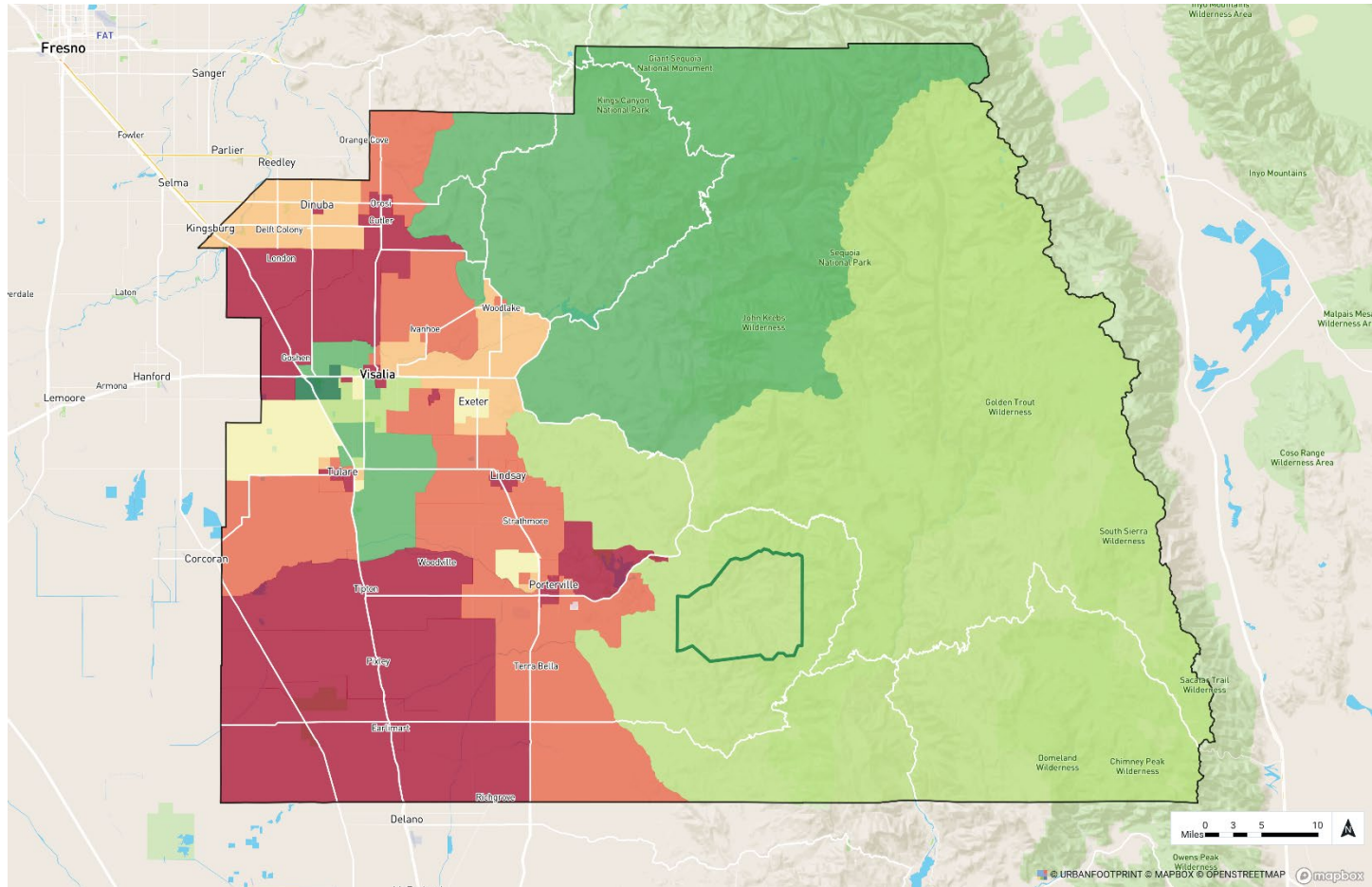
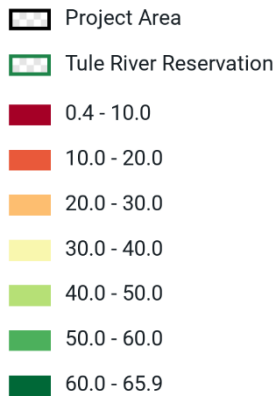




## California Healthy Places Index (HPI)

The California Health Places Index (HPI) score is a weighted index of 25 healthy community indicators. Higher scores indicate greater health conditions relative to the rest of California.

Source: Public Health Alliance of Southern California.

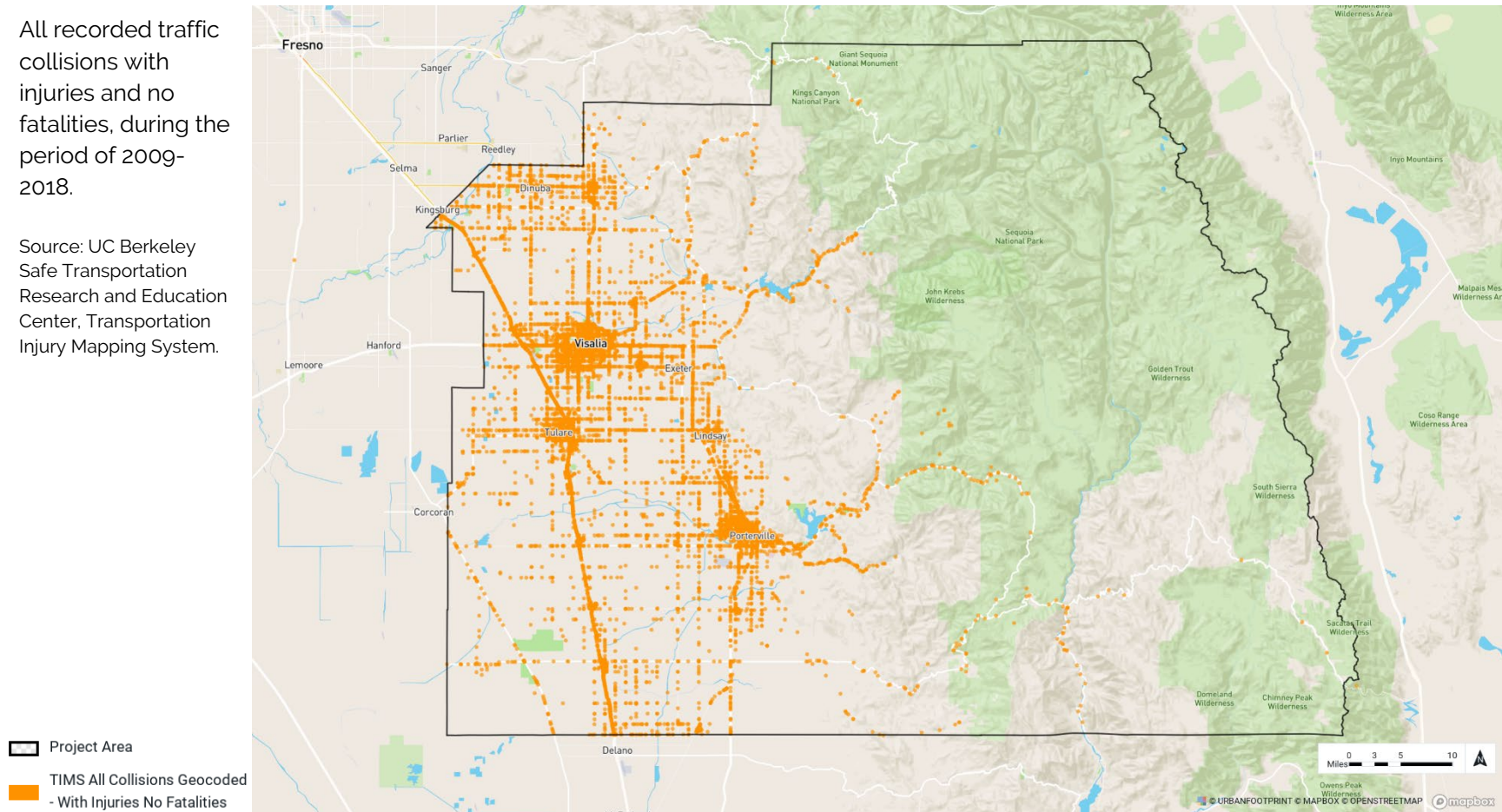


## Traffic-Related Injuries and Fatalities

### Traffic Collisions with Injuries and No Fatalities

All recorded traffic collisions with injuries and no fatalities, during the period of 2009-2018.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.

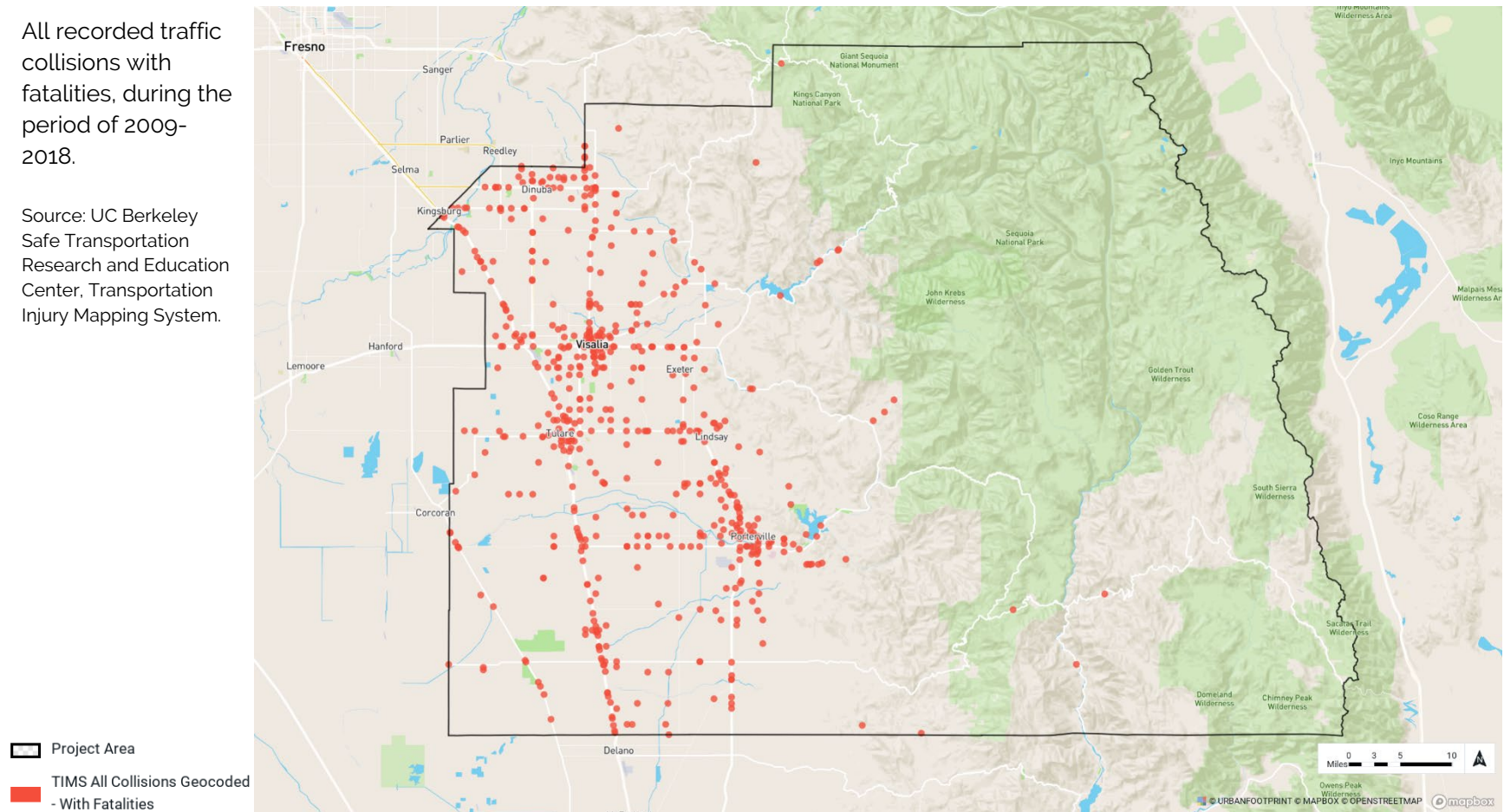




## Traffic Collisions with Fatalities

All recorded traffic collisions with fatalities, during the period of 2009-2018.

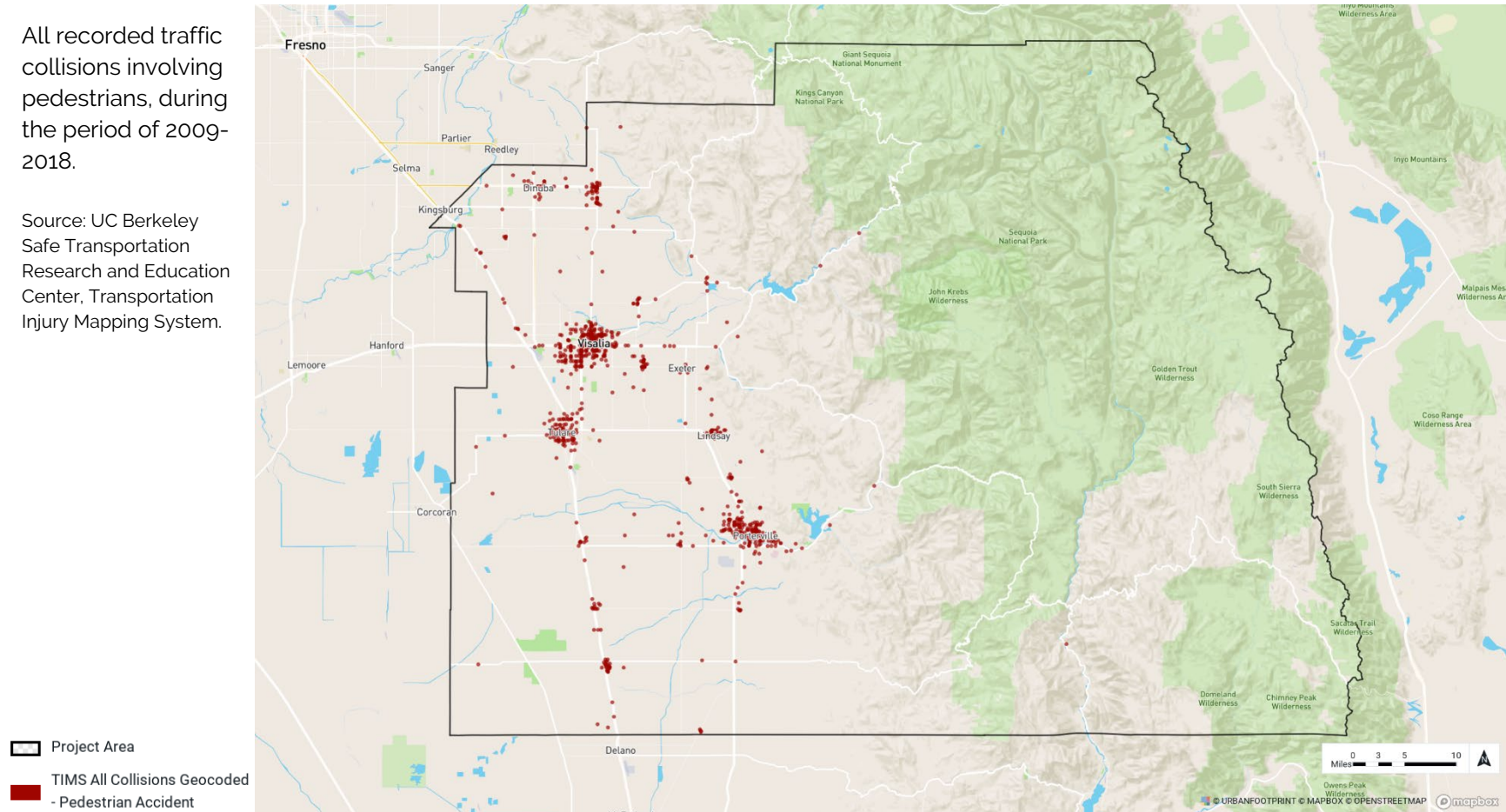
Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.



## Collisions Involving Pedestrians

All recorded traffic collisions involving pedestrians, during the period of 2009-2018.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.

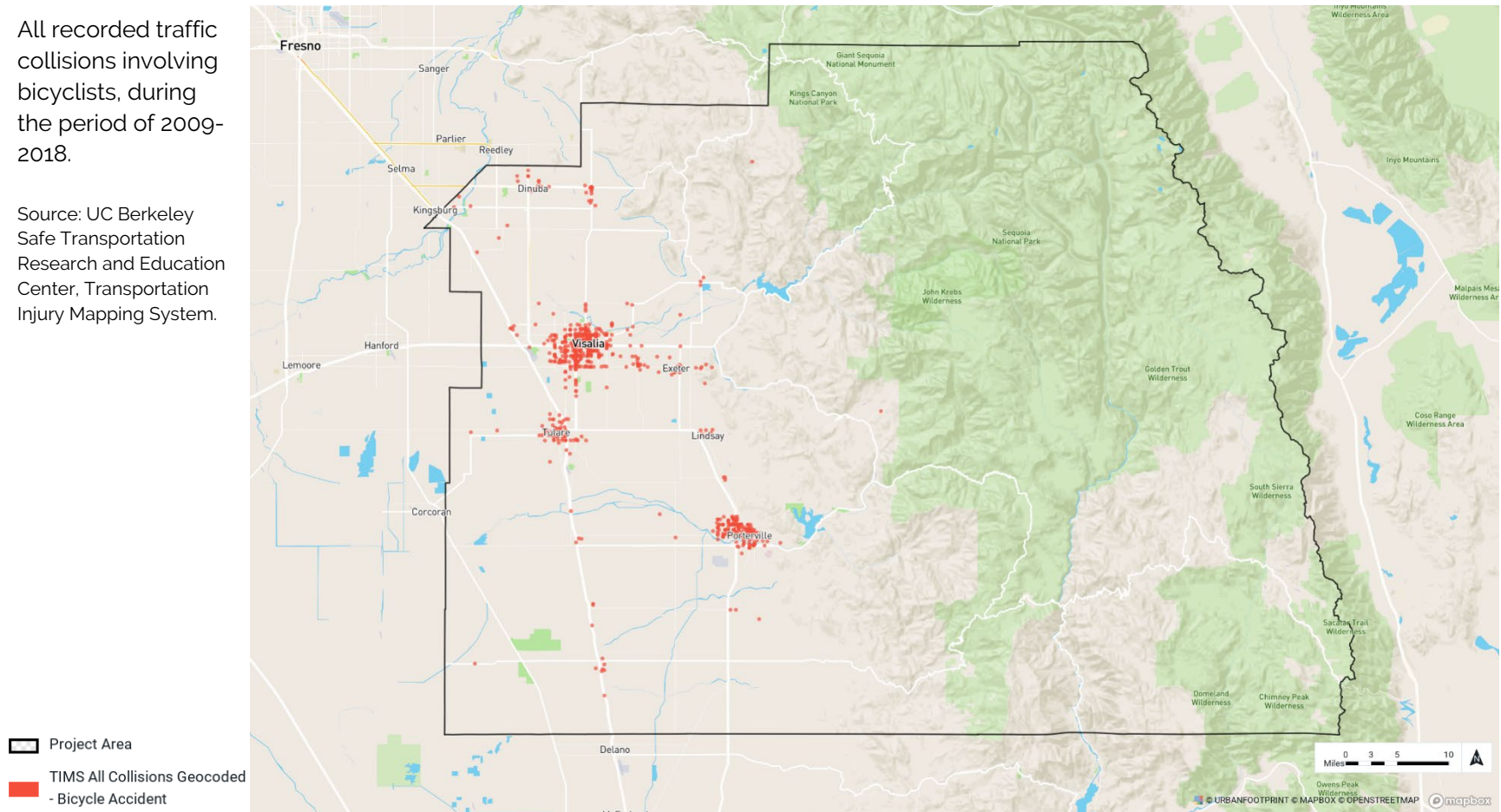




## Collisions Involving Bicyclists

All recorded traffic collisions involving bicyclists, during the period of 2009-2018.

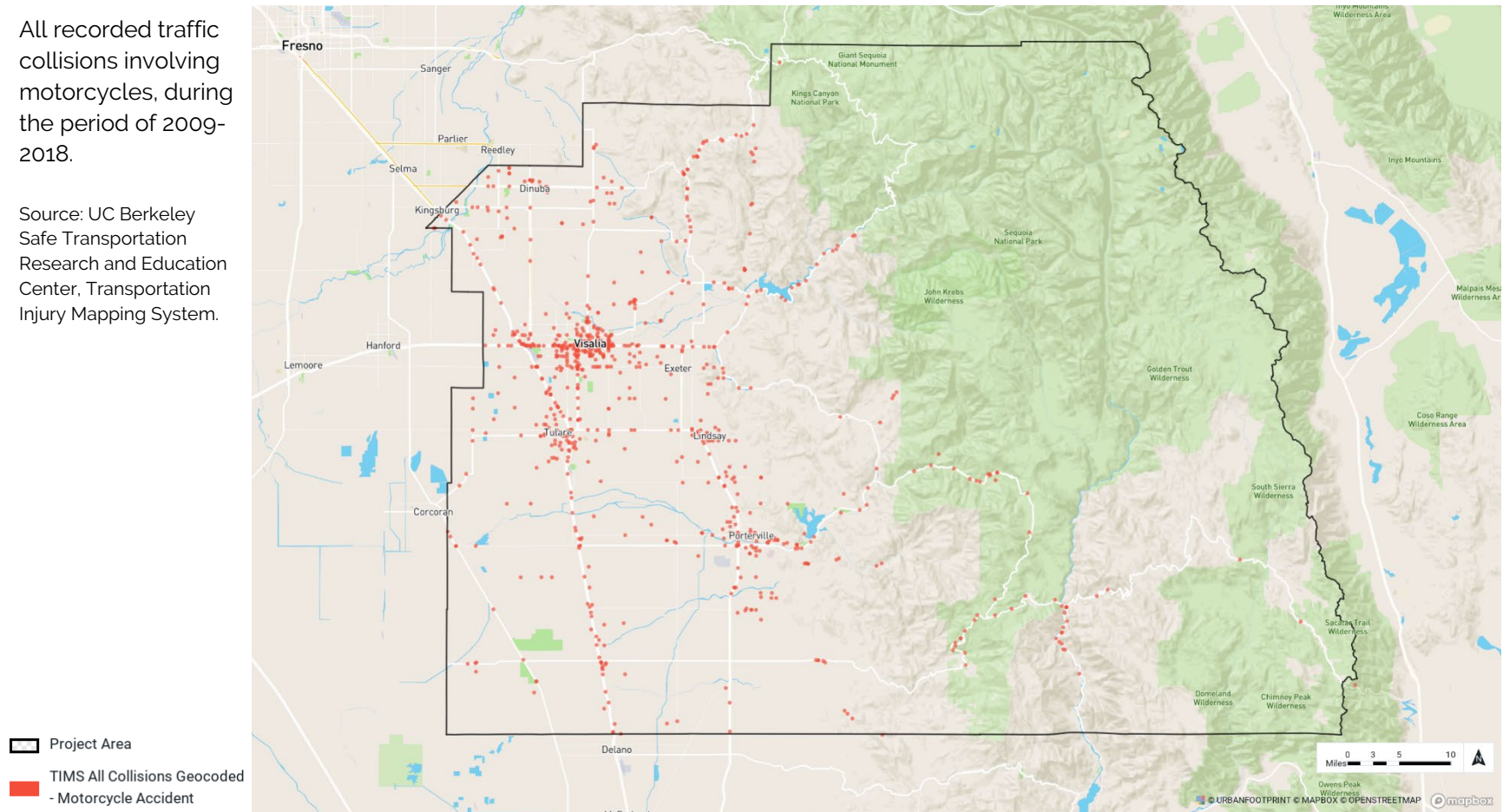
Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.



## Collisions Involving Motorcycles

All recorded traffic collisions involving motorcycles, during the period of 2009-2018.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.

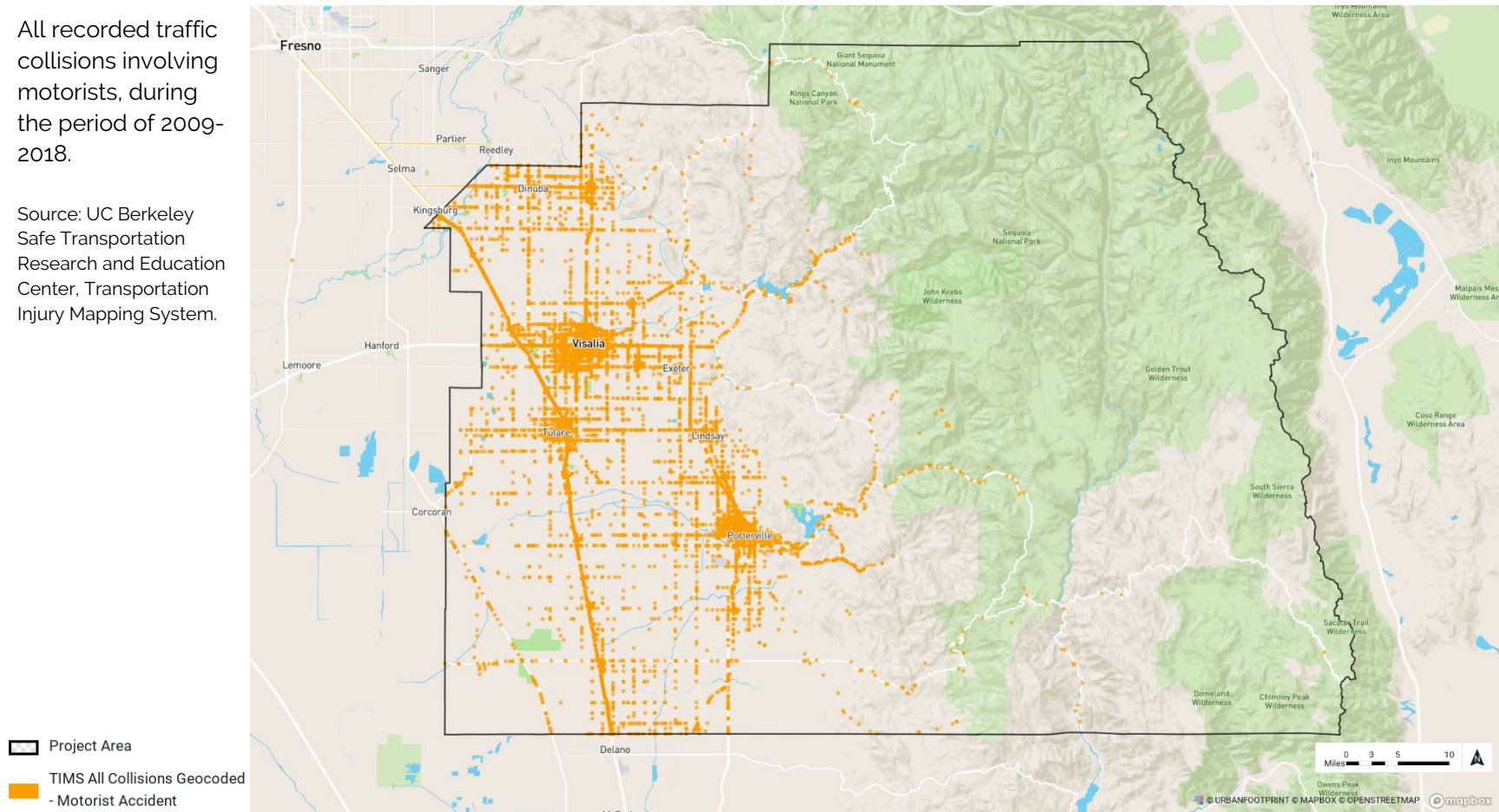




## Collisions Involving Motorists

All recorded traffic collisions involving motorists, during the period of 2009-2018.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.






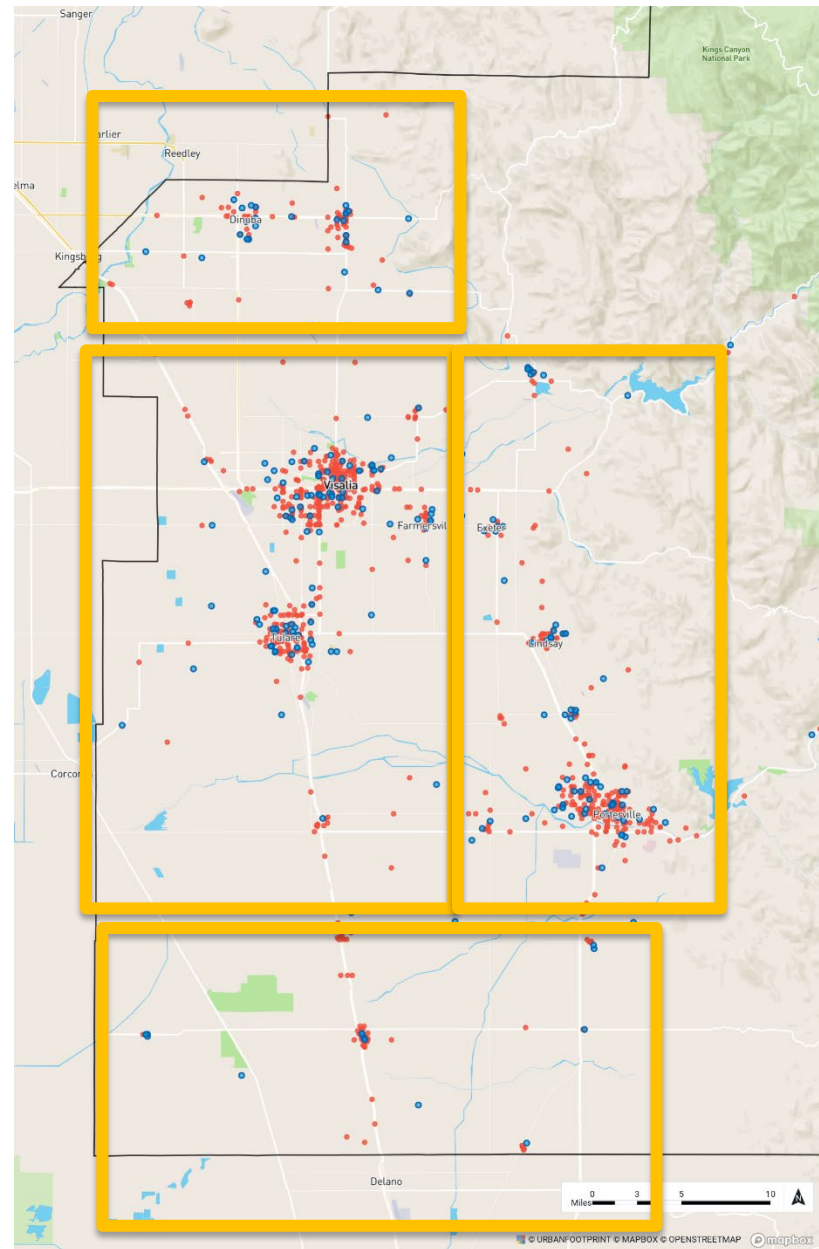
## Pedestrian Collisions and Schools

### Collisions with Injuries and Fatalities Near Schools: Regional

According to the Transportation Injury Mapping System (TIMS) statewide database, 926 collisions involving pedestrians occurred within Tulare County during the time period 2009-2018. This spatial analysis found that 375 collisions, or 40.5% of all collisions involving pedestrians, occurred within a 5-minute walk of school entrances (represented as blue circles in the following maps). Among the 375 collisions that occurred within a 5-minute walkshed of school entrances, 347 of them, or 92.5%, involved injuries to pedestrians. Moreover, 306 of the 375 collisions near schools, or 81.6%, occurred during the school week when there are greater concentrations of children and youth walking near schools.

