

CHAPTER 6

ENVIRONMENTAL JUSTICE

This chapter summarizes key findings from the Environmental Justice and Equity Analysis for the Madera County’s 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) for the Madera County Region.

As a federally designated Metropolitan Planning Organization (MPO), MCTC is must comply with federal and state rules and policies and, therefore, conducts an Environmental Justice Analysis, which assures MCTC conforms to federal environmental justice principles, policies, and regulations, including Title VI. MCTC is required by law to determine whether the RTP/SCS benefits low-income and minority communities equitably, and whether the Plan’s transportation investments have any disproportionate negative effects on minority/and low-income populations in the MCTC region, and to minimize negative impacts where they exist.

The goal of environmental justice (EJ) is to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations and to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

Addressing Environmental Justice

Transportation systems play a vital role in advancing the safety, economy, and quality of life for residents of Madera County. Each day, transportation facilitates the movement of goods and people, providing mobility to Madera’s residents, visitors, and businesses. Transportation systems are quite diverse, including roadways, public transportation, bicycle and pedestrian facilities, airports, and railroads and like any system, maintenance and improvements are crucial to its success. Madera is committed to maintaining the existing infrastructure and to create and implement changes, which would add to the system’s efficiency and safety.

Investment in the transportation system creates measurable benefits but may also result in unintended consequences if not planned correctly. Projects may generate disproportionate negative impacts to minority or low-income communities by either denying them their “fair-share” of transportation projects or subjecting them to an unequal share of the negative externalities. To prevent such an event from occurring, the Madera County Transportation Commission (MCTC) is committed to employing an environmental justice program that will help ensure early and continued public involvement, and an equal distribution of transportation projects, paying close attention to the needs of low income and minority populations.

Environmental Justice is a public policy goal of promoting the fair treatment and meaningful involvement of all people in the decision-making process for transportation. Satisfying this goal means ensuring that low-income and minority communities receive an equitable distribution of the benefits of transportation activities without suffering disproportionate adverse impacts. Achieving environmental justice requires both analytical techniques as well as the full and fair participation by all potentially affected communities in the transportation decision-making process.

MCTC will continue to consult and coordinate with the various Native American Tribes within Madera County. It is crucial that MCTC and these organizations work together to identify transportation needs including the provision of transit services, necessary highway and road improvements, and improvements that address known safety issues. MCTC will examine the future necessity of forming an Environmental Justice Committee to further build upon current community collaboration to enhance anticipated planning efforts.

Title VI, Federal Mandates and Relevant EJ Legislation

The goal of environmental justice is to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations and to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

Title VI

Title VI of the 1964 Civil Rights Act provides one of the principal legal underpinnings for environmental justice. Title VI 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. Title VI prohibits recipients of Federal funds from actions that reflect ‘intentional discrimination’ or that exhibit ‘adverse disparate impact discrimination’ on the basis of race, ethnicity or national origin.” Title VI also prohibits discrimination in the form of the denial of meaningful access for limited English proficient (LEP) persons.

Executive Order 12898

E.O. 12898 requires that federal agencies shall, to the greatest extent of the law, carry out their activities, programs and policies in a way that avoids disproportionately high and adverse health and environmental impacts on low-income and minority populations

Executive Order 13175

E.O. 13175 Consultation and Coordination with Indian Tribal Governments. It establishes regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies with tribal implications, to strengthen intergovernmental relationships with Indian tribes and to reduce the imposition of unfunded mandates upon Indian tribes.

As a government agency receiving federal funding, the MCTC is committed to implementing Title VI and conforming to federal environmental justice principles.

In addition to federal requirements, MCTC must comply with the following regulations:

- California Government Code Section 11135, which states that, “no person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under any program or activity that is conducted, operated, or administered by the state or by any state agency that is funded directly by the state, or receives any financial assistance from the state.”
- California Senate Bill 115, passed in 1999, also established the definition of “EJ” in the California Government Code as “The fair treatment of people of all races, cultures and income with respect to development, adoption and implementation of environmental laws, regulations and policies.” The State of California also provides guidance for those involved in transportation decision-making to address environmental justice.

Other legislation relevant to environmental justice in recent years includes:

Senate Bill 1000 (SB 1000), the Planning for Healthy Communities Act, which requires all local jurisdictions in California with disadvantages communities, as defined by SB 535, to develop an environmental justice element as part of their general plan update or consider environmental justice goals, policies, and objectives throughout their general plan.

- Assembly Bill 617 (AB 617) brings air quality monitoring to a more localized level. While MCTC does not have statutory requirements from this legislation, it is evident that environmental justice is becoming an increasingly significant topic in all sectors of planning. As a result of this, MCTC aims to provide support, as needed, to its members agencies.

More detailed information about the Federal and State requirements is available in the Environmental Justice and Equity Report, Appendix N.

How Transportation Investments Affect Communities

Multiple Modes of Transportation

The number and availability of different transportation modes play a critical role within Madera. Non-automobile travel modes (primarily transit) are essential to ensure access to jobs and services for the low income and elderly who may not have reliable access to a car. The investment in public transit affects the mobility of Madera residents by offering alternatives to the personal automobile.

Residents can access transit services via:

Fixed-Route and Demand-Response

Fixed route bus service for the City of Madera (Madera Metro). Intercity fixed-route system that services the unincorporated areas of Madera County (Madera County Connection). The Yosemite Area Regional Transportation System (YARTS) provides public transit in the Yosemite region, as well as many different communities along the way. In Madera it runs on SR 41 and Eastern Madera County.

Demand-response system for the City of Madera and City of Chowchilla (Madera Dial-a-Ride and Chowchilla Area Transit Express). Demand-response system for the elderly and people with disabilities in Eastern Madera County (Eastern Madera County Senior Bus). A demand-response service for medical and dental appointments for residents of Eastern Madera County (Eastern Madera County Escort Service).

Private Carriers

Several private carriers provide inter-city services, including Greyhound and Madera Cab Company. Greyhound operates seven days a week from the City of Madera's Downtown Intermodal Center on North "E" Street. Madera Cab Company provides service in Madera County seven days a week, 24 hours a day.

Amtrak operates seven days a week with twelve (12) daily stops in Madera along the Burlington Northern and Santa

Fe (BNSF) Railroad alignment. The station is located on Avenue 15½ and Road 29.

Native American Tribes Transit Service

In addition to transit services conducted by public transit providers, Native American Tribes provide transit services and have developed the North Fork Rancheria's transportation center and transit services program. In addition, the Picayune Rancheria of the Chukchansi Indians provide transit services to and from the Chukchansi Casino and Resort from Fresno, other central California regions, and from Modesto, stopping in Madera and continuing to the Casino.

Rideshare

CalVans is also available to provide commute vanpooling within Madera County and to employment centers in other counties in the Valley.

