

# **APPENDIX A – 2**

## **2015 TIP Investment Analysis**



## Draft 2015 TIP Investment Analysis: Focus on Low-Income and Minority Communities

The federally required Transportation Improvement Program, or TIP, is a comprehensive listing of all Bay Area surface transportation projects that are to receive federal funding or are subject to a federally required action, or are considered regionally significant for air quality conformity purposes. The 2013 TIP was adopted by the Commission on July 18, 2013 and approved by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) on August 12, 2013. MTC has developed the Draft 2015 TIP, which covers the four-year period of FY 2014-15 through FY 2017-18.

As part of the 2013 TIP development, MTC had conducted an investment analysis with a focus on minority and low-income residents to assist in the public assessment of the TIP, and specifically to address the equity implications of the proposed TIP investments. An update to this analysis for the 2015 TIP is discussed here. The purpose of the analysis is to understand if low-income and minority populations are sharing equitably in the TIP's financial investments. The analysis calculates the shares of 2015 TIP investments flowing to the identified communities, and compares those shares with the proportional size of this group's population and trip-making, relative to that of the general population. This report presents the results of this analysis. For reference, the 2013 TIP investment analysis is available at [http://www.mtc.ca.gov/funding/tip/2013/2013\\_TIP\\_Final\\_Investment\\_Analysis\\_Report.pdf](http://www.mtc.ca.gov/funding/tip/2013/2013_TIP_Final_Investment_Analysis_Report.pdf).

While this investment analysis is a companion to the 2015 TIP, it is also a follow-up to several related MTC efforts, including the Plan Bay Area Equity Analysis, Transportation 2035 Equity Analysis (February 2009), the Snapshot Analysis for MTC Communities of Concern (June 2010), the 2013 TIP Investment Analysis (July 2013) and the 2011 TIP Investment Analysis (September 2010). Together, these efforts are meant to provide accurate and current data to help inform decision-makers and the public, and to inform and encourage public.

MTC strives to employ best practices in metropolitan planning, and we constantly seek to refine and improve the analytical work that undergirds our planning processes. In keeping with these efforts MTC staff actively seeks feedback on this analysis. This document is available online at [www.mtc.ca.gov/funding/tip/2015/tip\\_investment\\_analysis\\_report.pdf](http://www.mtc.ca.gov/funding/tip/2015/tip_investment_analysis_report.pdf).

### **About the 2015 TIP**

The Bay Area's 2015 TIP includes roughly 1,000 transportation projects, and a total of approximately \$9.4 billion in committed federal, state and local funding over the four-year TIP period through fiscal year 2018. Figure 1 on the next page illustrates the relative share of the 2015 TIP fund sources, with state sources comprising the largest share at over one-third of total funding. Roughly 40 projects account for \$5.9 billion or 63 percent of the total funding in the 4-year TIP period. See Attachment A for a map of projects with costs greater than \$200 million.



Figure 1

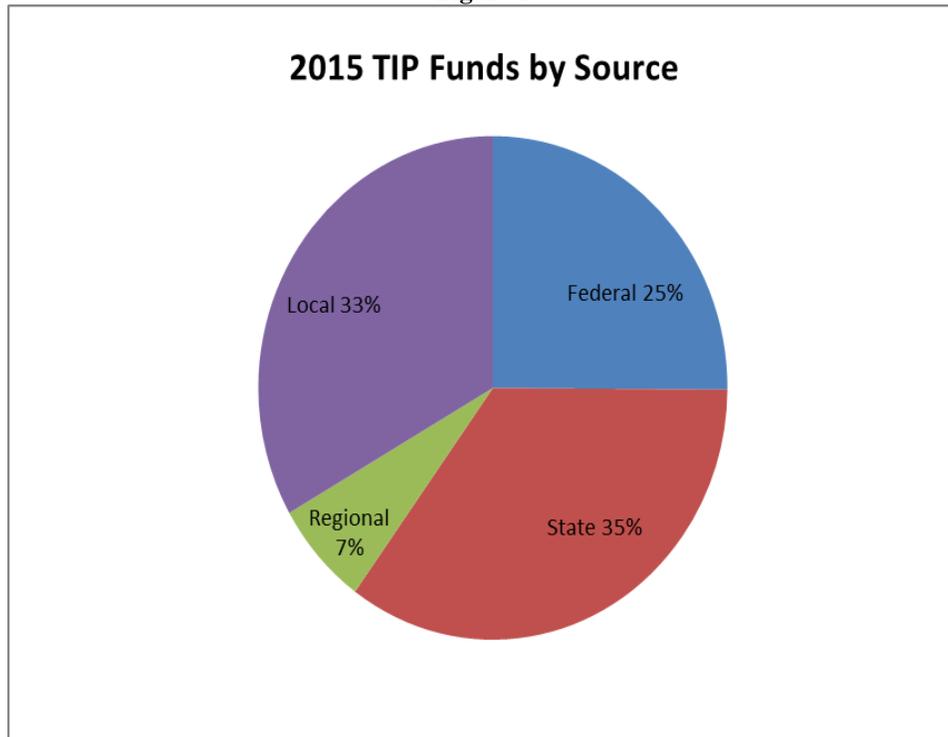
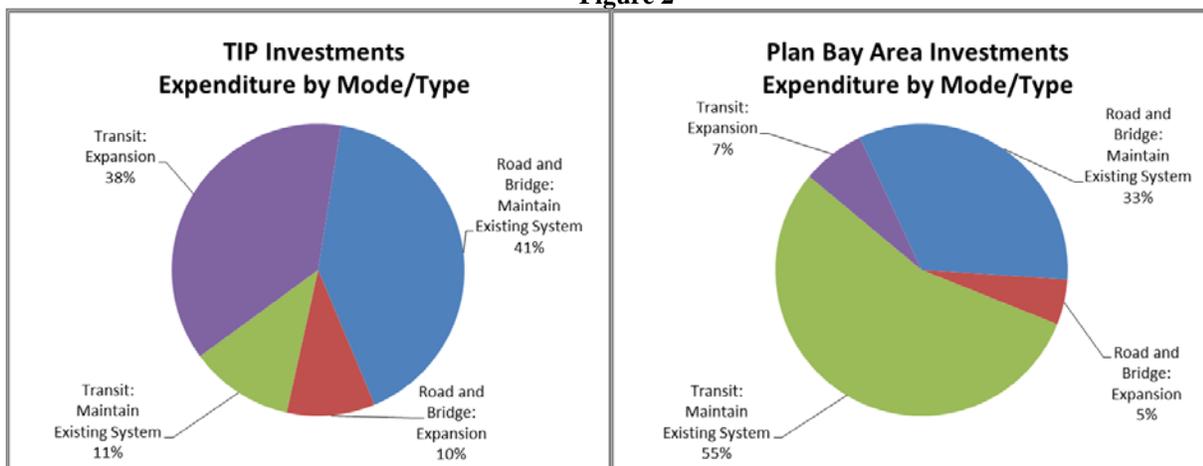


Figure 2 below at left shows the planned investments in the 2015 TIP by transportation mode (road/bridge or transit) and type of expenditure (maintenance/management or capital expansion). The TIP investments for bicycle and pedestrian improvements are included under the road/bridge category as elements of complete streets. As a frame of reference, the Plan Bay Area expenditures by mode and function are shown as well on the right.

Figure 2



The most striking difference is that the share of capital expansion for both transit and complete streets/highways is much greater in the 2015 TIP than is the case for Plan Bay Area.

The main reason for this difference is that the TIP represents only a fraction of Bay Area transportation investments and is only a four-year snapshot. Because the TIP is focused on projects that have federal funds, will require a federal action, or are regionally significant, it tends by its nature to be more heavily weighted toward capital projects – such as roadway preservation, transit extensions and replacement of transit vehicles. The majority of funds that go to operate, maintain, and manage the region’s transportation system – both for transit and streets and roads – are not a part of the TIP though they are a significant part of Plan Bay Area. For this reason, the TIP investments are not representative of the broader funding picture in Plan Bay Area, the region’s long-range plan.

Another feature of the TIP that distinguishes it from the region’s long-range plan is that it tends to be a more dynamic document – meaning that it is revised frequently to reflect changing fund sources and project changes, and on-going programming efforts. For example, the current 2015 TIP does not yet reflect over \$1.7 billion in Federal Transit Administration (FTA) formula funds because the Commission has not yet adopted a final program for the four years of the TIP. These funds have historically been directed to transit rehabilitation. Once the action occurs, the 2015 TIP will be amended to include the projects and funding. As context, the 2011 TIP was revised over 30 times between its adoption and the approval of the 2013 TIP.

### **Equity and Environmental Justice Considerations**

As the federally designated MPO, MTC is responsible for developing a long-range regional transportation plan and the TIP. The legal, regulatory, and policy framework for addressing equity and environmental justice as it relates to the long-range transportation planning process is included in Appendix A and includes: 1) Title VI of the Civil Rights Act; 2) Federal Guidance on Environmental Justice; and 3) MTC’s Environmental Justice Principles.

These laws, regulations, and policies form the basis of analyzing MTC’s Plan Bay Area for equity and inform the 2015 TIP Investment Analysis. MTC is building on the work undertaken in the 2011 TIP Investment Analysis, the 2013 TIP Investment Analysis, the Transportation 2035 analysis, and the Equity Analysis for Plan Bay Area. We continue to seek feedback on the methodology and future enhancements to the analysis.

### **Bay Area – Demographic Context**

Before embarking on a discussion of the analysis, it is important to understand demographic and travel patterns for the Bay Area. In terms of overall demographics, roughly 31 percent of the region’s households are low-income, defined as households with incomes that fall below roughly 200 percent of the federal poverty level for a family of four. Also, the Bay Area is now a “majority minority” region with 58 percent of the households in the racial/ethnic minority category. Table 1 provides summary information on demographics.

**Table 1. Population Distribution by Income and Race/Ethnicity**

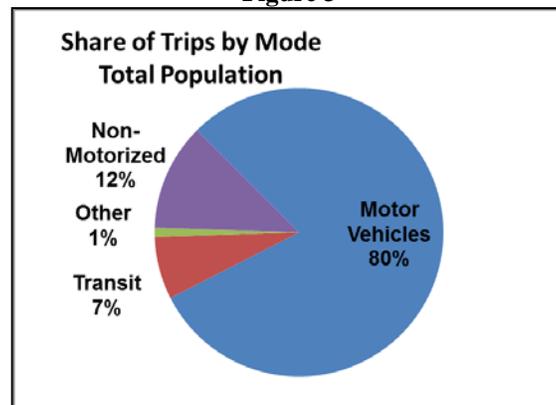
Population Distribution by Household Income		
	Population	% of Total
<b>Low-Income (≤ \$50,000)</b>	2,211,080	31%
<b>Not Low-Income (&gt; \$50,000)</b>	4,843,266	69%
<b>Total</b>	7,054,346	100%
Population Distribution by Race/Ethnicity		
	Population	% of Total
<b>Minority</b>	4,117,836	58%
<b>Non-Minority</b>	3,032,903	42%
<b>Total</b>	7,150,739	100%

Sources: 2010 Census SF1; 2010 American Community Survey (ACS): Public Use Microdata Sample 1 Year Estimates.

Notes: Low-income universe is the population in households, excluding persons living in group quarters. Low-income households adjusted for inflation across different data sources/years to capture households with incomes below \$50,000 per year in 2006 dollars. Population totals for the region differ in the table above due to differences in the methodologies used to create the data sources.

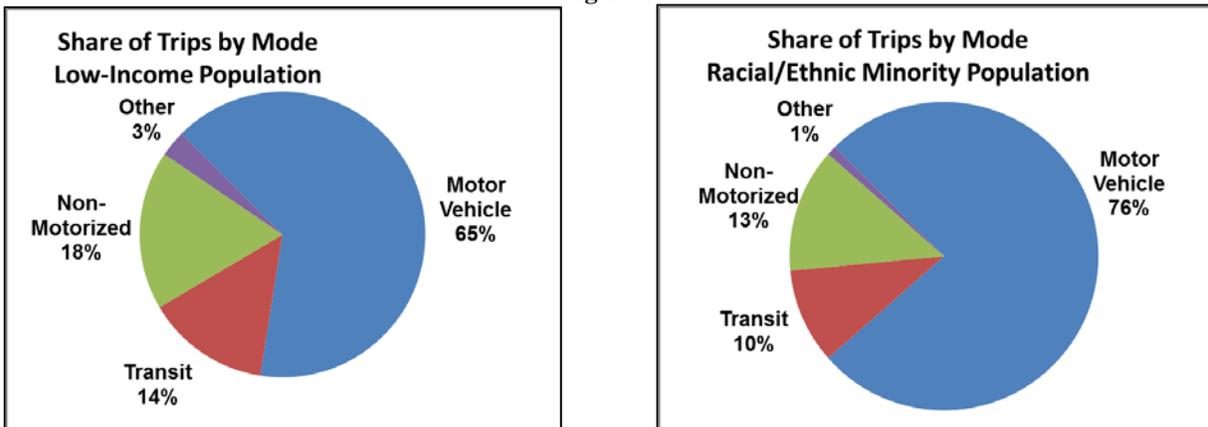
Most notably in terms of travel patterns, Figure 3 illustrates that trips by all Bay Area residents are overwhelmingly made by motor vehicle (80 percent) by the population at large, followed by non-motorized trips (12 percent), and transit (7 percent). While there are real differences for travel patterns for minority and low-income populations, motor vehicles are still the primary mode for trips at 65 percent or greater for both groups (see Figure 4).

**Figure 3**



Source: 2000 Bay Area Travel Survey.

Figure 4



Source: 2000 Bay Area Travel Survey.

### Investment Analysis Overview and Results

The 2015 TIP Investment Analysis uses the following analytical methodology to compare how low-income and minority communities may be affected by the proposed investments in the 2015 TIP:

- Population Use-Based Analysis:** This analysis is use-based. It compares the estimated percent of investment for low-income and minority populations to the percent of use of the transportation system (both roadways and transit) by low-income and minority populations. In the aggregate, the analysis measures transit and motor vehicle trips using the 2000 Bay Area Travel Survey (2000 BATS). In drilling deeper into the slice of roadway investment alone, the analysis uses vehicle miles traveled (VMT) as the measure of system use from the 2000 BATS. Similarly, for a more refined look at transit investment alone, transit trips are measured using data from MTC’s 2006 Transit Passenger Demographic Survey.
- Mapped Projects Analysis:** In addition to the analytical methodologies framework and based on feedback received from the MTC Policy Advisory Council, staff has also mapped projects in the 2015 TIP that are mappable and overlaid them over Communities of Concern; and census tracts with above average minority populations (included as Appendix C).
- Title VI Analysis:** MTC is using the above methodologies within the broader Transportation Investment Analysis framework along with a disparate impact analysis of the Transportation Investment Analysis results to meet federal Title VI requirements.

The results are discussed below. Appendix B includes definitions and data sources used in this analysis.

### Population Use-Based Analysis

The population-based analysis was conducted as follows:

- The 2015 TIP investments were separated into two modes: transit and road/highway.