The following set of maps present more localized collision sites, focusing (“zooming in”) on the four areas outlined in yellow on the map to the right, as well as city-specific maps for the county's three largest cities: Visalia, Tulare, and Porterville.

-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries






Sources: TIMS, UrbanFootprint

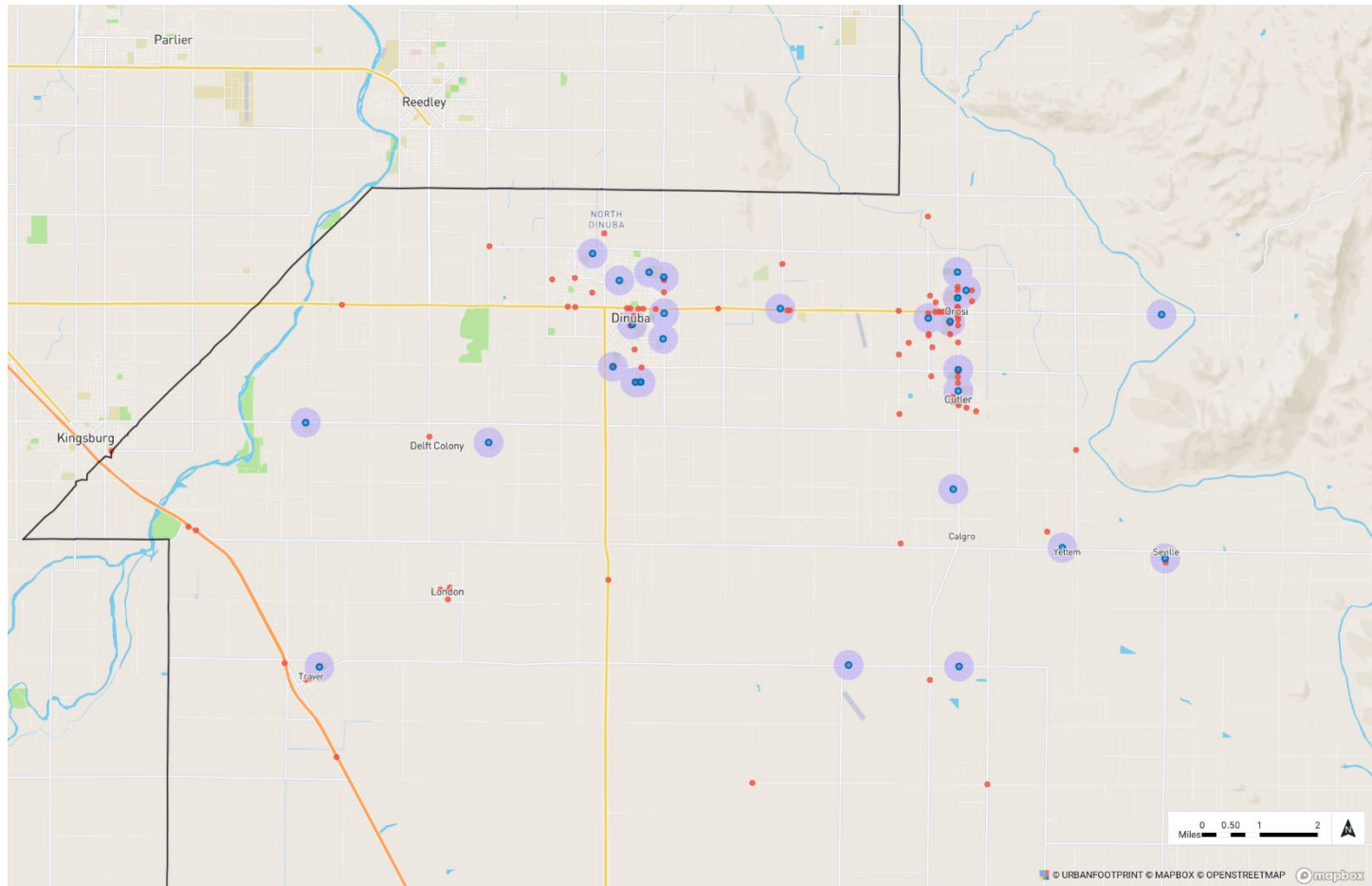


## Collisions with Injuries and Fatalities Near Schools: North County

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in north county.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.





-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries
-  Buffered: Sensitive Use - All Schools - 0.25Mile

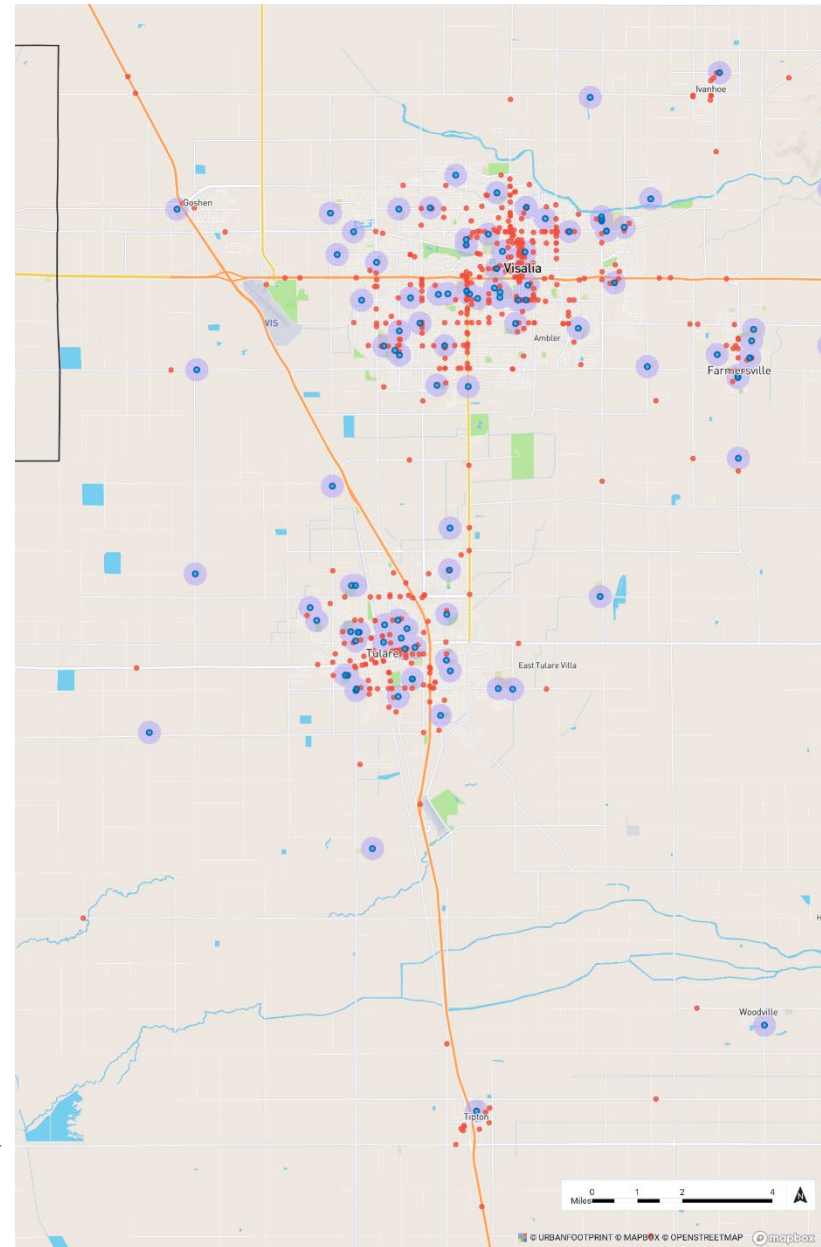


## Collisions with Injuries and Fatalities Near Schools: Visalia and Tulare Area

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in the Visalia and Tulare area.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.





-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries
-  Buffered: Sensitive Use - All Schools - 0.25Mile

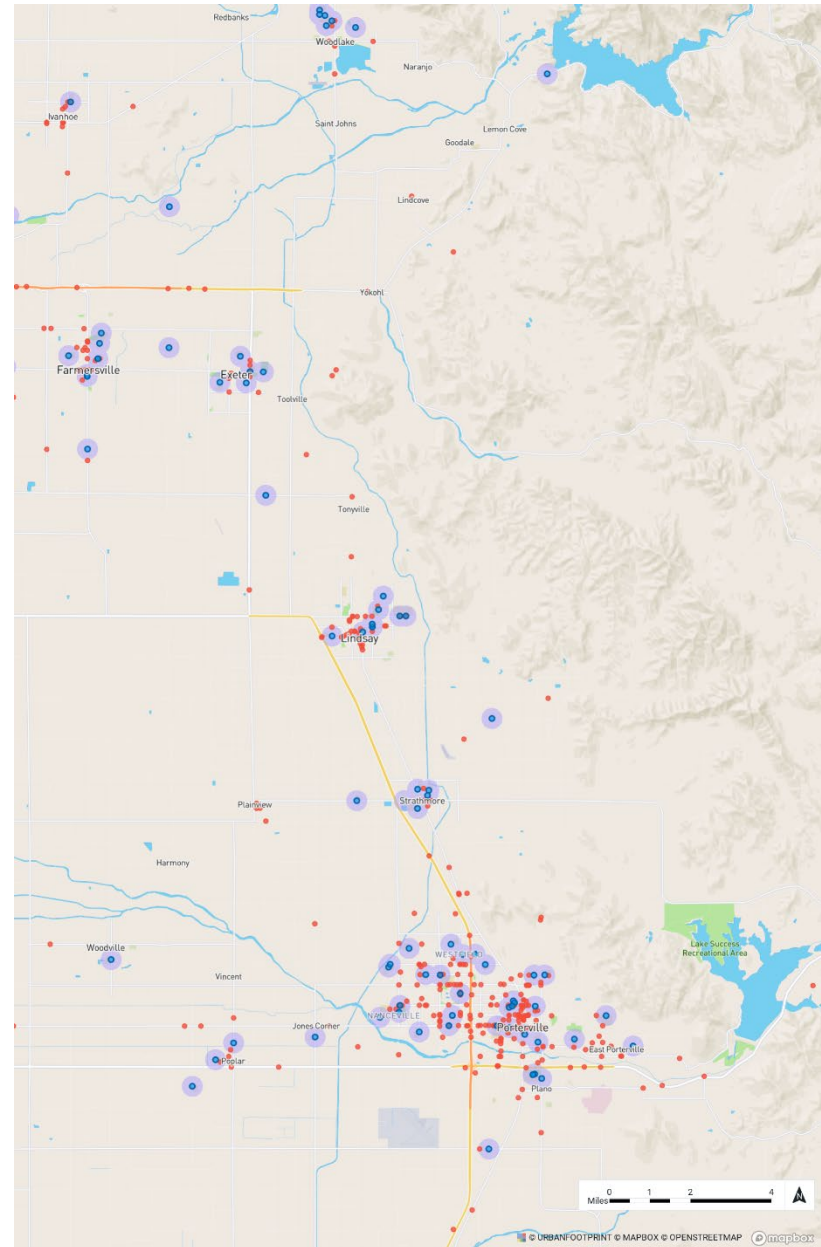


## Collisions with Injuries and Fatalities Near Schools: Porterville Area

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in the Porterville area.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.





-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries
-  Buffered: Sensitive Use - All Schools - 0.25Mile

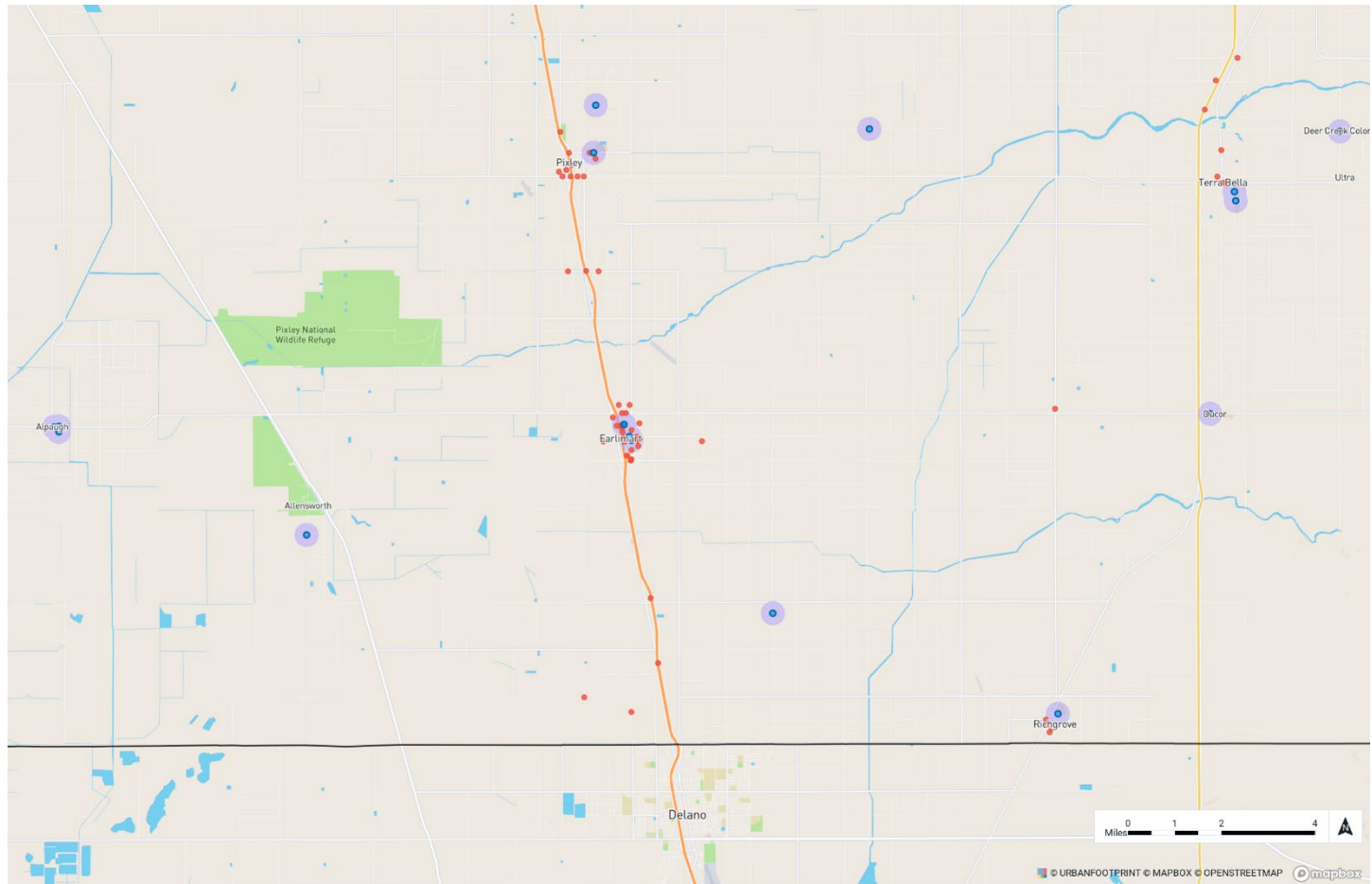


## Collisions with Injuries and Fatalities Near Schools: South County

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in south county.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.

-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries
-  Buffered: Sensitive Use - All Schools - 0.25Mile

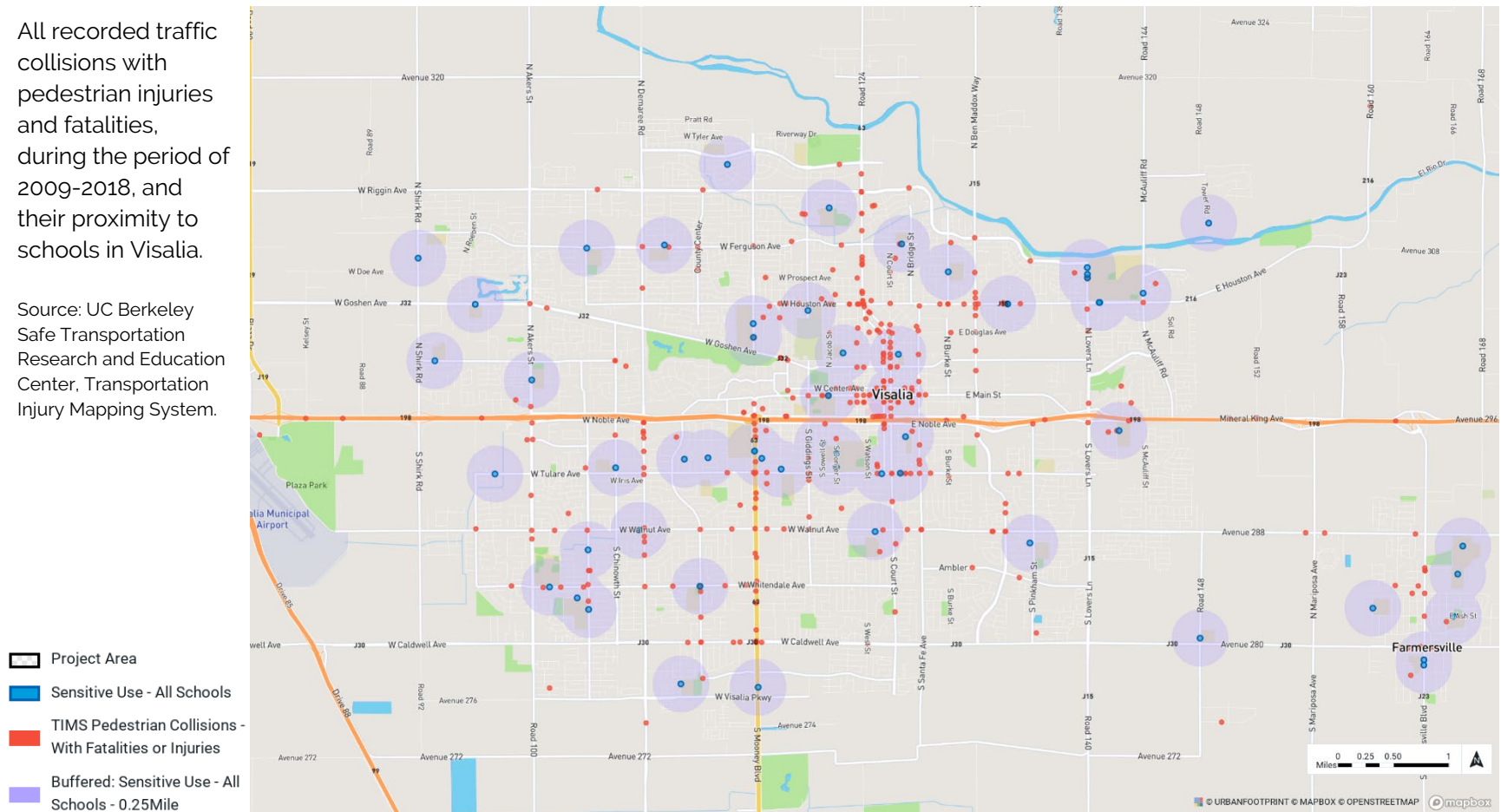




## Collisions with Injuries and Fatalities Near Schools: Visalia

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in Visalia.

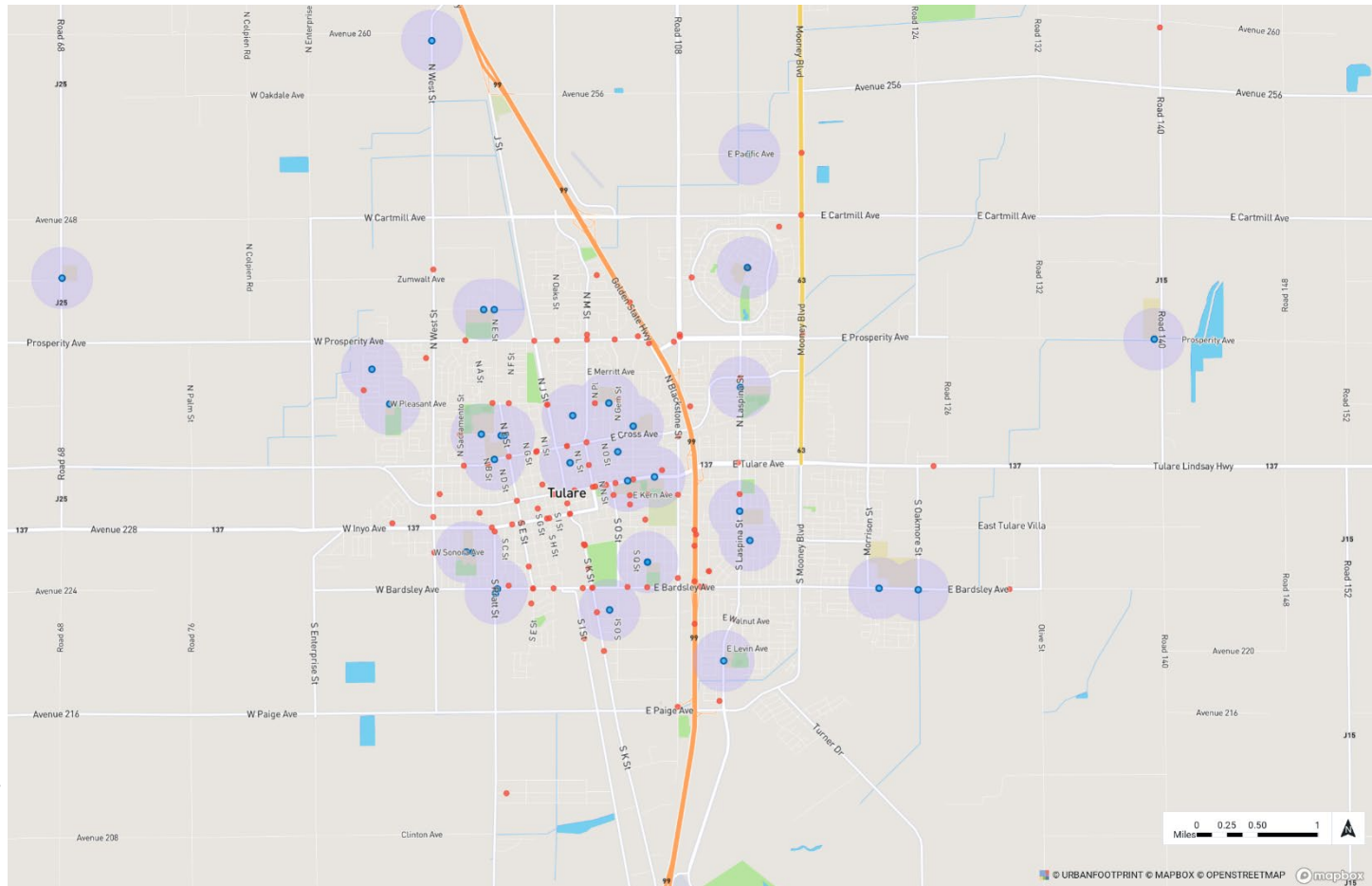
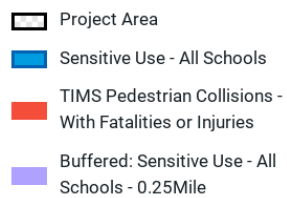
Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.



## Collisions with Injuries and Fatalities Near Schools: Tulare

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in Tulare.




Source: UC Berkeley  
Safe Transportation  
Research and Education  
Center, Transportation  
Injury Mapping System.

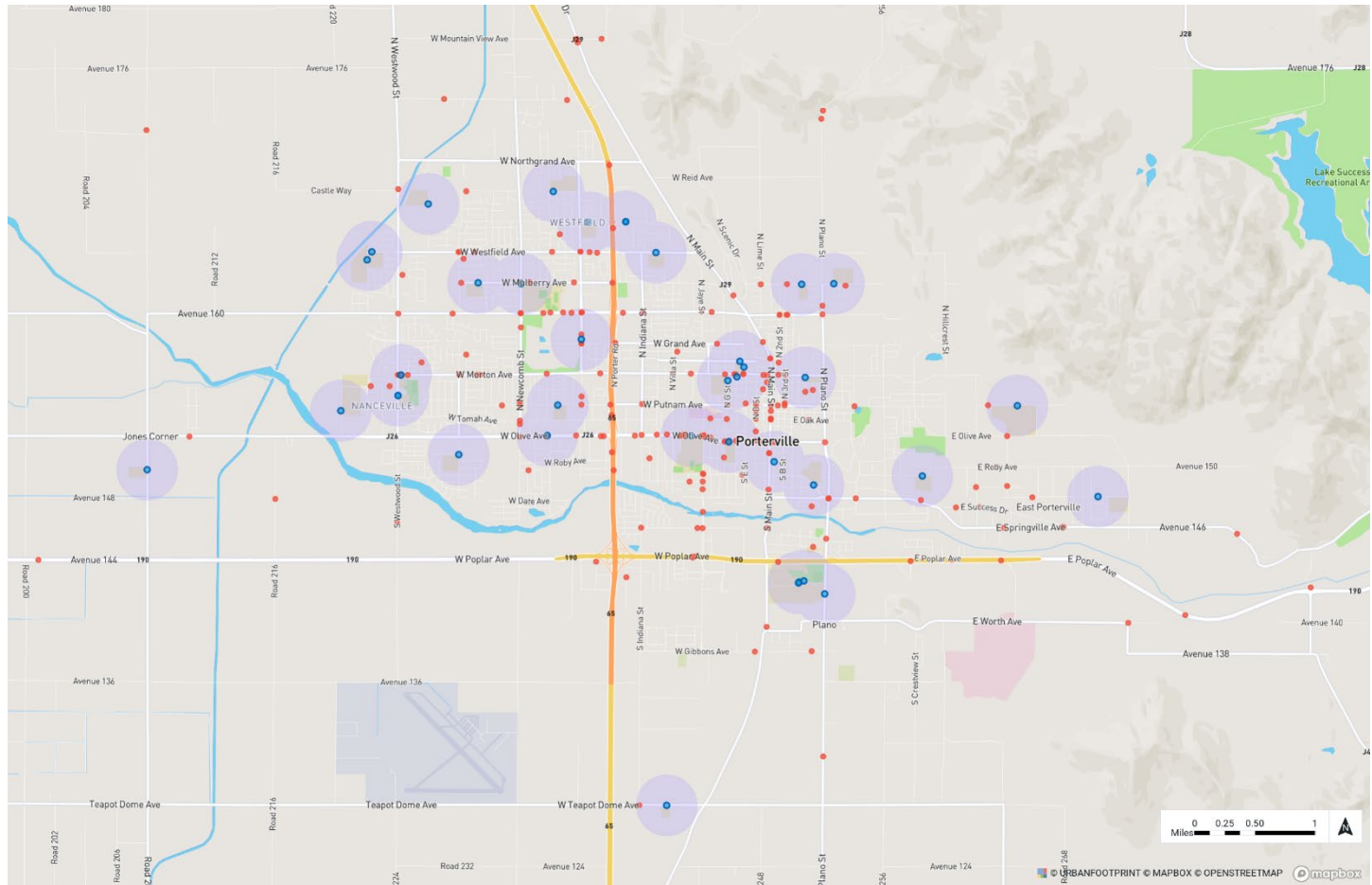


## Collisions with Injuries and Fatalities Near Schools: Porterville

All recorded traffic collisions with pedestrian injuries and fatalities, during the period of 2009-2018, and their proximity to schools in Porterville.

Source: UC Berkeley Safe Transportation Research and Education Center, Transportation Injury Mapping System.

-  Project Area
-  Sensitive Use - All Schools
-  TIMS Pedestrian Collisions - With Fatalities or Injuries
-  Buffered: Sensitive Use - All Schools - 0.25Mile



## Healthcare Access and Utilization

### Countywide Access to Healthcare Providers and Preventative Healthcare

According to data from County Health Rankings & Roadmaps, Tulare County has lower access to healthcare providers that provide primary and preventive healthcare than the rest of the state (see chart below). Specifically, the county's ratio of residents to primary care physicians (2,350:1) is nearly twice as high as the statewide average (1,250:1). Tulare County also has a significantly higher ratio of residents to dentists (1,850:1) compared to the statewide average (1,150:1), a much higher ratio of residents to other primary care providers (1,170:1) compared to the statewide average (620:1).