Pedestrian and Bicycle Investments

Madera also invests in other modes of transportation such as bicycle and pedestrian facilities and encourages rideshare activities such as carpooling and vanpooling.



More detailed information on Public Transportation in Madera County can be found in Chapter 4, and Appendix J Madera County Short-Range Transit Development Plan.

The effect of motor vehicles on air quality is one of the most recognized and quantified environmental impacts of transportation. There is a significant body of evidence that suggests air pollution from motor vehicle emissions cause a number of public health problems. Investment in transportation may have a positive or negative effect on air quality. Generally, investments that cause travelers to shift to less polluting modes (public transit, carpooling, bicycling, rail, etc.) can have a positive air quality impact. Similarly, investment that reduces roadway congestion typically reduces pollution emissions, but may be slightly offset through greater induced travel.

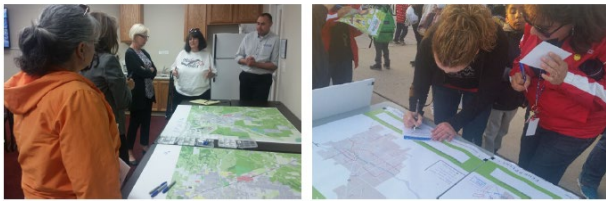


Public Participation

Because the RTP and SCS play such a significant role in establishing goals and objectives, and guides development of infrastructure improvements, extensive efforts were made to achieve consultation and coordination with all transportation providers, facility operators, appropriate federal, State, and local agencies, Native American Tribal Governments, Environmental Justice Communities, environmental resource agencies, air districts, pedestrian and bicycle representatives, and adjoining MPOs/RTPAs, according to the requirements of 23 CFR 450.316 and the 2020 MCTC Public Participation Plan (see Appendix C).

Ongoing outreach efforts

The 2022 RTP and SCS public participation program built on the success of previous public outreach campaigns to ensure widespread dissemination of information to a geographically and socially diverse population. Since the last RTP update in 2018, MCTC staff has continued to engage the public through workshops, public meetings, and presentations at service clubs and professional organizations, and on-line workshops. Educating the public about the regional transportation planning process and opportunities for continued public participation and input remains a priority for MCTC. Although COVID-19 limited the amount of in-person outreach efforts, outreach was done in an on-line virtual format.



The MCTC Public Participation Plan can be viewed in Appendix C.

In 2010, MCTC joined with seven other Valley MPOs in the San Joaquin Valley Tribal EJ Collaborative Grant Project. This Caltrans-sponsored grant has facilitated increased collaboration between MPO staff and the leadership of local, federally-recognized and unrecognized tribal governments. Through this process, MCTC staff has been able to increase awareness of long-range planning projects in the County, including the Regional Blueprint, RTP and SCS.

Public workshops were held in the in the City of Madera, and in the City of Chowchilla after an extensive public outreach campaign, including newspaper advertisements, email invitations, a notice on the MCTC website and MCTC’s Facebook page, including e-blasts to the community. To make public participation as convenient as possible, staff felt it was important to have a number of different workshops and pop-up events throughout the County. The selected time for each workshop was between 6:00 and 8:30 p.m. to make attendance more accessible, as well as, per stakeholder request. For a detailed list of outreach activities for the 2022 RTP-SCS, please see Chapter 3 and *Appendix D RTP/SCS Outreach Summary Report*.

The 2020 MCTC Public Participation Plan (PPP), establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision-making process. Detailed within the plan is the length of public comment periods for MCTC documents, methods MCTC employs to distribute information, and goals for public access.

Equity Analysis Methodology and Results

The equity analysis started with data collection. Demographic and income data for Madera County was collected and then compared to the transportation investments in Madera County in determined transportation target areas and with the environmental impacts in this region.

Defining Population Groups

1. Minority
2. Low Income
3. Language English Proficiency
4. Transit Dependency
5. Elderly

The data was taken from the 2020: 5-Year Estimates

Defining Target Areas Population Characteristics

Five (5) Target Areas were identified in the Madera region:

1. Target area I includes the town of La Vina, located in the south-west corner of Madera County, and is characterized by being mostly rural.

2. Target area II includes the entire city of Chowchilla and surrounding block groups.
3. Target area III includes the entire city of Madera and surrounding block groups. It is the most populous of the five target areas.
4. Target area IV includes the Madera Ranchos area, which is located near Avenue 12, between Highway 41 and Road 34. The areas of Ripperdan and Eastin Arcola, located in the south-west portion of the target area. There is significant population growth planned for this target area in the future, much of which will take place in the Rio Mesa development area.
5. Target area V represents the mountain communities within Madera County, north of the Madera Canal. A significant portion of target area V lies within the Sierra National Forest, with little population. The majority of the persons living within target area V live in the Yosemite Lakes, Coarsegold, Oakhurst, Bass Lake and North Fork areas.

Defining Environmental Justice Areas

Analysis was performed on the state designated SB 535 disadvantaged communities as determined by CalEnviroScreen 4.0 (CES). According to the CES, disadvantaged communities are census tracts that rank in the top 25th percentile in the state for pollution burden, along with several other social and environmental factors.

The census tracts that scored the highest for pollution burden, that had high percentage of minority populations, limited English proficiency, transit dependent, and low income thresholds, were then compared with the transportation projects in the RTP, the transit project funding, and pedestrian/bike priorities.