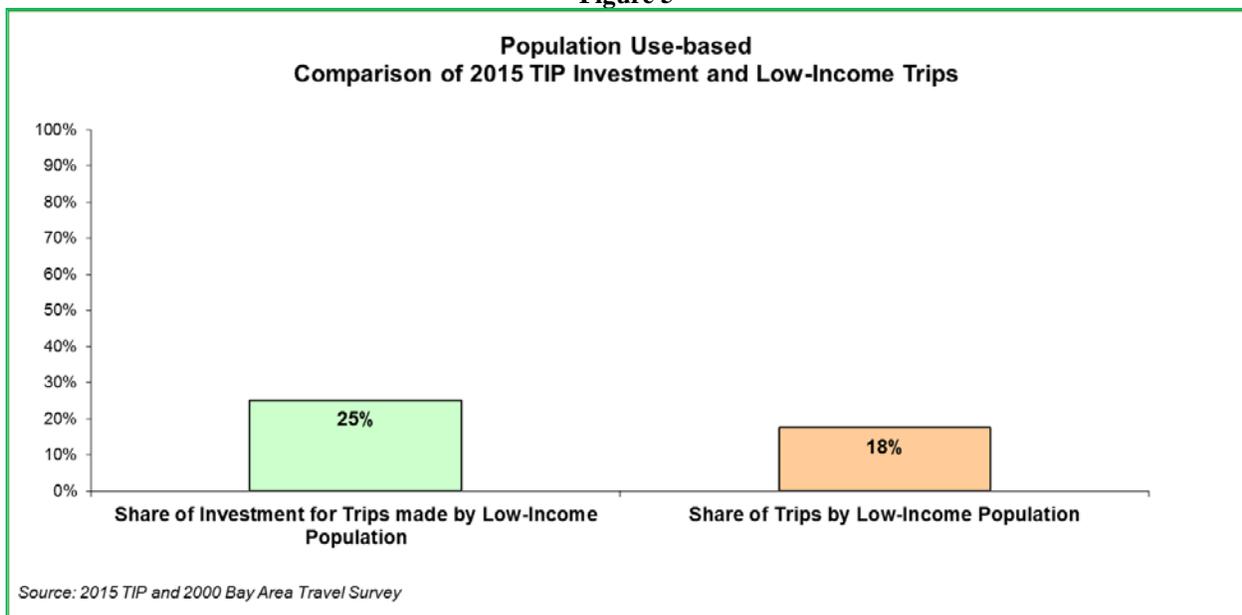
- Investments were allocated in each category to low-income and minority populations, and other populations according to each groups' usage share of each mode at the county or transit operator level.
  - First, to analyze what share of each mode (transit and roads/highways) low-income and minority populations utilize, the following definitions were used:
    - *Low-Income Households:* Low-income households were defined as households earning \$50,000 or less. This is roughly equivalent to 200 percent of the federal poverty level for a family of four.
    - *Minority Households:* For this analysis, minority households were defined using U.S. Census Bureau definitions.
  - Second, the assignment of investment by usage was performed by multiplying the percent of use of the mode by the investment in that particular mode. This analysis was conducted at the county level for highways and roadways and at the transit-operator level for transit. As an illustrative example, for a \$50 million state highway project in Alameda County, 18 percent or \$9 million, would have been assigned as a financial benefit to low-income populations and the remaining 82 percent or \$41 million to other populations because 18 percent of Alameda County motor vehicle trips are made by low-income populations based on the 2000 BATS. A similar approach was followed for transit investment allocations. For multimodal, aggregate analysis, trip data from the 2000 BATS were used. For the in-depth transit analysis, data came from MTC's 2006 Transit Passenger Demographic Survey. For the focused roadway analysis, vehicle miles traveled (VMT) data from the 2000 BATS were used.
- Lastly, the investments by mode (from county or transit operator data) were summed for low-income and minority populations and for all other populations based on each group's usage share of each mode. The percent of usage of the system by the target and other populations was then compared to the percent of investment for trips supporting that population.

As a regional-level analysis, this assessment is quite coarse, and has several limitations. The most significant shortcoming is that the analysis does not directly assess the benefit and burden of specific projects or programs. With respect to assigning investment benefit from expansion projects to households, this analysis is limited to assuming that existing usage demographics apply, since current demographic and travel surveys do not include future riders or drivers who will be attracted to the areas served by these expansions either as origins and destinations. Moreover, the roadway-usage share does not account for the benefit to the region's transit vehicles that share the roads with private automobiles. Also, for simplicity, pedestrian and bicycle projects were assigned to local streets and roads and not specifically assigned based on usage by low-income or minority populations of these facilities, or walk/bike mode share.

**Population Use-Based Results**

Table 2. Population Use-Based Comparison of 2015 TIP Investment and Trips by Income Distribution			
	2015 TIP Investments	% of Investment	% of Trips
Trips by People Living in Low-Income Households (≤\$50k/yr)	\$2,311,730,342	25%	18%
Trips by People Living in Not-Low Income Households (>\$50k/yr)	\$7,040,576,551	75%	82%
<b>Total</b>	<b>\$9,352,306,893</b>	<b>100%</b>	<b>100%</b>

Figure 5

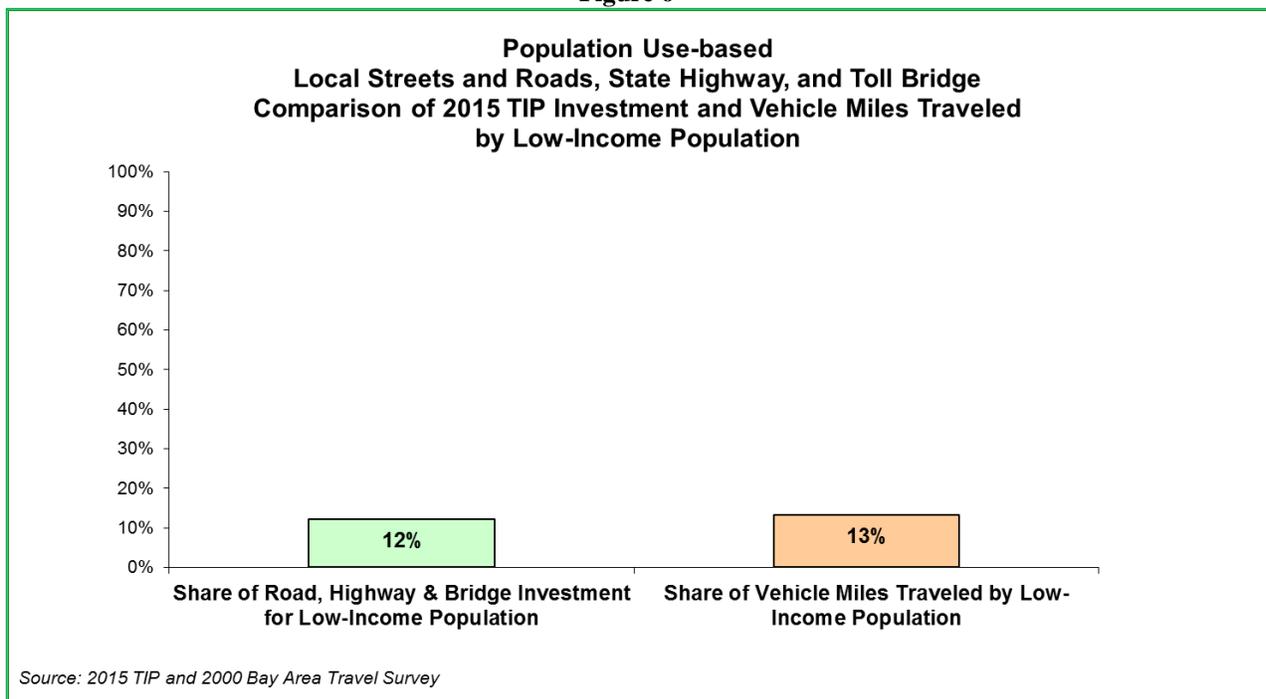


**Observations**

- The share of investment in projects that support trips made by people living in low-income households (25%) is greater than the proportion of trips made by people living in households that earns \$50,000 or less (18%).
- While low-income households make up 31% of the population in the Bay Area (Source: 2010 American Community Survey [ACS]: Public Use Microdata Sample 1 Year Estimates) people living in these households account for only 18% of all trips (Source: 2000 Bay Area Travel Survey).

Table 3. Population Use-Based Local Streets and Roads, State Highway, and Toll Bridge Comparison of 2015 TIP Investment and Vehicle Miles Traveled by Income Distribution			
	Road, Highway & Bridge Investment	% of Investment	% of Vehicle Miles Traveled
Drivers Living in Low-Income Households (<\$50k/yr)	\$578,905,196	12%	13%
Drivers Living in Not Low-Income Households (>\$50k/yr)	\$4,186,008,941	88%	87%
<b>Total</b>	<b>\$4,764,914,137</b>	<b>100%</b>	<b>100%</b>

Figure 6

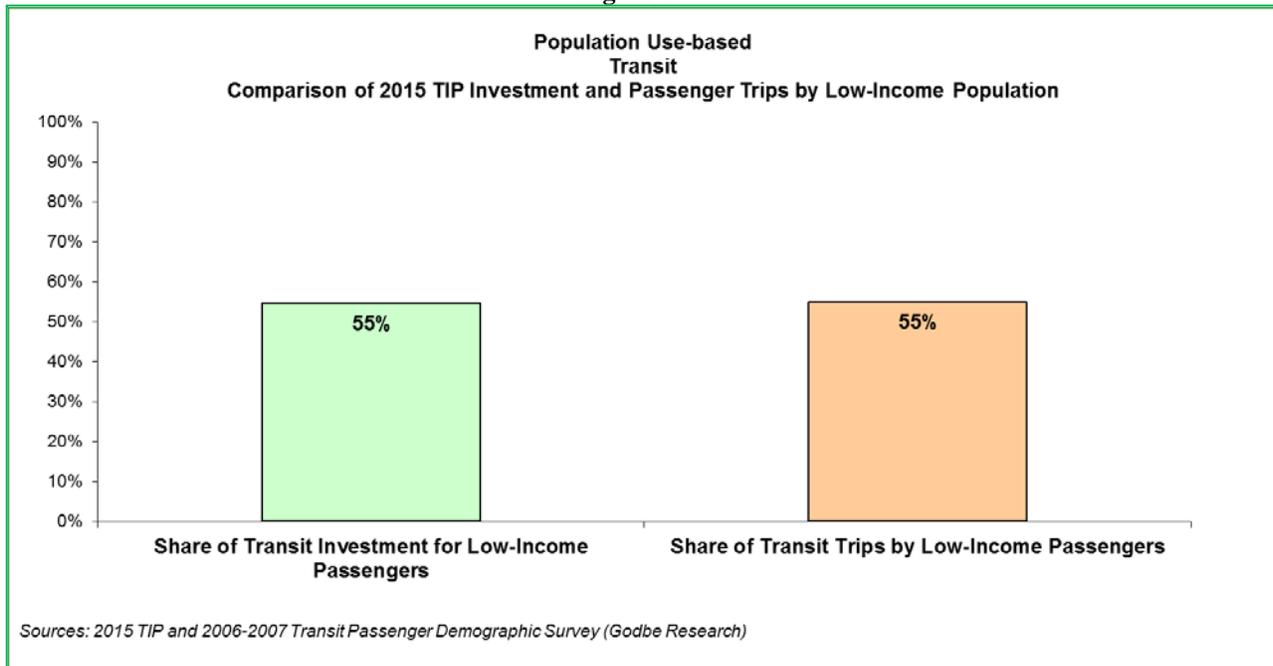


**Observations**

- The share of investments in local road, state highway and toll bridge systems that benefit drivers living in low-income households (12%) is slightly lower than the share of total vehicle miles traveled by drivers living in low-income households (13%).
- While low-income households account for 31% of the population in the Bay Area (Source: 2010 American Community Survey [ACS]: Public Use Microdata Sample 1 Year Estimates) the drivers living in these households account for only 13% of the driving done in the region (Source: 2000 Bay Area Travel Survey).

Table 4. Population Use-Based Transit Comparison of 2015 TIP Investment and Passenger Trips by Income Distribution			
	Transit Investment	% of Investments	% of Passenger Transit Trips
Passengers Living in Low-Income Households (≤\$50k/yr)	\$2,503,093,084	55%	55%
Passengers Living in Not Low-Income Households (>\$50k/yr)	\$2,084,299,672	45%	45%
<b>Total</b>	<b>\$4,587,392,756</b>	<b>100%</b>	<b>100%</b>

Figure 7

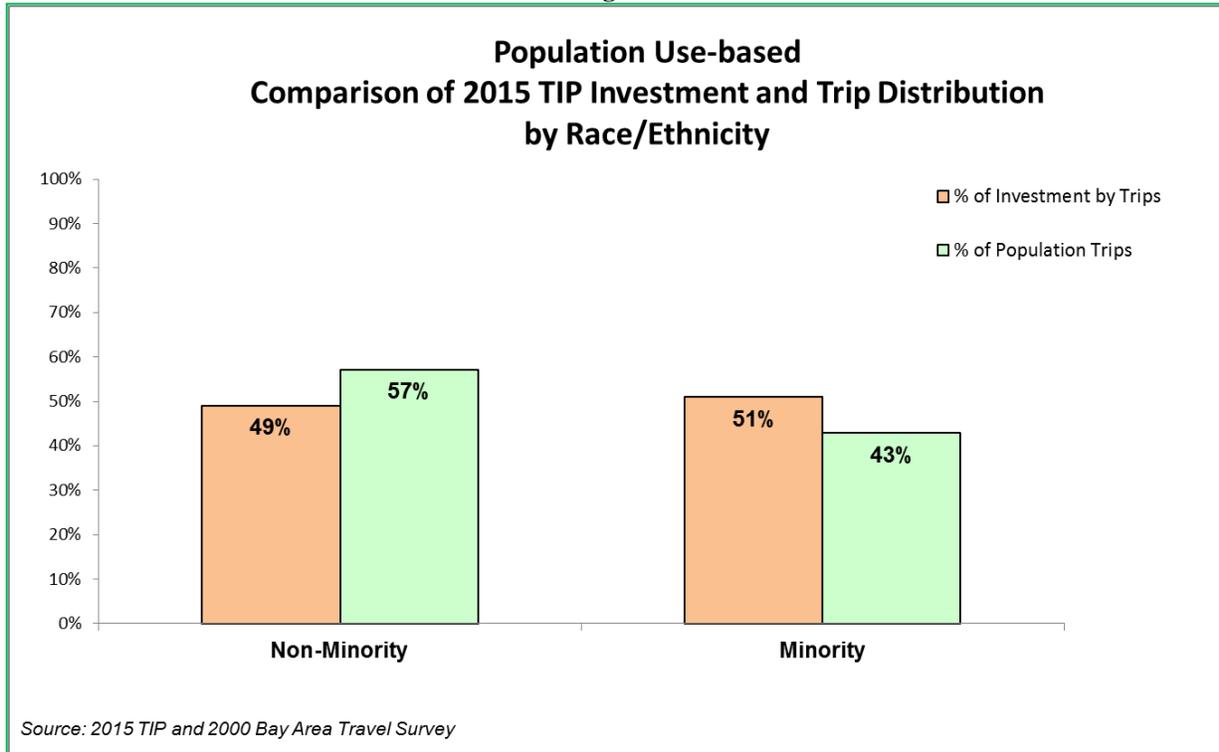


**Observations**

- The share of transit investment for passengers living in low-income households (55%) is equivalent to the share of transit trips taken by passengers living in low-income households (55%).
- While the share of total low-income households in the Bay Area is 31% of the population (Source: 2010 American Community Survey [ACS]: Public Use Microdata Sample 1 Year Estimates), passengers from these households account for 55% of transit trips (2006-2007 Transit Passenger Demographic Survey).