	Tulare County	Error Margin	Top U.S. Performers ^	California
<b>Clinical Care</b>				
Uninsured	9%	8-10%	6%	8%
Primary care physicians	2,350:1		1,030:1	1,250:1
Dentists	1,850:1		1,210:1	1,150:1
Mental health providers	350:1		270:1	270:1
Preventable hospital stays	3,923		2,565	3,358
Mammography screening	34%		51%	36%
Flu vaccinations	43%		55%	43%
<b>Additional Clinical Care (not included in overall ranking)</b>				
Uninsured adults	12%	11-13%	7%	10%
Uninsured children	3%	2-4%	3%	3%
Other primary care providers	1,170:1		620:1	1,480:1

^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data

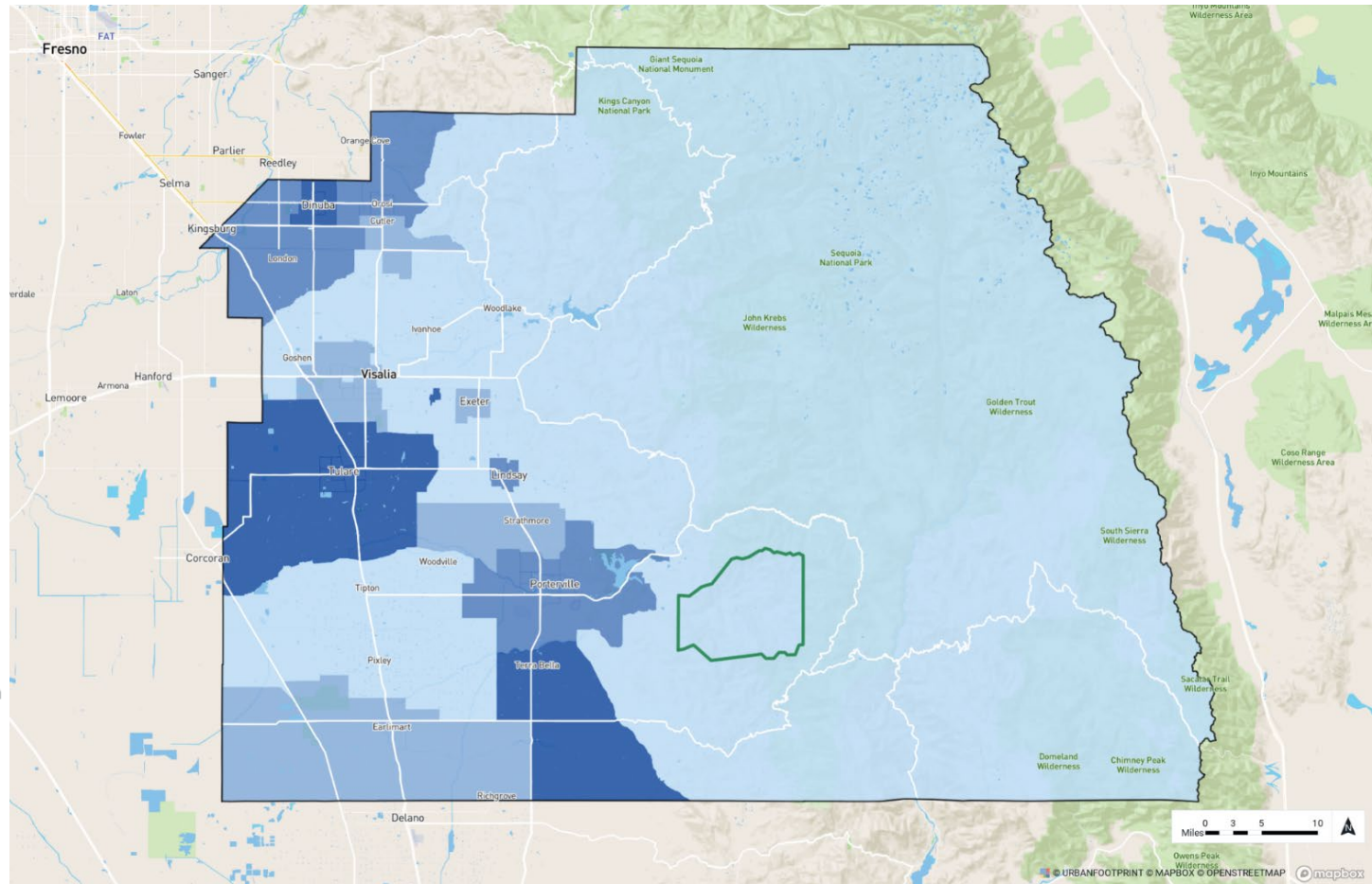
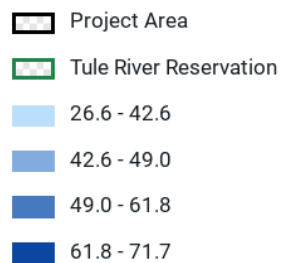
Source: County Health Rankings & Roadmaps. 2021.



## Asthma-Related Emergency Department Visits

Age-adjusted rate of emergency department visits for asthma per 10,000 people (averaged over 2015-2017) by census tract.

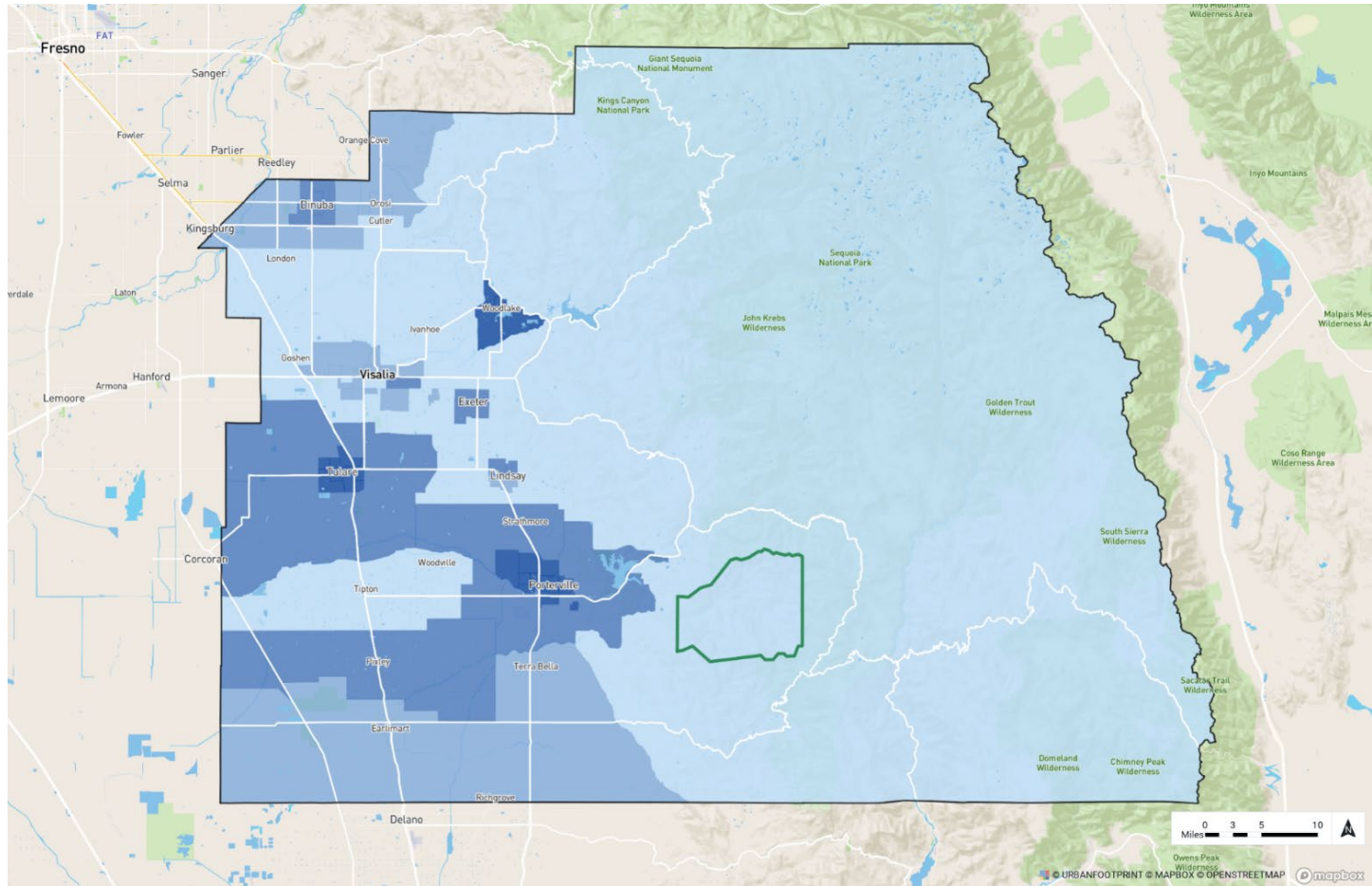
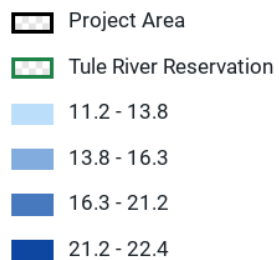
Source: California Office of Environmental Health Hazard Assessment.



## Cardiovascular Disease-Related Emergency Department Visits

Age-adjusted rate of emergency department visits for acute myocardial infarction (i.e., heart attack) per 10,000 people (averaged over 2015-2017) by census tract.

Source: California Office of Environmental Health Hazard Assessment.

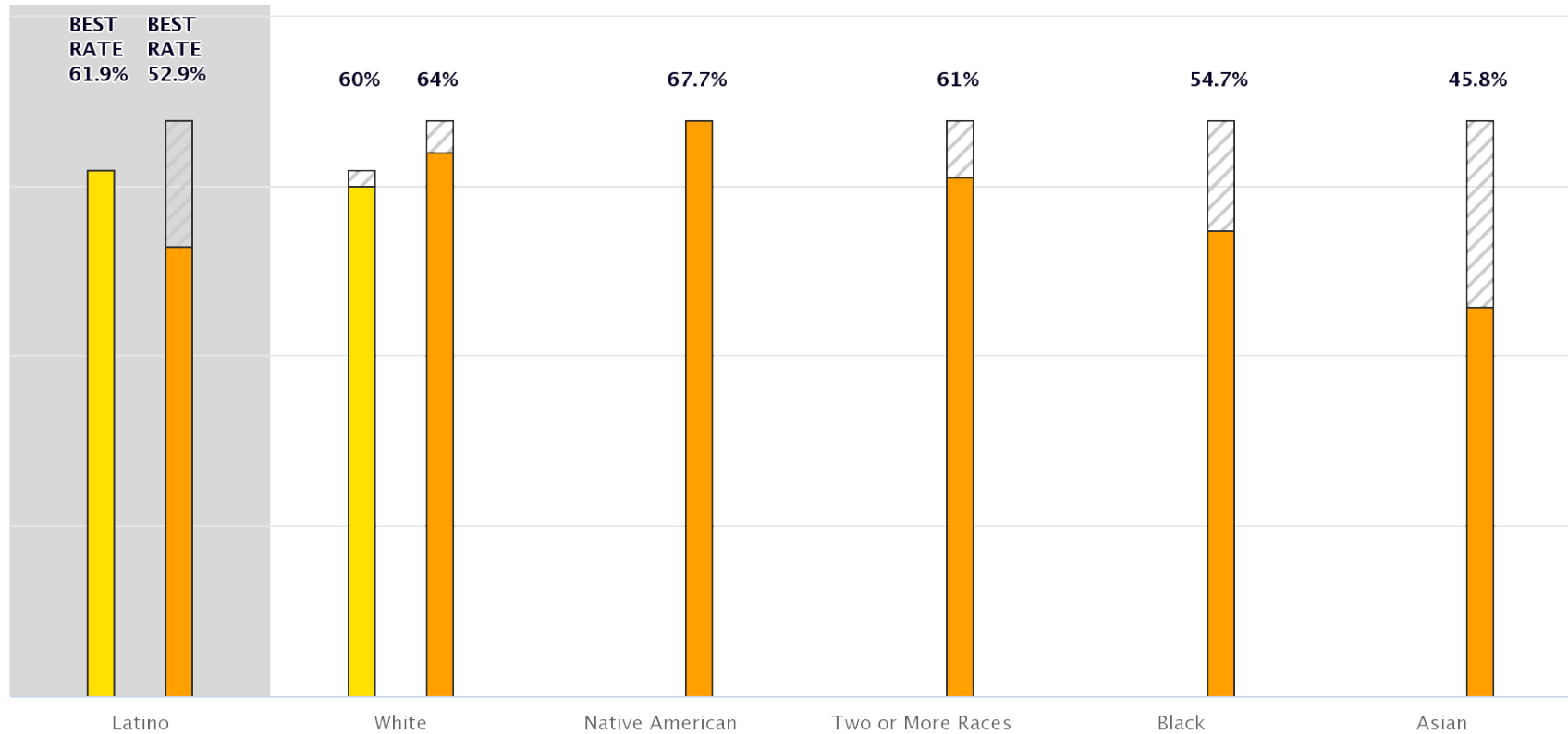


## Racial/Ethnic Inequities in Healthcare Utilization

The yellow bar (on left side) represents Tulare County data, while the orange bar (right side) is for all of California.

### Adults who Got Help for Mental/Emotional or Alcohol/Drug Issues (%)

Tulare County, California



© Advancement Project California; RACE COUNTS, racecounts.org, 2021  
<https://www.racecounts.org/county/tulare/> (accessed December 6, 2021)

**Data Source:** California Health Interview Survey (2011–17)

**Our Partners:** California Calls, USC Dornsife, PICO California

## Social Determinants of Health

As defined by the U.S. Department of Health and Human Services, the social determinants of health are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. A few examples of social determinants of health include transportation, housing, air and water quality, access to nutritious foods, access to physical activity opportunities, racism and discrimination, and other neighborhood conditions. The social determinants of health play an important role in contributing to health disparities and inequities, such as those described in this report in Tulare County.

Social and Economic Factors that Shape Health in Tulare County Compared to California and the U.S.

	Tulare County	Error Margin	Top U.S. Performers ^	California
<b>Social &amp; Economic Factors</b>				
High school completion	71%	70-72%	94%	83%
Some college	48%	46-50%	73%	66%
Unemployment	9.6%		2.6%	4.0%
Children in poverty	26%	21-31%	10%	16%
Income inequality	4.9	4.7-5.1	3.7	5.2
Children in single-parent households	24%	23-26%	14%	23%
Social associations	4.9		18.2	5.9
Violent crime	382		63	421
Injury deaths	58	55-61	59	52

*Continued on following page.*



Continued from previous page.

	County	Error Margin	Top U.S. Performers ^	California
<b>Additional Social &amp; Economic Factors (not included in overall ranking)</b>				
High school graduation	90%		95%	87%
Disconnected youth	10%	8-12%	4%	6%
Reading scores	2.7		3.3	2.9
Math scores	2.5		3.4	2.7
Median household income	\$56,800	\$53,900-59,600	\$72,900	\$80,400
Children eligible for free or reduced price lunch	76%		32%	59%
Residential segregation - Black/White	60		23	55
Residential segregation - non-white/white	17		14	38
Homicides	8	7-9	2	5
Suicides	10	9-12	11	11
Firearm fatalities	10	9-12	8	8
Juvenile arrests				

^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data

Source: County Health Rankings & Roadmaps. 2021.

## Physical Environment Factors that Shape Health in Tulare County Compared to California and the U.S.

	County	Error Margin	Top U.S. Performers ^	California
<b>Physical Environment</b>				
Air pollution - particulate matter	14.7		5.2	8.1
Drinking water violations	Yes			
Severe housing problems	27%	26-28%	9%	26%
Driving alone to work	79%	78-80%	72%	74%
Long commute - driving alone	26%	25-27%	16%	42%
<b>Additional Physical Environment (not included in overall ranking)</b>				
Traffic volume	400			1,991
Homeownership	57%	56-58%	81%	55%
Severe housing cost burden	19%	18-21%	7%	20%
Broadband access	78%	77-79%	86%	87%

^ 10th/90th percentile, i.e., only 10% are better.

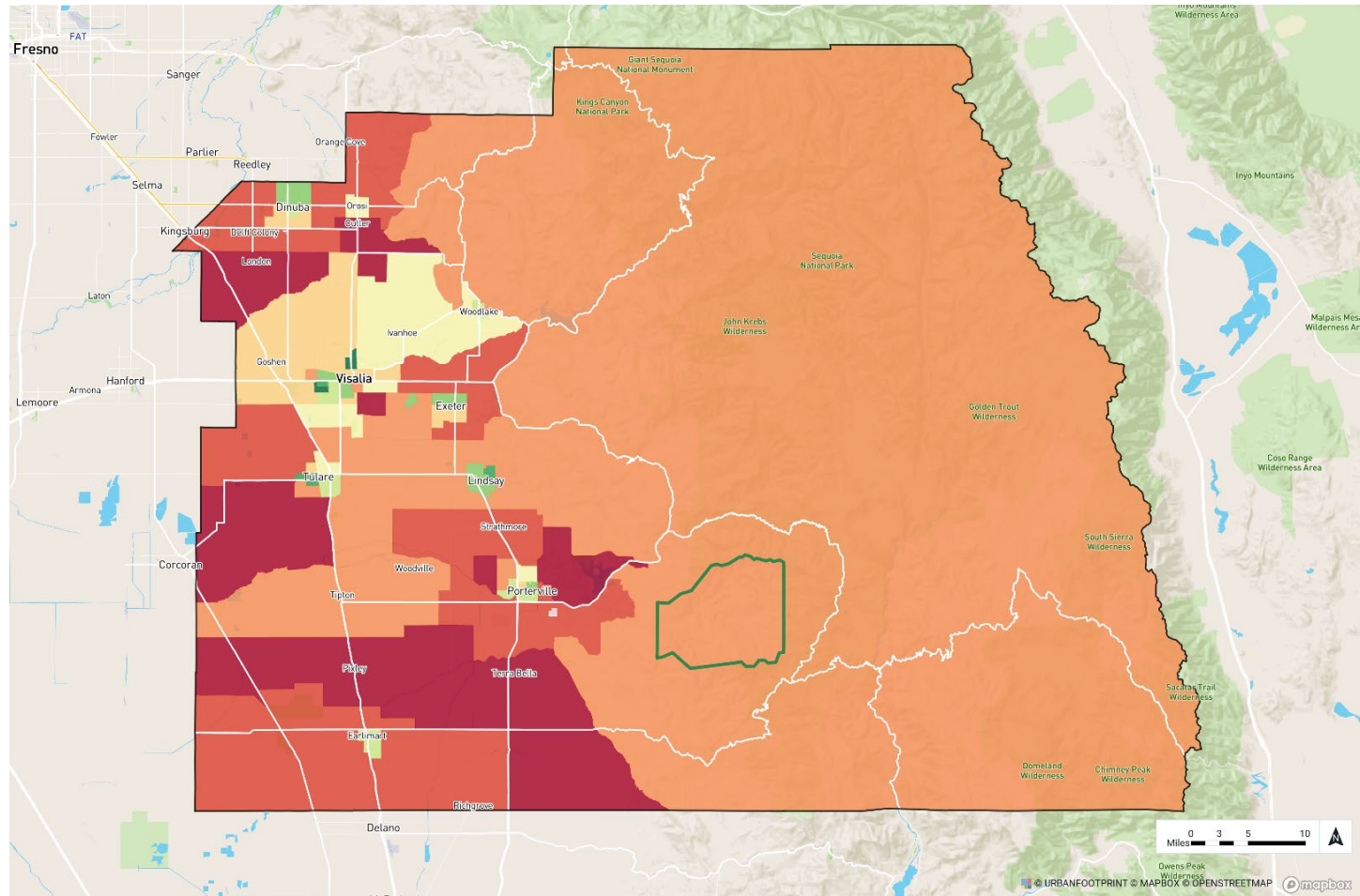
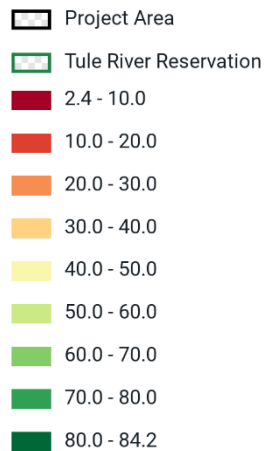
\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data

Source: County Health Rankings & Roadmaps. 2021.

## Supermarket Access

Percentile scores for the percentage of people residing within 0.5 miles (urban) or 1 mile (rural) of a supermarket or large grocery store. Higher scores indicate greater access relative to the rest of California. Source: Public Health Alliance of Southern California.

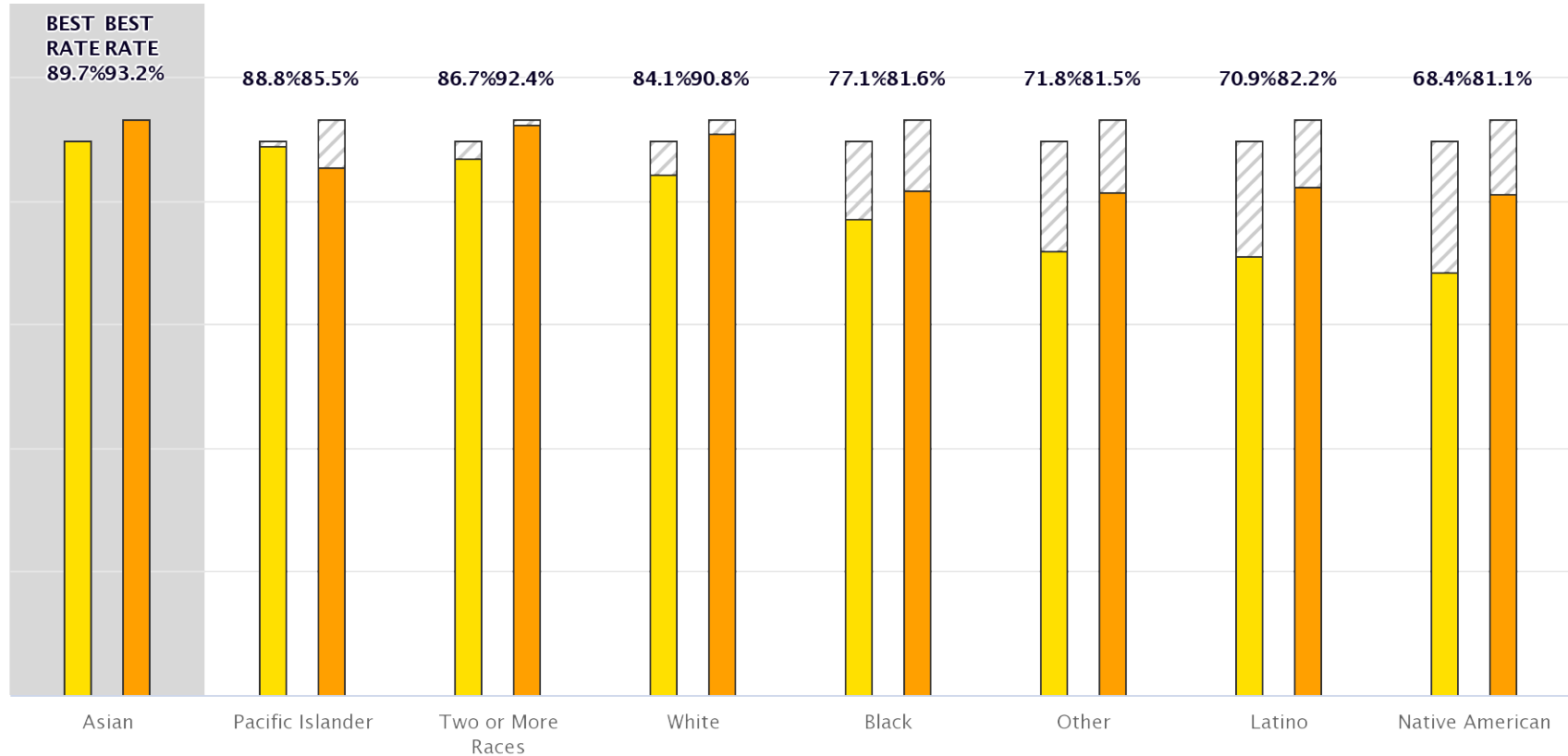


## Racial/Ethnic Inequities related to Internet Access

The yellow bar (on left side) represents Tulare County data, while the orange bar (right side) is for all of California.

### Persons with Internet Access (%)

Tulare County, California



© Advancement Project California; RACE COUNTS, [racecounts.org](https://www.racecounts.org), 2021  
<https://www.racecounts.org/county/tulare/> (accessed December 6, 2021)  
**Data Source:** American Community Survey 5-Year Estimates, Table S2802 (2014–2018)  
**Our Partners:** California Calls, USC Dornsife, PICO California



## Disadvantaged Community Screening Analysis

### Methods Used in the Analysis

As part of the Environmental Justice and Health Impact Assessment of the 2022 update to Tulare County's Regional Transportation Plan and Sustainable Communities Strategy, TCAG developed a custom methodology to identify disadvantaged communities within the county. TCAG assessed more than two dozen indicators for health, equity, and environmental justice (see table on the next page). Whenever possible, these indicators presented data for all census block groups within the county.

Below are short descriptions for each of the units of geography used to identify Tulare County's environmental justice disadvantaged communities for the purpose of the environmental justice analysis and health impact assessment.

- **Census Tract:** A statistical subdivision of a county designated by the U.S. Census Bureau. A census tract generally has a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. Census tracts are often used in demographic analysis because their optimum size allows for community-level data with low margins of error.
- **Census Block Group:** A small statistical subdivision of county designated by the U.S. Census Bureau. A block group generally has a population size between 600 and 3,000 people. Every census tract has at least one block group, and block groups are uniquely numbered within a census tract.

TCAG adopted an iterative approach of sequentially narrowing indicators to ensure that approximately one-quarter of the county's population would be identified as living in a disadvantaged community. This top 25% threshold is a standard used in CalEnviroScreen and, for the purposes of this methodology, it has been tailored to Tulare County. Ultimately, seven indicators were chosen for the final identification of disadvantaged communities (see table on the next page). These seven indicators identify areas in the county with the most overall pollution burden, transportation challenges, and racial and economic inequities.

The criteria initially used to identify environmental justice disadvantaged communities in Tulare County initially identified the majority of the area and population of Tulare County. TCAG therefore developed two categories of DACs (i.e., Inclusive EJ DACs and Priority EJ DACs) in order to better prioritize the needs of communities with the most overall pollution burden, transportation challenges, and racial and economic inequities. The Inclusive EJ DACs are areas that qualify for EJ state and federal grants; represent 73% of the county's area and 82% of all residents. In contrast, the Priority EJ DACs were designed to have higher thresholds for disproportionate burden to ensure that approximately one-quarter of the county's population would be identified as living in a DAC. This top 25% of population threshold is a standard used at the statewide level for

CalEnviroScreen and, thus, it has been tailored to Tulare County. Priority EJ DACs represent 20% of the county's area and 28% of residents.