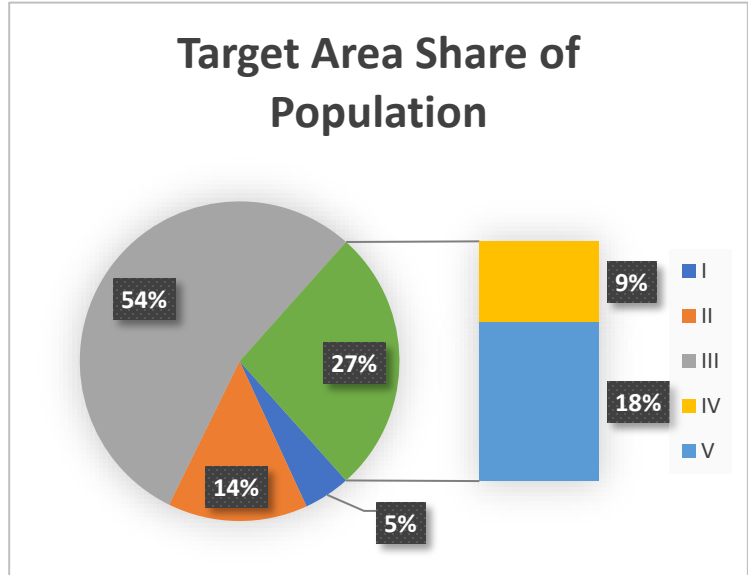
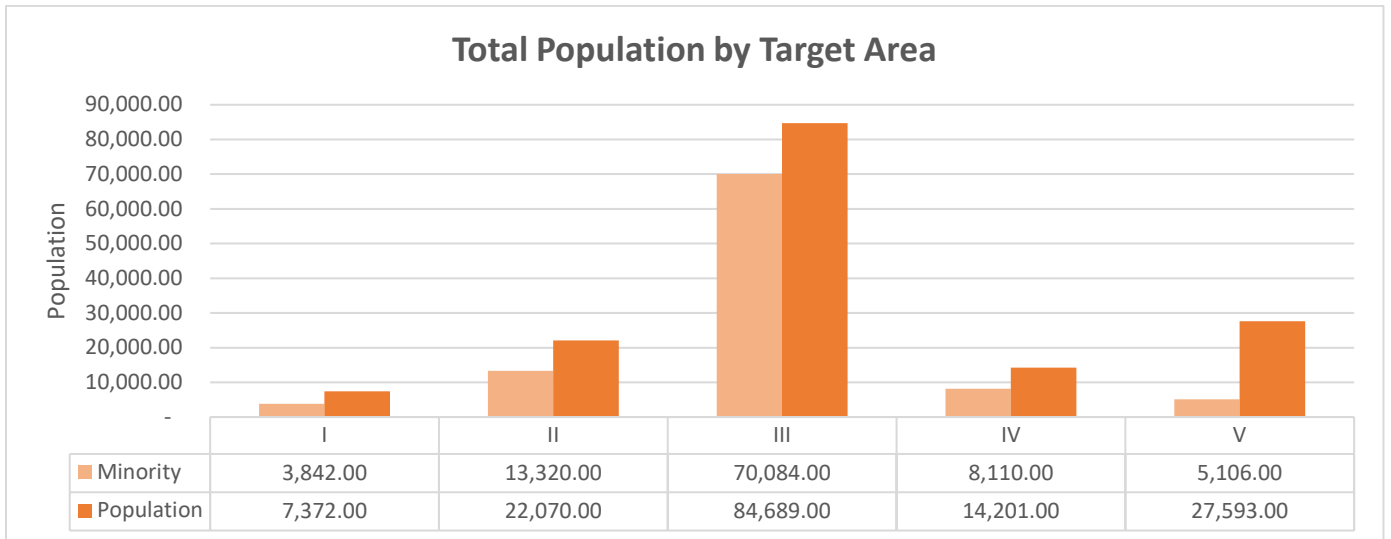


Figure 6-1 Target Area Share of Population

The goal of this analysis is to ensure racial, low-income and geographic equity of project benefit. That is, populations considered minority or low-income should have equal levels of benefit compared to other population groups. Similarly, projects and the level of benefit they provide should not be concentrated into one geographic region, but rather should be distributed proportionally to the share of use of a particular system.

Figure 6-1 and Figure 6-2 show that there is higher population density in Target Area III where the City of Madera is located.

Figure 6-2 Total Population by Target Area



The following section shows the analysis process and the conclusions from the analysis.

Figure 6-3 shows the population density of the County.