Table 5. Population Use-Based Comparison of 2015 TIP Investment and Trip Distribution by Race/Ethnicity			
Race/Ethnicity	Investment by Trips	% of Investment	% of Trips
Non-Minority	\$4,617,246,286	49%	57%
Minority	\$4,735,060,607	51%	43%
<b>Total</b>	<b>\$9,352,306,893</b>	<b>100%</b>	<b>100%</b>

Figure 8

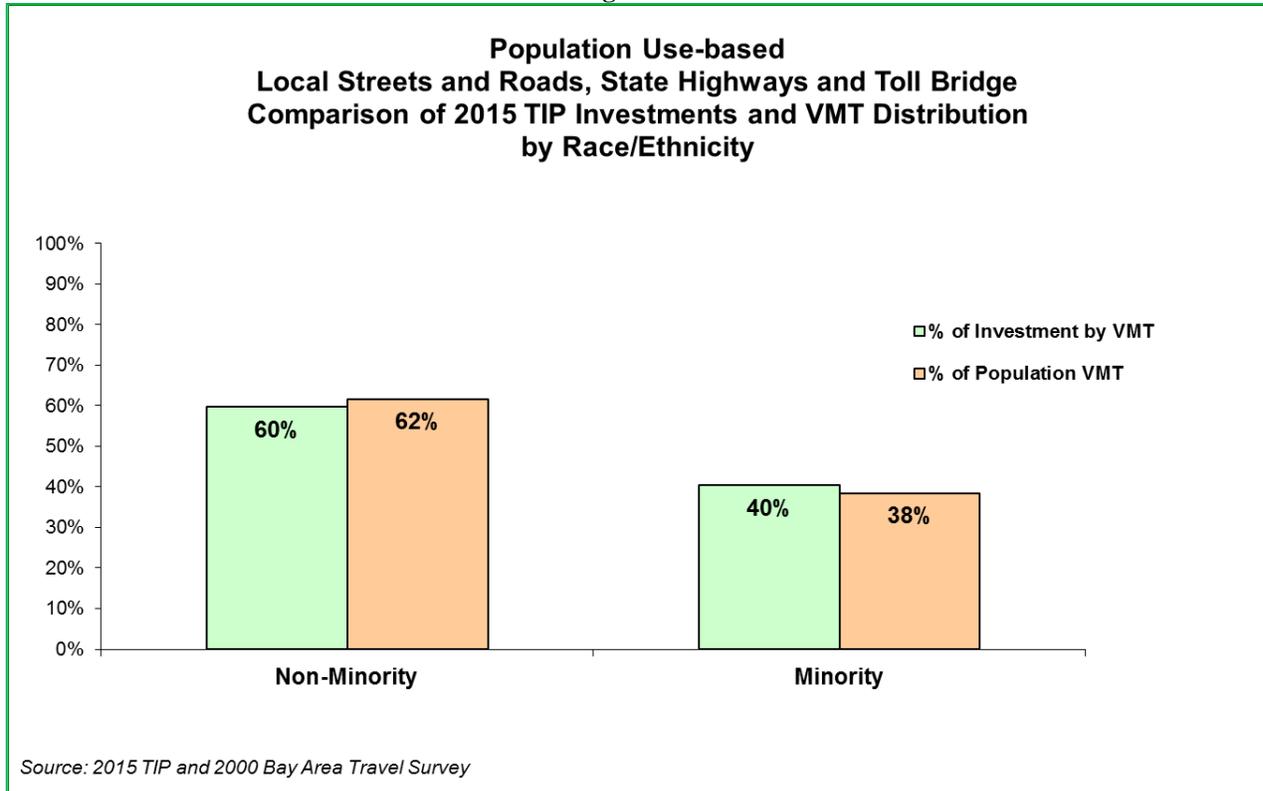


**Observations**

- Minority households make up 58% of the population, and take 43% of all trips in the Bay Area.
- The share of transportation investments in the Bay Area that support minority population trips (51%) is greater than the share of trips taken by these communities (43%).

Table 6. Population Use-Based Local Streets and Roads, State Highways and Toll Bridge Comparison of 2015 TIP Investments and VMT Distribution by Race/Ethnicity			
Race/Ethnicity	Investment by VMT	% of Investment	% of Population VMT
Non-Minority	\$2,842,836,373	60%	62%
Minority	\$1,922,077,764	40%	38%
<b>Total</b>	<b>\$4,764,914,137</b>	<b>100%</b>	<b>100%</b>

Figure 9

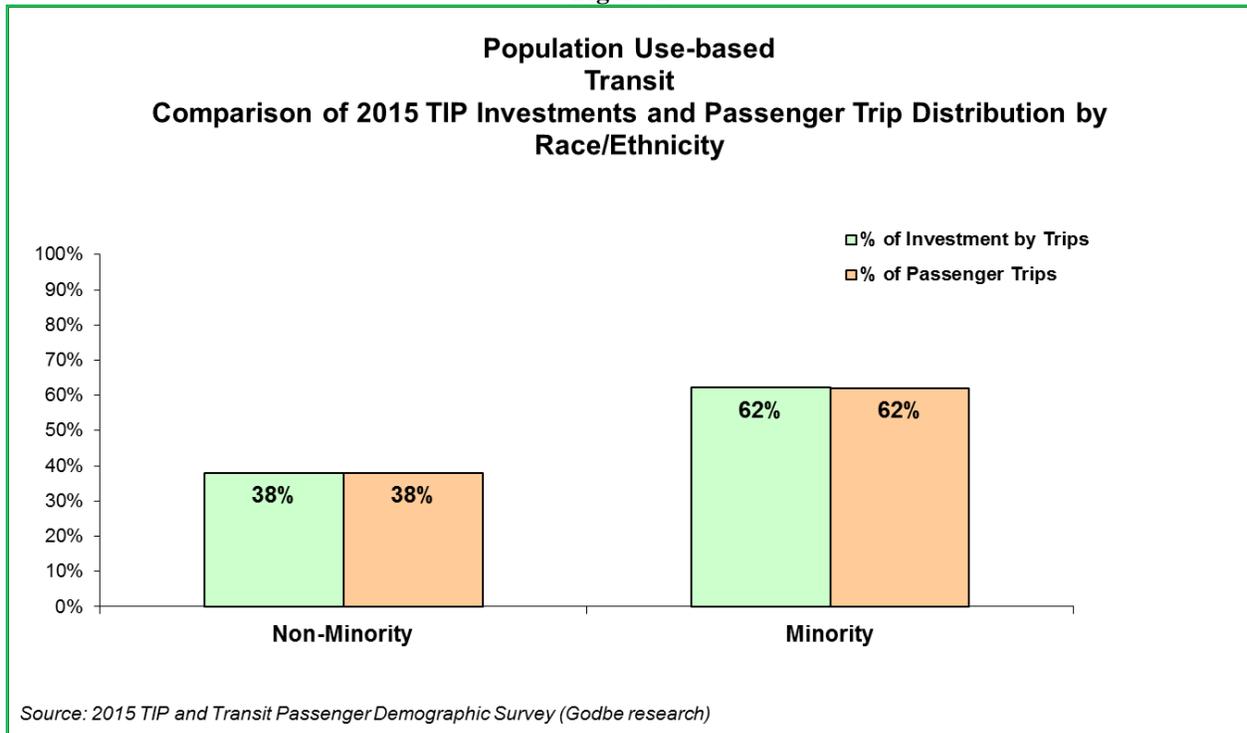


**Observations**

- Minority households make up 58% of the population in the Bay Area, and account for 38% of the vehicle miles traveled in the Bay Area.
- The share of local streets and roads, state highway, and toll bridge investments that support minority communities in the Bay Area (40%) is greater than the share of vehicle miles traveled by minority populations at 38%.

Table 7. Population Use-Based Transit Comparison of 2015 TIP Investments and Passenger Trip Distribution by Race/Ethnicity			
Race/Ethnicity	Investment by Trips	% of Investment	% of Passenger Trips
Non-Minority	\$1,736,422,788	38%	38%
Minority	\$2,850,969,968	62%	62%
<b>Total</b>	<b>\$4,587,392,756</b>	<b>100%</b>	<b>100%</b>

Figure 10



**Observations**

- While minority groups make up 58% of the Bay Area population, this population accounts for 62% of all transit trips.
- The share of investment in racial/ethnic minority transit trips (62%) is equivalent to the share of transit trips made by minority populations (62%).

### **Mapped Project Analysis**

To supplement the population/use-based analysis described above, MTC mapped projects in the TIP that are mappable and overlaid them against communities of concern as well as census tracts with concentrations of minority populations that are above the regional average. This analysis is in response to stakeholder feedback that it is also important to analyze the overall spatial distribution of projects to assess equitable access to TIP investments.

The project mapping analysis also has some limitations. First, not all significant regional investments are mappable. For example, a substantial share of total funding in the TIP is dedicated to transit operators for ongoing operations and maintenance of their entire system, which cannot be represented as a simple point or line on a map in relation to a specific community.

Second, despite previous attempts by MTC to quantify the spatial distribution of regional investments in response to stakeholder requests (as in the 2011 TIP Investment Analysis), stakeholders have not agreed on how investments can be appropriately accounted for in terms of whether or not a specific project or investment truly benefits a specific community and to what degree.

Given these limitations, the Regional Equity Working Group, which reviewed and provided input on the Transportation Investment Analysis methodology for Plan Bay Area and the draft 2013 TIP, recommended a more straightforward qualitative, rather than quantitative, assessment of the spatial distribution of mappable projects included in the TIP.

This qualitative assessment mainly involves examining the distribution of projects for any apparent systematic exclusion of communities of concern or minority communities in the spatial distribution of benefits, or any apparent systematic imbalances between the distribution of projects between communities of concern and the remainder of the region, or between minority and non-minority communities.

The component of this analysis overlaying TIP investments against communities with above-average minority populations also constitutes part of the Title VI Analysis. All the maps are included as part of Appendix C.

**Title VI Analysis**

The Federal Transit Administration released guidance in October 2012 specifying how MPOs such as MTC are to certify compliance with the provisions of Title VI of the Civil Rights Act of 1964 in the metropolitan planning process. This section describes the methodology that MTC is using to meet these requirements within the broader Transportation Investment Analysis framework for the TIP, including the methodology for conducting a disparate impact analysis of the Transportation Investment Analysis results. This methodology is the same as the one utilized in Plan Bay Area.

The key FTA requirements the Transportation Investment Analysis addresses in terms of Title VI are:

FTA Requirement	Related Plan Bay Area Analysis
<b>“Demographic maps that overlay the percent minority and non-minority populations as identified by Census or ACS data ...”</b>	(1) <b>Project mapping analysis</b> overlaying mappable TIP projects against 2010 Census tracts with above-average concentrations of minority residents.
<b>“[C]harts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes...”</b>	(2) <b>Population/use-based analysis</b> of <u>only</u> public transit investments using State and Federal funding sources.
<b>“An analysis of impacts identified in paragraph [above] that identifies any disparate impacts on the basis of race, color, or national origin”<sup>1</sup></b>	(3) <b>Disparate impact analysis</b> comparing TIP investments per capita for minority populations identified under (2) above as a percentage of per-capita investments identified for non-minority populations.

The disparate impact analysis under (3) incorporates the quantitative results produced by the population/use-based analysis under (2) to make a determination of any disparate impact. The mapping analysis under (1) therefore shows all investments overlaid against minority tracts, regardless of fund source, and is a qualitative analysis only. MTC does have the ability to specify public transportation investments that use State and Federal funds in the population/use-based analysis under (2) above. Some of the State and Federal fund sources included in the Title VI analysis of are: FTA 5307, FTA 5309, FTA 5311, FTA 5337 funds, STP/CMAQ, and Proposition 1B funds.

It is important to note that a substantial share of total funding dedicated to transit operators for ongoing operations and maintenance of their entire system comes from state, regional and local sources that are generally not included as part of the TIP as they generally do not require a federal action.

<sup>1</sup> FTA Circular 4702.1B, page VI-2.

To conduct the disparate impact analysis under (3) above, the results of the population/use-based analysis of public transportation investments using State and Federal funds under (2) are first expressed in terms of investments per capita for both minority and non-minority transit riders (or total population) in the region as follows:

$$\text{Minority benefit per capita} = \frac{\text{Total transit investments allocated to minority riders}}{\text{Total regional minority transit ridership (or population)}}$$

$$\text{Non-minority benefit per capita} = \frac{\text{Total transit investments allocated to non-minority riders}}{\text{Total regional non-minority transit ridership (or population)}}$$

Next, the minority and non-minority per-capita benefit results are compared, expressing the minority benefit per capita as a percentage of the non-minority benefit per capita:

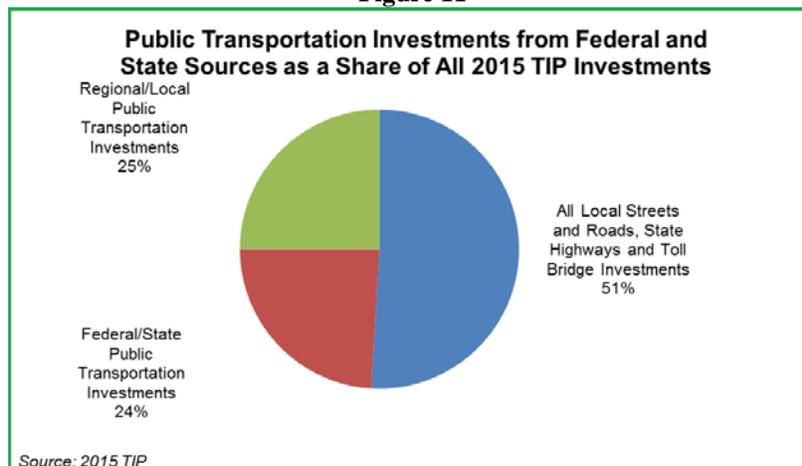
$$\text{Result (\%)} = \frac{\text{Minority benefit per capita}}{\text{Non-minority benefit per capita}}$$

Although FTA does not provide specific guidance or standard benchmarks for MPOs to use in the metropolitan planning process to determine whether any given result represents a disparate impact, a general practice in disparate impact analysis is to use the percentage result to determine whether any differences between benefits for minority or non-minority populations may be considered statistically significant. If a disparate impact is found to be statistically significant, consideration must then be given to “whether there is a substantial legitimate justification for the policy that resulted in the disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact.”<sup>2</sup>

### Results of the Title VI Analysis

First, to address FTA’s MPO-specific requirements for Title VI disparate-impact analysis, Federal and State funding sources for public transportation are separated out from the total TIP investments, as illustrated below in Figure 11.

Figure 11



<sup>2</sup> FTA Circular 4702.1B, page VI-2.

Next, using the same methodology as the population/use based investment analysis presented above, the \$2.2 billion in the TIP’s public transportation investments using Federal and State sources is distributed to minority and non-minority transit riders based on their respective shares of ridership among the various Bay Area transit agencies, and total investment shares are compared to the region’s overall transit ridership and populations as a whole, as shown in Table 8.

<b>Table 8. Comparison of Federal and State Transit 2015 TIP Investments by Minority Status</b>				
<b>Race/Ethnicity</b>	<b>Total Federal/ State Transit Funding (Millions \$)</b>	<b>% of Total Federal/ State Transit Funding</b>	<b>% of Regional Transit Ridership</b>	<b>% of Total Regional Population</b>
<b>Minority</b>	<b>\$1,369</b>	<b>61%</b>	<b>62%</b>	<b>58%</b>
<b>Non-minority</b>	<b>\$879</b>	<b>39%</b>	<b>38%</b>	<b>42%</b>
<b>Total</b>	<b>\$2,248</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Finally, investments are distributed on a per-capita and per-rider basis so that investment benefits accruing to the region’s minority riders and populations can be compared as a percentage to investment benefits accruing to the region’s non-minority populations and riders, as shown in Table 9 and Table 10, respectively.

<b>Table 9. Disparate Impact Analysis of 2015 TIP Investments: Population Analysis</b>				
<b>Race/Ethnicity</b>	<b>Total Federal/ State Transit Funding (Millions \$)</b>	<b>Regional Population (2010)</b>	<b>Per-Capita Benefit</b>	<b>Minority Per-Capita Benefit as % of Non-minority Per-Capita Benefit</b>
<b>Minority</b>	<b>\$1,369</b>	<b>4,117,836</b>	<b>\$ 332</b>	<b>115%</b>
<b>Non-minority</b>	<b>\$879</b>	<b>3,032,903</b>	<b>\$ 290</b>	
<b>Total</b>	<b>\$2,248</b>	<b>7,150,739</b>		

Source: 2015 TIP, 2006 Transit Passenger Demographic Survey, 2010 Census SF1.