#### Indicators for DAC Screening Analysis

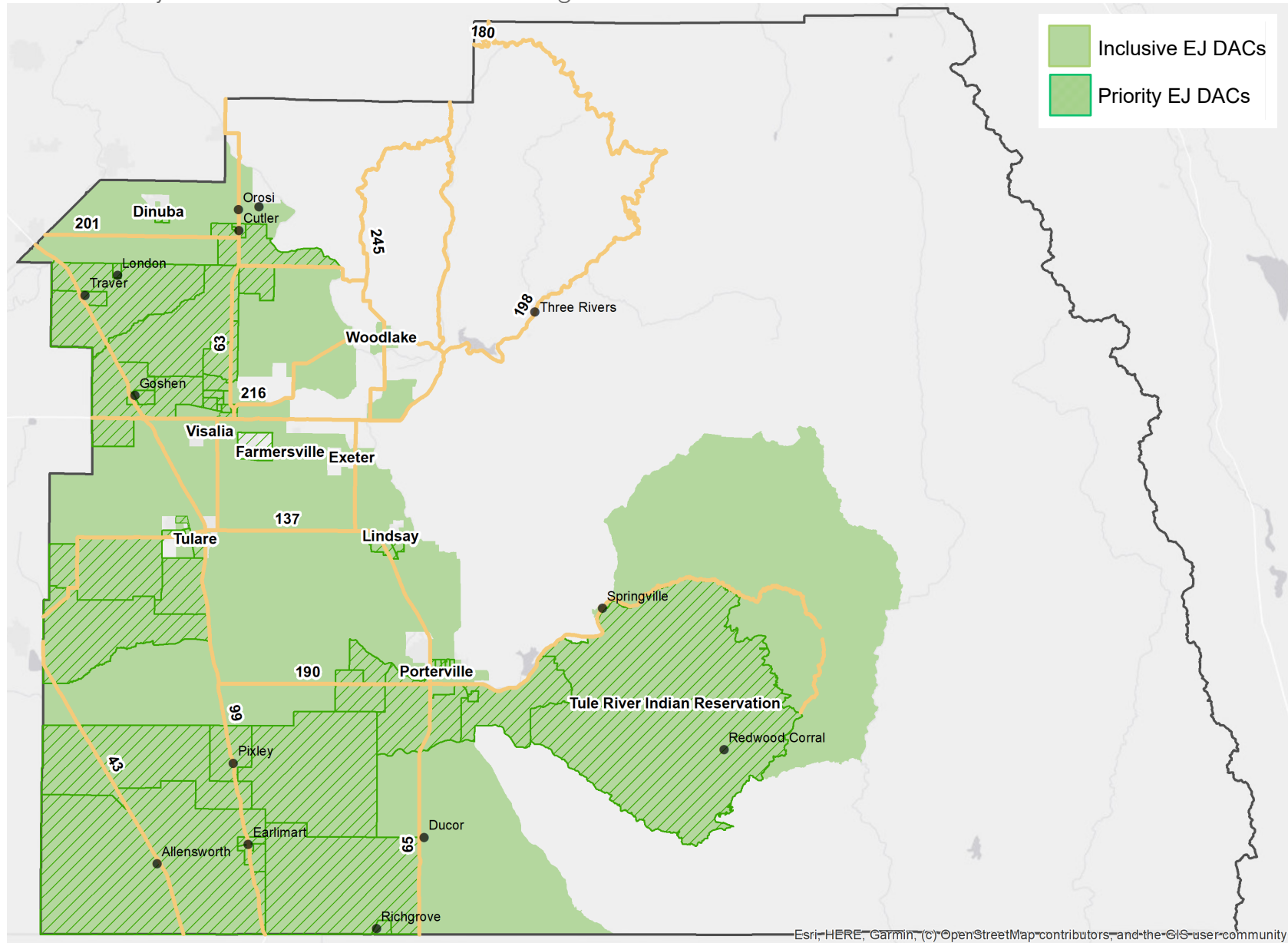
Indicator		Inclusive EJ DACs	Priority EJ DACs
Racially/ethnically concentrated area of poverty			
More than 250 American Indian/Alaska Native residents			
More than 250 Black or African American residents			
Median income is below 80% of the County's AMI			
More than 400 households severely housing cost-burdened			
More than 150 households without a vehicle			
CalEnviroScreen 4.0 aggregate pollution burden* at or above:	75 <sup>th</sup> percentile		
	95 <sup>th</sup> percentile		
<b>Percent of County's Total Population</b>		<b>81.7%</b>	<b>27.6%</b>

#### Analysis Results: Environmental Justice Disadvantaged Communities

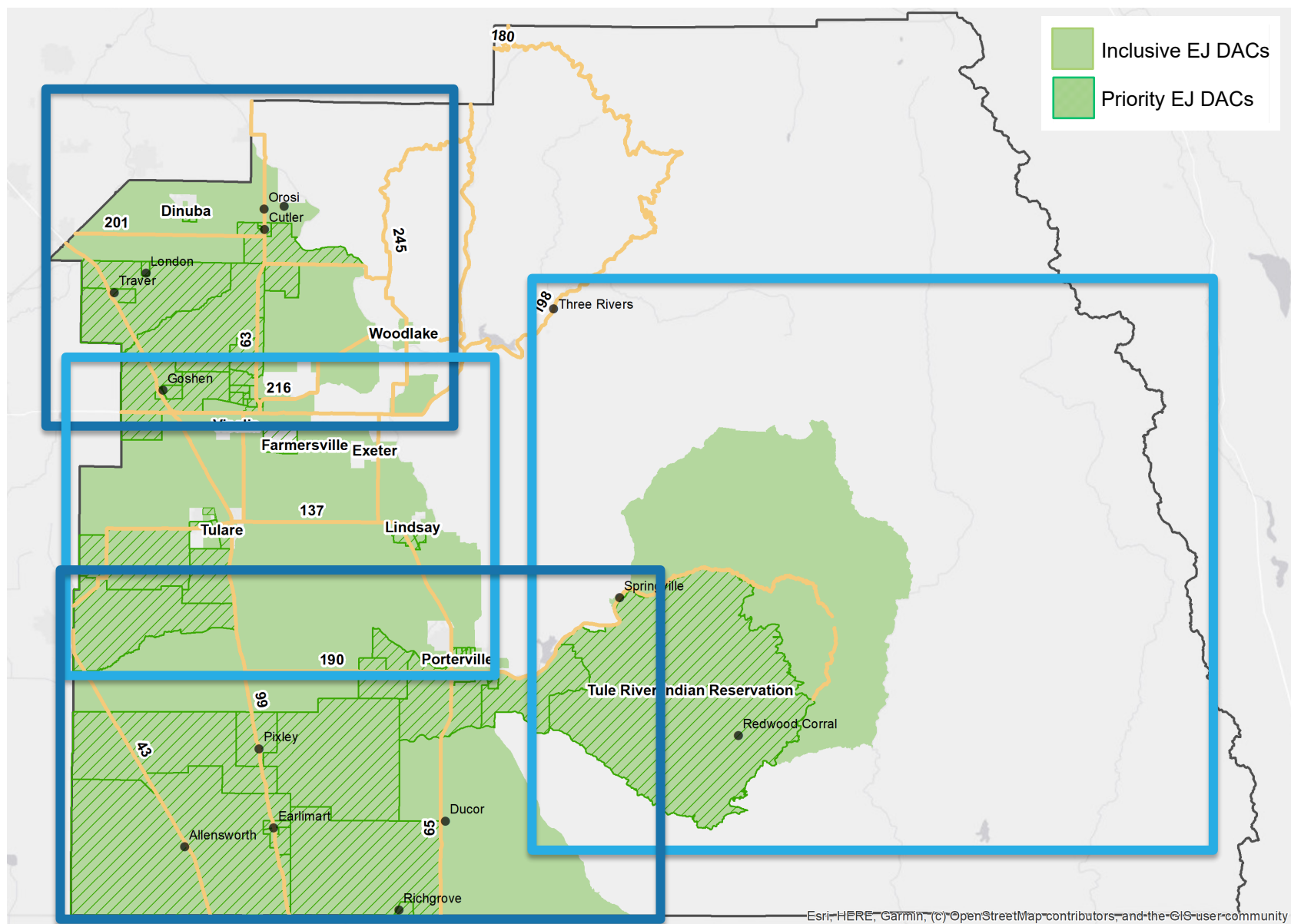
The map on the next page displays the spatial results of the DAC screening analysis at the block group level. Most of the western one-third of the county, in addition to the block groups in and around the Tule River Indian Reservation, were identified as Inclusive EJ DACs. In contrast, the Priority EJ DACs were found to be concentrated in four areas of the County:

1. Northwest Tulare County: Cutler, Goshen, London, South Dinuba, Traver, and Yettem;
2. West Central Tulare County: Lindsay, Matheny, North Visalia, Northwest Visalia, Southwest Tulare, Waukena, and West Tulare;
3. Southwest Tulare County: Allensworth, Alpaugh, Central Porterville, Earlimart, Pixley, Poplar-Cotton Center, and Richgrove;
4. Eastern Tulare County: Springville and the Tule River Indian Reservation.

## Tulare County Environmental Justice Disadvantaged Communities

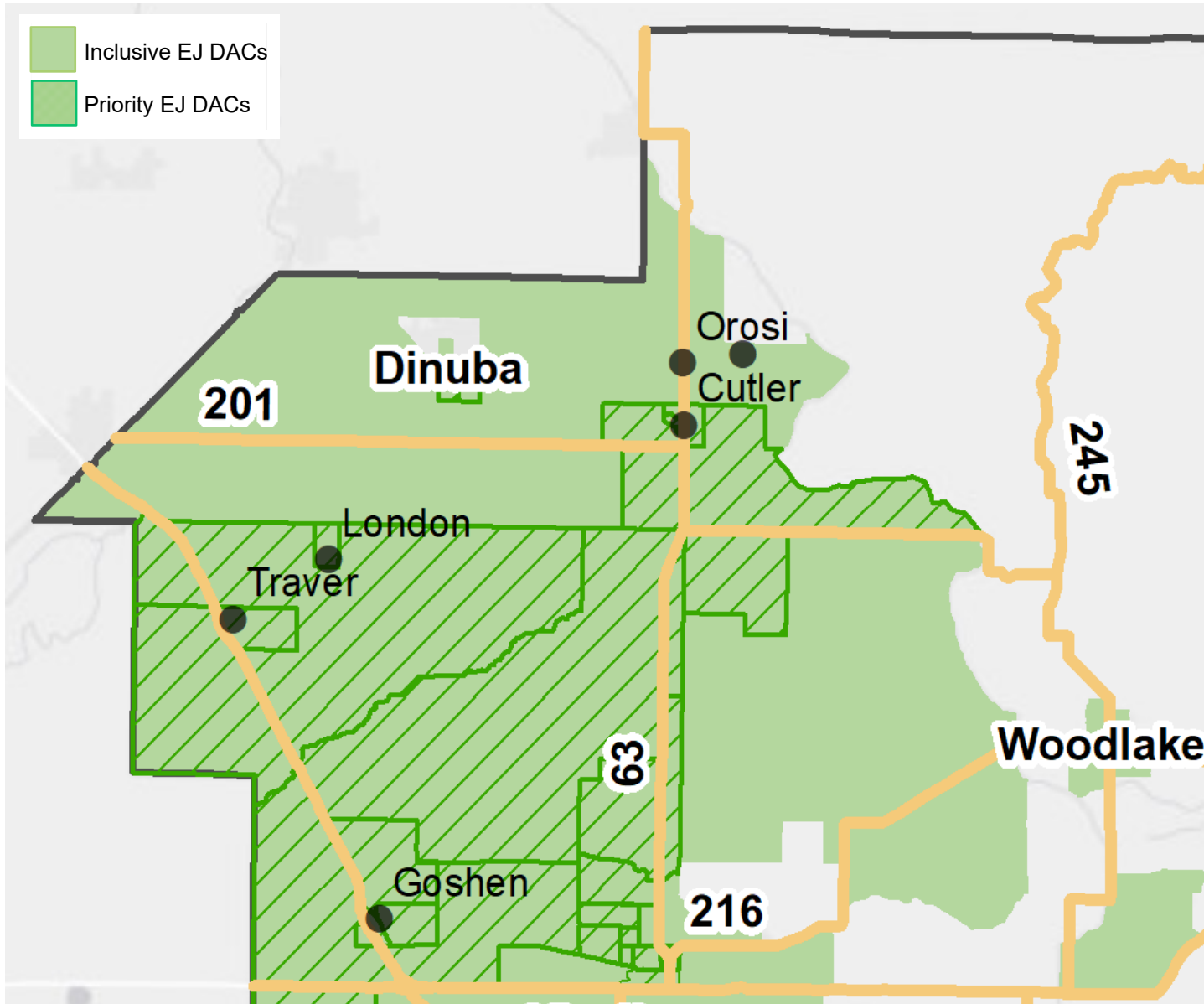


## Tulare County Environmental Justice Disadvantaged Communities

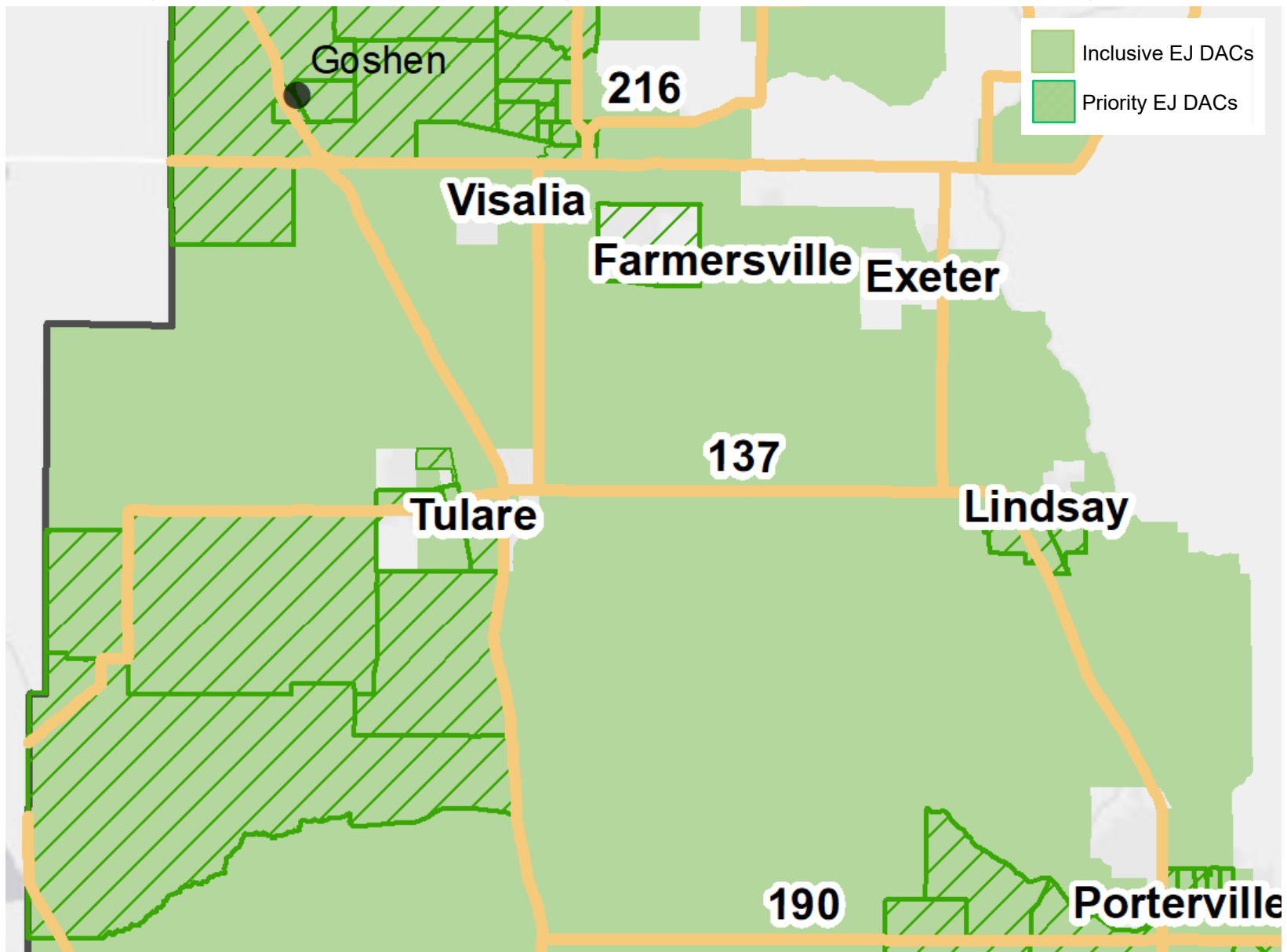




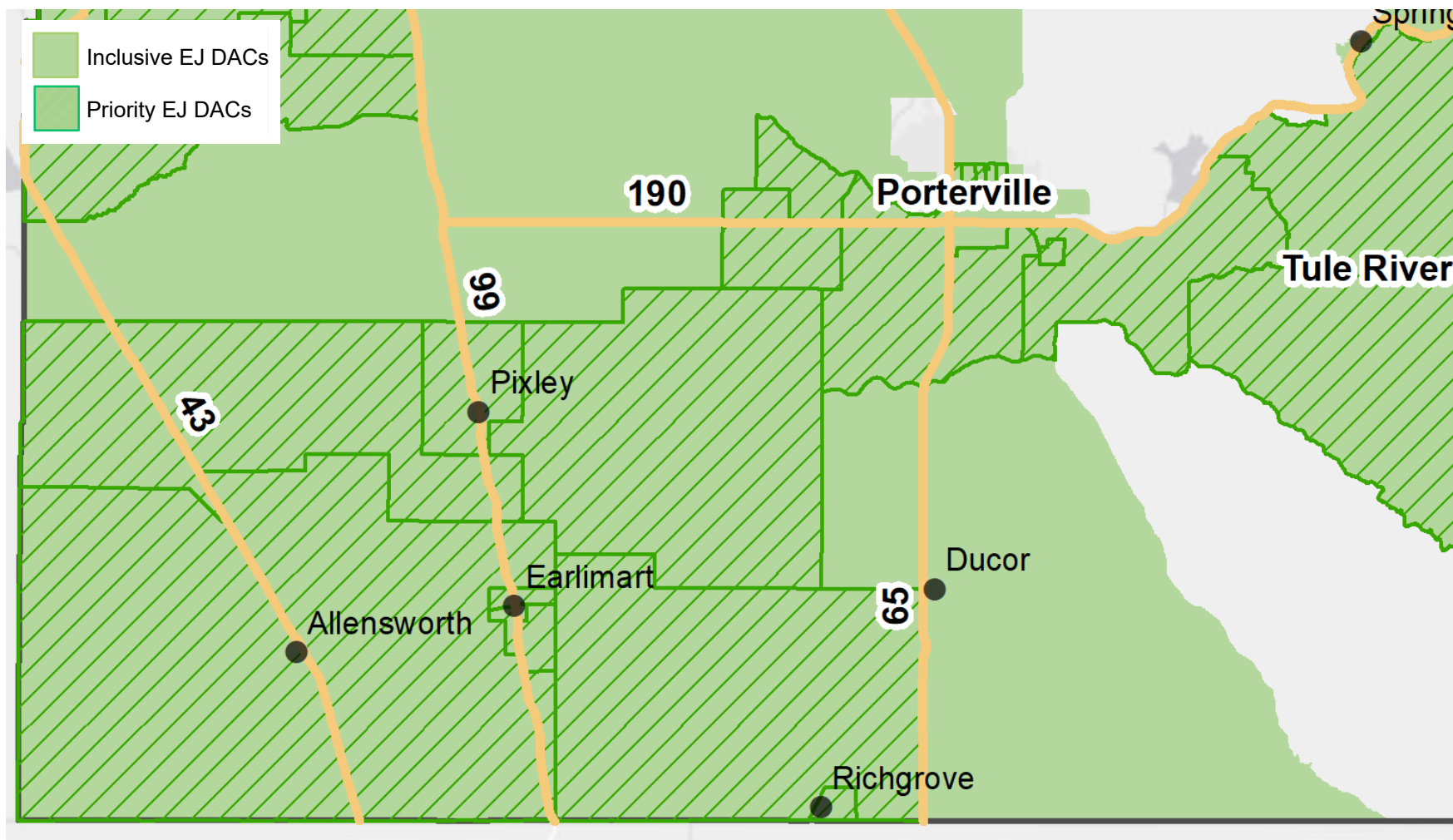
Tulare County Environmental Justice Disadvantaged Communities: Northwest Tulare County



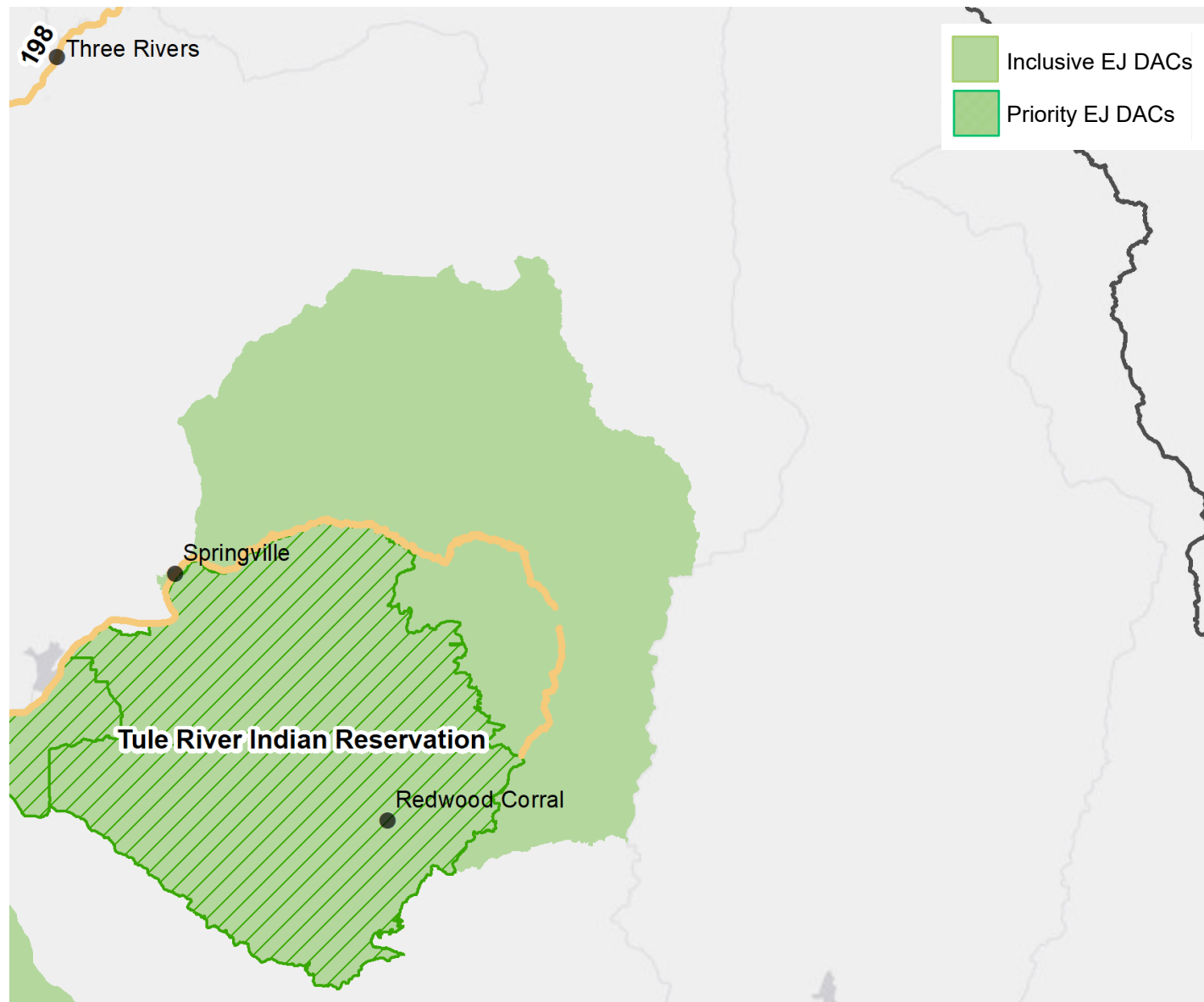
Tulare County Environmental Justice Disadvantaged Communities: West Central Tulare County



## Tulare County Environmental Justice Disadvantaged Communities: Southwest Tulare County



## Tulare County Environmental Justice Disadvantaged Communities: Eastern Tulare County





	Community Includes Area(s):				Community Includes Area(s):		
	Not IDed as an EJ DAC	Within Inclusive EJ DAC	Within Priority EJ DAC		Not IDed as an EJ DAC	Within Inclusive EJ DAC	Within Priority EJ DAC
Incorporated Cities							
City of Dinuba	X	X	X	City of Porterville	X	X	X
City of Exeter	X	X		City of Tulare	X	X	X
City of Farmersville	X	X		City of Visalia	X	X	X
City of Lindsay	X	X	X	City of Woodlake	X	X	
Unincorporated Communities and Census-Designated Places in Tulare County							
Allensworth		X	X	Plainview		X	
Alpaugh		X	X	Ponderosa	X		
California Hot Springs	X			Posey	X		
Camp Nelson	X			Poso Park	X		
Cedar Slope	X			Pixley		X	X
Cutler		X	X	Poplar-Cotton Center		X	X
Delft Colony		X		Richgrove		X	X
Ducor		X		Rodriguez Camp		X	X
Earlimart		X	X	Sequoia Crest	X		

East Orosi		X		Silver City	X		
East Porterville		X	X	Springville	X	X	X
El Rancho		X		Strathmore		X	
East Tulare Villa		X		Sugarloaf Mountain Park	X		
Goshen		X	X	Sugarloaf Saw Mill	X		
Hartland	X			Sugarloaf Village	X		
Idlewild	X			Sultana	X		
Ivanhoe	X			Teviston		X	X
Kennedy Meadows	X			Terra Bella		X	
Lemon Cove	X			Tipton		X	
Lindcove	X			Three Rivers	X		
Linnell Camp		X		Tonyville		X	
London		X	X	Tooleville		X	
Matheny		X	X	Traver		X	X
McClenney Tract	X			Tule River Indian Reservation		X	X
Monson		X		Waukena		X	X
Orosi		X		West Goshen		X	X
Panorama Heights	X			Wilsonia	X		

Patterson Tract		X	X	Woodville		X	
Pierpoint	X			Yettem		X	X
Pine Flat	X						

# Chapter 2: Community Engagement

## Background

As part of the Environmental Justice (EJ) and Health Impact Assessment (HIA) analyses for the 2022 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS), Raimi + Associates (R+A) conducted outreach to selected key leaders in Tulare County who were able to provide input on the needs of historically disenfranchised/environmental justice communities throughout the county, as well as about opportunities and concerns related to potential transportation investments. In addition to gathering information for the environmental justice and health impact analyses, the outreach process and initial portion of each interview were also leveraged as an educational opportunity, educating community leaders who have not previously been involved in RTP/SCS planning about the frequency, purpose, and opportunities related to the regional transportation plan.

## Community Engagement Methodology

All leaders who were interviewed had extensive experience (often decades) working with diverse community residents within Tulare County, and were therefore able to speak both to common experiences and trends as well as to key differences between different geographic parts of the county and between different kinds of community members. This outreach approach is a cost-effective engagement method because it limits the amount of people who are engaged while nonetheless ensuring that the information gathered reflects a wide range of resident experiences within the broader context that key leaders can provide. This engagement method is also particularly effective at ensuring that the needs, concerns, and priorities of historically disenfranchised communities are highlighted (whereas engaging sufficient numbers of diverse residents from historically disenfranchised communities is a time- and resource-intensive task).

All interviews were conducted via remote web meeting (zoom). Key leaders were initially invited to participate in group interviews with other key leaders with experience with the same or similar historically disenfranchised communities, but some leaders were interviewed 1:1 to ensure that scheduling did not exclude them from participating.

Interviews focused on a series questions related to health, equity, and environmental justice (see below table).



## Stakeholder interview questions

	Agricultural Workers	Cutler-Orosi	Historically Disenfranchised Communities	Public Health
Primary community needs and communities most burdened by inequities	<ul style="list-style-type: none"> <li>What are the primary long-term unmet needs of agricultural workers in Tulare County? If there are certain unmet needs that are more common for ag workers based in certain areas of the county (e.g., along Rt 99, without access to transit, outside of Cutler-Orosi), what are they?</li> <li>How has the COVID-19 pandemic changed transportation needs, use, and/or concerns (if at all) for ag workers in Tulare County?</li> </ul>	<ul style="list-style-type: none"> <li>What are the primary long-term unmet needs of people of color and low-income residents in Orosi, East Orosi, and Cutler?</li> <li>How does transportation help address these needs (if at all)? How does it exacerbate these needs (if at all)?</li> </ul>	<ul style="list-style-type: none"> <li>What are the primary long-term unmet needs of people of color and low-income residents throughout Tulare County? Are there significant needs specific to some historically disenfranchised communities?</li> <li>What (if any) inequities exist related to transportation infrastructure (e.g., roads, sidewalks, trails, bike lanes, transit routes, bridges/overpasses) are you aware of locally and/or within the county? Who is negatively impacted by these inequities?</li> <li>What communities (geographic or demographic) do you consider to be most burdened by inequities?</li> </ul>	<ul style="list-style-type: none"> <li>What are the primary long-term unmet needs of people of color and low-income residents throughout Tulare County? Are there significant needs specific to some historically disenfranchised communities?</li> <li>What communities (geographic or demographic) do you consider to be most burdened by inequities?</li> </ul>
Actual transportation investments in Tulare County with positive impacts	<ul style="list-style-type: none"> <li>Are you aware of any examples of ongoing or recent transportation investments in Tulare County that have improved farmworkers' wellbeing (including overall health and access to economic and educational opportunities)? What made that/those investments so meaningful?</li> </ul>	<ul style="list-style-type: none"> <li>Are you aware of any examples of ongoing or recent transportation investments in Cutler-Orosi that have improved residents' wellbeing (including overall health and access to economic and educational opportunities)? What made that/those investments so meaningful?</li> </ul>	[Not included in protocol to allow more time for other questions]	[Not included in protocol to allow more time for other questions]
Opportunities for transportation investments to improve the health and wellbeing of residents	<ul style="list-style-type: none"> <li>Given existing transportation access and challenges, what specific places (if any) do you think should be prioritized for transportation investments to meet the needs of ag workers? Is there a particular group of farmworkers in Tulare County</li> </ul>	<ul style="list-style-type: none"> <li>Are there ways that you think types and/or locations for future transportation investments might help address any of these needs?</li> <li>Do you think that sort of transportation investment would have a significant positive</li> </ul>	<ul style="list-style-type: none"> <li>Are there ways that you think types and/or locations for future transportation investments might help address any of these needs and/or have a significant positive impact on people's lives?</li> </ul>	<ul style="list-style-type: none"> <li>Given the county context (e.g., large rural areas, less densely populated, existing state highways), what transportation investments do you think would have the most positive impact on residents' health and wellbeing?</li> </ul>

	Agricultural Workers	Cutler-Orosi	Historically Disenfranchised Communities	Public Health
<i>(continued from previous page)</i>	<p>who have greater transportation access needs, or who would significantly benefit from better transportation access?</p> <ul style="list-style-type: none"> <li>○ Are there any other things you want to share when you think about how transportation might reduce inequities/challenges for farmworkers in Tulare County?</li> </ul>	<p>impact, some positive impact, or no positive impact on residents?</p> <ul style="list-style-type: none"> <li>○ Are there any other things you want to share when you think about how transportation might reduce inequities and/or increase opportunities for people of color and low-income residents?</li> <li>○ What other places in this area (if any) do you think should be prioritized for specific transportation investments? If these investments are made, how would they benefit residents (e.g., increased opportunity for physical activity, better access to economic and education opportunities)? Would the impact on members of historically disenfranchised communities be any different?</li> </ul>	<ul style="list-style-type: none"> <li>○ Are there any other things you want to share when you think about how transportation might reduce inequities and/or increase opportunities for residents of historically disenfranchised communities?</li> <li>○ What other places in this area (if any) do you think should be prioritized for specific transportation investments? If these investments are made, how would they benefit residents (e.g., increased opportunity for physical activity, better access to economic and education opportunities)? Would the impact on members of historically disenfranchised communities be any different?</li> </ul>	<ul style="list-style-type: none"> <li>○ Are there programs, resources, policies, or design elements that you think TCAG and/or other local governments should implement to help mitigate or offset increased vehicle emissions and other health risks that may result from transportation infrastructure projects? What ideas or recommendations do you have?</li> <li>○ Are there any other things you want to share when you think about how transportation might reduce health inequities in Tulare County?</li> <li>○ What places in Tulare County (if any) do you think should be prioritized for specific transportation investments? If these investments are made, how would they benefit residents (e.g., increased opportunity for physical activity, better access to economic and education opportunities)? Would the impact on members of historically disenfranchised communities be any different?</li> </ul>
Concerns related to recent and planned transportation investments	<ul style="list-style-type: none"> <li>○ What (if any) concerns do you have about recent transportation investments in Tulare County? What (if any) concerns do you have about potential future transportation investments?</li> </ul>	<ul style="list-style-type: none"> <li>○ What (if any) concerns do you have about possible future local transportation investments (e.g., road widening, bike lanes, electric vehicle charging stations, van-share programs)?</li> </ul>	<ul style="list-style-type: none"> <li>○ What (if any) concerns do you have about possible future local transportation investments (e.g., road widening, bike lanes, electric vehicle charging stations, van-share programs)?</li> </ul>	<ul style="list-style-type: none"> <li>○ What (if any) concerns do you have about possible future local transportation investments (e.g., road widening, bike lanes, electric vehicle charging stations, van-share programs)?</li> </ul>

## Community Outreach Conducted

The Tulare County Association of Governments (TCAG) wanted to ensure that the needs, concerns, and perspectives of stakeholders who historically have had minimal participation in the RTP/SCS planning are gathered and addressed in the RTP/SCS as much as possible. By gathering information from a range of community leaders with expertise in the environmental justice and/or health issues impacting historically disenfranchised communities, TCAG will be able to better ensure that transportation investments lead to an equitable share of benefits and burdens for all residents in the region. Key leader interviewees were identified because of their experience with either historically disenfranchised communities within Tulare County (including agricultural workers and residents of Cutler-Orosi) or public health.