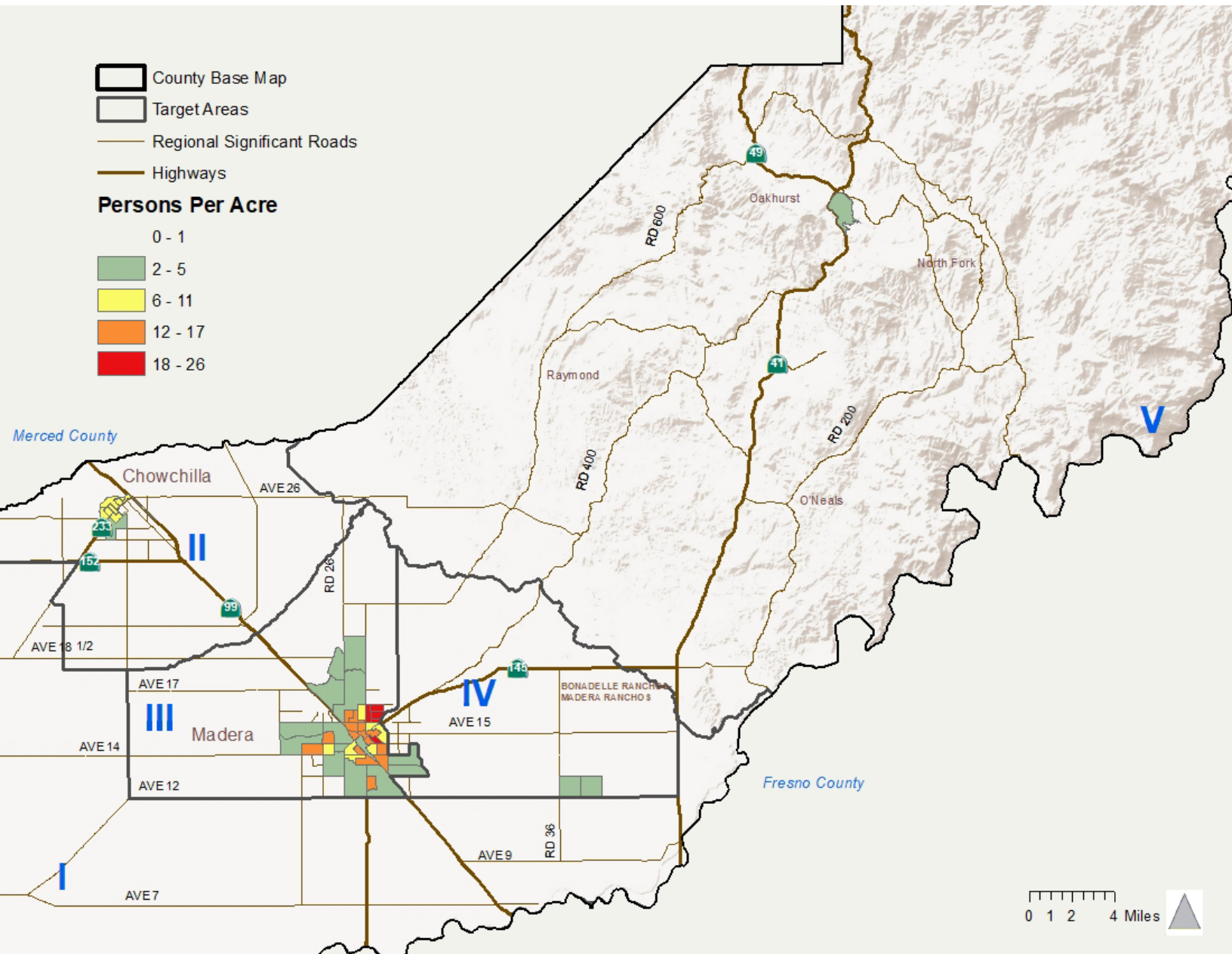


Figure 6-3 Population Density

Figure 6-4 Minority Over 70%

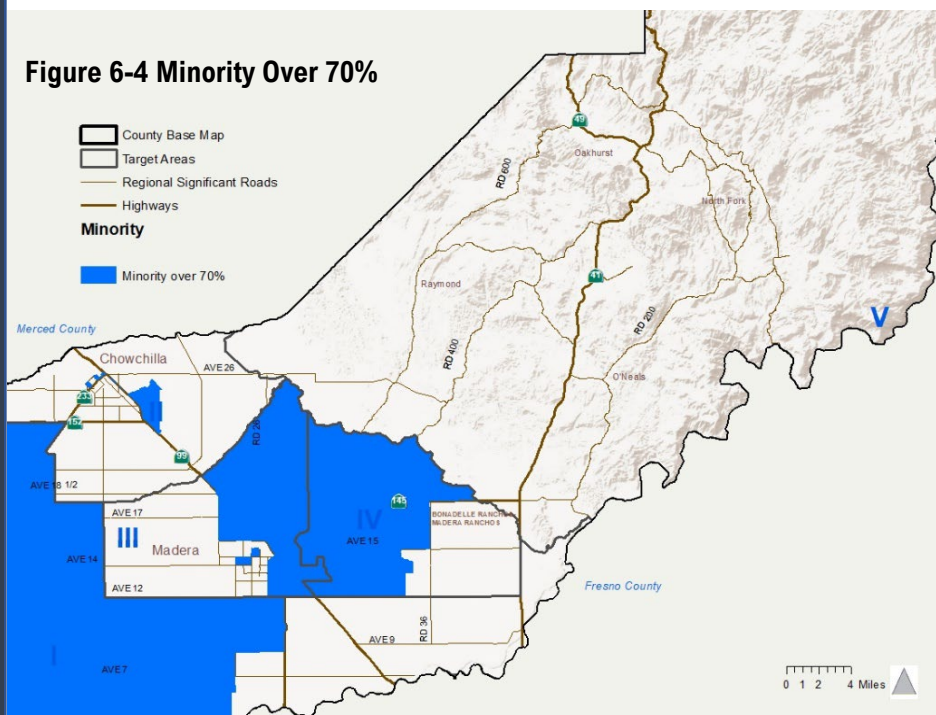


Figure 6-4 - Block groups where the minority population is over 70% of the total population in those block groups.

Target Area I, about half of target Area III and IV, and Target Area II have over 70% minority populations.

Figure 6-5 Low-Income Populations

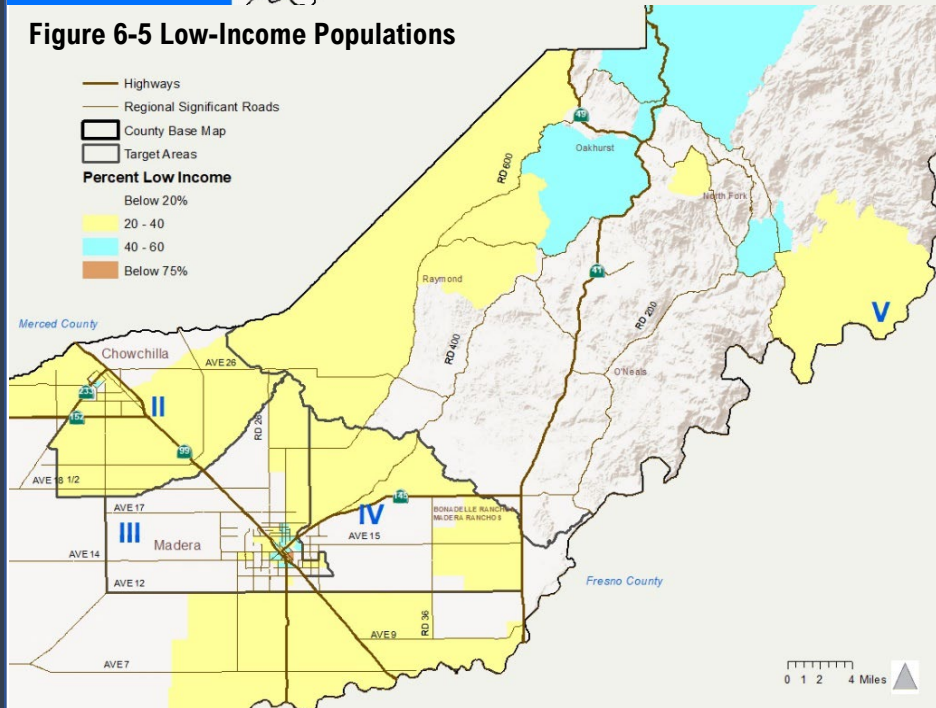


Figure 6-5 - Low-income block groups. Block groups within the City of Madera, Target Area III, indicates the highest percent of low-income populations. All other target areas also show a high percent of low-income populations.

Figure 6-6 Low-Income and Minority Populations

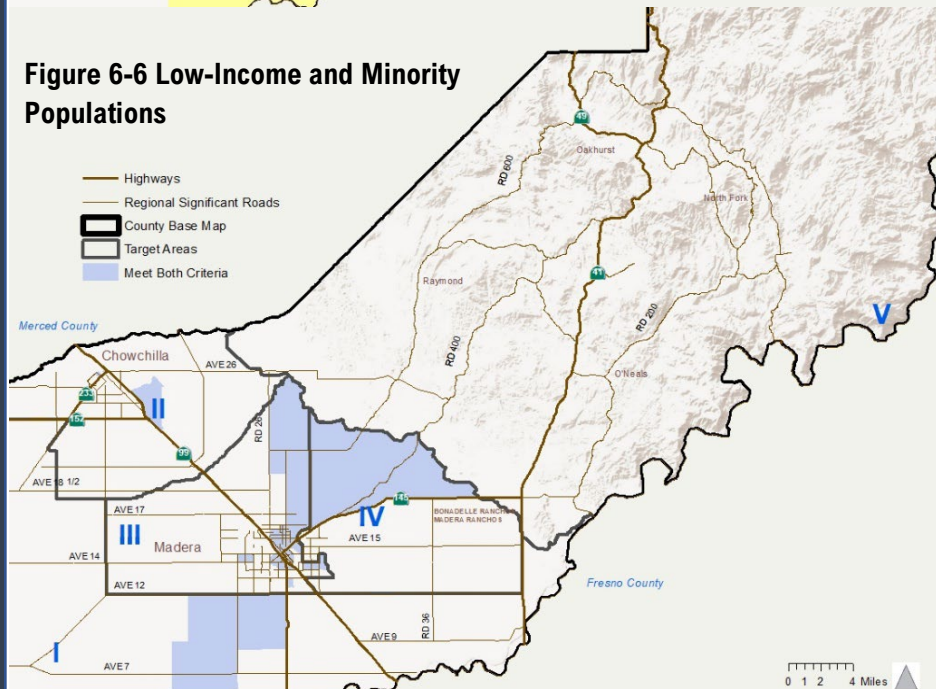


Figure 6-6 - Block groups containing both low-income populations and minority populations are demarcated in blue. The only Target Area which does not have block groups that meet both criteria is Target Area V, Eastern Madera.