<b>Table 10. Disparate Impact Analysis of 2015 TIP Investments: Ridership Analysis</b>				
<b>Race/Ethnicity</b>	<b>Total Federal/ State Transit Funding (Millions \$)</b>	<b>Avg. Daily Transit Ridership (2006)</b>	<b>Per-Rider Benefit</b>	<b>Minority Per-Capita Benefit as % of Non-minority Per-Capita Benefit</b>
<b>Minority</b>	<b>\$1,369</b>	<b>816,059</b>	<b>\$1,677</b>	<b>95%</b>
<b>Non-minority</b>	<b>\$879</b>	<b>498,303</b>	<b>\$1,764</b>	
<b>Total</b>	<b>\$2,248</b>	<b>1,314,362</b>		

Source: 2015 TIP, 2006 Transit Passenger Demographic Survey, MTC Statistical Summary for Bay Area Transit Operators.

On a per-capita population basis, Table 9 shows minority persons in the region are receiving 115% of the benefit of the TIP’s investments in public transportation from Federal and State sources compared to non-minority persons. On a ridership basis, Table 10, shows that minority riders are receiving 95% of the benefit of Federal- and State-funded transit investments in the TIP compared to non-minority riders. This 5% difference between minority and non-minority per-rider benefits does not demonstrate a systematic disbenefit to minority populations, and therefore this analysis finds no disparate impact in the distribution of Federal and State funding for public transportation purposes between minority and non-minority populations or riders in the 2015 TIP.

**Key Findings**

The purpose of this investment analysis is to compare the allocation of 2015 TIP investments between low-income and minority populations and all other populations. The key question addressed is: “Are low-income and minority populations sharing equitably in the TIP’s financial investments?”

This analysis attempts to take a relatively conservative approach to assigning investments (or “benefit”) to low-income households given some of the limitations of the analysis. The results suggest that according to several indices, the 2015 TIP invests greater public funding to the benefit of low-income and minority communities than their proportionate share of the region’s population or trip-making as a whole.

- As shown in Table 11 the analysis concludes in the aggregate that there is a relatively higher proportional investment in the 2015 TIP in minority and low-income populations than the proportionate share of trips taken by minority and low-income populations.

**Table 11. Findings for Aggregate Analysis**

	Share of 2015 TIP Investment	Share of Total Trips/Population
<b>Population Use-Based</b>		
<i>Low-Income</i>	25%	18% (total trips)
<i>Minority</i>	51%	43% (total trips)

- In delving deeper into the investments by mode, one finds that the results are similar. For example, for transit, the results show that for low-income populations, the share of investment (55 percent) was equivalent to the share of trips (55 percent). The share of investment in minority transit trips (62 percent) is both slightly greater than the minority share of the total population (58 percent) and also equivalent to the share of transit trips made by minority populations (62 percent). For streets and road investments, these findings also hold true for the minority trips, but not for trips by low-income population when compared against the Vehicle Miles Traveled. However, in no case, do the results appear to demonstrate a systematic disbenefit to low-income or minority populations.
- The Title VI Analysis finds no disparate impact in the distribution of Federal and State funding for public transportation purposes between minority and non-minority populations or riders in the 2015 TIP.

## Appendix A: Regulatory and Policy Context for Environmental Justice in Transportation Planning

The contents of this report are intended to satisfy several federal requirements as well as regional policy objectives as summarized in this section. At the federal level are civil rights protections afforded to persons against discrimination in federal programs on the basis of race, color, or national origin; and federal environmental justice objectives. At the regional level are MTC's own adopted environmental justice principles in addition to numerous efforts by MTC and ABAG to incorporate social equity throughout the agencies' regional planning efforts, including Plan Bay Area.

### Title VI of the Civil Rights Act of 1964: The Right of Non-discrimination in Federally Funded Programs on the Basis of Race, Color, or National Origin

This section discusses the relationship between Title VI, its requirements, and the development of the Regional Transportation Plan and Transportation Improvement Program.

#### ***What Is Covered under Title VI?***

Title VI of the Civil Rights Act of 1964 states that “[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”<sup>3</sup> Title VI further authorizes Federal agencies that make grants (for example, the U.S. Department of Transportation) to promulgate regulations to effectuate compliance with the law's provisions.

#### ***What Are MTC's Responsibilities?***

As a recipient of DOT funds, MTC is responsible for complying with DOT regulations related to Title VI<sup>4</sup> (see sidebar). In October 2012, the Federal

### U.S. Department of Transportation Title VI Regulations

Specific discriminatory actions prohibited under DOT Title VI regulations include:

- (1) A recipient under any program to which this part applies may not, directly or through contractual or other arrangements, on the grounds of race, color, or national origin.
  - (a) Deny a person any service, financial aid, or other benefit provided under the program;
  - (b) Provide any service, financial aid, or other benefit to a person which is different, or is provided in a different manner, from that provided to others under the program;
  - (c) Subject a person to segregation or separate treatment in any matter related to his receipt of any service, financial aid, or other benefit under the program;
  - (d) Restrict a person in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit under the program;
  - (e) Treat a person differently from others in determining whether he satisfies any admission, enrollment, quota, eligibility, membership, or other requirement or condition which persons must meet in order to be provided any service, financial aid, or other benefit provided under the program;
  - (f) Deny a person an opportunity to participate in the program through the provision of services or otherwise or afford him an opportunity to do so which is different from that afforded others under the program; or
  - (g) Deny a person the opportunity to participate as a member of a planning, advisory, or similar body which is an integral part of the program.
- (2) A recipient, in determining the types of services, financial aid, or other benefits, or facilities which will be provided under any such program, or the class of person to whom, or the situations in which, such services, financial aid, other benefits, or facilities will be provided under any such program, or the class of persons to be afforded an opportunity to participate in any such program; may not, directly or through contractual or other arrangements, utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, or national origin.

<sup>3</sup> 42 U.S.C §2000d.

<sup>4</sup> 49 CFR part 21.

Transit Administration issued a new Circular with guidance to its recipients for compliance with federal Title VI requirements.<sup>5</sup> This guidance lays out requirements for FTA’s recipients, including metropolitan planning organizations (MPOs) such as MTC, to ensure that their programs, policies, and activities comply with the Department of Transportation’s Title VI regulations. The guidance offers several specific requirements that MPOs must submit to the State and to FTA as part of their overall Title VI Programs, including:

- “All general requirements set out in [the General Requirements section of the] Circular.
- “A demographic profile of the metropolitan area that includes identification of the locations of minority populations in the aggregate;...
- “A description of the procedures by which the mobility needs of minority populations are identified and considered within the planning process;
- “Demographic maps that overlay the percent minority and non-minority populations as identified by Census or ACS data ... and charts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes...;
- “An analysis of impacts identified in paragraph (4) that identifies any disparate impacts on the basis of race, color, or national origin, and, if so, determines whether there is a substantial legitimate justification for the policy that resulted in the disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact.”<sup>6</sup>

Specific methods MTC uses in addressing these requirements for the Regional Transportation Plan are included in Plan Bay Area. In addition to analyzing the long-range Plan as described in this report, MTC’s broader Title VI program includes a variety of commitments to ensure nondiscrimination on the basis of race, color, or national origin in its programs and activities.<sup>7</sup>

### **Environmental Justice: Avoiding, Minimizing, or Mitigating Disproportionately High and Adverse Effects on Low-Income and Minority Populations**

Environmental justice is a concept related to, but distinct from civil rights and Title VI. Whereas Title VI provides legal protection from discrimination in Federal programs on the basis of “race, color, or national origin,” environmental justice in the context of the region’s long range Plan relates to an administrative framework for internal management of federal agencies to ensure their programs and activities incorporate environmental justice principles and do not disproportionately burden low-income and minority populations.

The environmental justice movement emerged following the broader environmental movement of the 1960s and 1970s, out of concern that predominantly minority and low-income communities were bearing disproportionate environmental burdens relative to their non-minority and non-low-income counterparts. In this sense, the “justice” aspect of environmental justice is

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<sup>5</sup> Federal Transit Administration Circular 4702.1B, *Title VI Requirements and Guidelines for Federal Transit Administration Recipients*: [http://www.fta.dot.gov/documents/FTA\\_Title\\_VI\\_FINAL.pdf](http://www.fta.dot.gov/documents/FTA_Title_VI_FINAL.pdf).

<sup>6</sup> FTA Circular 4702.1B, page VI-1f.

<sup>7</sup> For more information, see MTC’s Title VI page at: [http://www.mtc.ca.gov/get\\_involved/rights/title\\_VI.htm](http://www.mtc.ca.gov/get_involved/rights/title_VI.htm).

rooted in the basic concept of fairness in terms of an equitable distribution of environmental benefits and burdens, and seeks to promote participation of community members in the decision-making processes that affect them.

### ***What Is Covered under Environmental Justice?***

In an effort to address environmental justice concerns mounting across the country during the 1980s and early 1990s, in 1994 President Clinton signed Executive Order 12898, *Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*. This Order directed each Federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...”<sup>8</sup> Furthermore, the Executive Order directed each agency to develop an agency-wide environmental justice strategy.

Accordingly, the U.S. Department of Transportation issued its original Environmental Justice Order in April 1997, establishing DOT’s overall strategy and procedures to be used by DOT to comply with EO 12898. In response to the Memorandum of Understanding on Environmental Justice signed by heads of Federal agencies on August 4, 2011, in an effort to “renew the process under Executive Order 12898 for agencies to provide environmental justice strategies and implementation progress reports,”<sup>9</sup> DOT issued its revised environmental justice strategy, DOT Order 5610.2(a), in March 2012. This Order places responsibility on the head of each Operating Administration within DOT to determine whether programs, policies, or activities for which they are responsible will have an adverse human health or environmental effect on minority and low-income populations and whether that adverse effect will be disproportionately high.

As operating administrations within DOT, the Federal Highway Administration and Federal Transit Administration both define three fundamental environmental justice principles consistent with the Executive and DOT Orders as follows:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The DOT Order further defines “disproportionately high and adverse effect on minority and low-income populations” as an adverse effect that:

1. is predominately borne by a minority population and/or a low-income population, or

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<sup>8</sup> Executive Order 12898 (1994, Clinton).

<sup>9</sup> Memorandum of Understanding on Environmental Justice and Executive Order 12898, available at: <http://www.epa.gov/compliance/ej/resources/publications/interagency/ej-mou-2011-08.pdf>.

2. will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

In June 2012, the Federal Highway Administration released a new and updated Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.<sup>10</sup> This Order clarifies FHWA's environmental justice policies, guidance, and responsibilities consistent with the updated DOT Order.

In August 2012, the Federal Transit Administration released final guidance in the form of a Circular on incorporating environmental justice principles into plans, projects, and activities that receive funding from FTA.<sup>11</sup> This final guidance provides recommendations to recipients of FTA funds, including metropolitan planning organizations, on how to fully engage environmental justice populations in the public transportation decision-making process; how to determine whether environmental justice populations would be subjected to disproportionately high and adverse human health or environmental effects as a result of a transportation plan, project, or activity; and how to avoid, minimize, or mitigate these effects.

### ***MTC Environmental Justice Principles***

In addition to MTC's long-standing commitment to supporting DOT, FHWA, and FTA in fulfilling their environmental justice mission under the Executive Order, MTC's commitment to environmental justice is embodied in the Environmental Justice principles adopted by the Commission in 2007. Developed in a collaborative process involving regional environmental-justice stakeholders and transportation agencies, the adopted principles affirm MTC's ongoing commitments to:

1. Create an open and transparent public participation process that empowers low-income communities and communities of color to participate in decision making that affects them.
2. Collect accurate and current data essential to defining and understanding the presence and extent of inequities, if any, in transportation funding based on race and income.

### ***What Are MTC's Responsibilities?***

Recipients' responsibilities regarding environmental justice are part of FTA's annual Master Agreement, which requires recipients, including MTC, to promote environmental justice by following and facilitating FTA's compliance with Executive Order 12898, and following DOT's Order on environmental justice. MTC fulfills these responsibilities through a range of programs and activities that support environmental justice principles, including:

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<sup>10</sup> FHWA Order 6640.23A, available at: <http://www.fhwa.dot.gov/legregs/directives/orders/664023a.htm>.

<sup>11</sup> FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients*, available at: [http://www.fta.dot.gov/legislation\\_law/12349\\_14740.html](http://www.fta.dot.gov/legislation_law/12349_14740.html).

- Identifying mobility needs of low-income and minority communities through MTC's Community Based Transportation Planning Program.
- Developing and implementing MTC's Public Participation Plan, which lays out specific strategies for engaging low-income and minority populations and other community stakeholders throughout the metropolitan planning process in general, and providing for input on the development of the Equity Analysis methodology and the definitions of environmental justice populations and performance measures in particular.
- Conducting an environmental justice analysis of the Regional Transportation Plan (as referenced in this report), including an analysis of the distribution of regional transportation investments for low-income and minority populations, and analysis of benefits and burdens using technical performance measures to determine whether the proposed investment strategy may present any disproportionately high and adverse human health and environmental effects on environmental justice populations.
- Continually refining and updating the data and analytical methods required to carry out environmental justice analysis at the regional, programmatic level, incorporating both stakeholder feedback and ongoing improvements in analytical technologies and data collection.

## Appendix B: Definitions and Data Sources

### Definitions

#### Minority

Minority populations include persons who identify as any of the following groups defined by the Census Bureau in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB):

- American Indian or Pacific Islander alone
- Asian alone
- Black or African-American alone
- Hispanic or Latino of any race
- Native Hawaiian or Pacific Islander alone

For the purposes of this report, all Hispanic and Latino residents of all races are included in the Hispanic and Latino definition, and only non-Hispanic or Latino persons are included in other minority groups. In addition, this report includes with the minority population those persons whose responses identify Some Other Race or Two or More Races. Accordingly, the “non-minority” population consists of all other persons not included in any of the above-named groups, namely those identifying as non-Hispanic white alone. Because the Bay Area is a “majority minority” region, the designation of non-Hispanic white persons as “non-minority” is not intended to be misleading, as this population still represents a relative majority (a plurality) in the region but not an absolute majority. Nevertheless, the term “non-minority” is used here to provide consistency and clarity with regard to federal guidance.

#### Low-Income Households

Many of the measures analyzed using the regional travel model are able to produce results for all low-income households, or persons living in low-income households, throughout the region, regardless of their residential location. Low-income households are defined in MTC’s travel model as having incomes of less than \$30,000 a year in 2000 dollars (approximately \$38,000 in 2010 dollars), which represent the lowest 28% of households in 2010. Non-low-income households, as a basis for comparison, are defined as having incomes of \$30,000 or more per year in 2000 dollars, and represent the upper 72% of households. Due to limitations of other regional data sources, the Plan Bay Area Transportation Investment Analysis and the 2015 TIP Investment Analysis defines low-income households as those earning \$50,000 per year or less (in 2006 dollars).

#### Low-Income Persons

A low income person is defined by MTC as persons identified by the Census Bureau as below 200% of the federal poverty level. MTC established the 200% of poverty threshold in 2001 to account for the Bay Area’s high cost of living relative to nationally defined poverty thresholds; the Census Bureau does not adjust the poverty level for different parts of the continental U.S. where different costs of living to factor into the varying affordability of basic necessities. The Census Bureau establishes poverty status for individuals based on a combination of an individual’s household composition, size, and income. As of 2010, the 200% threshold

represented a household income of approximately \$23,000 a year for a single person living alone, and approximately \$47,000 a year for a family of four.