In preparation for the project's outreach efforts, R+A first developed a list of potential stakeholder/key leader interviewees with at least two organizations or agencies identified for each of the four outreach foci (agricultural workers, Cutler-Orosi residents, other historically disenfranchised communities, and public health). From that initial list, R+A recommended specific people and organizations for interviews by prioritizing perspectives that were not (at that point in time) reflected in the outreach process for the overall RTP/SCS update and that had not participated in other recent TCAG planning processes.

R+A requested consultation from seven representatives of TCAG partner agencies and organizations. These representatives had existing relationships with TCAG, such as serving on a TCAG committee, and they were from trusted agencies and organizations with outreach and engagement experience in Tulare County. The seven representatives provided feedback on R+A's recommended interviewees and recommended dozens of potential additional stakeholder/key leader interviewees with expertise relevant to environmental justice and/or health within Tulare County.

Overall, 23 stakeholders were invited to participate in interviews. Stakeholders received multiple email and/or phone invitations in order to maximize participation. Across all stakeholders, R+A conducted 34 emails and 18 phone calls for a total of 52 correspondences. Specifically, among the public health stakeholders, a total of 4 emails were sent. Among the environmental justice stakeholders (i.e., agricultural workers, Cutler-Orosi residents, other historically disenfranchised communities), 30 emails were sent, and 18 phone calls were made. Ultimately, 12 stakeholders participated in interviews (including 8 who participated in group interviews). Dates, interviewee expertise, and interviewees are listed below.

## Stakeholder Interview Perspectives and Participants

Interview Focus	Perspective	Date of Interview	Participants
<b>Environmental Justice Focused Interviews</b> (7 interviews, 10 interviewees)			
Cutler-Orosi Community (1 interview)	Expertise Living in and Working with Youth and Families with Children who Live in Cutler, Orosi, and East Orosi	September 28, 2021	<ul style="list-style-type: none"> <li>○ Cynthia Garcia, Grant Coordinator, Cutler-Orosi Family Education Center</li> <li>○ Yolanda Valdez, Superintendent, Cutler-Orosi Joint Unified School District and Secretary for Cutler-Orosi Community for Youth</li> </ul>
Agricultural Workers throughout Tulare County (1 interview)	Expertise Working with Tulare County Agricultural Workers	October 13, 2021	<ul style="list-style-type: none"> <li>○ Miguel Castaneda, Employment Program Representative for Agricultural Outreach/Migrant and Seasonal Farmworkers, California Employee Development Department</li> <li>○ Sidney Pedraza, Employment Program Representative for Agricultural Outreach/Migrant and Seasonal Farmworkers, California Employee Development Department</li> </ul>
Other Historically Disenfranchised Communities (5 interviews)	Expertise Working with Residents of Rural Unincorporated Areas Accessing Non-Emergency/Non-Urgent Healthcare Services	October 20, 2021	<ul style="list-style-type: none"> <li>○ Mallory Barragan, Director of Special Programs, Family HealthCare Network</li> </ul>
	Expertise Working with Low- and No-Income Families in Tulare (city), Earlimart, and Southwestern Tulare County	October 20, 2021	<ul style="list-style-type: none"> <li>○ Angel Avitia, Assistant Director of Community Initiatives and of the Tulare Family Resource Center, Community Services Employment Training (CSET)</li> </ul>
	Expertise Working with Low- and No-Income Residents Utilizing Social Services (including homeless and marginally housed residents)	October 21, 2021	<ul style="list-style-type: none"> <li>○ Francena Martinez, Deputy Director of Mental Health Branch and former Self Sufficiency/TulareWORKS Division Manager, Tulare County Health and Human Services Agency</li> <li>○ Noah Whitaker, Community Outreach Manager, Tulare County Health and Human Services Agency</li> </ul>
	Expertise Working with Youth on Probation	October 22, 2021	<ul style="list-style-type: none"> <li>○ Margarita Luna, Deputy Chief Probation Officer, Tulare County Probation Department</li> </ul>
	Expertise Working with Low- and No-Income Residents Charged with Criminal Offenses and Incarcerated While Awaiting Court Proceedings	October 26, 2021	<ul style="list-style-type: none"> <li>○ Erin Brooks, Tulare County Public Defender</li> </ul>
<b>Public Health Focused Interview</b> (1 interview, 2 interviewees)			
Public Health Sector (1 interview)	Expertise in Health in All Policies and Environmental Health	October 15, 2021	<ul style="list-style-type: none"> <li>○ Jose Ruiz-Salas, Administrative Specialist, Tulare County Department of Public Health</li> <li>○ Laura Salcido, Administrative Specialist, Tulare County Department of Public Health</li> </ul>



## Findings

### Overview of Themes

The following themes emerged from the interviews.

1. Interviewees reported that **rural, unincorporated communities within Tulare County should be prioritized for transportation investments** – although there was not a shared understanding of which specific communities most needed investments.
2. Participants consistently identified the **need for improved transportation infrastructure/built environment** (lack of sidewalks and crosswalks, number of potholes in some roads, etc.) – **especially for pedestrians**.
3. Although the only option for some residents, Tulare County's limited **public transportation options are challenging for many community members to understand and navigate**.
4. **Unmet transportation needs have a negative impact on residents' wellbeing**, creating additional barriers to people utilizing supportive social or health services and achieving economic security.
5. Many nonprofit organizations, local businesses, and government agencies provide *some* transportation to *some* of the community members they serve (e.g., patients, customers, clients), creating an **uncoordinated, informal transportation system that is inconsistent in which residents are served and when (and where) transportation is available**.
6. Some interviewees identified that **transitioning to electric vehicles is an important step to reduce air pollution and improve health**.

Interviewees also identified some transportation challenges specific to subpopulations within the county, including agricultural workers, residents experiencing homelessness (especially those sleeping/living in their vehicles), and people actively engaged with the criminal justice system.

The below table presents a summary of major themes that emerged from the feedback provided by interviewed stakeholders. Themes that emerged during interviews with stakeholders that represented agricultural workers, Cutler-Orosi, and historically disenfranchised communities were categorized as environmental justice. Themes that emerged during the group interview with public health stakeholders were categorized as public health.

For detailed results from the community engagement process, including specific quotes from stakeholders organized by the above themes, refer to Appendix A.

## Themes by Interview Foci

Theme	Environmental Justice			Public Health
	Cutler-Orosi Community	Agricultural Workers	Other Historically Disenfranchised Communities	
1) Low transportation access and investments in rural communities	✓	✓	✓	✓
2) Investments in pedestrian infrastructure needed to address safety concerns	✓		✓	✓
3) Bus/transit system is difficult to navigate for many low-income residents	✓		✓	
4) Unmet transportation needs negatively impact residents' health and access to opportunity	✓	✓	✓	✓
5) Organizations provide some rides for residents (in an uncoordinated and inconsistent way)	✓	✓	✓	✓
6) Transitioning to electric vehicles is an important step to addressing poor air quality			✓	✓

# Chapter 3: Supplemental Analysis

## Considerations for Planned and Potential RTP Projects

### Potential Reductions in Speed Limits for Specific Roadway Segments

During the production of the RTP/SCS, the California State Legislature and Governor approved Assembly Bill 43 (AB 43) and it went into effect on January 1, 2022. This law has reduced some of the barriers to and provides cities and counties with options for reducing speed limits on their local streets. Thus, a supplemental AB 43 analysis was conducted in Spring 2022 because traffic injuries have direct public health impacts and traffic safety has been a long-time priority of TCAG, including a core funding focus of the 2018 RTP/SCS through investments in complete streets projects, plans, and policies in EJ DACs. Moreover, some stakeholders, especially those in Cutler-Orosi and other historically marginalized communities, elevated concerns around unsafe speeds and unsafe pedestrian infrastructure (see Appendix A).

Jurisdictions throughout California now have more power to reduce speed limits if the existing speed limit or a proposed amended speed limit is found to be “more than is reasonable or safe,” including based on the safety of vulnerable pedestrian groups. Speed limits may now be lowered as low as 15 miles per hour depending on the road conditions, populations and land uses in close proximity of the roadway, and the results of an engineering and traffic survey. Local authorities may also now establish a 25 mph or 20 mph speed limit in a business activity district with no more than 4 traffic lanes (also based on current and previous speed limits and findings from an engineering survey). The length of time for which engineering and traffic surveys are valid to maintain speed limits has also been extended.

Although the law also authorizes speed limits to be reduced for portions of highway designated as “safety corridors,” the Department of Transportation has not yet defined what factors may be used to designate “safety corridors.” Given this, R+A recommends that TCAG not work on identifying these until CalTrans guidance is available.

Of the 9,210 traffic collisions in Tulare County that resulted in fatalities and/or injuries between January 1, 2017 and December 31, 2021,<sup>5</sup> 69% occurred on roads that are *not* state highways. Of the 2,120 collisions during this time with the primary collision factor identified as unsafe speed, 57% occurred on roads that are not state highways. Unsafe speed was also the most common

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<sup>5</sup> California Statewide Integrated Traffic Records System (SWITRS) data accessed via the Transportation Injury Mapping Systems (TIMS) in March and April 2022. Note that data on collisions which occurred in 2020 and 2021 are provisional and subject to change.

primary collision factor identified, accounting for 23% of 2017-2021 traffic collisions in Tulare County that resulted in injuries and/or fatalities. While higher vehicle speeds are more likely to result in fatalities and more severe injuries, unsafe speed was *less likely* to be identified as the primary collision factor for collisions that resulted in fatalities and/or severe injuries (the primary factor for 14% of collisions with fatalities or severe injuries compared to 25% of collisions with non-severe injuries). To highlight a new (lower cost) opportunity to address traffic safety, R+A identified roadway segments to consider for reduced speed limits through the following steps.

1. Excluded interstates and other freeways and expressways from analysis, limiting roads included to other principal arterial roads, minor arterial roads, major and minor collectors, and local roads (based on assumption that changing speed limits would need to be determined by CalTrans and to exclude separated highways that do not qualify for speed reductions based on building density).
2. Created 90 ft buffers from the roadway centerlines (establishing a proxy for the edge of the roadway based on a minimum width of 30 ft for the roadway / 15 ft buffer around the centerline, then calculating the 75 ft buffer beyond the estimated roadside for a combined 90 ft square buffer or total width of 180 ft).
3. Calculated the average number of buildings per foot of roadway segment length (i.e., the number of intersections between geospatial polygons of the roadway buffers and available building footprints).
4. Classified roadway segments with an average of at least 0.009848 buildings per foot of roadway (the minimum building to roadway length ratio that could meet the legal threshold of at least 13 residential or commercial buildings located within 75 ft of the road in a 0.25 mile (1,320 ft) stretch of roadway) as roadway segments for further inquiry (criteria 1).
5. Visually assessed roadway segments and identified ones that met both criteria 2 and 3:
  - a. Could possibly meet the building density threshold established by law (criteria 2), either as 1) contiguous segments that were cumulatively 0.25 miles or longer or 2) segments on the same corridor in close proximity (less than 0.25 miles between criteria 1 segments) with notably higher building densities for the criteria 1 segments) **and**
  - b. Were the site for multiple traffic collisions between 2009 and 2021 which resulted in injuries and/or fatalities (criteria 3).
6. Once segments which met both criteria 2 and 3 were identified, they were coded by the name of the community in which they are located (e.g., incorporated city, unincorporated place).



The table below presents the length of roadway identified as meeting criteria 1, 2, and 3.

Community	Total miles of roadways to consider for possible speed reductions	Percent of Tulare County roadways identified for possible speed reductions	Miles of roads in community most likely to meet legal requirements for possible speed reductions (>0.25 miles)	Percent of roads most likely to meet legal requirements for speed reductions located in community
<b>Cutler (unincorporated)</b>	6.64	0.082 %	4.97	9 %
<b>Earlimart (unincorporated)</b>	1.63	0.020 %	1.63	3 %
<b>East Porterville (unincorporated)</b>	6.79	0.084 %	6.31	11 %
<b>Ivanhoe (unincorporated)</b>	3.42	0.042 %	3.38	6 %
<b>London (unincorporated)</b>	6.25	0.077 %	5.62	10 %
<b>Orosi (unincorporated)</b>	3.85	0.047 %	3.60	7 %
<b>Patterson Tract (unincorporated)</b>	0.85	0.011 %	0.85	2 %
<b>Poplar-Cotton Center (unincorporated)</b>	3.91	0.048 %	3.91	7 %
<b>Porterville, City of</b>	4.43	0.055 %	4.19	8 %

Community	Total miles of roadways to consider for possible speed reductions	Percent of Tulare County roadways identified for possible speed reductions	Miles of roads in community most likely to meet legal requirements for possible speed reductions (>0.25 miles)	Percent of roads most likely to meet legal requirements for speed reductions located in community
<b>Strathmore (unincorporated)</b>	2.11	0.026 %	2.11	4 %
<b>Three Rivers (unincorporated)</b>	0.55	0.007 %	0.55	1 %
<b>Traver (unincorporated)</b>	2.63	0.032 %	2.11	4 %
<b>Visalia, City of</b>	16.99	0.209 %	15.65	29 %
<b>Not identified for further inquiry</b>	8,050.40	99.260 %	-	-

Maps of the road segments identified for further inquiry are presented at the end of this memorandum. The following planned and candidate RTP projects identified in the pre-draft Action Element for the 2022 Tulare County RTP/SCS should be assessed against the roadway segments which R+A identified for further inquiry related to potential reduced speed limits.

- The following corridors were identified as candidates for Transportation System Management (TSM) strategies:
  - Portion of Locust Street / southbound State Route 63 in the City of Visalia
  - Portion of State Route 63 north of the City of Visalia
- The following projects are among the Awarded Active Transportation Projects:
  - Cycle 1
    - Porterville - Garden Avenue Pedestrian Access Corridor

#### Cycle 2

- Unincorporated Tulare County: Traver - Jacob Street Improvements
- Porterville - Olive Avenue Corridor Crosswalk Warning Lights Installation
- Visalia- Green Acres Middle School Enhanced Crosswalk
- Unincorporated Tulare County: Earlimart Safe Routes to School Community Projects

#### Cycle 3

- Unincorporated Tulare County: Earlimart - Sidewalk Improvements Project

#### Cycle 4

- Unincorporated Tulare County: Ivanhoe - Road 160 Sidewalk Improvements

#### Cycle 5

- Porterville - Butterfield Stage Corridor (Tea Pot Dome to Ave 196)

- The following streets are identified as projects for local funded roads (information below comes from the Project Justification For Local Funded Roads, Table A-13.1):

##### a. In Porterville

Facility	Scope	Limits	Improvement	Purpose	Need
<b>Olive Ave.</b>	Widen existing roadway	Friant-Kern Canal to Tule River	Widen to 4-lane Arterial	Increase Capacity	Relieve Congestion
<b>Olive Ave.</b>	Olive Ave at Hillcrest St	Olive Ave at Hillcrest St	Traffic Signal	Improve Circulation	Safety

##### b. In Visalia

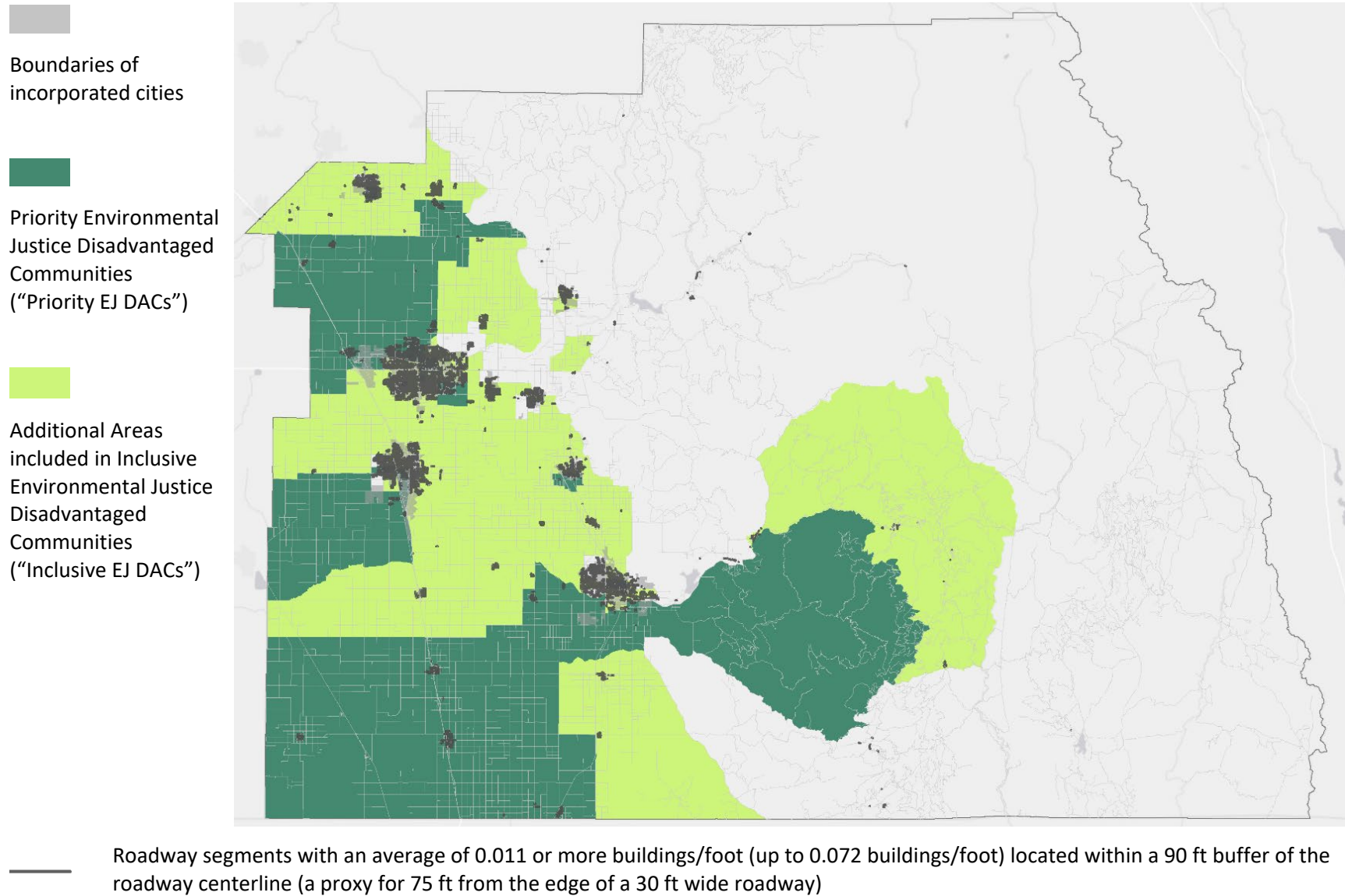
Facility	Scope	Limits	Improvement	Purpose	Need
<b>Houston Ave.</b>	Widen existing roadway	Ben Maddox to Lovers Lane; 1 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Houston Ave.</b>	Widen existing roadway	Mooney to Santa Fe; 1.5mi	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Court St.</b>	Widen existing roadway	Walnut to Tulare; .5 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion

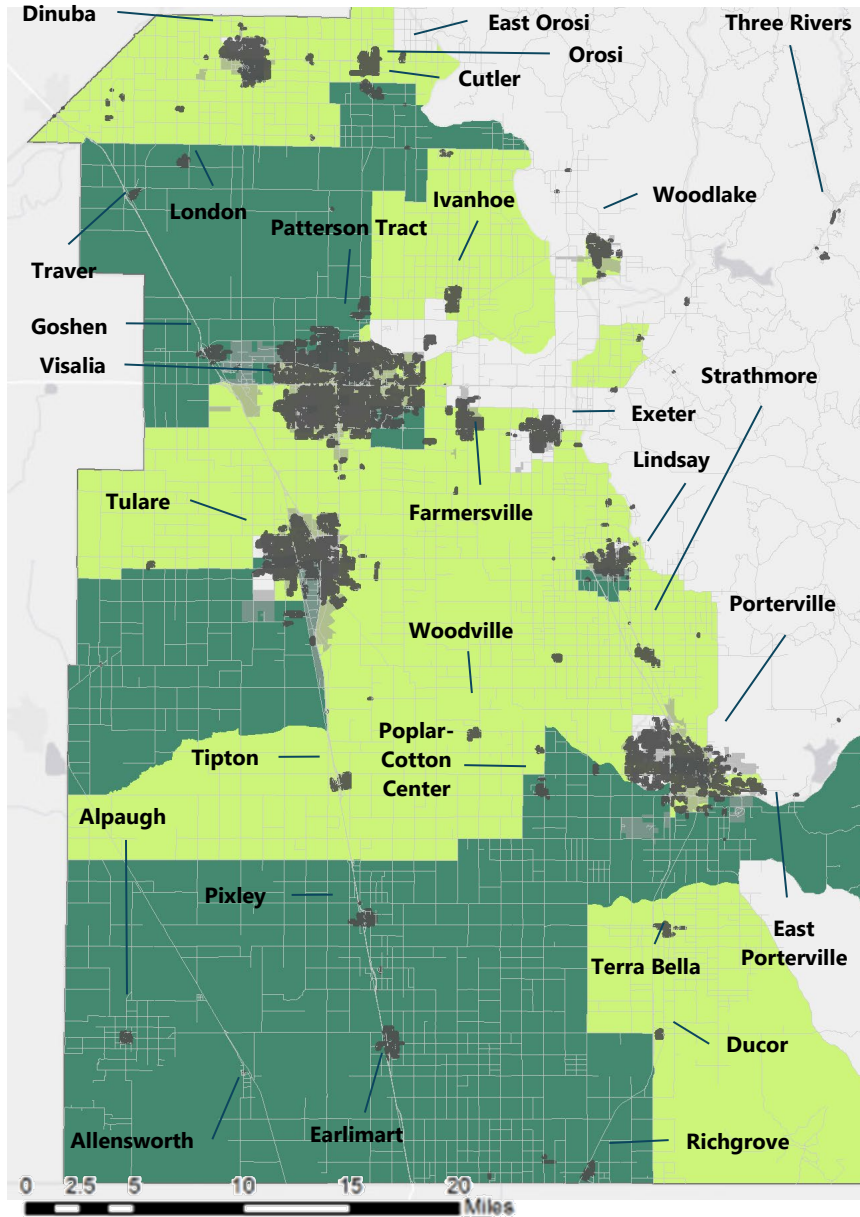
<b>Chinowth Street</b>	Construct new roadway	Goshen to Houston; 0.2 mi.	New 2-lane; collector	Improve Circulation	Relieve Congestion
<b>Chinowth Street</b>	Construct new roadway	Ave 272 to Ave 276; 0.5 mi.	New 2-lane; collector	Improve Circulation	Relieve Congestion
<b>Court Street</b>	Construct new roadway	Ave 272 to Ave 276; 0.5 mi.	New 4-lane; collector	Improve Circulation	Relieve Congestion
<b>Linwood Street</b>	Construct new roadway	Ave 272 to Ave 276; 0.5 mi.	New 2-lane; collector	Improve Circulation	Relieve Congestion
<b>Linwood Street</b>	Construct new roadway	Riggin to Avenue 320; 1 mi.	New 2-lane; collector	Improve Circulation	Relieve Congestion
<b>Tulare Avenue</b>	Construct new roadway	Shirk to Roeben; 0.5 mi.	New 2-lane; collector	Improve Circulation	Relieve Congestion
<b>Walnut Avenue</b>	Widen existing roadway	Cedar to McAuliff; 0.7 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Walnut Avenue</b>	Widen existing roadway	McAuliff to Rd 148; 0.5 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Walnut Avenue</b>	Widen existing roadway	Shirk to Roeben; .5 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Demaree St.</b>	Widen existing roadway	Pratt to Avenue 320; 0.4 mi.	Widen from 2 to 4 lanes	Increase Capacity	Relieve Congestion
<b>Court St at Whitendale Ave</b>	Court St Whitendale Ave	Court St at Whitendale Ave	Traffic Signal	Improve Circulation	Safety
<b>Burke St at Tulare Ave</b>	Burke St at Tulare Ave	Burke St at Tulare Ave	Traffic Signal	Improve Circulation	Safety
<b>Court St at Paradise Ave</b>	Court St at Paradise Ave	Court St at Paradise Ave	Traffic Signal	Improve Circulation	Safety
<b>Divisadero St at Walnut Ave</b>	Divisadero St at Walnut Ave	Divisadero St at Walnut Ave	Traffic Signal	Improve Circulation	Safety
<b>Chinowth St at Goshen Ave</b>	Chinowth St at Goshen Ave	Chinowth St at Goshen Ave	Traffic Signal	Improve Circulation	Safety
<b>Cypress Ave at Linwood St</b>	Cypress Ave at Linwood St	Cypress Ave at Linwood St	Traffic Signal	Improve Circulation	Safety
<b>County Center at Houston Ave</b>	County Center at Houston Ave	County Center at Houston Ave	Traffic Signal	Improve Circulation	Safety



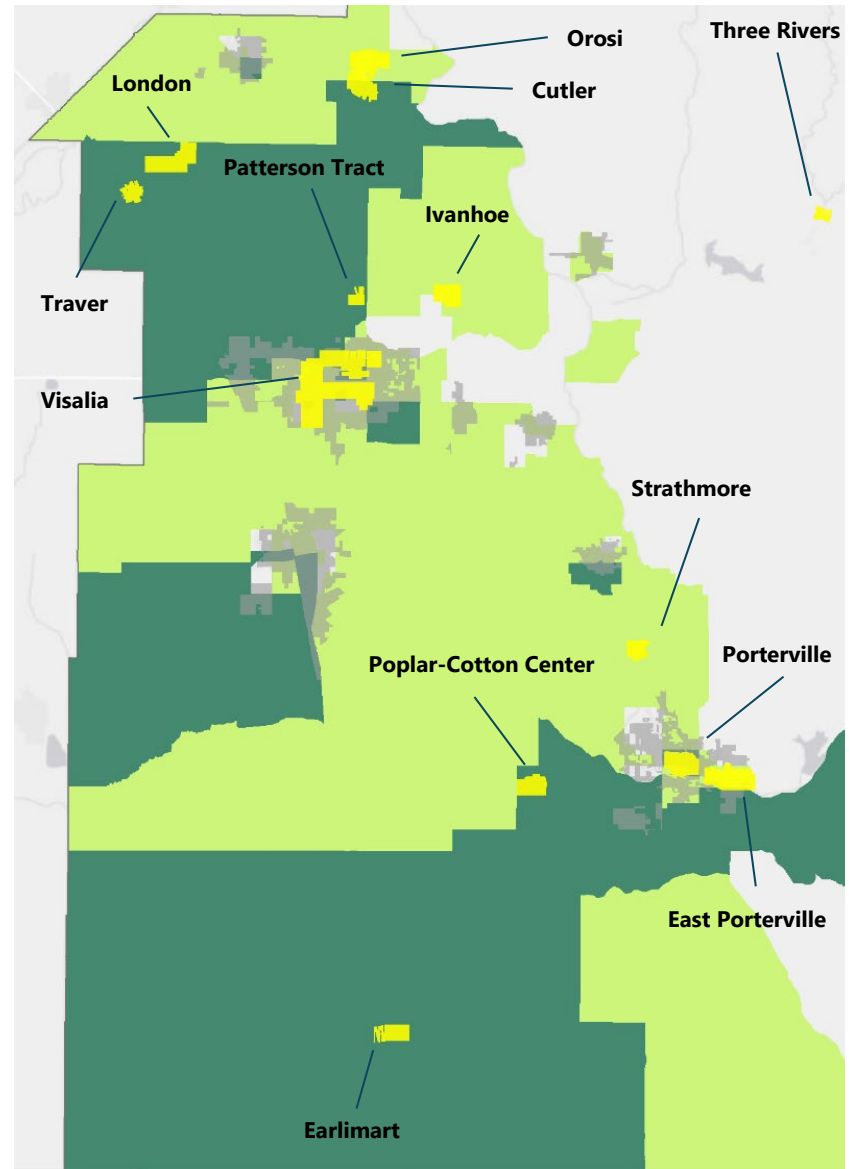
<b>Houston Ave at Rinaldi St</b>	Houston Ave at Rinaldi St	Houston Ave at Rinaldi St	Traffic Signal	Improve Circulation	Safety
<b>Bridge St at Tulare Ave</b>	Bridge St at Tulare Ave	Bridge St at Tulare Ave	Traffic Signal	Improve Circulation	Safety
<b>Jacob St at Main St.</b>	Jacob St at Main St.	Jacob St at Main St.	Traffic Signal	Improve Circulation	Safety
<b>Shirk St at Walnut Ave</b>	Shirk St at Walnut Ave	Shirk St at Walnut Ave	Traffic Signal	Improve Circulation	Safety
<b>Central St at Tulare Ave</b>	Central St at Tulare Ave	Central St at Tulare Ave	Traffic Signal	Improve Circulation	Safety
<b>McAuliff St at Walnut Ave</b>	McAuliff St at Walnut Ave	McAuliff St at Walnut Ave	Traffic Signal	Improve Circulation	Safety
<b>Beech Ave at Court St</b>	Beech Ave at Court St	Beech Ave at Court St	Traffic Signal	Improve Circulation	Safety
<b>Roeben St at Walnut Ave</b>	Roeben St at Walnut Ave	Roeben St at Walnut Ave	Traffic Signal	Improve Circulation	Safety
<b>Damsen Ave at Demaree St</b>	Damsen Ave at Demaree St	Damsen Ave at Demaree St	Traffic Signal	Improve Circulation	Safety
<b>Ferguson Ave at Linwood St</b>	Ferguson Ave at Linwood St	Ferguson Ave at Linwood St	Traffic Signal	Improve Circulation	Safety