Environmental Justice (EJ) Areas

Analysis was performed on the state designated SB 535 disadvantaged communities as determined by CalEnviroScreen 4.0 (CES). According to the CES, disadvantaged communities are census tracts that rank in the top 25th percentile in the state for pollution burden, along with several other social and environmental factors. State designated disadvantaged communities are located in Target Areas I, II, III, and part of Target Area IV. State designated disadvantaged communities are located in Target Area I, II, III, and part of Target Area IV, Figure 6-7.

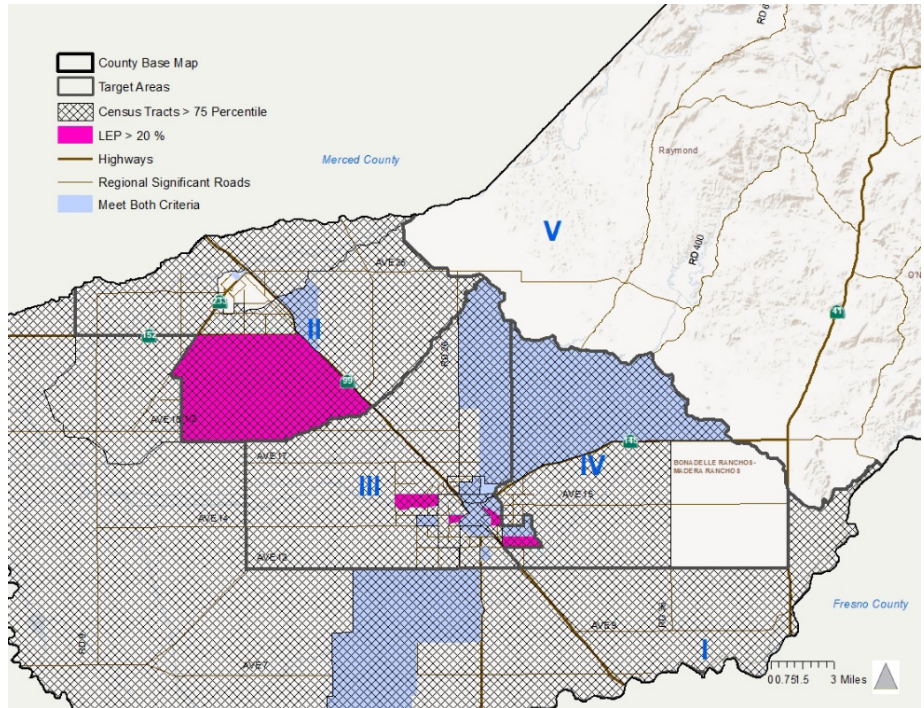


Figure 6-7 EJ Areas, Low-Income, Minority and Limited English

For a regional analysis, MCTC identified environmental justice areas as census blocks that meet both criteria for minority and/or low-income residents and Language English Proficiency (LEP) above 20%. Figure 7 also shows that Target Areas II and III, primarily within the City of Chowchilla rank in the top 25 percentile pollution burden, meet the EJ criteria of minority and limited means, and the City of Madera also includes LEP population.

The majority of the elderly and transit dependent population are located in Target Area V, as shown in Figure 6-8.