Communities of Concern

In discussing how to define target populations for equity analysis, Equity Working Group members emphasized the importance of spatial location within the region with respect to the impacts of future development patterns and transportation investments. Thus, staff worked with Working Group members to develop a spatial definition of communities of concern, against which performance measure results could be compared with non-communities of concern (typically referred to in the analysis as the “remainder of region”). Except where noted, data used to define communities of concern is from the Census Bureau’s 2005–09 American Community Survey, the most recent data set available for this analysis that is readily compatible with MTC’s existing travel-analysis-zone definitions used for spatial analysis, which are based on 2000 Census geography.

In response to feedback that the analysis would be more informative with a more focused definition of communities of concern than was used in past RTP Equity Analyses, and a recommendation from MTC’s Policy Advisory Council to consider seniors and persons with disabilities in addition to low-income and minority populations, staff proposed a revised community-of-concern definition which identifies communities with multiple overlapping potential disadvantage factors relevant to the Plan Bay Area planning process.

Thresholds were proposed to incorporate the most significant concentrations of eight different target populations while minimizing inclusion of non-target population members. The list of factors, reviewed by the Equity Working Group and approved by MTC’s Planning Committee in October 2011, are summarized in the table below.

Communities of concern were then defined as recommended by Equity Working Group members as those tracts having concentrations of 4 or more factors listed above, or having concentrations of both low-income and minority populations. Based on this definition, a total of 305 out of 1,405 Census tracts in the region were identified as communities of concern.

<b>Disadvantage Factor</b>	<b>% of Regional Population<sup>1</sup></b>	<b>Proposed Concentration Threshold</b>
1. Minority	54%	70%
2. Low Income (<200% of Poverty)	23%	30%
3. Limited English Proficiency	9%	20%
4. Zero-Vehicle Households	9%	10%
5. Seniors 75 and Over	6%	10%
6. Population with a Disability	18%	25%
7. Female-Headed Families with Children	10%	15%
8. Cost-burdened Renters <sup>2</sup>	10%	15%

<sup>1</sup>Source: 2005-09 American Community Survey tract-level data; data for population with a disability is from 2000 Census, the most recent available.

<sup>2</sup>Defined as the share of housing units occupied by renters paying more than 50% of income for rent.

## Data Sources

This section describes the various data sources used to perform the 2015 TIP Investment Analysis.

### Decennial Census and American Community Survey

The Census Bureau provides two key data sets used in this report. One, the decennial Census, was most recently completed in 2010 and is a 100% count of all persons in the United States as mandated in the U.S. Constitution. The decennial Census includes complete data on all persons' race and ethnicity as well as age and certain household and family characteristics.

The second Census Bureau data product used is the American Community Survey (ACS). The ACS is an ongoing annual sample-based survey of the U.S. population and provides basic demographic information similar to the decennial Census but also provides far greater detail on various socioeconomic characteristics, including such data relevant to this analysis as household income, poverty status, level of proficiency with English, household vehicle ownership, disability status, housing costs, and information about workers' typical commuting habits.

Because the ACS is based on sample data collected by the Census Bureau (as opposed to 100% counts of the population like the decennial Census), situations calling for very detailed socioeconomic data require using larger samples. Sample sizes can be increased by looking at either larger geographic areas or else multiple years' worth of data for smaller areas. Hence, looking at just one year's worth of data to get a single "snapshot" in time may require looking only at larger geographies such as counties, while looking at very detailed geographies at a neighborhood level may require examining up to five continuous years' worth of sample data collected from the same relatively small area.

In this report, data from the 2010 Census is used primarily in the regional demographic profile and to characterize the regional minority population for the Transportation Investment Analysis described. Data from the American Community Survey is used in the definition of communities of concern, and to characterize the regional low-income population for the Transportation Investment Analysis.

### Bay Area Travel Survey (BATS)

The Bay Area Travel Survey (BATS) is MTC's periodic regional household travel survey, the most recent of which was completed in 2000. BATS2000 is an activity-based travel survey that collected information on all in-home and out-of-home activities, including all trips, over a two-day period for more than 15,000 Bay Area households. The survey provides detailed information on many trip characteristics such as trip purpose, mode, origins and destinations, as well as household demographic and socioeconomic characteristics, and informs development of the regional travel model. In this report, BATS is used primarily to provide data on usage of the regional transportation system, and in particular the share of trip-making and vehicle-miles of travel (VMT) on the region's road and highway system, for different demographic and socioeconomic groups in the Transportation Investment Analysis.

The region's household travel survey is currently in the process of being updated as part of a broader statewide travel survey project. Data collection and analysis efforts are currently under way, and new data from the updated regional travel survey is expected to be available sometime in 2014.

Bay Area Transit Passenger Demographic Survey

In 2006 MTC conducted a comprehensive survey of all Bay Area transit operators to collect consistent demographic and socioeconomic data for all the region's transit riders. Data collected included race/ethnicity, age, fare payment information, household income, and vehicle availability. Results for this survey are used in the Transportation Investment Analysis to determine transit-investment benefits to low-income and minority populations based on these groups' share of transit use on individual systems and across the region as a whole. The Transit Passenger Demographic Survey also informs the Title VI Analysis by establishing a consistent demographic profile of the region's overall transit ridership across all systems by minority and non-minority status.

To update this data on an ongoing basis, MTC is now working with transit operators on ridership surveys that will collect a variety of consistent demographic and travel-activity data across all transit systems surveyed. In order to make best use of available funding and resources to support these extensive survey efforts, surveys are being conducted on different systems on a serial basis over time. Surveys are anticipated to be complete for all systems and updated regional data available in 2016.

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**Draft 2015  
Transportation  
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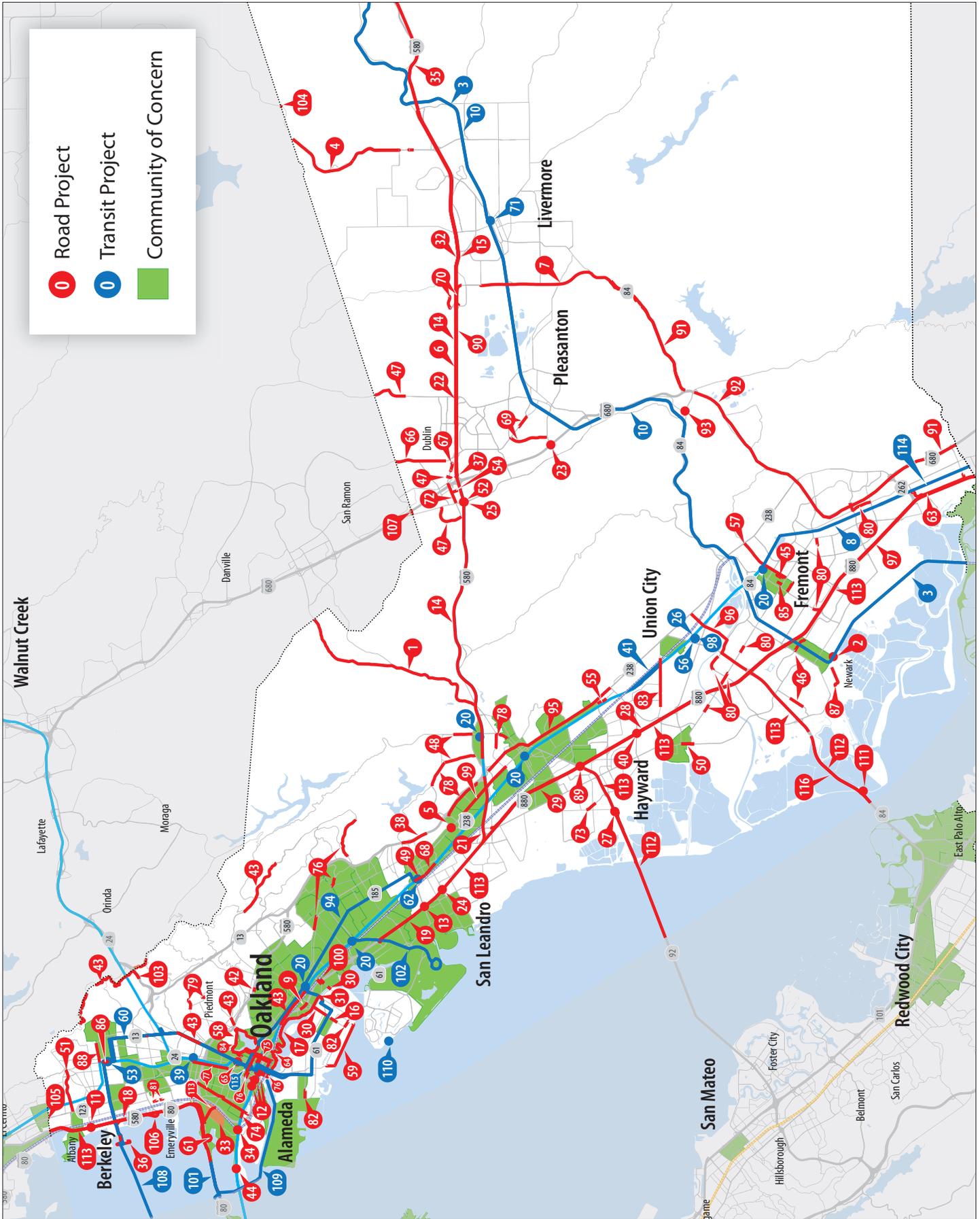
June 2014

# Alameda County TIP Projects

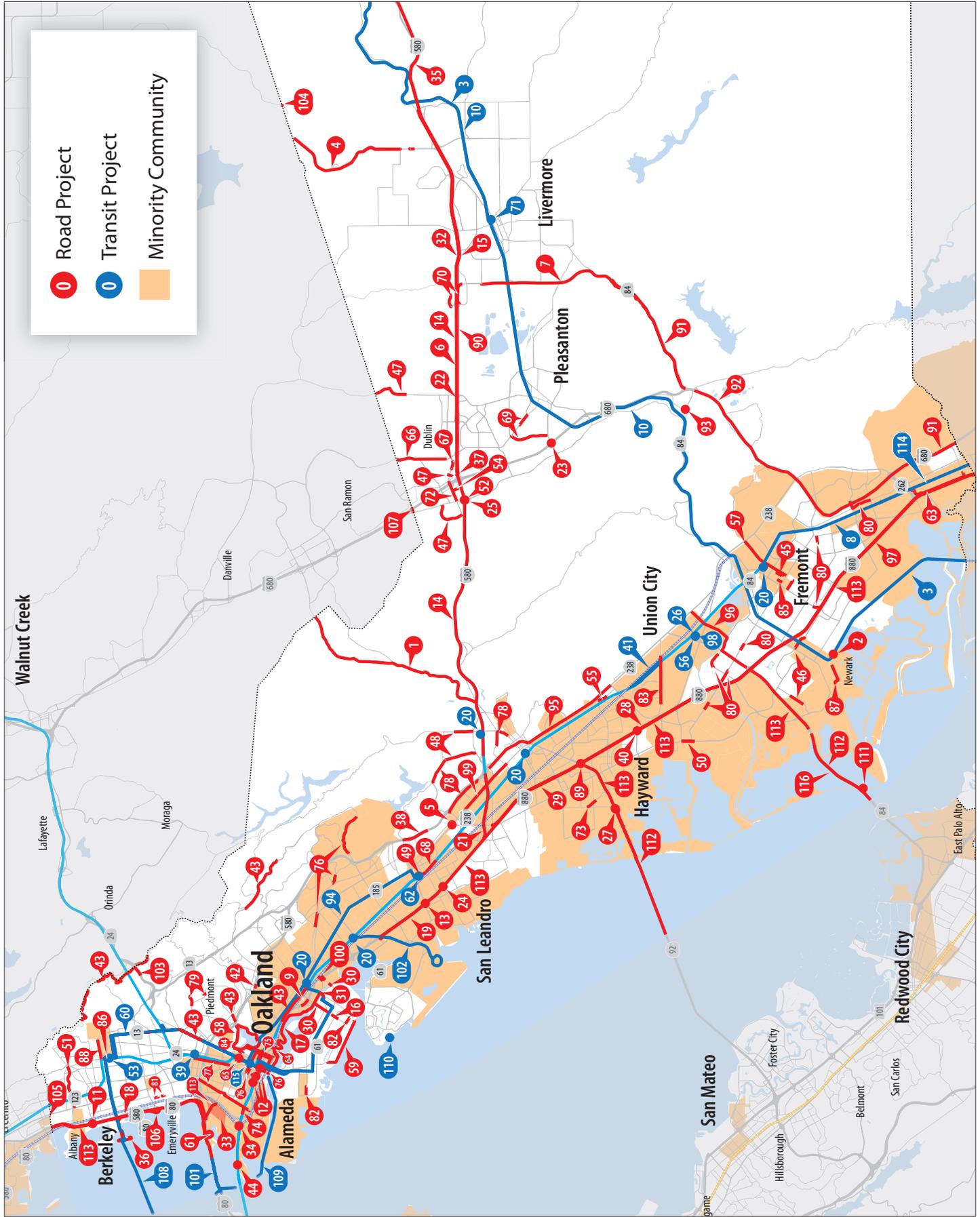
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- 116 Dumbarton Bridge Seismic Retrofit