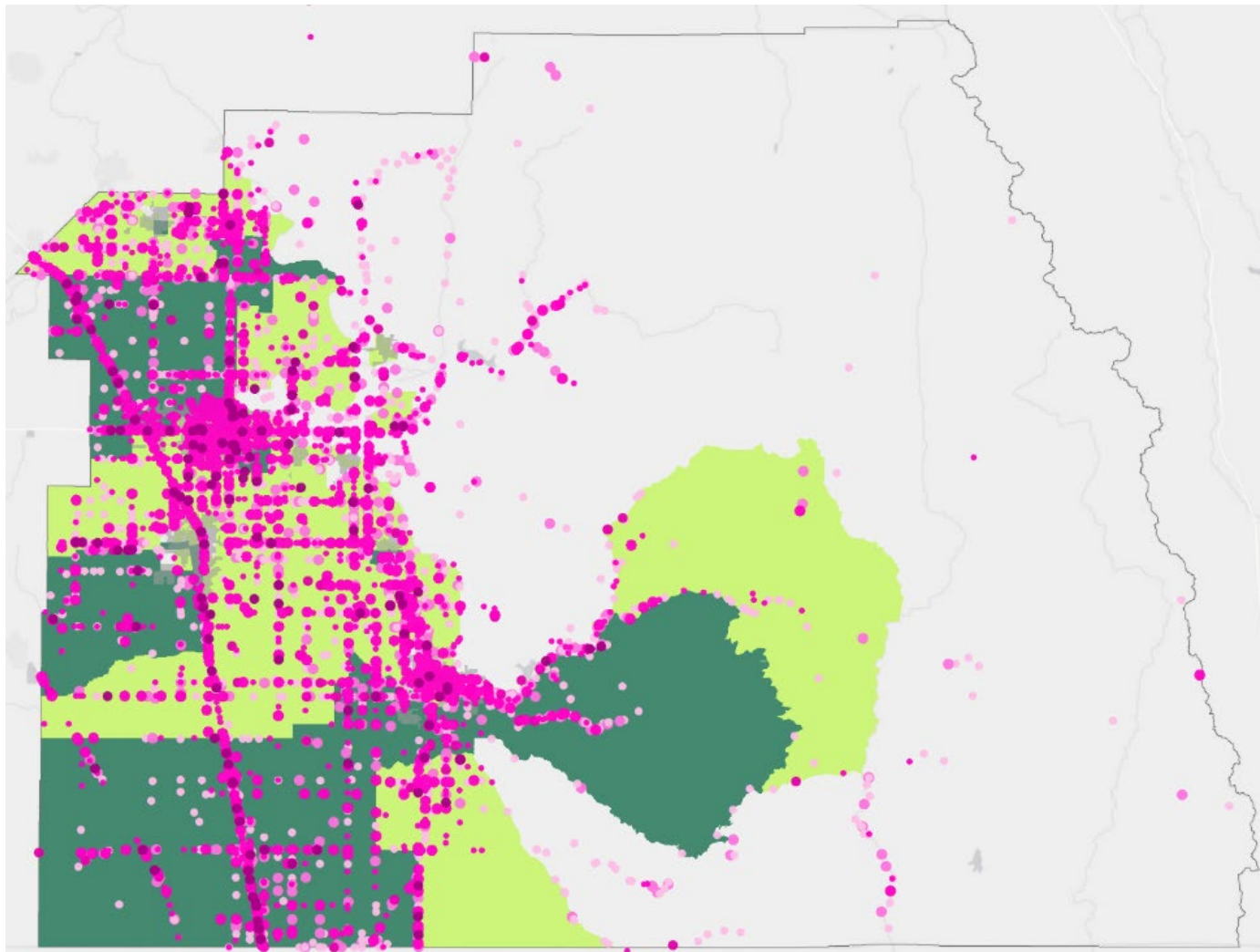
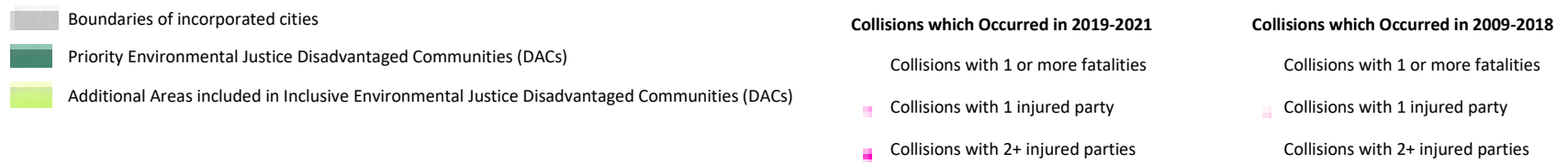
## Potential Business & Residential Districts to Consider Implementing Reduced Speed Limits



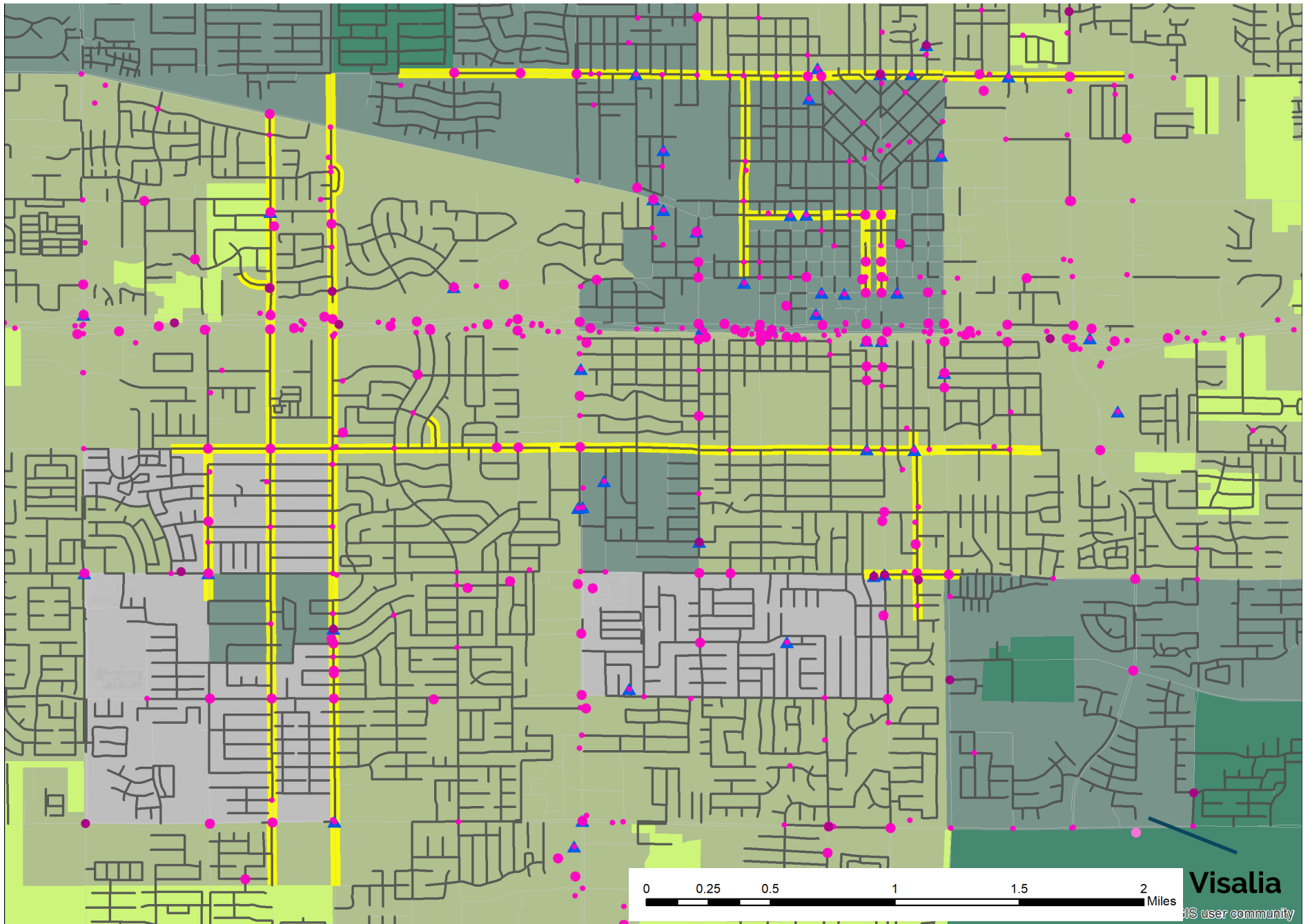


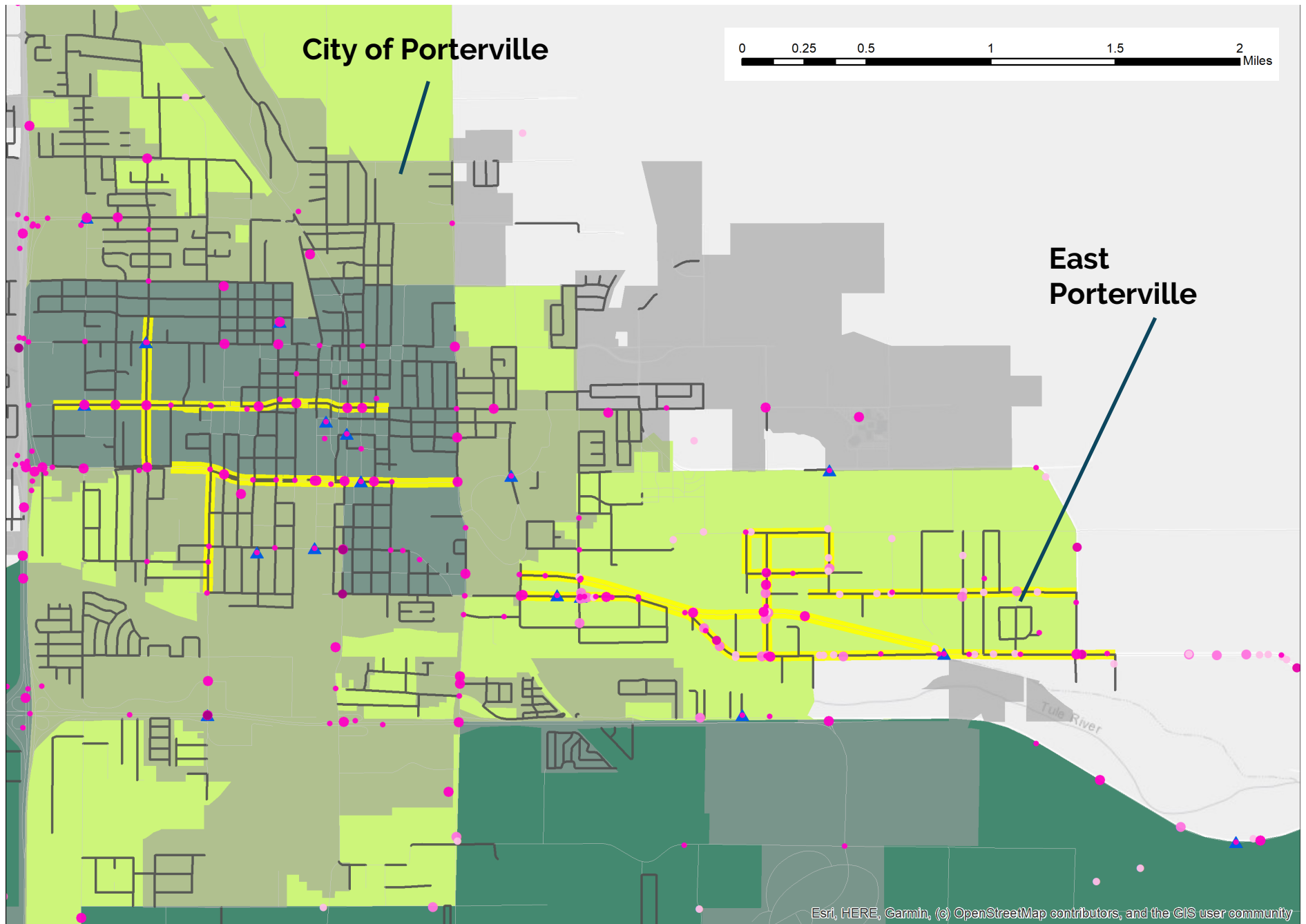
Contiguous roadway segments with at least a 0.011 buildings/foot and clusters of collisions resulting in injuries and/or fatalities