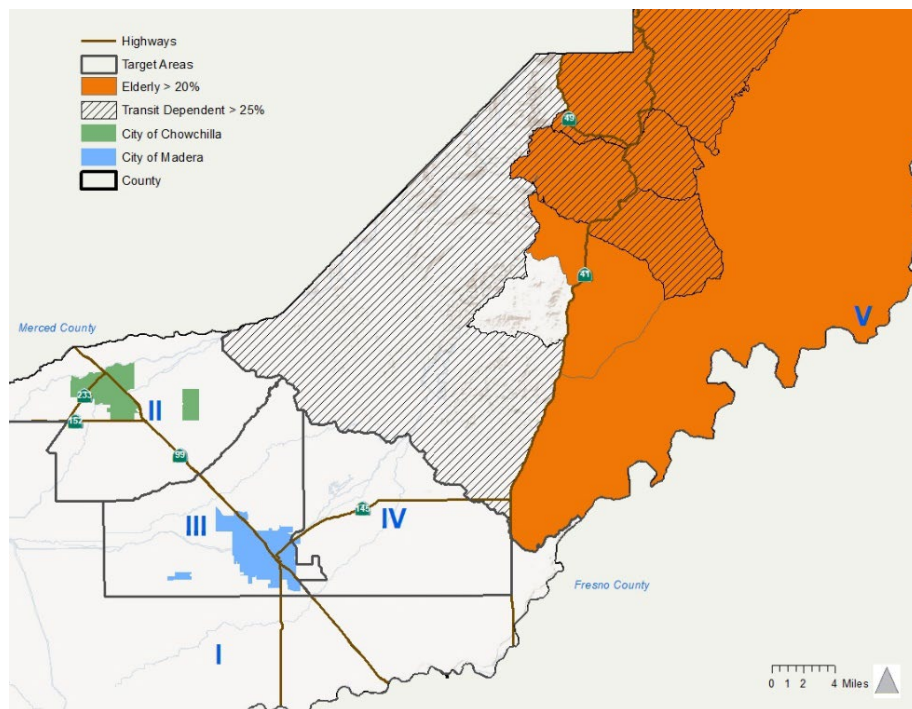


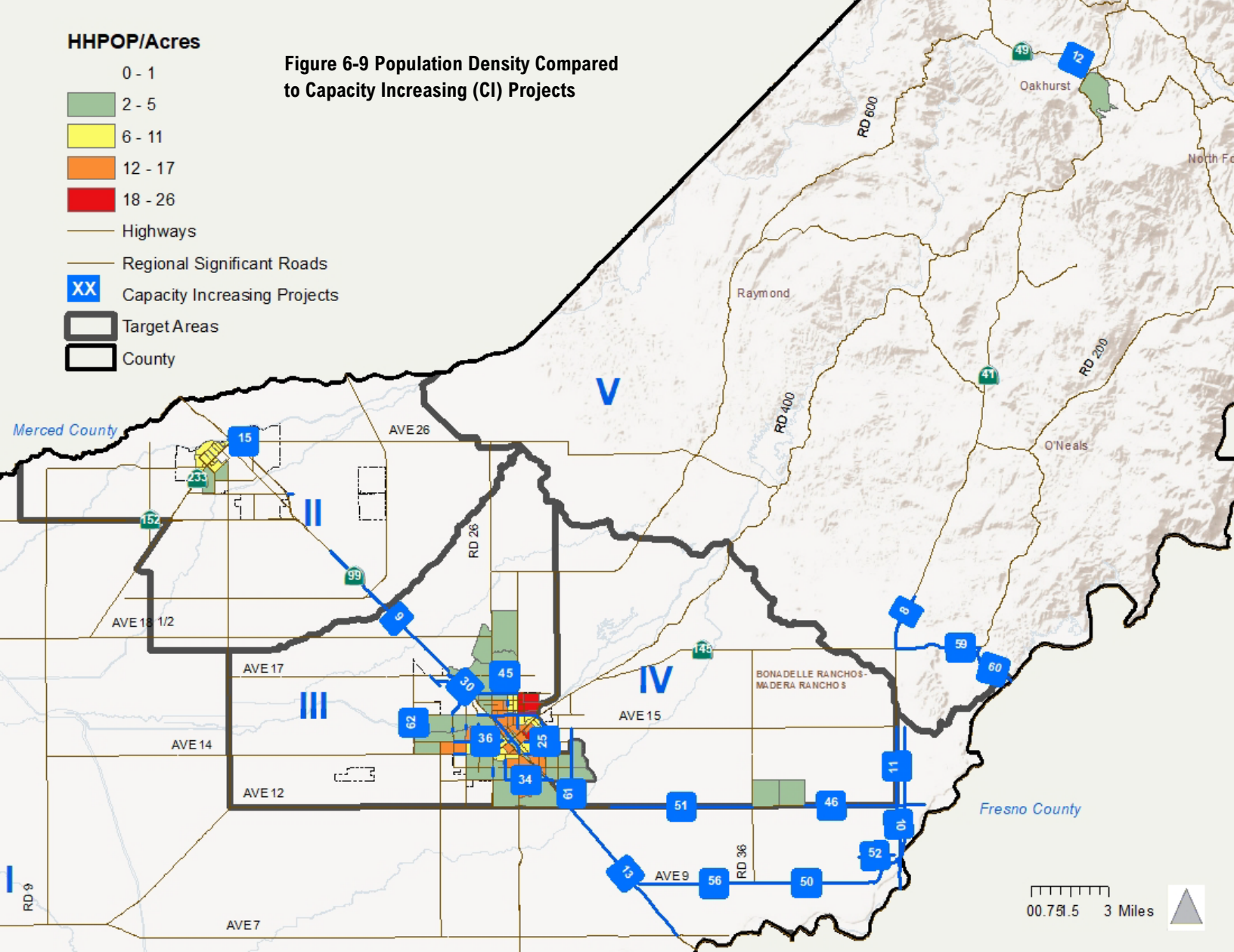
Figure 6-8 Transit Dependent and Elderly Populations

HHPOP/Acres

- 0 - 1
- 2 - 5
- 6 - 11
- 12 - 17
- 18 - 26

- Highways
- Regional Significant Roads
- XX Capacity Increasing Projects
- Target Areas
- County

Figure 6-9 Population Density Compared to Capacity Increasing (CI) Projects

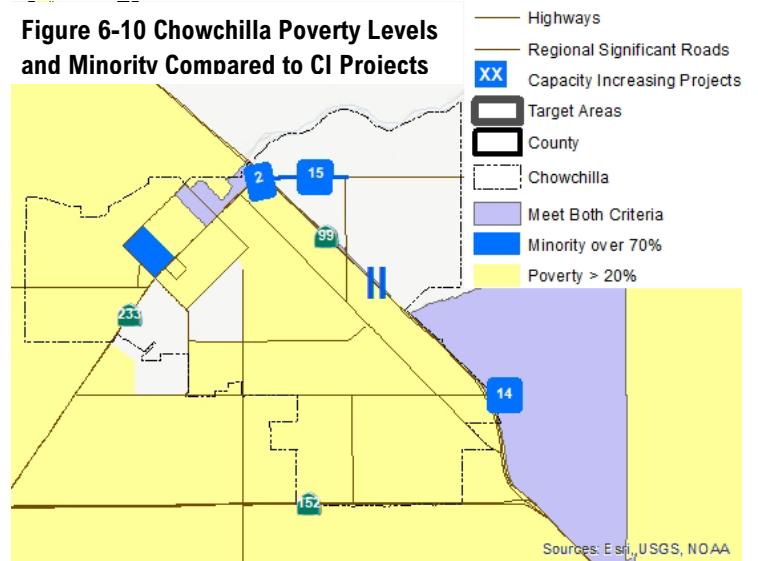


Roadway-Emphasis Projects

Roadway-emphasis projects include mainline highway, highway interchange, highway maintenance, regional roadway and regional roadway maintenance projects as listed in the 2022 RTP. Due to these projects' location-specific nature, this analysis is reliant on proximity to the proposed improvements and to regional travel patterns.

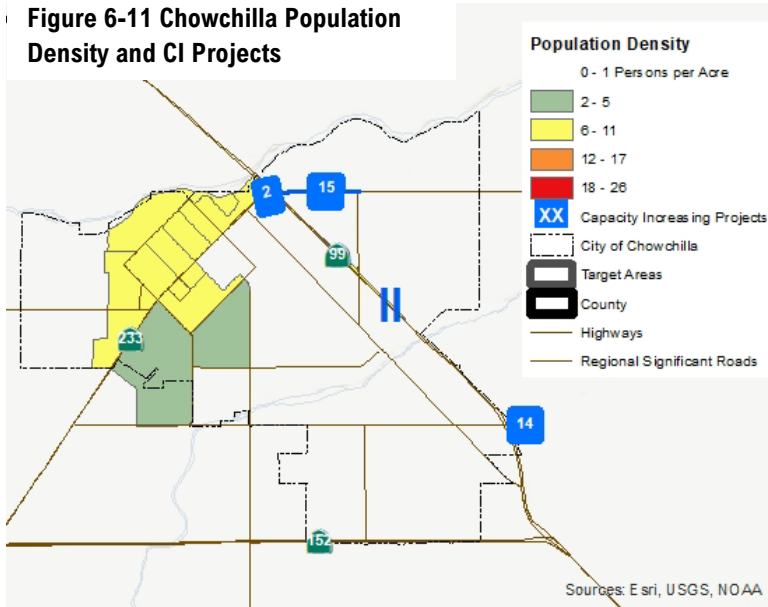
Each project is assigned to one of the five Target Areas; however, the benefit of each particular project is not limited only to residents of the Target Area in which the project is located. For example, any capacity increasing, or rehabilitation project, located on Highway 41 near Avenue 12 will not only benefit residents in Target Area IV but will benefit residents in Target Area V as well, since State Route 41 is the main thoroughfare to the mountain

Figure 6-10 Chowchilla Poverty Levels and Minority Compared to CI Projects



Sources: Esri, USGS, NOAA

Figure 6-11 Chowchilla Population Density and CI Projects



communities. Similarly, improvements made to State Route 99 will benefit all communities located on the valley floor since it is a primary travel corridor for Madera County residents. Benefits of State Route 99 projects are therefore assigned to Target Areas I, II, III and IV.