# Alameda County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



# Alameda County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population

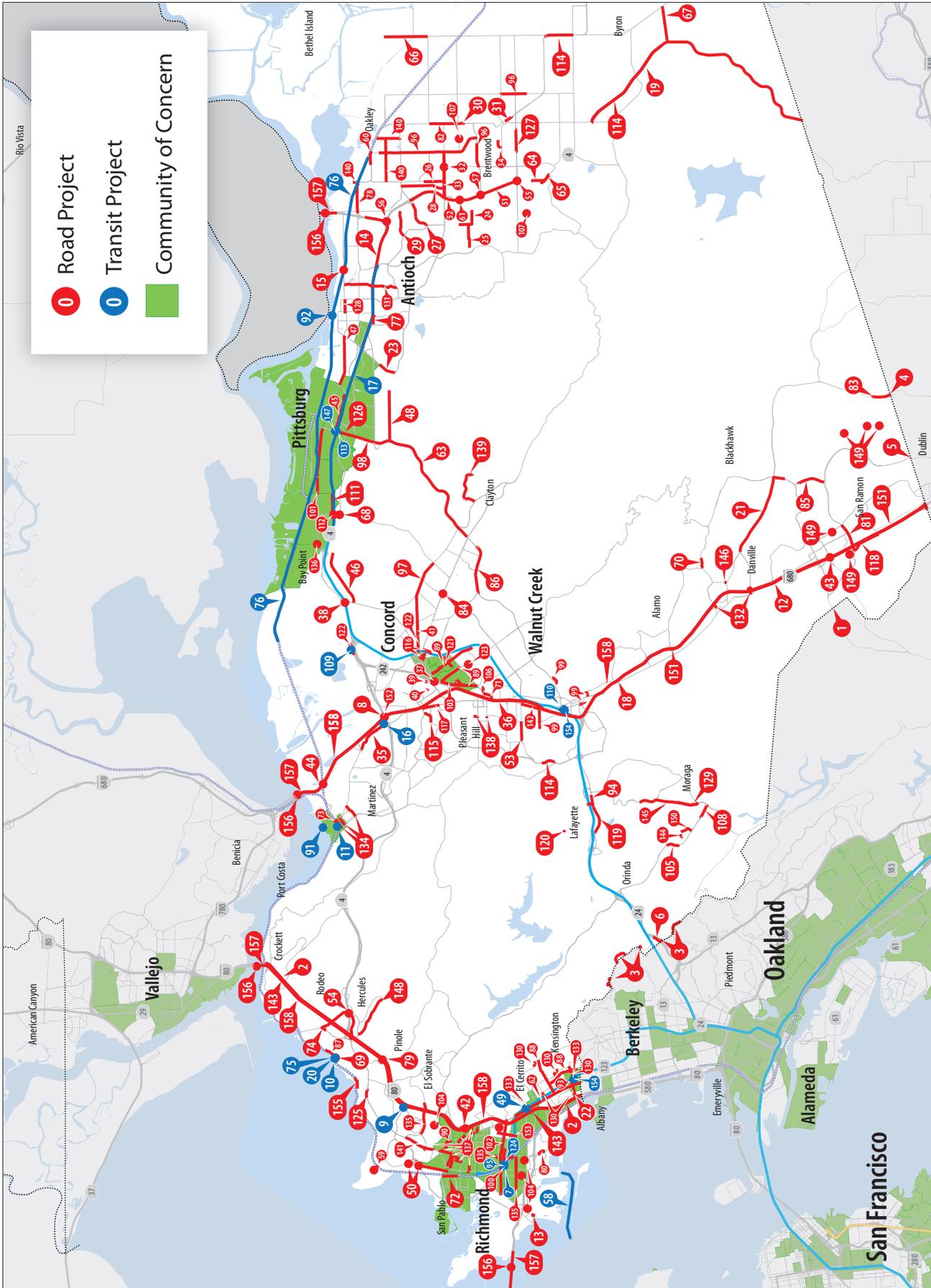


# Contra Costa County TIP Projects

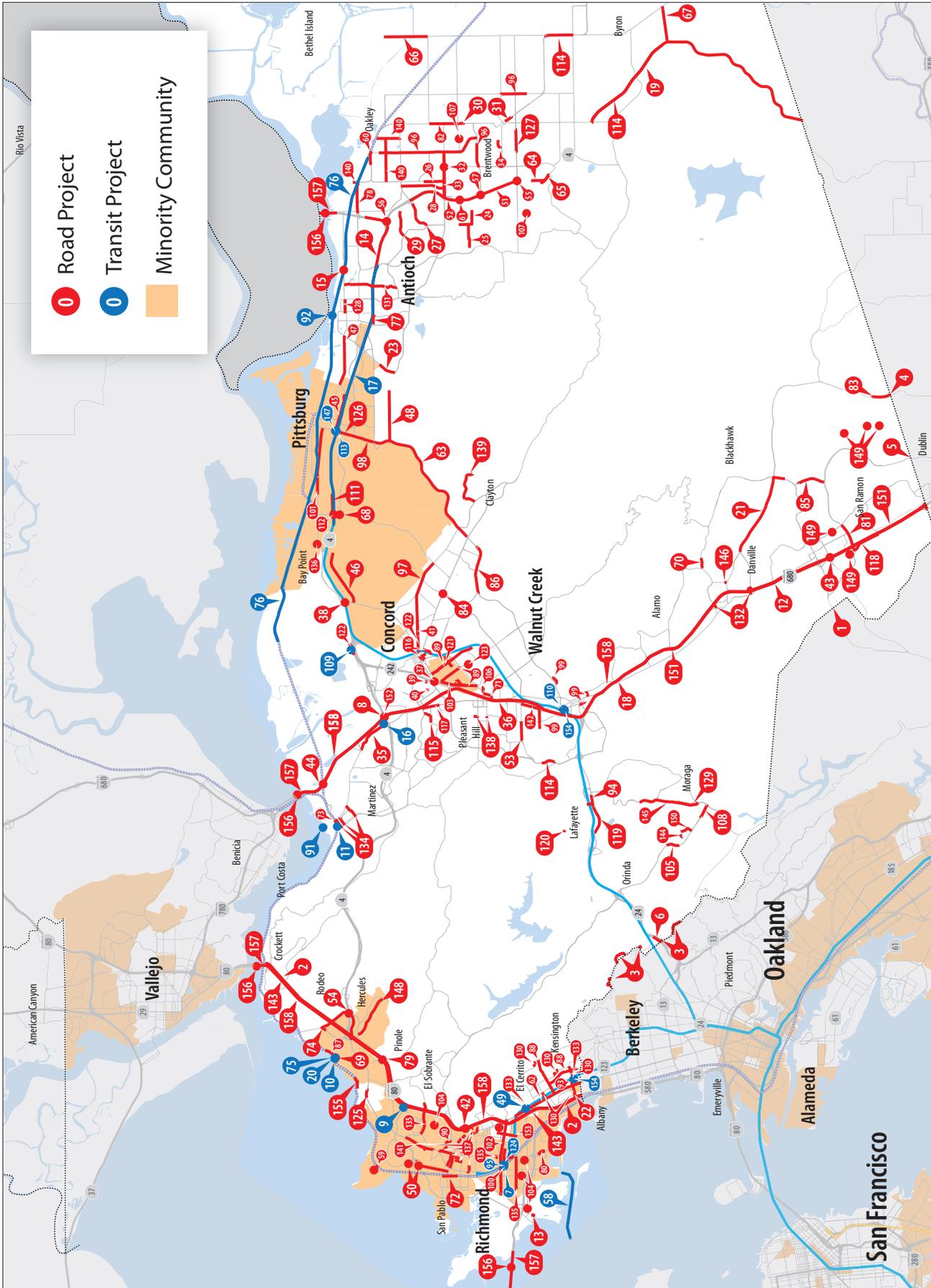
- 1 Crow Canyon Safety Improvements
- 2 I-80 Integrated Corridor Mobility Project
- 3 Various Streets Resurfacing and Bikeway Facilities
- 4 Dublin Citywide Street Resurfacing
- 5 Dougherty Road Widening
- 6 SR-24 - Caldecott Tunnel 4th Bore
- 7 Richmond Transit Village Transit & Ped Imps
- 8 I-680/SR-4 I/C Reconstruction - Phases 1, 2, 4 & 5
- 9 AC Transit: Richmond Parkway Transit Center
- 10 Hercules Intercity Rail Station - Phase 1
- 11 Martinez Intermodal Station Parking Expansion
- 12 I-680 Auxiliary Lanes
- 13 Dornan Drive/Garrard Blvd Tunnel Rehabilitation
- 14 SR-4 East Widening from Somersville to SR-160
- 15 Antioch - Wilbur Ave Bridge Widening
- 16 Pacheco Transit Hub
- 17 E-BART - East Contra Costa Rail Extension
- 18 I-680 SB HOV Lane Completion
- 19 Contra Costa County Vasco Road Safety Improvements
- 20 Hercules Intermodal Station Improvements
- 21 Crow Canyon/Camino Tassajara Intersection Imps
- 22 I-80/Central Avenue Interchange Modification
- 23 Somersville Road Widening
- 24 Hillcrest Ave Extension
- 25 Sand Creek Road Extension
- 26 Antioch - Empire Road Widening
- 27 Laurel Road Extension
- 28 Slatten Ranch Road Extension - Lone Tree to Laurel
- 29 Antioch - Wild Horse Road Extension
- 30 SR-4/Brentwood Boulevard Widening - North (Phase I)
- 31 SR-4 (Brentwood Boulevard) Widening (South)
- 32 Lone Tree Way Undercrossing
- 33 Lone Tree Way Widening
- 34 Central Blvd Widening (Phase II)
- 35 Pacheco Blvd Widening and Realignment
- 36 I-680 NB HOV Lane Extension
- 37 SR-242 / Clayton Road Interchange Improvements
- 38 SR-4/Willow Pass Interchange Improvements
- 39 Commerce Avenue Extension
- 40 Waterworld Parkway Extension and New Bridge
- 41 Concord Blvd. Gap Closure, Phase 2
- 42 Reconstruct I-80/San Pablo Dam Rd Interchange
- 43 I-680 Direct Access Ramps
- 44 I-680/Marina Vista I/C Improvements
- 45 California Avenue Widening
- 46 West Leland Extension, Phase II
- 47 Pittsburg-Antioch Highway Widening
- 48 James Donlon Extension (Buchanan Rd Bypass)
- 49 Del Norte Area TOD Bike/Ped/Transit Access Imps
- 50 Griffin Drive Railroad At-Grade Crossing
- 51 SR-4 Bypass: Sand Creek to Balfour Rd
- 52 SR-4 Bypass: Laurel Rd to Sand Creek
- 53 Pleasant Hill Geary Road Widening Phase 3
- 54 SR-4/Willow Avenue Ramps
- 55 SR-4: Balfour Road Interchange
- 56 SR-4 /SR-160 Interchange and Connectors
- 57 SR-4 Bypass: Sand Creek Interchange
- 58 Richmond Ferry Service
- 59 Atlas Road - New Bridge and Roadway Extension
- 60 Main Street (Previously SR-4) Realignment in Oakley
- 61 Mokelumne Trail Bike/Ped Overcrossing
- 62 San Pablo Avenue Streetscape
- 63 Kirker Pass Road NB Truck Climbing Lanes
- 64 John Muir Parkway Extension (Phase I)
- 65 John Muir Parkway Extension (Phase II)
- 66 Byron Hwy Extension
- 67 Byron Highway - Vasco Road Connection
- 68 Bailey Road Transit Access Improvements
- 69 Refugio Bridge - Bike, Ped & Vehicle Connectivity
- 70 Diablo Road Imps. - Green Valley to Avenida Neuva
- 71 Pleasant Hill - Buskirk Avenue Widening
- 72 North Richmond Truck Route Extension
- 73 Martinez - Court Street Overcrossing, Phase 1
- 74 Central Hercules Arterial Improvements
- 75 Construct Phase 2 of Hercules Intermodal Station
- 76 Double rail track btw Oakley & Port Chicago
- 77 Fitzuren Road Widening & Realignment
- 78 Main Street Widening
- 79 Widen Pinole Valley Road Ramps at I-80
- 80 Marina Bay Parkway Grade Separation
- 81 Bollinger Canyon Road Widening (Alcosta to SRVB)
- 82 Brentwood Blvd North Widening - Phases II & III
- 83 Contra Costa Co. Camino Tassajara Realignment
- 84 Concord Clayton Road/Treat Blvd Intersection Imps.
- 85 Dougherty Road Widening
- 86 Ygnacio Valley/Kirker Pass Roads Widening
- 87 Hercules (Bio-Rad) Bay Trail
- 88 Moeser & Ashbury Ped/Bike Corridor Improvements
- 89 Monument Corridor Pedestrian and Bikeway Network I
- 90 El Portal Drive Rehabilitation / Gateway Phases II

- 91 **Martinez Ferry Service**
- 92 **Antioch Ferry Service**
- 93 **El Cerrito Central Ave & Liberty St Streetscape Imp**
- 94 **Lafayette Downtown Bike/Ped Imp & Streetscape**
- 95 **Richmond Transit Village: Nevin Imps BART-19th**
- 96 **Brentwood 2012 Pavement Management Program**
- 97 **Concord Blvd Pavement Rehabilitation**
- 98 **Pittsburg Railroad Avenue Pavement Rehab**
- 99 **Walnut Creek Various Arterials & Collectors Rehab**
- 100 **Richmond Transit Village: Nevin Imps 19th-27th**
- 101 **Pittsburg N. Parkside Dr. Bike Lanes and Sidewalks**
- 102 **Richmond Barrett Avenue Bicycle Lanes**
- 103 **Concord Monument Corridor Shared Use Trail**
- 104 **SR-25 - Nystrom, Coronado, Highland, Wilson & Wash.**
- 105 **Moraga Way Pedestrian Pathway**
- 106 **Lisa Lane Sidewalk Project**
- 107 **Brentwood Area Schools Bike/Ped Access Imps**
- 108 **Moraga Way Streetscape**
- 109 **CCCTA: Maintenance Facility Rehabilitation**
- 110 **Walnut Creek BART TOD Access Improvements**
- 111 **Canal Road Bicycle and Pedestrian Facilities**
- 112 **Bailey Road-State Route 4 Interchange**
- 113 **eBART Railroad Avenue Station**
- 114 **Contra Costa County Various Streets & Road Preservation**
- 115 **Golf Club Rd Roundabout and Bike/Ped Improvements**
- 116 **Concord BART Station Bike/Ped Access Improvements**
- 117 **Pleasant Hill - Contra Costa Blvd. Preservation**
- 118 **San Ramon Valley Boulevard Preservation**
- 119 **Mt. Diablo Blvd West End Preservation**
- 120 **Happy Valley Rd. Walkway SRTS Improvements**
- 121 **Detroit Avenue Bicycle and Pedestrian Improvements**
- 122 **Concord Various Street Preservation**
- 123 **Ped/Bike Traffic Signal at Oak Grove Rd/Sierra Rd**
- 124 **Richmond BART Station Intermodal Improvements**
- 125 **Pinole - San Pablo Avenue Preservation**
- 126 **Pittsburg - Railroad Avenue Preservation**
- 127 **Balfour Road Preservation**
- 128 **Antioch Ninth Street Preservation**
- 129 **Moraga Various Streets and Roads Preservation**
- 130 **El Cerrito Various Streets and Roads Preservation**
- 131 **Antioch - SRTS Pedestrian Improvements**
- 132 **Danville Various Streets and Roads Preservation**
- 133 **El Cerrito Ohlone Greenway Bike/Ped Improvements**
- 134 **Martinez Various Streets and Roads Preservation**
- 135 **Richmond Local Streets and Roads Preservation**
- 136 **Port Chicago Hwy/Willow Pass Rd Bike Ped Upgrades**
- 137 **San Pablo Various Streets and Roads Preservation**
- 138 **Boyd Road/Elinora Drive SRTS Sidewalk Installation**
- 139 **Clayton Various Streets Preservation**
- 140 **Oakley Various Streets and Roads Preservation**
- 141 **San Pablo Avenue Bicycle and Ped Improvements**
- 142 **Walnut Creek - North Main Street Preservation**
- 143 **Interstate 80 Corridor Real Time Rideshare**
- 144 **Orinda SRTS Sidewalk Project**
- 145 **Moraga Rd SRTS Bicycle and Ped Improvements**
- 146 **Vista Grande Street Pedestrian Improvements/SR-25**
- 147 **Pittsburg Multimodal Transit Station Access Imps.**
- 148 **Hercules-Refugio Valley Road Pavement Preservation**
- 149 **Citywide School Crossing Enhancement Project**
- 150 **Ivy Drive Pavement Rehabilitation**
- 151 **I-680 Express Lane: Alcosta to Livorna/Rudgear**
- 152 **I-680 / SR-4 Interchange Reconstruction - Phase 3**
- 153 **37th Street Bicycle & Pedestrian Improvements**
- 154 **BART Station Modernization Program**
- 155 **Breuner Marsh Restoration and Public Access**
- 156 **Toll Bridge Maintenance**
- 157 **Toll Bridge Rehabilitation Program**
- 158 **Regional Express Lane Network**