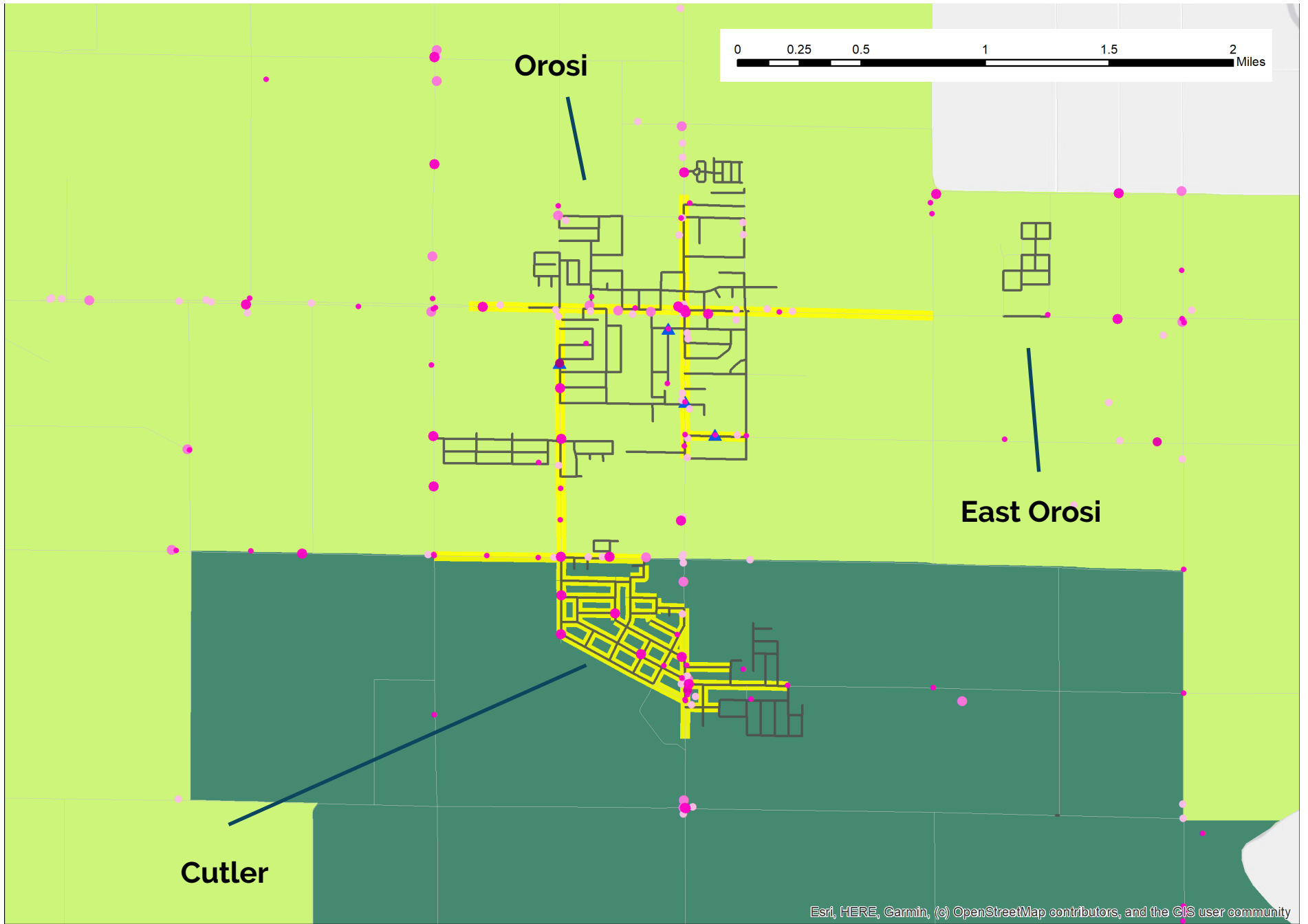


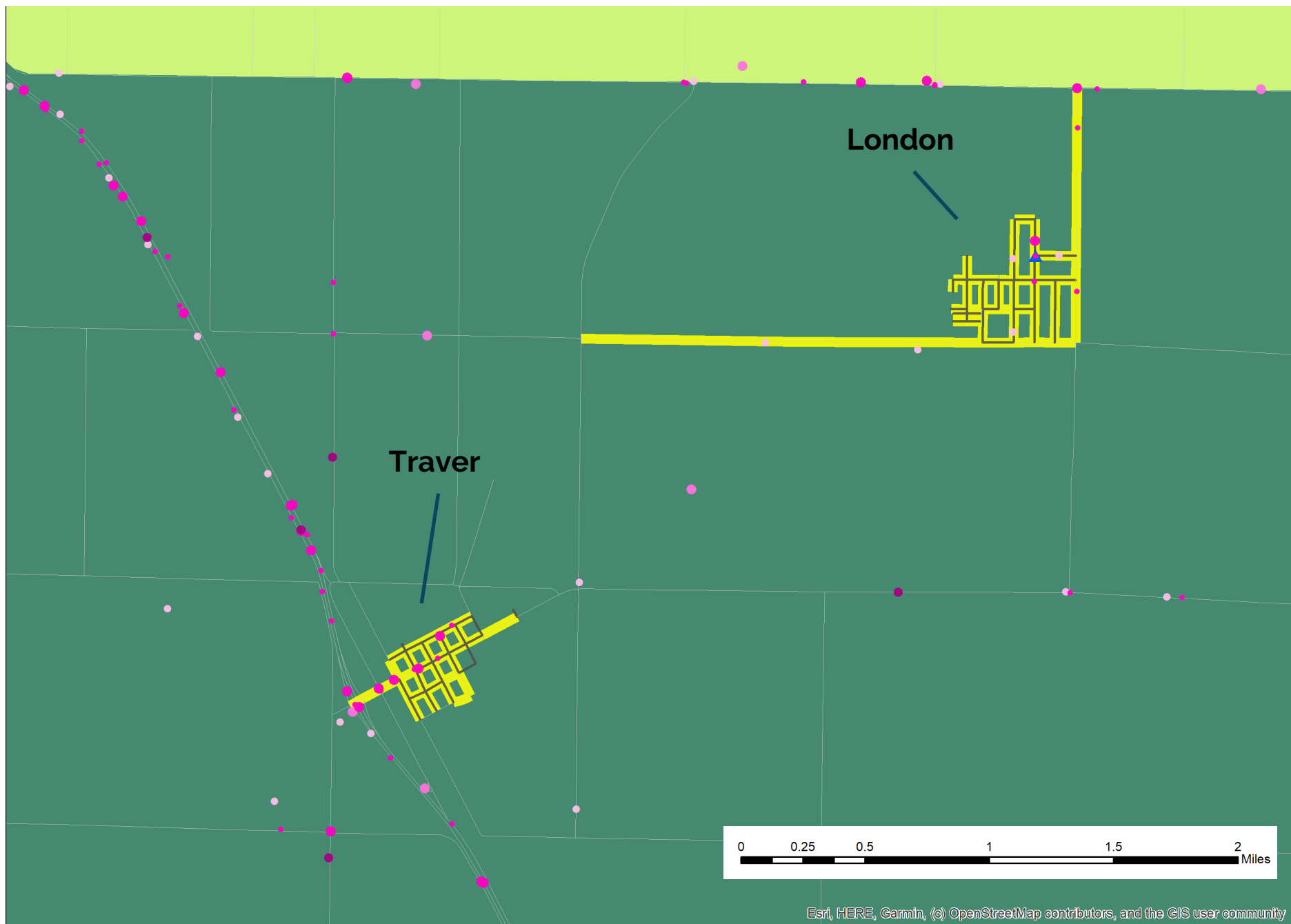




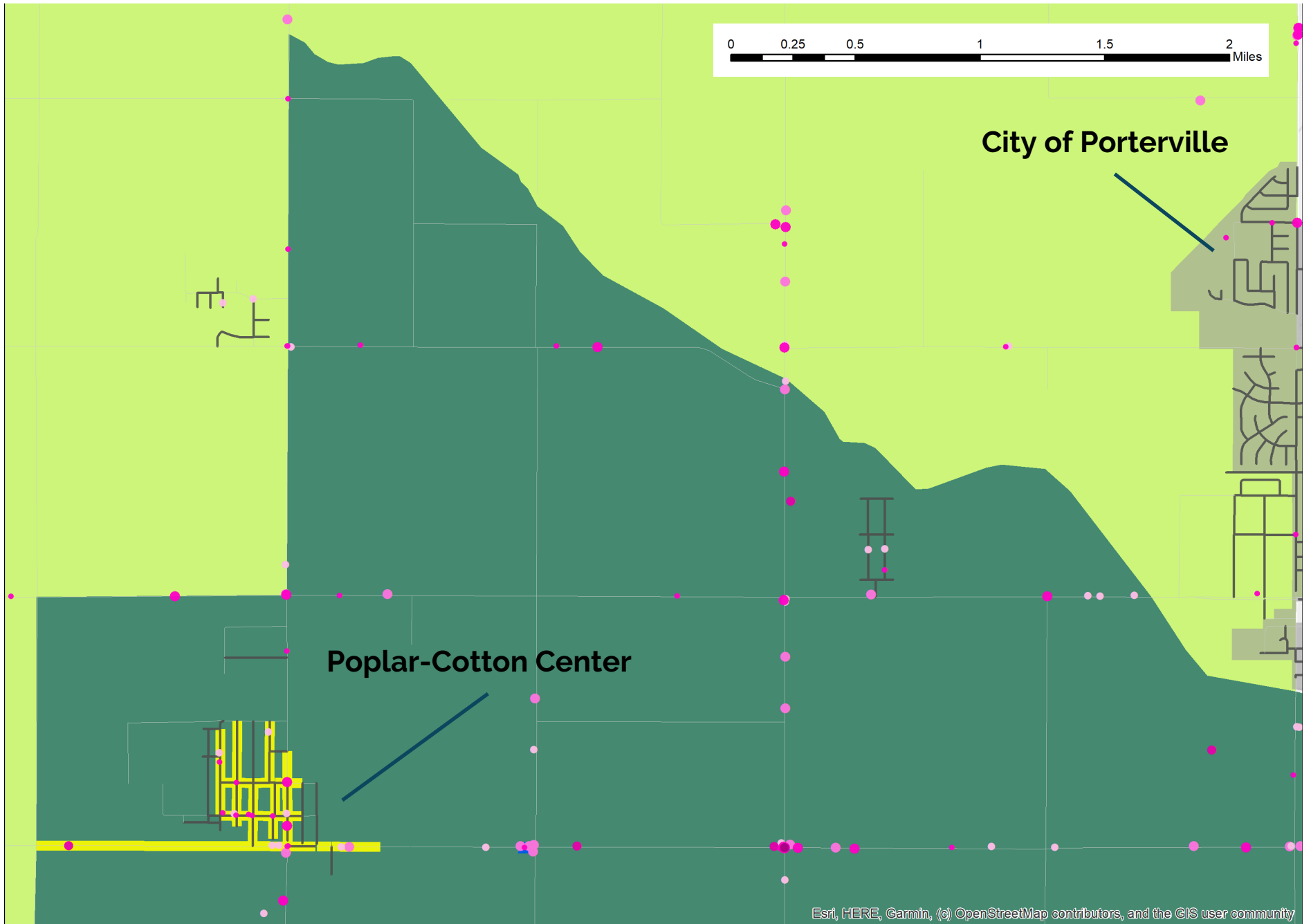


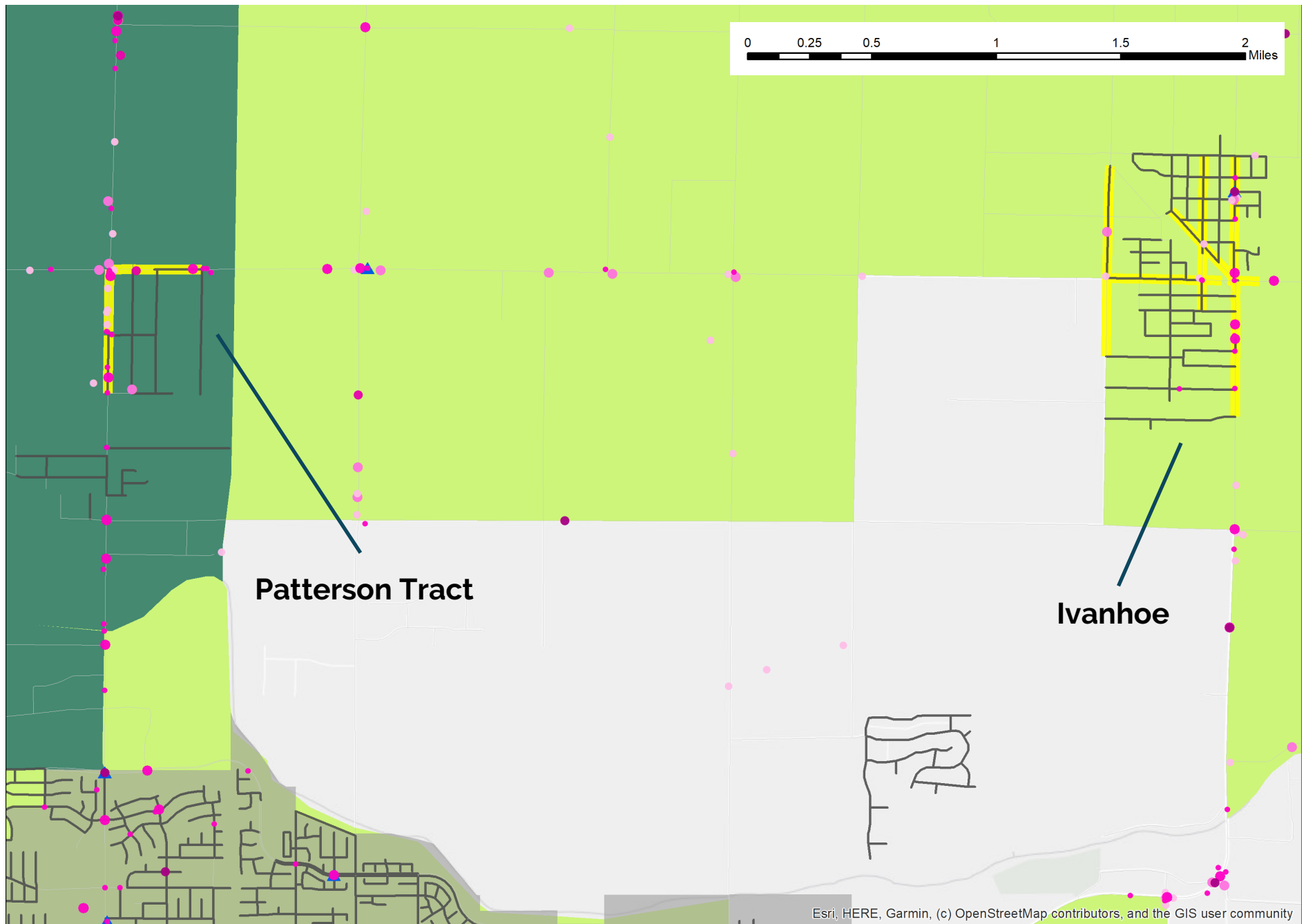


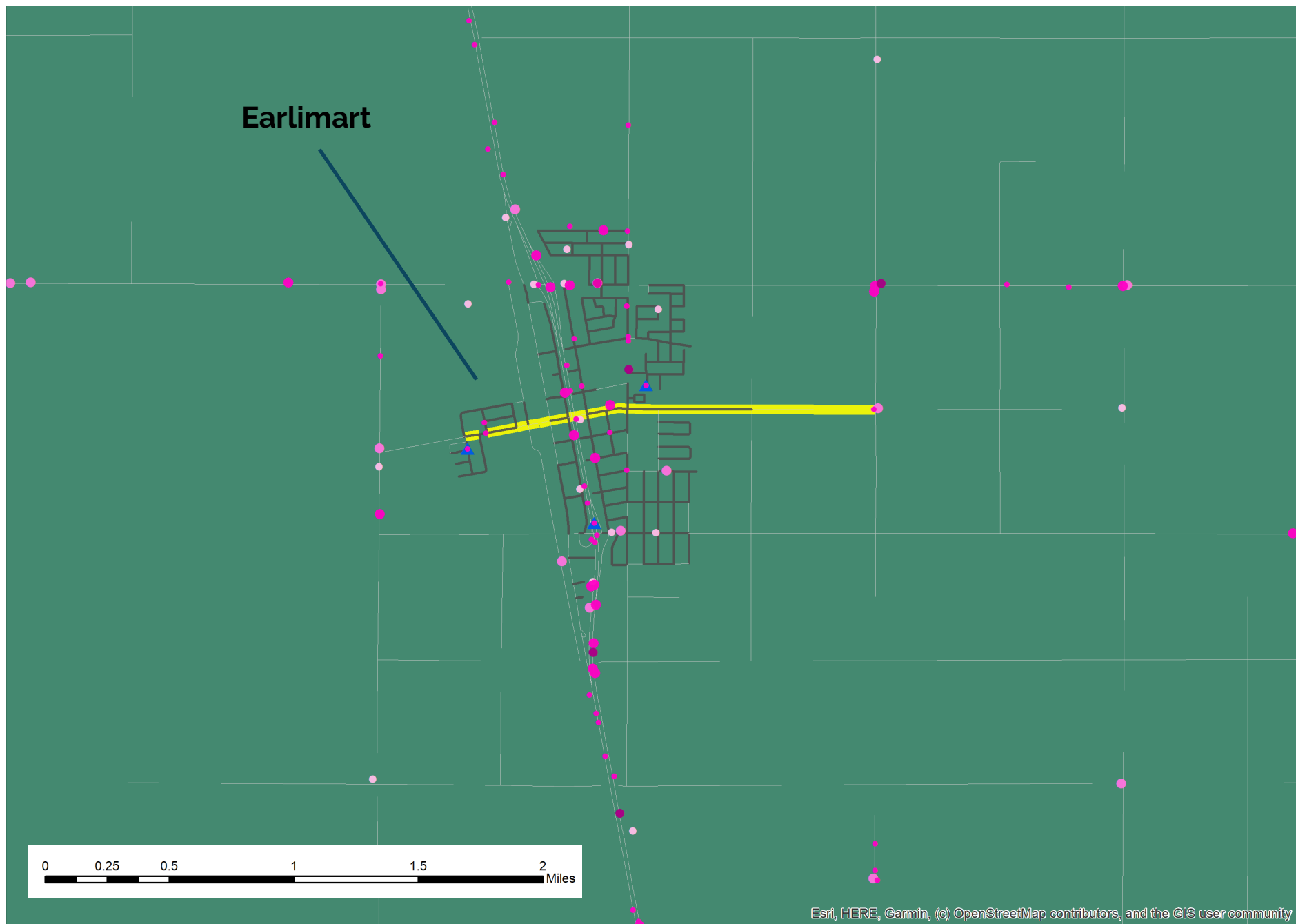


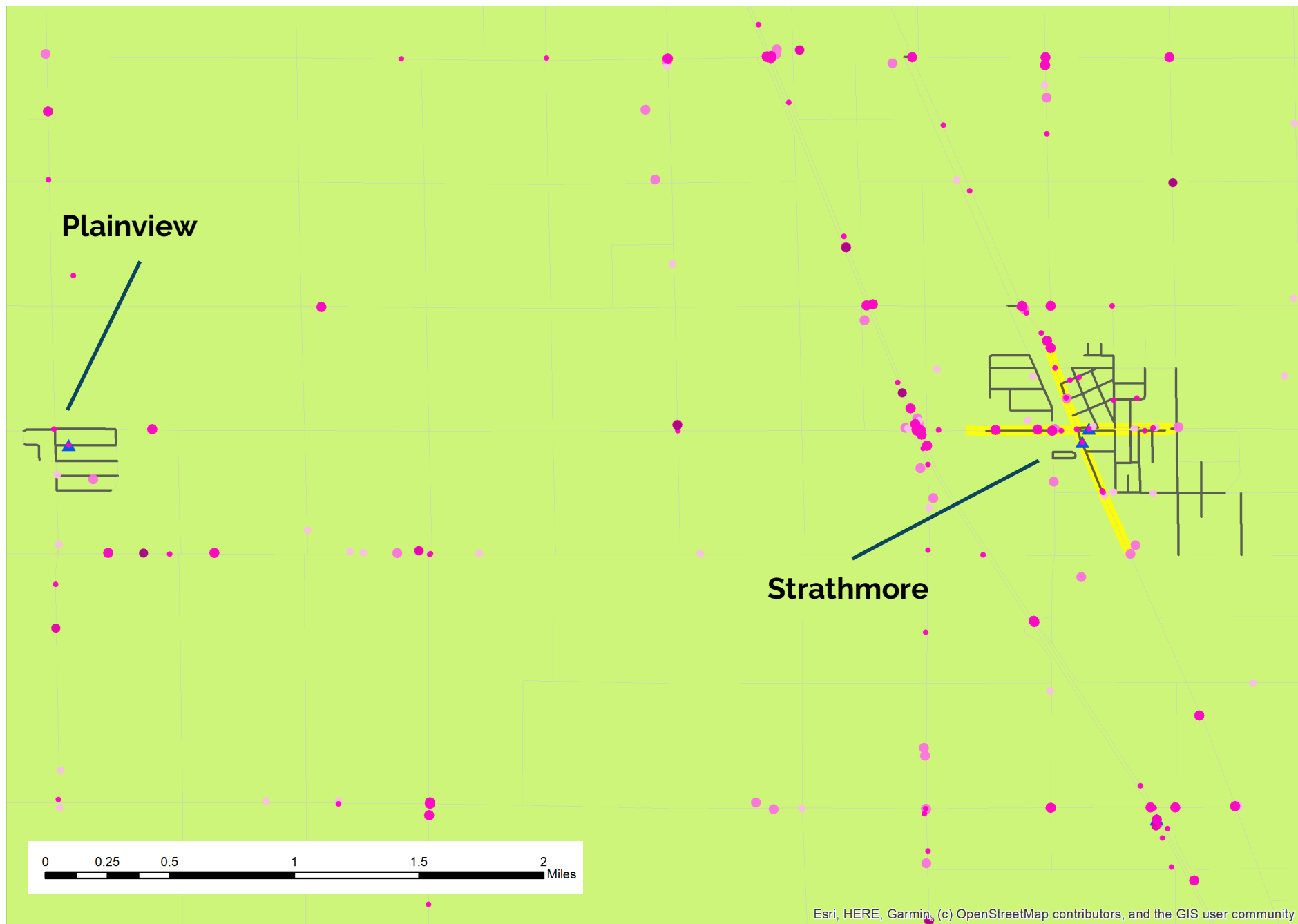


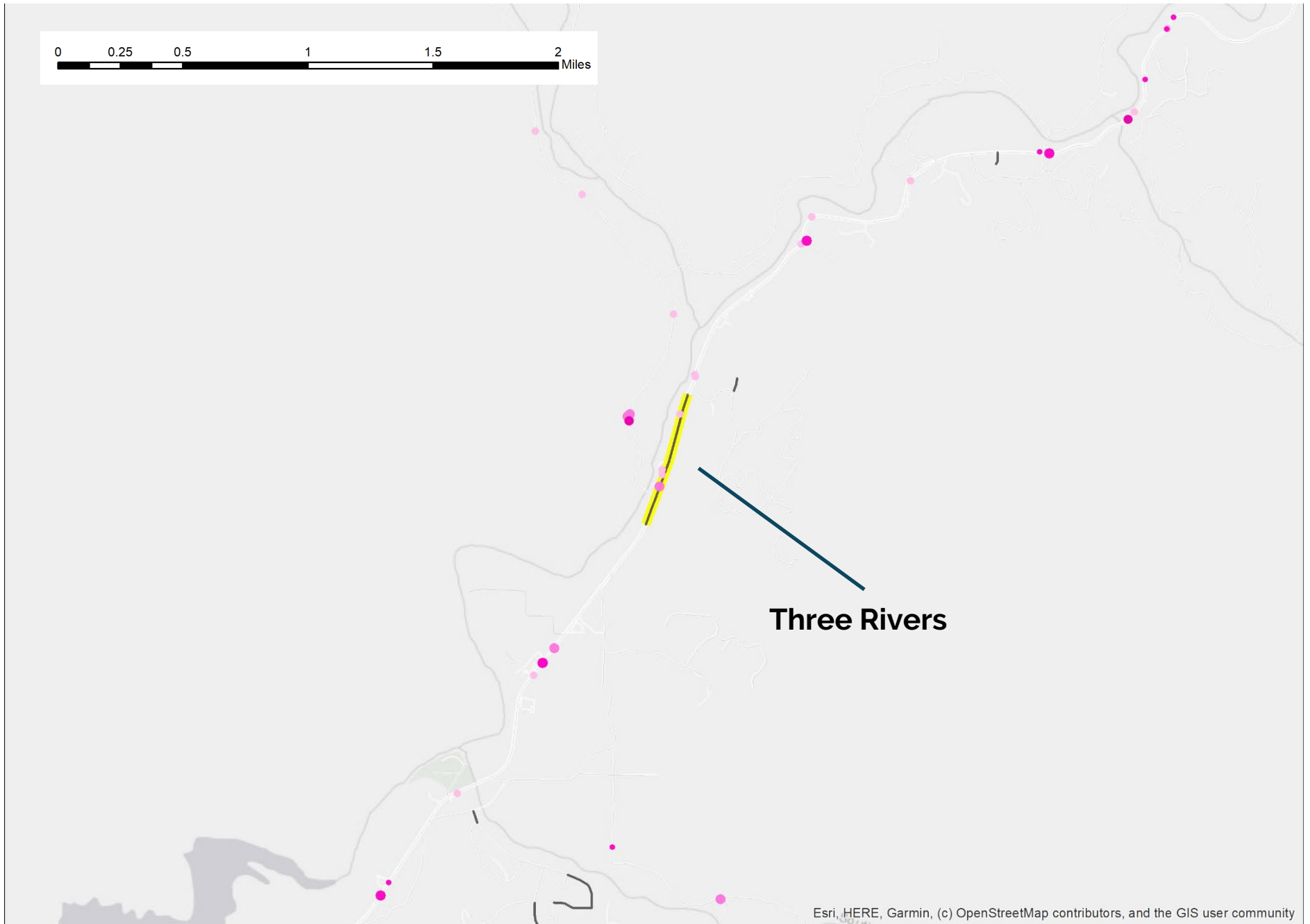




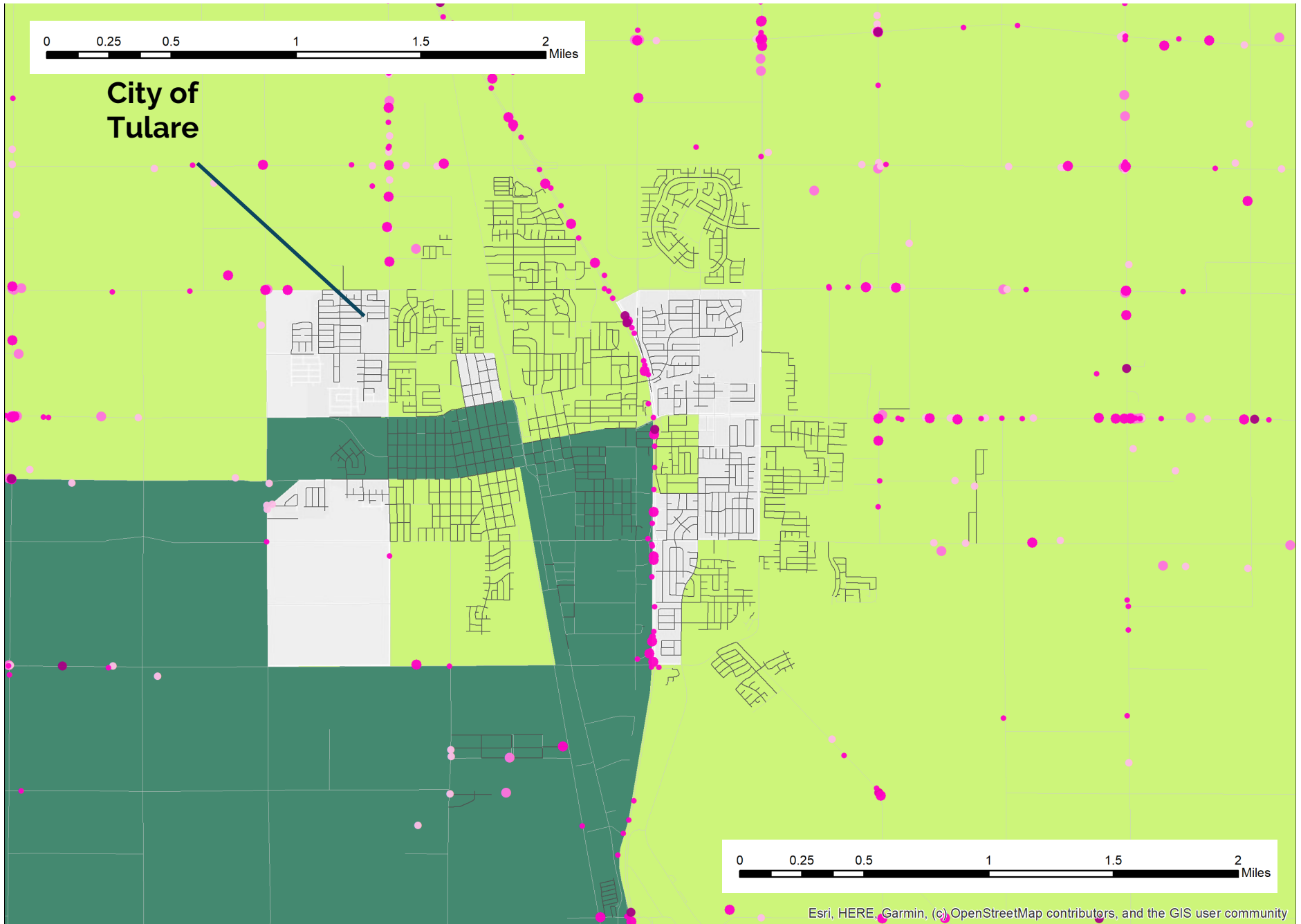


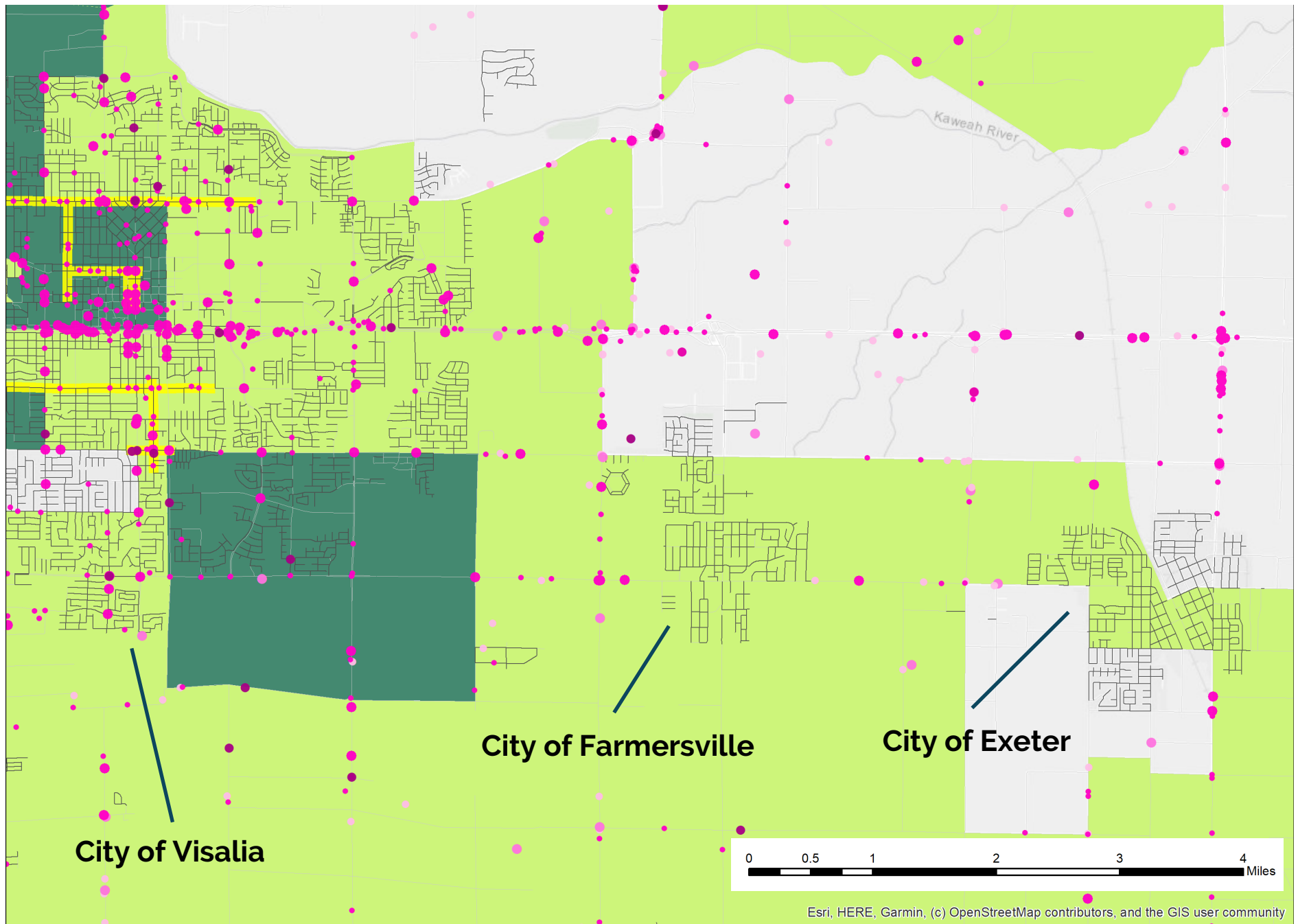












# Chapter 4: Conclusion

## Environmental Justice Performance Measures

In addition to the results from the above existing conditions analyses and stakeholder engagement, analyses were additionally conducted for TCAG's transit accessibility performance measure. As shown in the tables below, quarter-mile and half-mile accessibility to transit stops and transit routes were analyzed for four geographic areas: all of Tulare County, within Priority EJ DACs, within Inclusive EJ DACs, and non-EJ DAC areas (for an explanation on EJ DACs, refer to the Disadvantaged Community Screening Analysis on page 94). For each of the four geographic areas, the performance measure analysis was additionally conducted for three distinct groups: population (total number of residents), household (total number of households), and dwelling units (total number of habitable housing units).

### Access to Transit Stops

Across Tulare County, about 65.7% of residents live within a quarter-mile, or approximately a 10-minute walk, of a transit stop. As shown in the below table, there is a higher proportion of residents in Priority EJ DACs (66.9%) and Inclusive EJ DACs (66.8%) than in Non-EJ DAC Areas (63.1%) within a quarter-mile distance of a transit stop. This difference amounts to an approximately 3.7-3.8% higher access in EJ DACs. Furthermore, about 85.3% of residents live within a half-mile, or approximately a 20-minute walk, of a transit stop. Similarly, there is also a higher proportion of residents in Priority EJ DACs (87.0%) and Inclusive EJ DACs (85.7%) than in Non-EJ DAC Areas (81.9%) within a half-mile distance of a transit stop. This difference amounts to an approximately 3.8-5.1% higher access in EJ DACs. Therefore, Tulare County's fixed transit stops are doing a better job of physically reaching residents of EJ DACs than residents of non-EJ DAC areas. This finding is a major improvement from the 2018 RTP/SCS Environmental Justice Report, which found that EJ DACs had an approximately 1% lower access to transit stops, within a quarter mile, than non-EJ DACs. Since residents of EJ DACs are disproportionately low-income and historically marginalized, Tulare County's recent efforts over the past four years to expand access to transportation services have significantly helped to improve transit equity and access to opportunities.

	Total	Within a Quarter Mile	% within a Quarter Mile	Within a Half Mile	% within a Half Mile
<b>Entire County</b>					
Population	451,190	296,631	65.7%	384,891	85.3%
Households	133,495	88,065	66.0%	113,677	85.2%
Dwelling Units	145,200	94,597	65.1%	121,444	83.6%
<b>Within Priority EJ DACs</b>					
Population	123,070	82,351	66.9%	107,129	87.0%
Households	33,841	22,933	67.8%	29,775	88.0%
Dwelling Units	36,544	24,661	67.5%	31,838	87.1%
<b>Within Inclusive EJ DACs</b>					
Population	358,096	239,255	66.8%	306,918	85.7%
Households	104,645	70,837	67.7%	90,186	86.2%
Dwelling Units	112,765	76,116	67.5%	96,245	85.4%
<b>Non-EJ DAC Areas</b>					
Population	84,911	53,545	63.1%	69,580	81.9%
Households	26,084	15,952	61.2%	20,668	79.2%
Dwelling Units	29,694	17,214	58.0%	22,323	75.2%

### Access to Transit Routes and Flex Zones

Several transit agencies in Tulare County offer a flag stop and flex zone service on eligible bus routes. This service extends to up to 0.75 miles from the bus route. Across Tulare County, about 90.6% of residents live within a quarter-mile, or approximately a 10-minute walk, of a flex zone. As shown in the below table, there is a slightly higher proportion of residents in Priority EJ DACs (89.1%) and Inclusive EJ DACs (90.9%) than in Non-EJ DAC Areas (88.1%) within a quarter-mile distance of a flex zone. This difference amounts to an approximately 1.0-2.8% higher access in EJ DACs. Furthermore, about 92.6% of residents live within a half-mile, or approximately a 20-minute walk, of a flex zone. Similarly, there is also a higher proportion of residents in Priority EJ DACs (92.3%) and Inclusive EJ DACs (93.1%) than in Non-EJ DAC Areas (89.6%) within a half-mile distance of a flex zone. This difference amounts to an approximately 2.7-3.5% higher access in EJ DACs. Therefore, Tulare County's flexible transit routes are doing a better job of physically reaching residents of EJ DACs than residents of non-EJ DAC areas. This finding was not assessed in the 2018 RTP/SCS Environmental Justice Report and, thus, serves as a baseline for future progress that could be made in this area. Since residents of EJ DACs are disproportionately low-income and historically marginalized, Tulare County's efforts to expand access to transportation services via flex zones have significantly helped to improve transit equity and access to opportunities.

	Total	Within a Quarter Mile	% within a Quarter Mile	Within a Half Mile	% within a Half Mile
<b>Entire County</b>					
Population	451,190	408,749	90.6%	417,914	92.6%
Households	133,495	120,616	90.4%	123,100	92.2%
Dwelling Units	145,200	128,819	88.7%	131,752	90.7%
<b>Within Priority EJ DACs</b>					
Population	123,070	109,693	89.1%	113,640	92.3%
Households	33,841	30,455	90.0%	31,404	92.8%
Dwelling Units	36,544	32,536	89.0%	33,591	91.9%
<b>Within Inclusive EJ DACs</b>					
Population	358,096	325,433	90.9%	333,376	93.1%
Households	104,645	95,534	91.3%	97,606	93.3%
Dwelling Units	112,765	101,924	90.4%	104,229	92.4%
<b>Non-EJ DAC Areas</b>					
Population	84,911	74,800	88.1%	76,041	89.6%
Households	26,084	22,214	85.2%	22,633	86.8%
Dwelling Units	29,694	23,970	80.7%	24,613	82.9%

### Scenario Siting of Future Multifamily Housing Development

Siting for future housing developments is part of the Sustainable Communities Strategy and access to affordable housing impacts people's health, commutes, and opportunities. Multifamily housing typically has lower sales pricing and rents compared to single-family housing, and is therefore a meaningful performance measure to monitor whether anticipated housing developments and growth are expected to be accessible to residents of EJ DACs within Tulare County. (Additional performance measures for the Cross Valley Connection Blueprint Plus Scenario are already included in the Sustainable Communities Element of the RTP.). The 2046 Envision Tomorrow Modeling software produced the following numbers and corresponding percentages of units of multifamily homes as part of all expected new home construction.



	Housing		Multifamily				
	Region Acres	Units	Region Acres	Units	In Non EJ DAC	In Inclusive EJ DAC	In Priority EJ DAC
Town Neighborhood	25	151	25	151		151	72
Small Downtown	138	397	138	397		397	285
Compact Neighborhood High*	564	4,738	141	1,184	139	951	540
Mixed-Use Corridor	343	2,902	343	2,902	186	2,716	660
Compact Neighborhood Low	411	2,261					
Suburban Multifamily	604	14,979	604	14,979	3,001	11,210	3,993
Suburban Residential	3691	11,811					
Large Lot Residential	16	29					
Estate Home Agriculture	441	529					
	6,233	37,796	1,251	19,614	3,326	15,425	5,550
	Single Family	48%					
	Multifamily	52%		Multifamily	17%	79%	28%

### Community Engagement in RTP/SCS

Although TCAG has limited demographic data for community members who provided input on the RTP/SCS during the outreach process and does not have the capacity to track the demographics of people invited to participate, majority of in-person outreach happened in communities for which all or part of the community is within either the inclusive and/ or priority EJ DACs. The locations for RTP Outreach events are presented in the table below.

Communities Grouped by Alignment with EJ DAC Boundaries	Locations of In-Person RTP/SCS Outreach	Locations of Planned RTP/SCS Outreach which did not happen
Communities with some areas identified as being in the Priority EJ DAC and some areas in the Inclusive EJ DAC, with other areas not identified as being in any EJ DAC <ul style="list-style-type: none"> <li>City of Dinuba</li> </ul>	<ul style="list-style-type: none"> <li>Dinuba</li> <li>Lindsay</li> <li>Porterville (2 events)</li> </ul>	<ul style="list-style-type: none"> <li>Dinuba</li> <li>Tulare</li> </ul>

Communities Grouped by Alignment with EJ DAC Boundaries	Locations of In-Person RTP/SCS Outreach	Locations of Planned RTP/SCS Outreach which did not happen
<ul style="list-style-type: none"> <li>• City of Lindsay</li> <li>• City of Porterville</li> <li>• City of Tulare</li> <li>• City of Visalia</li> </ul>	<ul style="list-style-type: none"> <li>• Tulare</li> <li>• Visalia</li> </ul>	
<p>Communities with some areas identified as being in the Inclusive EJ DAC and other areas not identified as being in any EJ DAC</p> <ul style="list-style-type: none"> <li>• City of Exeter</li> <li>• City of Farmersville</li> <li>• City of Woodlake</li> </ul>	<ul style="list-style-type: none"> <li>• Exeter</li> <li>• Farmersville (2 events)</li> <li>• Woodlake</li> </ul>	<ul style="list-style-type: none"> <li>• Woodlake</li> </ul>
<p>Communities entirely in either the Inclusive and/or Priority EJ DAC</p> <div> <ul style="list-style-type: none"> <li>• Allensworth</li> <li>• Alpaugh</li> <li>• Cutler</li> <li>• Earlimart</li> <li>• East Porterville</li> <li>• Goshen</li> <li>• London</li> <li>• Matheny</li> <li>• Patterson Tract</li> <li>• Pixley</li> </ul> <ul style="list-style-type: none"> <li>• Poplar-Cotton Center</li> <li>• Richgrove</li> <li>• Rodriguez Camp</li> <li>• Teviston</li> <li>• Traver</li> <li>• Tule River Indian Reservation</li> <li>• Waukena</li> <li>• West Goshen</li> <li>• Yettem</li> </ul> </div>	<ul style="list-style-type: none"> <li>• Cutler</li> <li>• Earlimart</li> <li>• Goshen</li> <li>• London</li> <li>• Orosi</li> <li>• Visalia</li> <li>• Poplar</li> <li>• Tule River Tribe Reservation</li> </ul>	<ul style="list-style-type: none"> <li>• Earlimart</li> <li>• Richgrove</li> </ul>
<p>Communities not identified as being in any EJ DAC</p> <div> <ul style="list-style-type: none"> <li>• California Hot Springs</li> <li>• Camp Nelson</li> <li>• Cedar Slope</li> <li>• Hartland</li> <li>• Idlewild</li> </ul> <ul style="list-style-type: none"> <li>• Ponderosa</li> <li>• Posey</li> <li>• Poso Park</li> <li>• Sequoia Crest</li> <li>• Silver City</li> </ul> </div>	<ul style="list-style-type: none"> <li>• Lemon Cove</li> </ul>	<ul style="list-style-type: none"> <li>• Three Rivers</li> </ul>

Communities Grouped by Alignment with EJ DAC Boundaries	Locations of In-Person RTP/SCS Outreach	Locations of Planned RTP/SCS Outreach which did not happen
<ul style="list-style-type: none"> <li>Ivanhoe</li> <li>Kennedy Meadows</li> <li>Lemon Cove</li> <li>Lindcove</li> <li>McClenney Tract</li> <li>Panorama Heights</li> <li>Pierpoint</li> <li>Pine Flat</li> </ul>	<ul style="list-style-type: none"> <li>Springville</li> <li>Sugarloaf Mountain Park</li> <li>Sugarloaf Saw Mill</li> <li>Sugarloaf Village</li> <li>Sultana</li> <li>Three Rivers</li> <li>Wilsonia</li> </ul>	
<p>Communities entirely in the Inclusive EJ DAC</p> <ul style="list-style-type: none"> <li>Delft Colony</li> <li>Ducor</li> <li>East Orosi</li> <li>El Rancho</li> <li>East Tulare Villa</li> <li>Linnell Camp</li> <li>Monson</li> <li>Orosi</li> </ul>	<ul style="list-style-type: none"> <li>Linnell Camp</li> <li>Tipton</li> </ul>	<ul style="list-style-type: none"> <li>Plainview</li> <li>Tonyville</li> <li>Woodville</li> </ul>

### Share of RTP/SCS Projects for EJ DACs

Since many RTP/SCS projects cross jurisdictional and EJ DAC boundaries, it is a challenge to calculate the specific proportion of overall investments allocated to EJ DACs. However, the vast majority of TCAG's programs and funding are located in or highly likely to benefit residents of EJ DACs. For example, nearly 100% of TCAG's Active Transportation Program funding for the region as well as grant and regional funding for Complete Streets Plans have been spent in EJ DACs. Moreover, all the new transit center funding has been directed to project locations within EJ DACs and all regional projects funded by the State of California's Affordable Housing and Sustainable Communities grants are also located in EJ DACs.

## Recommendations

Raimi + Associates (R+A) has developed the recommendations outlined in this memorandum based on the following:

1. R+A's' review of:
  - a. Pre-draft elements of the 2022 Tulare County 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS),
  - b. Public engagement findings and comments submitted to the Tulare County Association of Governments (TCAG) related to the 2018 and 2022 RTP/SCS, the Regional Active Transportation Plan, the Coordinated Public Transit-Human Services Plan, and other recent TCAG studies and plans,
  - c. Public engagement data gathered by Tulare County agencies and organizations other than TCAG (e.g., Tulare County Health & Human Services Agency, Tulare County Resource Management Agency, Adventist Health); and
  - d. Geospatial data for Tulare County.
2. Interviews that R+A conducted with experts in environmental justice and health in Tulare County and with leaders from Tulare County's environmental justice communities;
3. Geospatial analyses that R+A conducted related to Tulare County's demographics and population distribution, community health outcomes, transportation environment and land use, and traffic-related collisions; and
4. Best and emerging practices related to transportation, infrastructure investments, the social determinants of health, and racial and social equity.

Based on the findings from the existing conditions analysis and the results from the stakeholder engagement process, the following set of recommendations were developed to advance health equity and environmental justice in Tulare County. As described in detail below, some of these recommendations have been incorporated into the 2022 RTP/SCS's distribution of transportation and infrastructure investments. A separate subset of recommendations will, on an ongoing basis, leverage TCAG's influential role as a regional convener of stakeholders to maximize co-benefits for health equity and environmental justice.

Some of the below recommendations encourage TCAG to “prioritize” certain actions in the RTP/SCS and in their ongoing decision-making. The designation of a recommendation as a priority is simply to emphasize that a certain action is influential in advancing health equity and environmental justice. A priority recommendation does not denote a mandate, nor does it require TCAG to implement the recommendation. Moreover, this designation does not imply that investments should not be made to actions without a priority designation.

### **1) Prioritize Investments in Pedestrian Infrastructure**

To maximize co-benefits for health, equity, and sustainability, TCAG should continue to prioritize investments in pedestrian infrastructure, and specifically in disadvantaged communities. The stakeholder engagement process and the geospatial analyses overwhelmingly highlighted the need to address pedestrian safety concerns, especially in the county's rural and unincorporated areas. By improving the quantity and quality of sidewalks, crosswalks, and other pedestrian infrastructure near schools, community health centers, and other public facilities, TCAG's investments will reduce road injuries and fatalities, promote walking as opposed to vehicle trips, and ultimately improve health outcomes.

As part of the 2022 RTP/SCS, TCAG has allocated approximately \$375 million in investments for specific pedestrian and bicycle projects over the next 25 years. Although this direct funding for pedestrian and bicycle projects represents about 5% of the RTP's total funding, this figure does not include the additional pedestrian and bicycle improvements that are a component of larger regional and local road projects, which represent about 64% of the RTP's total funding. Moreover, nearly 100% of Active Transportation Program funding for the region as well as grant and regional funding for Complete Streets Plans have been spent in disadvantaged communities. TCAG's significant investments in pedestrian and bicycle infrastructure, especially in disadvantaged communities, are major steps forward to reducing health inequities and improving health outcomes.