This method of assigning benefit to more than one target area explains why the analysis category “percent share of investment” used throughout this chapter will not be zero sum. This process of analyzing project benefit relative to geography was found to be the most accurate method of analysis. Subsequently, if MCTC staff is able to show a geographically equitable distribution of projects, those minority and low-income populations that exist within the specific geography would garner equal levels of project benefit relative to the rest of the county. Similarly, there are more investment dollars planned for State Route 99 compared to State Route 41, which explains the slightly less investment dollars in Target Area V, which is not assigned State Route 99 project benefits. The large investment of State Route 99 projects also explains the relatively large amount of benefit to Target Areas II and III relative to their share of the drive-to-work population.

Roadway-emphasis investments are equitable across the spectrum of different income and racial groups. With geographic equity among target areas, and block groups contained within these areas benefit from similar levels of equity. In particular, Target Area III, which is characterized by low-income and racial minority populations, derives significant benefit from roadway-emphasis investment.

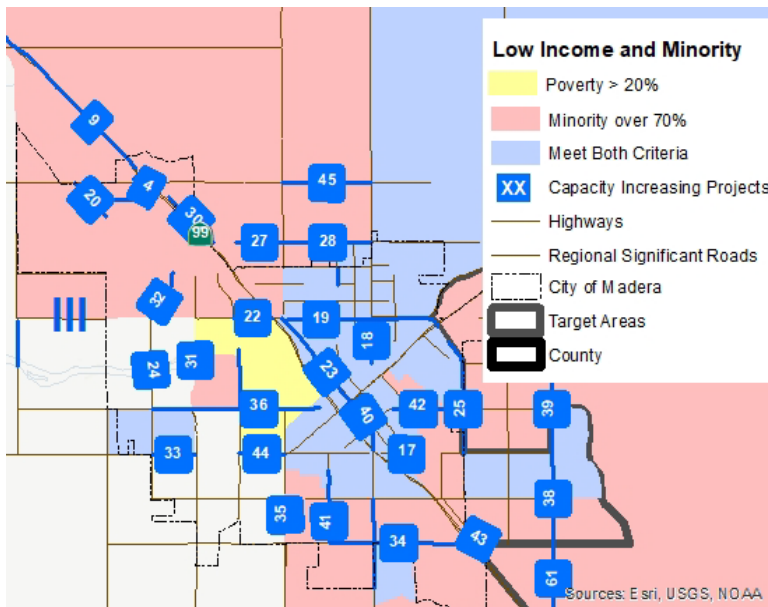


Figure 6-12 Madera Poverty Levels and Minority Compared to CI Projects

Figures 6-9 through 6-13 identify the proposed capacity increasing street and highway projects compared to 2020 low-income and minority populated areas within the County, Chowchilla, and Madera. The results continue to support the conclusion that the projects do not negatively impact the low-income or minority populated areas any greater than they do higher income and non-minority populated areas of the county. Furthermore, transportation improvement projects also benefit the low-income and minority populated areas of the county to the same extent as they do the higher-income and non-minority populated communities or areas of the County.