# Contra Costa County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



# Contra Costa County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population

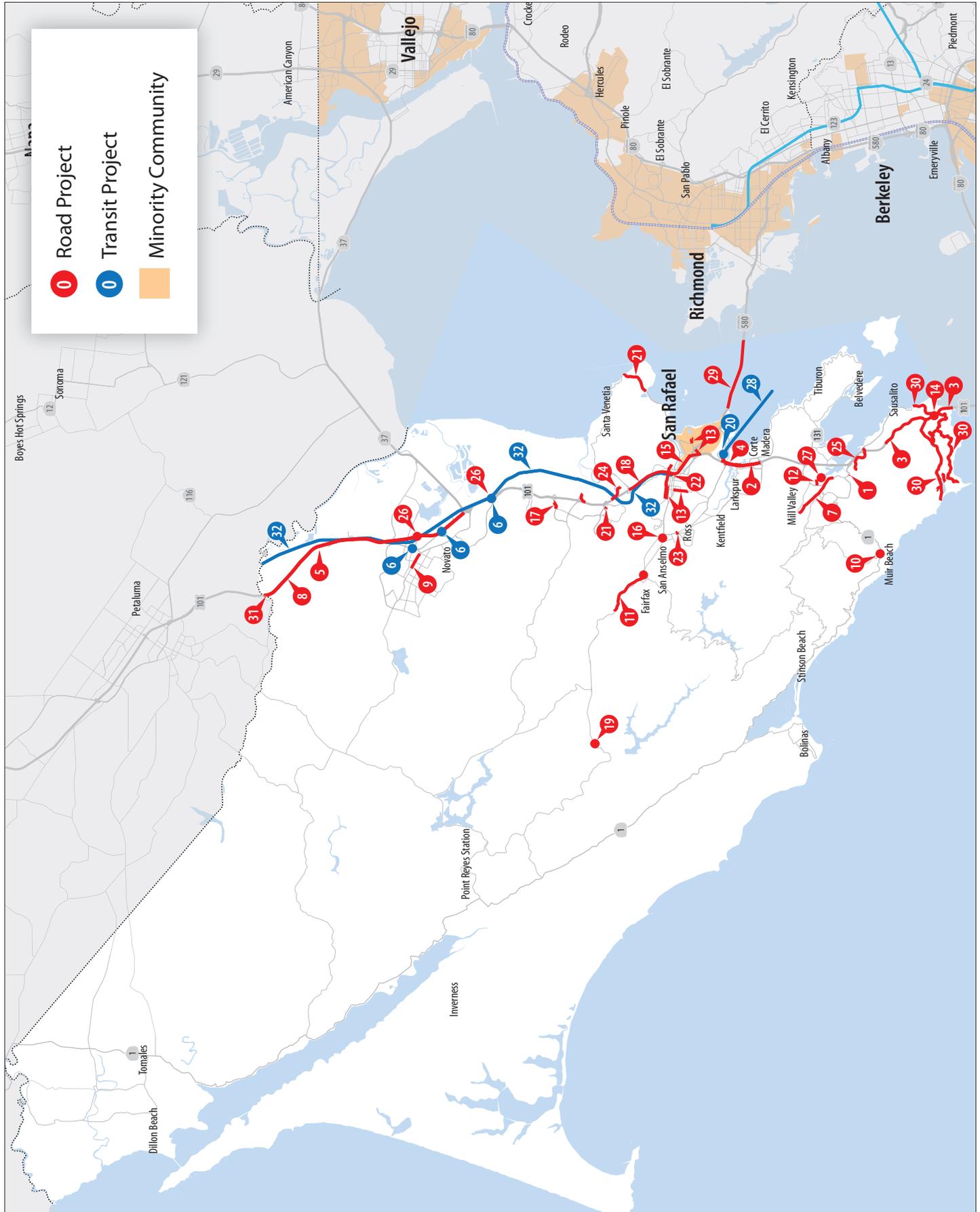


# Marin County TIP Projects

- 1 Tennessee Valley Bridge
- 2 US 101 / Greenbrae Interchange Corridor Improvements
- 3 US 101 - Golden Gate Botanical Area Revegetation
- 4 Central Marin Ferry Access Improvements
- 5 US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)
- 6 **Marin county: Bus Stop Improvements**
- 7 Mill Valley - Miller Avenue Rehabilitation
- 8 Marin Bike/Ped Facility North of Atherton Ave.
- 9 Novato Boulevard Widening, Diablo to Grant
- 10 Marin Parklands Visitor Access, Phase 2
- 11 Sir Francis Drake Boulevard Westbound Bike Lane
- 12 Mill Valley - Sycamore Ave Pedestrian Facilities
- 13 San Rafael Citywide Street Resurfacing
- 14 Sausalito - Bridgeway/US 101 Off Ramp Bicycle Imps
- 15 San Rafael: Sidewalk along East Francisco Blvd
- 16 San Anselmo - Center Blvd Bridge Replace (27C0079)
- 17 Miller Creek Road Bike Lanes and Ped Improvements
- 18 Highway 101 Landscaping for Gap Closure Project
- 19 Mountain View Rd Bridge Replacement - 27C0154
- 20 **Larkspur Ferry Terminal Parking Garage**
- 21 San Rafael Various Streets and Roads Preservation
- 22 San Rafael Transit Center Pedestrian Access Imps.
- 23 Bolinas Avenue and Sir Francis Drake Intersection
- 24 North Civic Center Drive Improvements
- 25 Donahue Street Road Rehabilitation Project
- 26 DeLong Avenue and Ignacio Boulevard Resurfacing
- 27 Bayfront Park Recreational Bay Access Pier Rehab
- 28 **Ferry channel & berth dredging.**
- 29 Toll Bridge Rehabilitation Program
- 30 Golden Gate Nat'l Rec. Area Road Rehab
- 31 US 101 Marin/Sonoma Narrows (Sonoma)
- 32 **Sonoma Marin Area Rail Corridor**



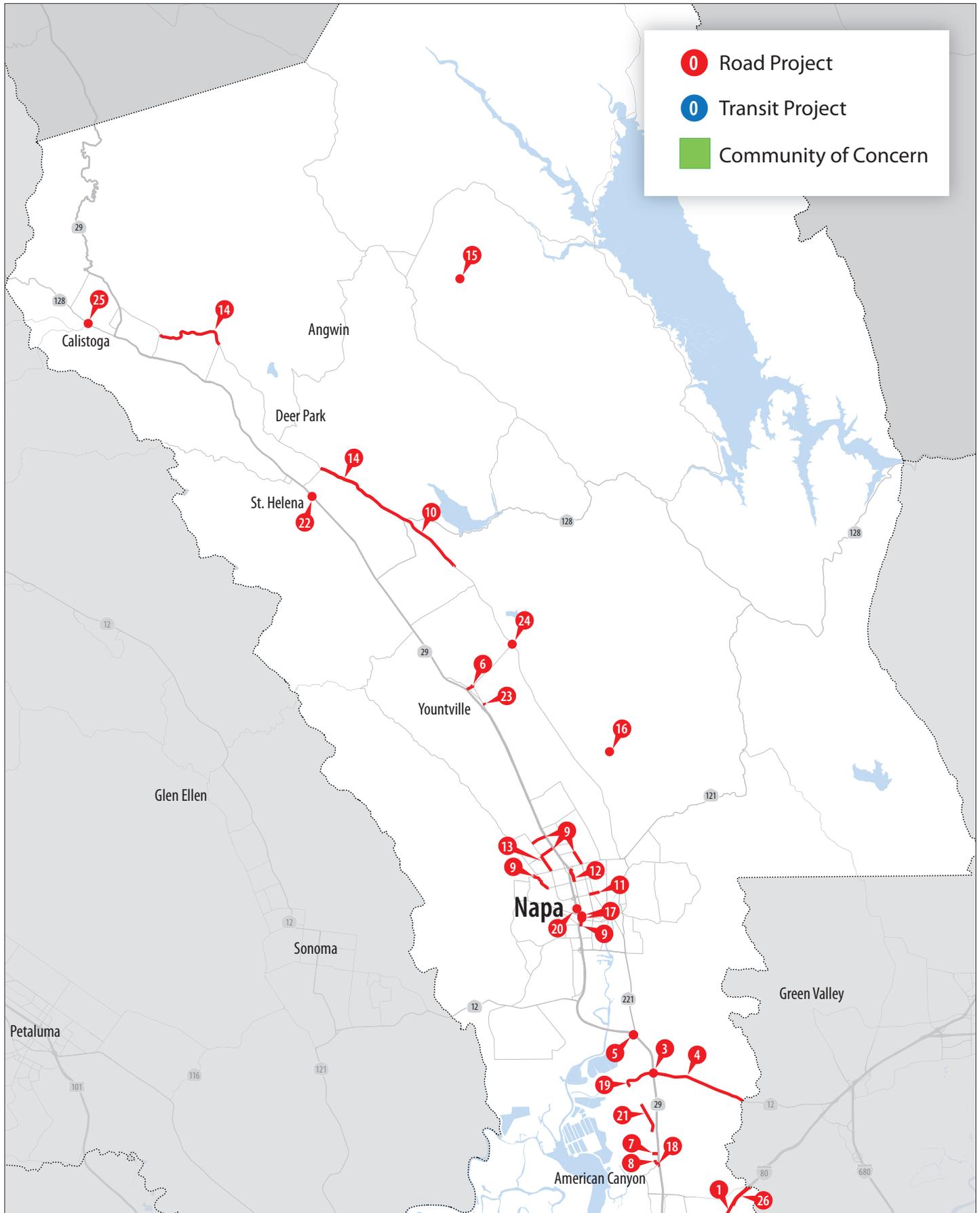
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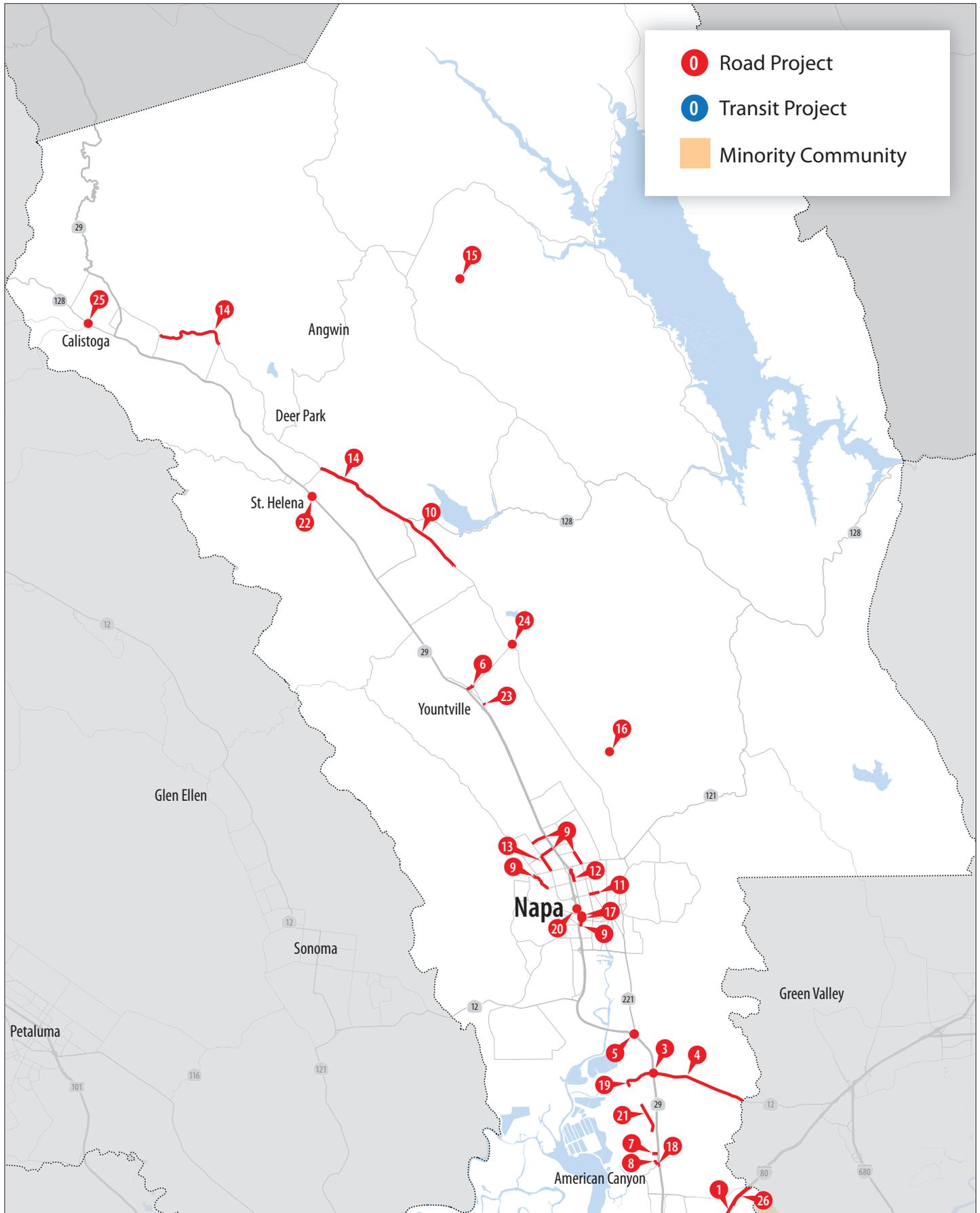
# Napa County TIP Projects

- 1 Interstate 80 Corridor Real Time Rideshare
- 3 Design of SR-12/29 /Airport Blvd Grade Separation
- 4 SR-12 (Jamieson Canyon Road) Widening
- 5 SR-12/29/221 Soscol Junction Interchange Study
- 6 Yountville - Napa County Bicycle Path Extension
- 7 American Canyon Napa Junction Elementary Ped Imps
- 8 American Canyon: Theresa Ave Sidewalk Imp Phase 3
- 9 Napa (City): 2011 Cape Seal Pavement Rehab
- 10 Napa County: Silverado Trail Paving Phase F
- 11 Napa: Lincoln Ave Bike Lane - Jefferson to Railroad
- 12 Napa City North/South Bike Connection
- 13 Napa City - Linda Vista Pavement Overlay
- 14 Silverado Trail Phase H Rehab
- 15 Hardin Rd Bridge Replacement - 21C0058
- 16 Loma Vista Dr Bridge Replacement - 21C0080
- 17 California Boulevard Roundabouts
- 18 Eucalyptus Drive Realignment Complete Streets
- 19 Airport Boulevard Rehabilitation
- 20 Highway 29/Napa Creek Bicycle Path Upgrade
- 21 Devlin Road and Vine Trail Extension
- 22 Hwy 29 Grayson Ave. Signal Construction
- 23 Hopper Creek Pedestrian Bridge and Path Project
- 24 Silverado Trail Yountville-Napa Safety Improvement
- 25 SR-128 and Petrified Forest Intersection Imp
- 26 Cordelia Hills Sky Valley