### **2) Prioritize Projects that Maximize Job Growth**

As part of ongoing RTP funding allocations, TCAG should prioritize projects that improve existing infrastructure as opposed to developing new roads, bridges, and transit. Overall, fixing existing infrastructure leads to a higher return-on-investment because more money is spent on employee wages, which directly stimulates the local economy, and instead less money is spent on plans, permitting, and buying property, which have little stimulative or reinvestment



value. According to Smart Growth America, investments in public transportation and road repair/maintenance produce 31% and 16% more jobs per dollar, respectively, than investments in new roads and bridges. Thus, TCAG can achieve significant economic co-benefits for the regional economy by prioritizing existing infrastructure over new capacity projects.

As part of the 2022 RTP/SCS, TCAG has allocated \$3.3 billion in investments for road operations and maintenance projects and \$1.8 billion in investments for transit (mostly transit operations) over the next 25 years. These figures represent 44% and 24%, respectively, of the RTP's total funding and are by far the largest categories of investments. Therefore, TCAG's large investments and prioritization of existing infrastructure will help to stimulate job growth and provide significant co-benefits for the regional economy.

### **3) Establish Criteria to Help Target Different Investments to Specific Rural Communities**

TCAG should prioritize RTP investments in rural communities that best facilitate access to essential services frequented by lower-income households as well as educational and economic opportunities needed to advance. For example, low-frequency bus routes to outlying communities should also provide transit connection to healthcare providers, social service agencies, local employment hubs, community colleges, the County's probation and court facilities, and other County public facilities. These needed transit connections will provide critical quality of life improvements for zero-vehicle and one-vehicle households in the region that rely on TCAG's public transit investments to access opportunities and improve their quality of life.

Establishing criteria for different types of projects and to achieve specific objectives can help focus investments on those rural communities that will most benefit from specific types of investments. For example, when deciding what areas should be served by expanded or new vanpool services, the number of households with no vehicles should be included in prioritization criteria or project ratings, as well as level of existing transit service and transit destinations from different candidate communities or locations.

TCAG has identified a variety of qualitative and performance-based criteria to evaluate candidate transportation projects and to establish prioritization in investments. Specifically, the 2022 RTP/SCS includes performance indicators for "Equity/Environmental Justice – Economic Well-Being" which measures whether transportation investments and impacts are distributed among all ethnic, age, and income groups. Moreover, the RTP/SCS includes performance

measures for "Equity/Geographic Equity" which measures whether transportation investments are geographically equitable within the county.

#### **4) Support Expanding and Improving Internet Access + Use to Reduce Trips**

As part of any RTP infrastructure project in the region, consider actively partnering with other jurisdictions and private entities to improve access to high-speed internet, especially in rural and disadvantaged communities. For example, support efforts to pair fiber optic cable installation as part of an existing road improvement project or to provide free Wi-Fi services at key bus stops and public facilities. The COVID-19 pandemic has shifted many sectors and increased the use of tele-health, work-from-home, online court procedures, and other online services; however, not all county residents have access to high-speed internet. By increasing access to internet as well as the speed and reliability of this infrastructure, TCAG can reduce the need for vehicle trips and related greenhouse gas emissions.

#### **5) Invest in Outreach and Education to Support Transit Use and Program Participation**

As part of the region's ongoing efforts to unify the transit agencies in the county, TCAG should partner with the Tulare County Regional Transit Agency (TCRTA) and invest in significant public outreach to educate community members on the new programs and bus routes. Many lower-income households, especially low-literacy residents, non-English speakers, and people with mental health conditions, have difficulty navigating and understanding bus schedules, routes, and transfers. TCAG and TCRTA should consider developing simplified and multilingual marketing materials, improving signage at all bus stops, and partnering with community-based organizations and social service providers to best reach residents who rely on public transit services.

Moreover, as part of this outreach and education campaign, TCAG should expand awareness of the flag stop service on eligible bus routes. Currently, the Tulare County Area Transit website and bus brochures briefly mention the ability for passengers to "wave or flag down the bus at a safe location along the route" other than at designated stops, but does not mention that this service extends to up to 0.75 miles from the bus route. As described in the Environmental Justice Performance Measures section (page 134), the flag stop service has the ability to reach an estimated 90.6% of residents in the county compared to the 85.3% of residents who live within a half-mile of designated bus stops and the 65.7% of residents who live within a quarter-mile of designated bus stops. Specifically, 90.9% of residents in the county's "Inclusive EJ DACs" live within 0.75 miles of a bus route and could benefit from this service. By expanding outreach to

residents of disadvantaged communities of this available service, TCAG has the opportunity to achieve multiple co-benefits. The increase in transit use will help low-income residents increase their access to economic, educational, and other opportunities. Furthermore, the reduction of vehicle trips will reduce greenhouse gas emissions and improve air quality, which in turn will improve regional public health outcomes and help the region achieve state climate mandates.

## **6) Leverage Relationships with Policymakers and Government Jurisdictions in New Ways**

Although the transportation environment is a major social determinant of health that shapes the opportunities people have, transportation investments, infrastructure, and programs can only do so much to address health inequities and environmental injustices. Reducing (and eventually eliminating) complex, deeply rooted inequities caused by structural racism and economic injustices requires a multipronged suite of interventions that involve multiple sectors, jurisdictions, and disciplines. As a regional convenor of stakeholders in Tulare County, TCAG should consider if there are additional ways it might leverage its influence on policymakers. TCAG may also identify opportunities where it might act as a convener to help coordinate public, private, and non-profit stakeholders working to reduce inequities and to maximize health and environmental justice co-benefits.

For example, TCAG could work with elected officials and other community leaders prior to and during project and program implementation to identify additional co-benefits (and how to achieve them), as well as to identify potential negative impacts of projects and to identify possible policies and/or programs to mitigate those impacts (e.g., establishing a multi-jurisdictional program to support low-income households with down payments to ensure that long-time community members are able to directly benefit from affordable housing developments). Regular generative conversations grounded in the potentials and realities for specific projects will also support ongoing and future collaborative work, as both entities will become more familiar with the challenges and opportunities of the other and will be able to share funding opportunities, no- and low-cost ideas to address pressing community issues, and innovative partnership ideas.

## **7) Partner with Government, Nonprofit Organizations, and Businesses to Reduce Trips**

For rural communities located far from key destinations and with no or minimal transit service, the most impactful way to reduce transportation-related greenhouse gas emissions is to reduce the need for vehicle trips. Many government agencies (e.g., school districts, the County probation department) and health and social service providers already

support some community members by providing rides to and from appointments. Additionally, some for-profit businesses (e.g., supermarkets) offer van or shuttle service to customers.

TCAG should encourage the expanded use of virtual and phone appointments to further reduce the need for trips, help coordinate regularly scheduled transportation between sites with internet access and communities with poor internet service (e.g., coordinating with the family court system to schedule virtual appointments for residents in specific communities on a set day of every month and establishing a vanpool to the area library on that day to facilitate internet access with fewer miles traveled), encourage use of mail delivery for small items needed irregularly (e.g., prescriptions), encourage the establishment of regularly scheduled deliveries from retailers (e.g., weekly delivery of grocery orders to different rural communities with low vehicle ownership, which would be a more efficient use of fuel and time compared to having members of many households travel to and from the retailer).

#### **8) Coordinate Micro-mobility Services with Regional Stakeholders**

TCAG should partner with TCRTA in expanding its on-demand and electric-vehicle (EV) shuttle service in a coordinated approach. Over time, many regional stakeholders, including healthcare providers, probation officers, social service providers, supermarkets, and agricultural employers have developed a patchwork and uncoordinated system of shared rides for lower-income households in the region. By proactively engaging these stakeholders in the expansion of the region's on-demand EV shuttle service, TCAG can gather their lessons learned and help to best meet the existing transportation needs of lower income households to achieve the ultimate goals of expanding equitable transportation access and reducing vehicle trips.

#### **9) Use Performance Measures to Monitor Health + Equity Impacts of RTP and to Help Prioritize Co-Benefits**

R+A recommends that TCAG begin using some of the following measures to monitor the co-benefits of RTP projects and programs as they are implemented and to monitor trends relevant to transportation investment co-benefits.

Performance Measure	Source	Purpose of Measure
Promoting Equity, Environmental Justice, + Health During Implementation of Projects		
Number of permanent (or temporary) public art installations as part of transportation projects or inspired by transportation projects	TCAG	To monitor co-benefits related to placemaking (and potentially economic opportunity)
Percentage of housing cost-burdened (>30% of household income spent on housing costs) and severely housing cost-burdened (>50% of household income spent on housing costs)	ACS	To monitor economic burdens and to prioritize where partnerships with local government and social service providers should be prioritized to meet needs of community members and increase opportunity
Presence of ADA/AASHTO compliant lighting for all modes in projects	TBD	To monitor implementation of a lower-cost safety enhancement that addresses visibility and perceived safety (or lack thereof)
Presence and type of physical safety features and enhancements focused on pedestrian safety (e.g., enhanced crosswalks, pedestrian median, sidewalk width)	TCAG	To monitor the quality of the pedestrian environment and evaluate the effects of physical safety measures that have been constructed
Presence and type of regulatory safety enhancements (e.g., speed limits, Right Turn on Red restrictions)	TCAG with local + regional planning staff and/or law enforcement	To monitor the effectiveness of regulatory safety measures that have been adopted
Type and quality of accommodations/amenities for passengers at transit stops (e.g., seating, bus shelters, lighting, wayfinding information, languages in which information is provided, real-time arrival information)	TCRTA and Visalia Transit	To monitor the quality of the transit environment



# Appendix A: Full Results from Community Engagement

As discussed in Chapter 2: Community Engagement, the following themes emerged from the interviews and were identified.

1. Interviewees reported that **rural, unincorporated communities within Tulare County should be prioritized for transportation investments** – although there was not a shared understanding of which specific communities most needed investments.
2. Participants consistently identified the **need for improved transportation infrastructure/built environment** (lack of sidewalks and crosswalks, number of potholes in some roads, etc.) – **especially for pedestrians**.
3. Although the only option for some residents, Tulare County's limited **public transportation options are challenging for many community members to understand and navigate**.
4. **Unmet transportation needs have a negative impact on residents' wellbeing**, creating additional barriers to people utilizing supportive social or health services and achieving economic security.
5. Many nonprofit organizations, local businesses, and government agencies provide *some* transportation to *some* of the community members they serve (e.g., patients, customers, clients), creating an **uncoordinated, informal transportation system that is inconsistent in which residents are served and when (and where) transportation is available**.
6. Some interviewees identified that **transitioning to electric vehicles is an important step to reduce air pollution and improve health**.
7. Interviewees also identified some transportation challenges specific to subpopulations within the county, including agricultural workers, residents experiencing homelessness (especially those sleeping/living in their vehicles), and people actively engaged with the criminal justice system.

This Appendix provides detailed results from the community engagement process, including specific quotes from stakeholders, organized by the above themes.

## Transportation Investments Should Focus on Rural Communities

Generally, there was not consensus on which specific rural communities within the county needed to be prioritized for transportation investments, rather there was strong consensus

on prioritizing rural communities over the larger cities. When asked to identify and prioritize specific rural areas that face inequities, stakeholders would often list rural communities from throughout the county. Some participants identified Allensworth and Earlimart in the South County, while others identified Cutler-Orosi and Dinuba in the North County.

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"The biggest inequities are in the rural areas of the county...and anywhere throughout the county really, as far as northern or southern or kind of the middle areas, I would say that there is definitely a transportation need for those rural communities."

– Historically Disenfranchised Communities

"We have used the Healthy Places Index tool, which basically allows public health departments to identify factors that will ultimately predict or influence life expectancy...there were 19 identified communities that fall in the low HPI quartiles, which are scattered throughout the county"

– Public Health

"Not in terms of specific places in Tulare County. I think in terms of some of our populations. We have, a very large, undocumented and farm labor community...I guess not thinking geographically, but more in terms of communities that we could potentially do more for and transportation wise."

– Public Health

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## Need for Improved Transportation Infrastructure / Built Environment

Stakeholders consistently were appreciative of sidewalks and expressed a desire to see further public investments in safe routes to schools and other sidewalk improvements.

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"I'm excited when I see sidewalk projects, like safe school passage projects, happening in rural communities, because some of these communities don't even have sidewalks...I'm hoping that in the future, that would be a continued project."

– Historically Disenfranchised Communities

"Since I've been working here I've seen different projects popping up, even here in front of my building...a lot of people advocating, and we now have streetlights. That's wonderful! Definitely seen other sidewalks and other things built, but we just need to continue in a forward motion and progress, keep adding."

– Cutler-Orosi

"I know that they made some investments in a lot of walking paths and bike paths around the cities and even in some of the rural areas...It's great that they have that sidewalk now."

– Historically Disenfranchised Communities

"RMA gets requests for those kinds of things, stop signs, gutters, sidewalks, and I think those are needed, especially from a public health perspective because that improves walkability, that improves

biking, and it really gets people outside and outdoors.”  
– Public Health

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However, stakeholders also discussed the continued shortage of sidewalks, crosswalks, and other pedestrian infrastructure in rural communities that cause residents to feel unsafe walking in their community.

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“I think bike trails or walking trails...would be helpful in our impoverished communities because, a lot of times, there's no real opportunity for you to go out for a hike or bike ride to promote wellness...Those types of amenities are just not there, but those communities also enjoy doing physical activities.”  
– Historically Disenfranchised Communities

“There's going to be more development happening...and so the transportation systems should assist in that development. Residents should have better road conditions and better sidewalks, especially in the South County...and smaller communities like Terra-Bella, Poplar, and Cutler-Orosi.”  
– Historically Disenfranchised Communities

“Before we go into biking or scootering, I think, let's just get real primary. Let's just have a way for people to walk and especially to walk to school. Right now, currently they do not, there's no sidewalks.”  
– Cutler-Orosi

“The majority of our students are walkers and they're going to be, so I really feel that our focus and attention should probably try to meet that need first...We are missing some basic primary needs in the community when we can't even have crosswalks.”  
– Cutler-Orosi

“Individuals...are more interested in gutters and sidewalks for their community more than anything else...They can see the improvements and they can feel good that they got sidewalks in places where, and there's still plenty of places within Tulare County that don't have sidewalks.”  
– Public Health

“I know that they made some investments in a lot of walking paths...but I don't think that they paired them with the safety upgrades, because a lot of the times cars are rolling by really fast...So I'm thinking of the kids who use those walking areas and if it's on their way to school...what are you doing about the traffic control?”  
– Historically Disenfranchised Communities

“There's no types of sidewalks in a lot of those unincorporated areas...A lot of the infrastructure is not well-maintained. Just really bringing sidewalks, bringing the handicap access to those rural areas. They are really lacking in that sense.”  
– Historically Disenfranchised Communities

“Safety is really important...when you're coming into near a school or healthcare facility and other things like that, like there needs to be more safety. Instead of just let's give people access, think

about the way they set it up.”  
– Historically Disenfranchised Communities

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Similarly, several stakeholders expressed concern over the lower quality road conditions and generally poorer infrastructure in the county's rural communities.

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“I frequent the lower income communities in Tulare County pretty often. I do notice a lot of bad roads that I feel are not being addressed...If you're coming from Tulare or Visalia, you'll see that those roads are really maintained, but once you start getting off the beaten path and going to those other communities, you'll see the difference.”  
– Historically Disenfranchised Communities

“Even within the more populated areas of Cutler-Orosi, you are going to find a lot more spots that don't have sidewalks or the roads are really horrible. Lots of potholes. And in East Orosi, the quality of those roads out there are really bad.”  
– Cutler-Orosi

“There's so many geographic areas within the county that are in rural areas with limited infrastructure, whether that's roads and sidewalks, that they could all benefit from investments.”  
– Public Health

“Definitely the lack of transportation, all of those things, roads, sidewalks, trails, and bike lanes really are lacking in the rural areas of the county.”  
– Historically Disenfranchised Communities

“All the new houses that are going up in Visalia or have over the last few years. I don't think we've grown the road system enough for the increased traffic in certain areas.”  
– Historically Disenfranchised Communities

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## Public Transit is Challenging for Those Who Most Need It to Navigate

There was broad consensus that many low-income populations, especially low-literacy residents, non-English speakers, and people with mental health conditions, have difficulty navigating and understanding bus schedules, routes, and transfers. Stakeholders described clients being so overwhelmed by the bus system that they would avoid using it entirely, even when they may not have other options.

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“The lack of understanding of what the bus routes are [is an issue]...to give families the thick book [of bus routes] and they have to figure it out, they're not going to do it on their own. Many adults

are barely literate in their primary language, much less literate in English.”  
– Cutler-Orosi

“How do people gain access to the service itself? It [the bus system] needs to be more user-friendly or more acceptable. We have people who don't speak the language. There are language barriers or who distrust. There's distrust of programs or systems. Is there a way to make it simpler?”  
– Historically Disenfranchised Communities

“Even if we increase the public transportation for the folks that we serve, educating them on how to do that is important...if you don't know or no one's ever taught you how to use the bus system or to read the maps or figure out where you're going, that can be very intimidating.”  
– Historically Disenfranchised Communities

“They [public transit users] really have to map out their day and if they have certain commitments, I think sometimes it can be overwhelming, especially with clients who have significant mental health issues. And it's just extremely time consuming...It's very difficult.”  
– Historically Disenfranchised Communities

“I think it would be important to provide that educational information to different folks, and that could be in different languages because there may be language barriers...Language barriers may impact their ability to get to the correct place on time.”  
– Historically Disenfranchised Communities

“If there were some sort of way to...having some signs at the bus stops to give people an easy way to identify when the bus is coming and where it's going to take them to, regardless of what language they speak.”  
– Cutler-Orosi

“What about a kiosk? That residents can walk up to and say, ‘okay, let me see the routes’. I don't know whether they would have the ability to place it at every bus stop, but at least at some so people know where to access the service.”  
– Historically Disenfranchised Communities

“If there was a mobile app that residents could use that was multilanguage, accessible, and just something simple to help them navigate from place to place. I'm not sure if that's available, but people use their phones for everything now.”  
– Cutler-Orosi

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## Unmet Transportation Needs Negatively Impact Residents' Wellbeing

Stakeholders described how Tulare County's limited public transportation system makes it difficult for low-income residents to access health and social services. Therefore, transportation presents a major barrier for health and social service providers in managing and preventing chronic diseases.



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"I know I can speak for my organization and it's part of when we're scouting a new area that we look at transportation routes and that we work with agencies so that we can either create access with asking for a bus stop next to our facility if there's not already one. But there are a lot of other social service agencies who don't have the ability to do that, or are located in more rural parts of the county where there's less access to them."

– Historically Disenfranchised Communities

"We have a lot of federally qualified health centers...These FQHCs require transportation services for their patients to be able to attend their appointments, or link them to services...Also, trying to outreach to rural health centers...or resource centers to be able to address the wellbeing and improve their health...We need to extend the sustainability of these transportation services...that will ultimately decrease the gaps that reflect health inequities."

– Public Health

"In Tulare County, we have a lot of rural communities. If you need to go see a doctor or a specialized doctor, like a cardiologist, and you live in Pixley or Earlimart, it's going to be a very difficult process. A lot of these folks are low income, they don't have vehicles, they don't have gas money."

– Historically Disenfranchised Communities

"We would have all of those people that really don't have access to any kind of transportation services right now, which really makes them at risk of not having any kind of a way to get to services. They're really at the mercy of people coming to them."

– Historically Disenfranchised Communities

"In the City of Tulare for example, a good portion of their homeless do tend to congregate around their transit hub...any possibilities of being able to co-locate social service providers with some of the transportation hubs, then that could enable even better access to those social services and that community."

– Historically Disenfranchised Communities

"Historically, if we know that disenfranchised populations are using our transportation, we're going to want to be more coordinated with the services that are available to them and essential to them."

– Historically Disenfranchised Communities

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The infrequency of bus service causes low-income residents to spend significant amounts of time waiting outside for the bus, which in turn affects their job and educational opportunities.

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"When you're living in areas such as East Orosi...It's really difficult to use the bus, the TCAT, because of the amount of times the bus even goes out into that community. If you're looking at relying on that to maintain employment, or anything else, it's not really realistic."

– Cutler-Orosi

“Whether it's to Reedley College or College of the Sequoias, it's difficult to access. Because Reedley college is crossing counties, you have to take the TCAT to go to Dinuba, to get to this one location where you can get the other transfer. It's just a little difficult.”

– Cutler-Orosi

“For people in rural communities...If they have to catch the bus at 6:45 in the morning, and they have a 10:00 AM appointment, chances are that bus isn't going to come back until 4:45 or 5:00 PM, and these people don't have all day to hang around and wait for a bus.”

– Historically Disenfranchised Communities

“in those rural communities...even if there is some transportation, it is very limited and it doesn't really meet their needs and it ends up taking so much time from them, which ultimately means money and, other negative impacts.”

– Historically Disenfranchised Communities

“...for folks that have to go out there to attend court, it's an all-day thing. It definitely impacts them...If they are socio-economically disadvantaged, then they're having to miss work, which really they just aren't able to do.”

– Historically Disenfranchised Communities

“I think, if the GPS mapping of all of the buses are available, then that becomes highly useful to the community members. In particular, during our summers and winters, when the weather conditions are really poor, because standing outside in 110 degree weather, and you don't know when the bus is going to come up or how off schedule it is, that's pretty miserable.”

– Historically Disenfranchised Communities

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A few stakeholders noted that the cost of public transportation can be prohibitive for low-income residents and, thus, they proposed bus passes or fee waivers for low-income residents. In addition, a couple stakeholders identified Medi-Cal as a streamlined approach to verifying eligibility of low-income status.

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“Because some folks, they just can't afford transportation... that would be something I think would also be helpful. There's an option for, free transportation for low income because that's a good part of our clients' situation.”

– Historically Disenfranchised Communities

“It is a barrier being low income, like students, they [farmworkers] do have that and senior citizens have that where they provide these vouchers or free passes for TCATs. That would be awesome for ag workers as well.”

– Agricultural Workers

“...perhaps even add an incentive that say, if you're an agriculture worker, you could get a monthly pass for like \$25.”

– Public Health

“If in the long-term, there could just simply be either a waiver or a very low cost option for people who receive Medi-Cal. The only way they're going to have Medi-Cal is because they're low income, you've got all the proof you need there.”  
– Historically Disenfranchised Communities

“That would probably be the easiest way, if you're looking at low-income populations, is those people that are on Medi-Cal... We [the County] could even build in a way with HHS whereas TCAG is processing those waiver applications, we can verify that they are actually active.”  
– Historically Disenfranchised Communities

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A few stakeholders expressed a desire for the public transportation system to play a larger role in connecting residents to jobs and economic opportunities.

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“That cooperative transit between our rural areas and our population centers...Any regional transit that would help people get up to Fresno would really help with...enabling lower income people greater access to jobs that otherwise would be expensive for them due to transportation issues.”  
– Historically Disenfranchised Communities

“Income and jobs create the biggest health disparity with our populations, both of color and for low income residents...I think where transportation investment would be helpful is in creating the infrastructure necessary for, or needed to attract employment opportunities. I think in order to create more jobs, I think we need to look more attractive to potential investors or companies.”  
– Public Health

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## Transportation Help Available to Some through an Uncoordinated Network

Local public agencies, non-profit organizations, and businesses are often meeting the transportation needs of low-income clients, which has created a patchwork and uncoordinated system of transportation.

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“There's oftentimes where our officers, they will make that trek out to a rural area of county, pick them up, bring them in. Unfortunately, we just can't do that for everybody, but whenever there's a need, we'll definitely step in.”  
– Historically Disenfranchised Communities

“We use our existing transportation to transport clients, to access resources, even here within the community. Of course, sometimes we have to fill that need to assist families to access services outside of the community. We've driven to San Francisco, we've driven to Fresno, we've driven to

other places depending on the need and the specific situation of the family.”

– Cutler-Orosi

“I believe that our transit department has done a lot to try to improve the links in the transportation system...to ensure that clinics have bus transportation that goes directly to clinics, but still you have that issue where the clinics themselves have to offer their own transportation to get people to the appointments.”

– Public Health

“I have heard and seen the Sheriffs get taxis for people [recently released inmates] and then they drop them off here at the courthouse in Visalia. I don't know if that happens for everyone, but it does happen.”

– Historically Disenfranchised Communities

“If there's a specific job, they [farmworkers] have transportation when going to a job site, they have people that give them rides. They'll charge \$2 a day or something in that manner.”

– Agricultural Workers

“I do know there are areas that people, if they're looking for work, maybe they're not full time with the company, but they know what corner to go to where the crew boss is going to come through with a van where they can pick up work for the day. If you're one of the lucky ones to be there soon enough and then you're going to get it.”

– Cutler-Orosi

“Bigger supermarkets actually had a van and that van will provide transportation services to consumers. They would take them, I don't know exactly what that radius was, but they would provide free transportation services once they shopped.”

– Public Health

“I have heard of the Vallarta program where I think if you spend more than a hundred bucks, you get, transportation home. Well, that's great.”

– Public Health

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## Electric Vehicles: An Important Opportunity to Improve Air Quality + Health

Several stakeholders identified moving to electric vehicles as an important strategy to improve air quality, and therefore reduce the negative health impacts from air pollution.

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“I think going electric would be great...all with the intention of improving the air quality, we see that the effects it [pollution] has on a variety of chronic illnesses is just horrendous. We know that we have one of the worst air quality, if not the worst air quality in the country.”

– Public Health

"The buses are not in tip-top shape...There are now vehicles that emit less emissions...there is a need to update vehicles because we already have bad air quality, and with all the emissions, it just makes it worse. We have a high prevalence of asthma in our area."

– Historically Disenfranchised Communities

"Finding ways, with the Valley having such poor air quality, to incentivizing and cutting those emissions down and, so that there is a bigger effort to clean up the air a little bit because we just have horrible air."

– Historically Disenfranchised Communities

"Reducing carbon emissions, I think would be fundamental in improving, not just the air quality, but all of the chronic conditions that we see here in the county."

– Public Health

"One of the biggest health issues is just the quality of the air. The question is how do you improve air quality?...Unfortunately, we have the 99 corridor. The amount of pollution that comes in, due to that is just a mess. And so, what kind of investments can we make in mass transit to support moving people?"

– Public Health

"I know that 20 years from now we're supposed to all have electric cars, but how is that going to be possible if, unless we start building more charging stations and that are convenient and fast."

– Historically Disenfranchised Communities

"We are seeing more and more electric vehicles, and so we want to keep it up...They make me hopeful. Tulare County is like a vacuum in the valley, and we do get a lot of pollution here. It's important to continue with the clean energy and clean vehicles."

– Historically Disenfranchised

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## Population-Specific Findings

Public transportation services cannot meet the commuting needs of agricultural workers, but rather agricultural workers rely on a formal to informal system of vanpools and carpools. Bus routes are only helpful for this population during the evenings and weekends.

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"When it comes to making it to work at a specific agricultural site, there's no way that public transportation could ever meet the needs or to have routes to all of these different ag fields. The way they're spread out; number one. And it wouldn't be feasible either because, maybe the route is needed this week, but if they [farm labor contractors] send them [farmworkers] to another part of the county or even a different county, there's no need for that route anymore...These people [farmworkers] are constantly on the move."

– Agricultural Workers

"I do know there are areas that people, if they're looking for work, maybe they're not full time with the company, but they know what corner to go to where the crew boss is going to come through



with a van where they can pick up work for the day. If you're one of the lucky ones to be there soon enough and then you're going to get it.”

– Cutler-Orosi

“There are specific sites and designated areas...where people could get picked up. They go to their designated area to work, and then by the end of the day, they return to that same area, and then everybody goes their own way. It can be a Valero gas station. It can be Chevron, but again, these designated areas are...just a parking lot.”

– Agricultural Workers

“...the farm labor centers are about a hundred percent farm workers. If there would be a specific TCAT pickup point to take them to where they need to go, that would be a big help for them...They probably would utilize public transportation either in the evening or on the weekends to get over to Walmart or Target or wherever they have to go shopping...”

– Agricultural Workers

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Since many people impacted by the justice system are also low-income, they often rely on the public transportation system. However, these residents face many barriers and hurdles to using public transportation to reach the County's justice complex north of Visalia.

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“For folks that have to go out there to attend court, it's an all-day thing. It definitely impacts them, versus someone that has transportation may be able to go appear for court and then, get back to work or school where, the folks that don't have those means are essentially losing a whole day.”

– Historically Disenfranchised Communities.

“Our juvenile justice center...If they go and visit for 30 minutes, then they have to wait around for four hours for the next bus. Then there's also no food restaurants or...a way for anybody to kill any time, they're waiting out there so long, cause there's none of those resources out there as well.”

– Historically Disenfranchised Communities.

“It's basically an all-day affair or half day affair, for them to even get to that juvenile court, because it's just so remote. That's kind of a big issue that comes up often. Also, I do know a lot of clients are...on very limited income and asking for bus passes”

– Historically Disenfranchised Communities.

“if you're late...and relying on public transportation...depending on the judge, some judges are understanding and some judges are not...Sometimes it could happen where if the client is not there when their case is called, potentially a bench warrant could be issued and they could be taken into custody on that warrant for failure to appear.”

– Historically Disenfranchised Communities.

“Clients who have DUIs or who have had their licenses suspended oftentimes, because there's not a good [transportation] alternative, will risk committing a misdemeanor because they have to go to work, they have to support their family, or they have to go to court...They get into this vicious cycle.”

– Historically Disenfranchised Communities

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Unhoused residents of Tulare County face unique transportation challenges and, thus, require unique solutions to meet their transportation needs.

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Our homeless populations do tend to be more populated in the cities because it's closer to more amenities, but they run into a lot of transportation barriers. For example, they have animal that is their companion. They can't leave it somewhere because they're homeless. They have to bring it with them. Or, they have belongings that they carry with them. Any ability to help enable transportation with those barriers being minimized or removed, I think would make a large impact for that community."

– Historically Disenfranchised Communities

"These folks really have nothing, they only have their vehicle, and then their vehicle breaks down, and then even that gets taken from them. Now they're truly on the streets, their ability to look for work or attain work is now even lower because they also have no vehicle and it creates this compounding effect, trapping them in homelessness...If there were some funding stream or program to help those kinds of individuals get their vehicles repaired and brought up to smog compliance, I think that could make a pretty big difference too."

– Historically Disenfranchised Communities

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