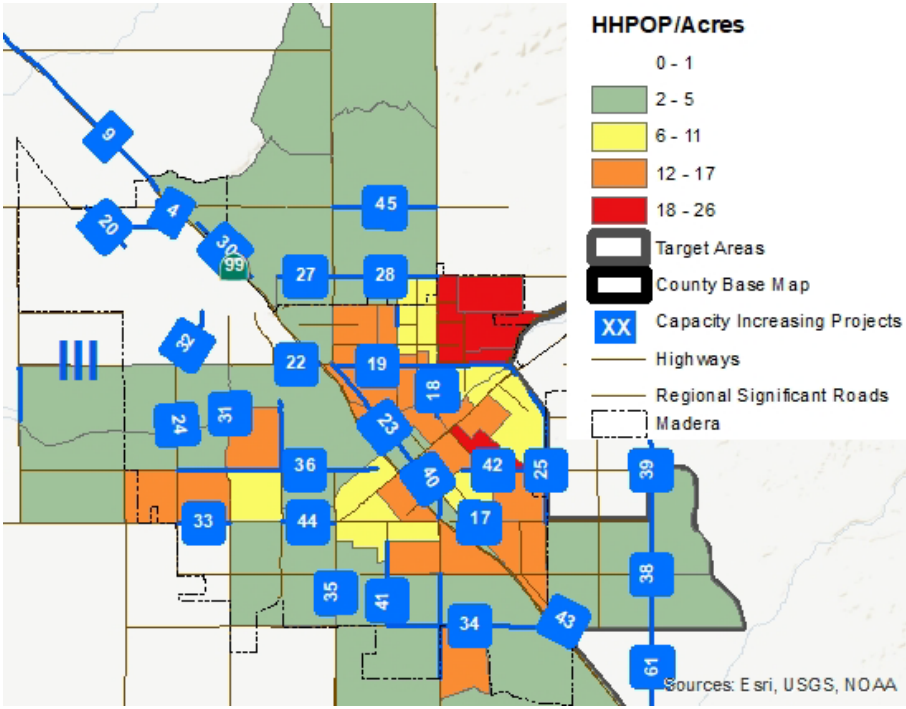


Figure 6-13 Madera Population Density and CI Projects

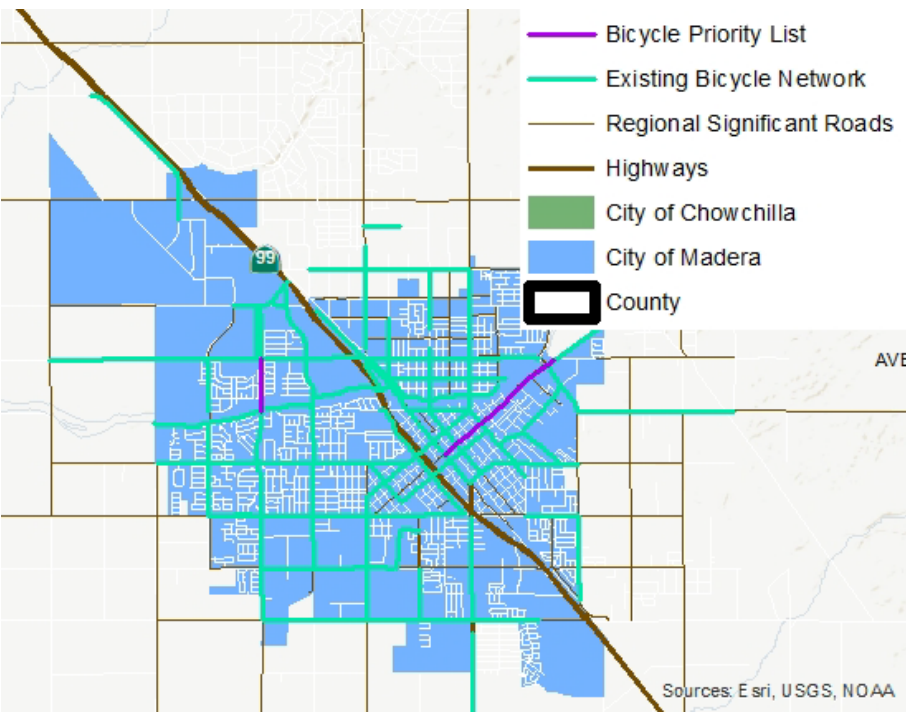


Figure 6-14 Madera Existing Bicycle Facilities and Bicycle Priority List

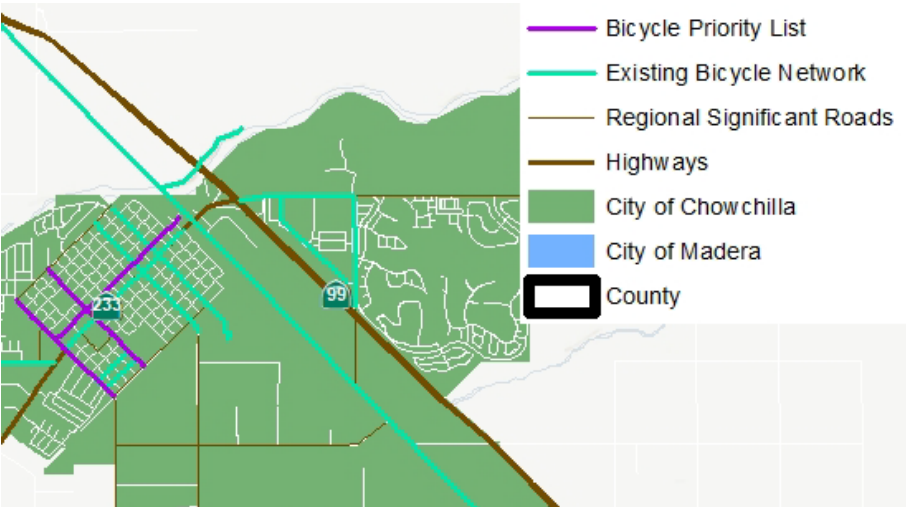


Figure 6-15 Chowchilla Existing Bicycle Facilities and Bicycle Priority List

Transit Projects

Transit services within Madera County play an integral role in the transportation of low-income, elderly and people with disabilities who lack reliable use of personal automobiles. Fixed-route and demand-response transit systems provide access to jobs and services throughout the county.

To determine the adequacy of the current transit system and areas needed for improvement, public participation is critical. MCTC is committed to annually complete an Unmet Transit Needs Public Hearing process. The purpose of this process is to receive testimony from the public regarding transit systems within the County. The fixed route system, Madera Metro, and the Madera County Connection owe their creation to this process, and since it is such an important one, MCTC staff undertakes extensive efforts to outreach to the community. Once comments are received, MCTC staff works with the Social Service Transportation Advisory Committee (SSTAC) to make recommendations for improvement to the MCTC Policy Board.

Transit expenditures were calculated using projected estimates of Federal Transit Administration (FTA) 5307 and 5311, Local Transportation Fund (LTF), and Congestion Mitigation & Air Quality (CMAQ) dollars. These funds were further broken down to the specific transit systems operating within Madera County and into their respective target areas. Since the Madera County Connection (MCC) operates in all five target areas, the funds available are divided equally among the five target areas.

Each transit system operates within a specific target area, except for the Madera County Connection, which provides service to all target areas. The number of passengers per service is assigned to the specific target area to quantify the percentage share of use. This share is then compared to the percentage share of transit investment.

There exists a strong correlation between transit use and transit investment within Madera. Target Area III, which has the largest proportion of minority and low-income residents—and also the most access to transit services (Madera Metro and Madera Dial-A-Ride)—would receive the largest proportion of transit investment. This proportionality is a key element of equity analysis. Residents who rely on public transit most, should subsequently receive the largest share of transit investment. Similarly, transit investment in other Target Areas should be relatively proportional to its residents' use of the transit system. In this respect, there is equity of transit investments among all residents of Madera County.

Bicycle/Pedestrian Facilities

Bicycle and pedestrian facilities are integral components of a multi-modal transportation network. These facilities not only provide regional connectivity, but by reducing the reliance on motor vehicles, can have positive impacts on air quality. Bicycle and pedestrian facilities are primarily funded through Local Transportation Fund (LTF), Congestion Mitigation and Air Quality (CMAQ), and Measure T dollars, and there is an estimated \$160 million dollars over the next 24 years.

The majority of bicycle/pedestrian funding positively correlates with use; however, there are some discrepancies. These discrepancies can be attributed to two factors. First, there are limitations to the number of residents who use the facilities. Since the City of Madera has higher population and commercial densities relative to the rest of the county, there is little surprise that

there are significantly higher numbers of pedestrians who walk to work within the city. Similarly, more existing bicycle and pedestrian infrastructure can be found in the city relative to the rest of the county. Figures 6-14 through 6-16, show the existing and priority projects proposed for the bicycle network in the region. These projects are consistent with the ones in the 2018 Active Transportation Plan.

Environmental Impacts

The equity analysis section mainly assesses whether all racial and income target areas will benefit from fair shares in the transportation investments. However, some transportation projects may create some adverse impacts. Successful transportation projects do not only focus on improvements to the transportation system, but also minimizes and mitigates any negative environmental and social impacts the project may create.

Air Pollution Emissions

The projects included in this RTP are intended to alleviate existing congestion and improve the level of service (LOS) for the roadway system. The completion of these proposed projects is likely to help congestion, thus reducing air pollutant emissions from vehicle idling and constantly accelerating and decelerating.

Therefore, the neighborhoods that contain these projects may initially experience some negative impacts in local air quality due to the projects' construction, but in the long

run, the local air quality in these areas will benefit from the better traffic flow and less localized pollutant emission.

In addition to the roadway projects, the transit and bike projects included in this RTP will also contribute to the improvement of air quality. The Cities and County of Madera has also been recognized for its efforts to improve air quality through the purchase of low pollutant or natural gas vehicles. Much of the money used for these particular clean air projects comes from federal CMAQ dollars.

Conclusion

The analysis in this chapter mainly focuses on racial minority, low-income and geographic equity of transportation projects within Madera County. This analysis endeavors to present a reasonably comprehensive investigation on the fairness of the distribution of benefits and detriments of the transportation projects included in this RTP and SCS. Considering all the analyses as a whole, it is sufficient to conclude that the RTP and SCS does meet the environmental justice requirements: ensuring that all residents of Madera County are subject to proportionate benefits and detriments of transportation investment.

Figure 6-16 Madera County Existing Bicycle Facilities and Bicycle Priority List