# Napa County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



# Napa County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



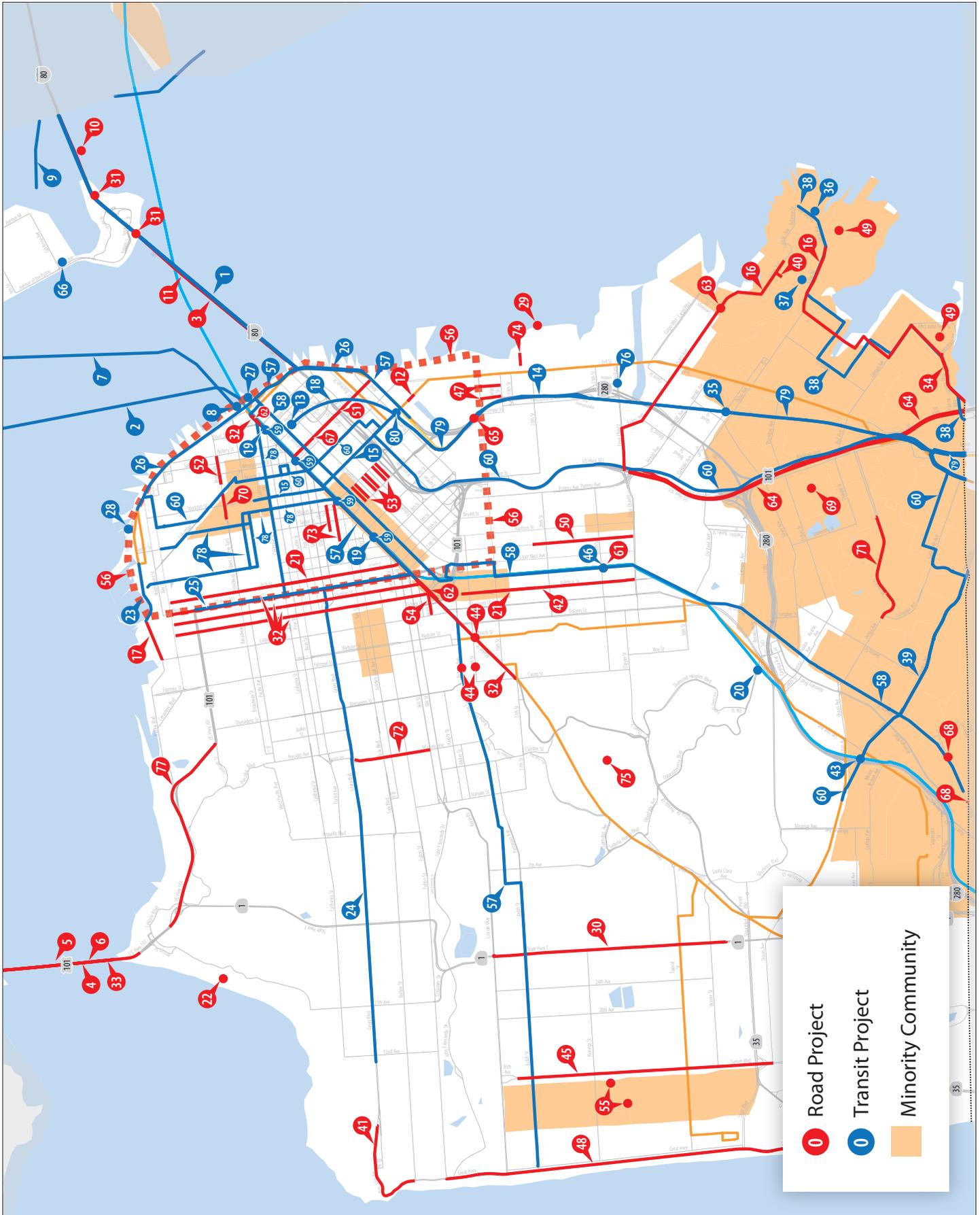
# San Francisco County TIP Projects

- 1 BART Transbay Tube Seismic Retrofit
- 2 Richmond Ferry Service
- 3 Interstate 80 Corridor Real Time Rideshare
- 4 Golden Gate Bridge Seismic Retrofit, Phase 3B
- 5 Golden Gate Bridge-Suicide Deterrent Safety Barrier
- 6 Golden Gate Bridge Seismic Retrofit, Ph: 1-3A
- 7 Ferry Service - Berkeley/Albany
- 8 SF Ferry Terminal/Berthing Facilities
- 9 Treasure Island Ferry Service
- 10 Toll Bridge Maintenance
- 11 Toll Bridge Rehabilitation Program
- 12 4th St Bridge Seismic Retrofit & Rehab
- 13 Transbay Terminal/Caltrain Downtown Extension: Ph. 1
- 14 Caltrain Electrification
- 15 SF Muni Third St LRT Phase 2 - New Central Subway
- 16 Bayview Transportation Improvements
- 17 Golden Gate Nat'l Rec. Area Road Rehab
- 18 Transbay Terminal/Caltrain Downtown Extension: Ph. 2
- 19 BART/MUNI Direct Connection Platform
- 20 Glen Park Intermodal Facility
- 21 Citywide: San Francisco Street Improvements
- 22 Golden Gate Nat'l Rec. Area Non-Motorized Access
- 23 Historic Streetcar Extension to Fort Mason
- 24 Geary Bus Rapid Transit
- 25 Van Ness Avenue Bus Rapid Transit
- 26 Embarcadero Corridor Transportation Improvements
- 27 San Francisco Downtown Ferry Terminal
- 28 Fisherman's Wharf Ferry Terminal Improvements
- 29 Pier 70 Shoreline Open Space Improvements
- 30 SR-1 - 19th Avenue Median Improvements
- 31 Yerba Buena Island (YBI) Ramp Improvements
- 32 SFGO-Corridor Management
- 33 Golden Gate Bridge - Moveable Median Barrier
- 34 Harney Way Roadway Widening
- 35 Oakdale Caltrain Station
- 36 Transit Center in Hunters Point
- 37 Extended Trolleybus Service into Hunters Point
- 38 Geneva-Harney BRT to Hunters Point - Geneva Extension
- 39 Geneva-Harney BRT to Hunters Point - Geneva Portio
- 40 San Francisco - Arelious Walker Stairway Imps.
- 41 San Francisco Point Lobos Streetscape
- 42 San Francisco Bicycle Parking
- 43 Balboa Park Station Eastside Walkway Project
- 44 Church and Duboce Bike/Ped Enhancements
- 45 Sunset Boulevard Ped Safety and Education
- 46 24th Street/Mission BART Plaza Pedestrian Imps.
- 47 Mission Bay/UCSF Multi-Modal Transportation Imps.
- 48 Great Highway Restoration
- 49 Hunters Pt Shipyard and Candlestick Pt Local Roads
- 50 San Francisco - Folsom Streetscape and Rehab
- 51 Second St Phase 1 - SFGo Signal Rehab and Upgrade
- 52 San Francisco - Broadway Streetscape and Rehab
- 53 South of Market Alleyways Improvements, Phase 2
- 54 San Francisco Market & Haight St. Transit/Ped Imps
- 55 Sunset and AP Giannini SR-2S Improvements
- 56 San Francisco Parking Pricing and Regulation Study
- 57 SFMTA: N-Judah Customer First Program
- 58 SFMTA: Mission Customer First Program
- 59 Regional Real-Time Transit Information at BART
- 60 SFMTA: 8X Customer First Program
- 61 BART 24th Street Train Control Upgrade
- 62 SF- Better Market Street Transportation Elements
- 63 HOPE SF Street Grid Phase 1
- 64 HOV Lanes on US 101 in SF - Project Development
- 65 HOV Ramps: I-280/6th St Ramps-Project Development
- 66 Construct Treasure Island Bus Terminal Facility
- 67 SF- Second Street Complete Streets and Road Diet
- 68 SF- Longfellow ES Safe Routes to School
- 69 SF-ER Taylor ES Safe Routes to School
- 70 SF- Broadway Chinatown Complete Streets
- 71 Mansell Corridor Complete Streets
- 72 Masonic Avenue Complete Streets
- 73 Eddy and Ellis Traffic Calming Improvement Project
- 74 Pier 70 19th Street & Illinois Street Sidewalk
- 75 Twin Peaks Connectivity Planning
- 76 Islais Creek Motor Coach Facility
- 77 US 101 Doyle Drive Replacement
- 78 Cable Car Traction Power & Guideway Rehab
- 79 Caltrain: Systemwide Security
- 80 Caltrain South Terminal Phase II and III

# San Francisco County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



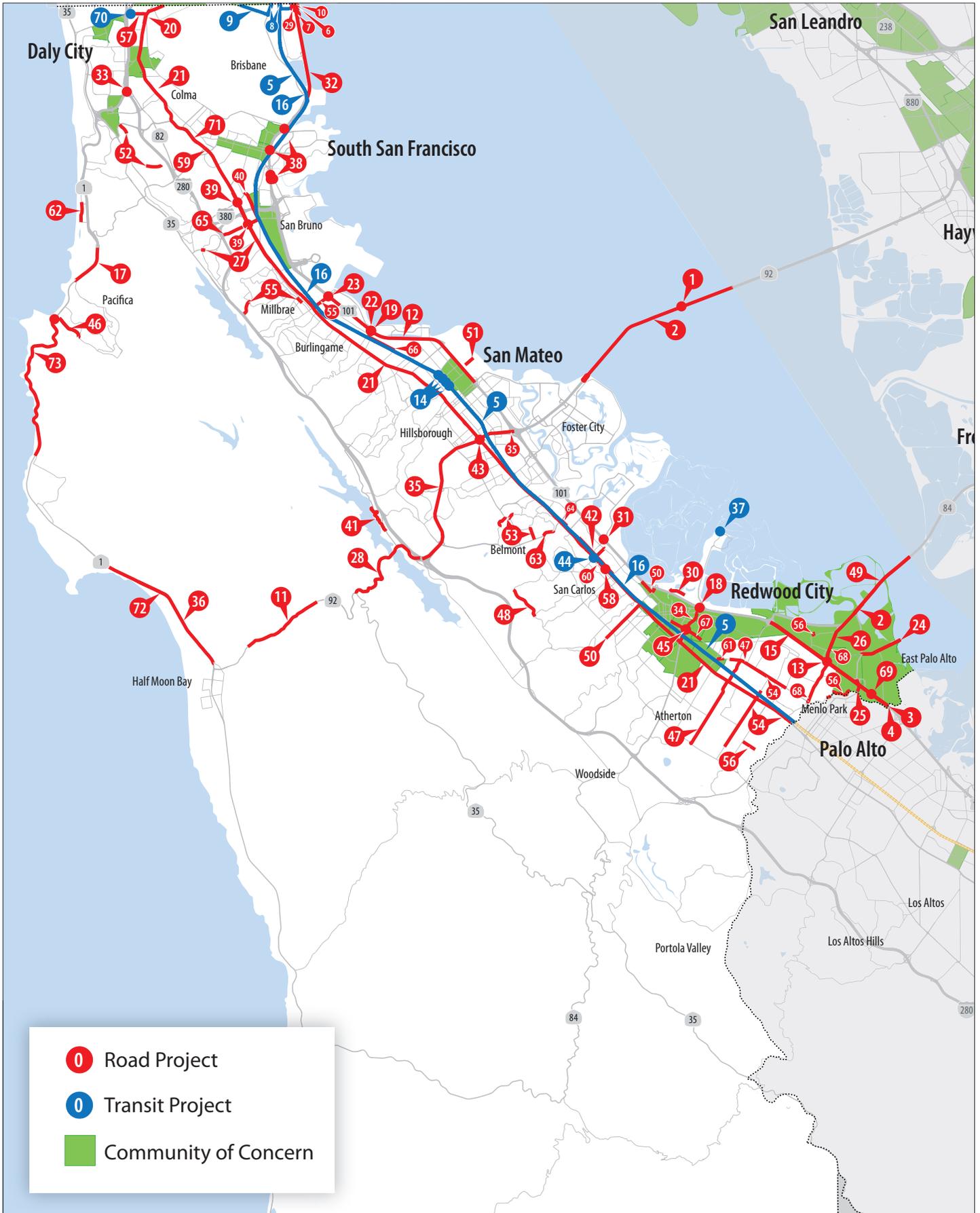
# San Francisco County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



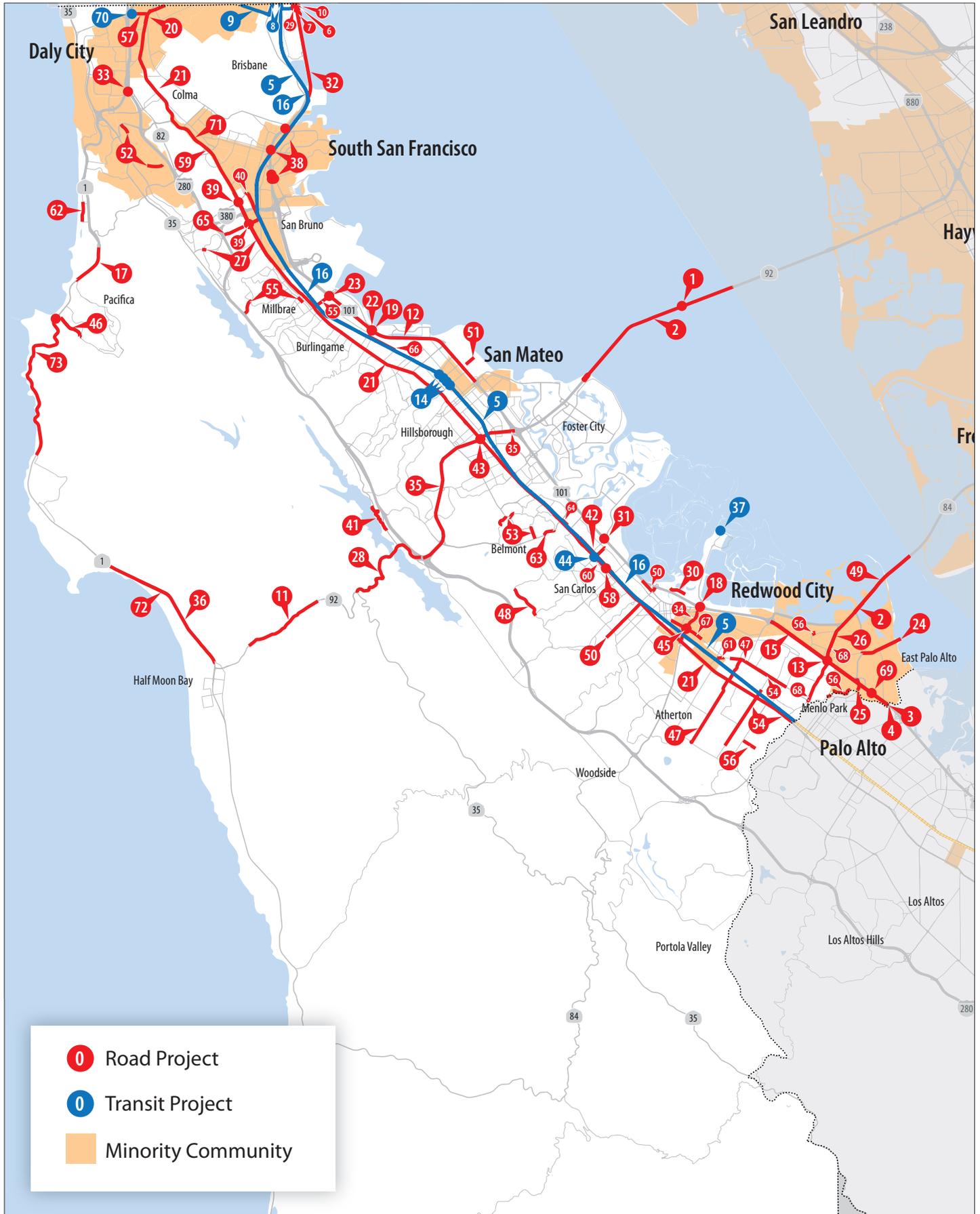
# San Mateo County TIP Projects

- 1 Toll Bridge Maintenance
- 2 Toll Bridge Rehabilitation Program
- 3 SR-85 Express Lanes
- 4 Santa Clara County - US 101 Express Lanes
- 5 Caltrain Electrification
- 6 Bayview Transportation Improvements
- 7 Harney Way Roadway Widening
- 8 Geneva-Harney BRT to Hunters Point - Geneva Extension
- 9 Geneva-Harney BRT to Hunters Point - Geneva Portio
- 10 HOV Lanes on US 101 in SF - Project Development
- 11 SR-92 Shoulder Widening & Curve Correction
- 12 US 101 Auxiliary Lanes - 3rd to Millbrae
- 13 US 101 / Willow Road Interchange Reconstruction
- 14 San Mateo Bridges Replacement
- 15 US 101 Auxiliary Lanes - Marsh Road to SCL County
- 16 Caltrain: Systemwide Security
- 17 SR-1 - Fassler to West Port Drive Widening
- 18 US 101 / Woodside Interchange Improvement
- 19 US 101 / Broadway Interchange Improvement
- 20 SR-82 Daly City-Mission St. Pedestrian Imps.- Ph I
- 21 SR-82 - El Camino Real Grand Boulevard Initiative
- 22 SR-1 San Pedro Creek Bridge Replacement
- 23 US 101 Millbrae Ave Bike/Ped Bridge
- 24 Bay Rd Bicycle/Ped Improvements Phase II & III
- 25 US 101 University Ave Interchange Improvements
- 26 Dumbarton Bridge to US-101 Connection Study
- 27 SR-82 El Camino Real: Grand Boulevard Initiative
- 28 Construct WB Lane on SR-92
- 29 US 101/Candlestick Interchange
- 30 Blomquist Street Extension
- 31 US-101/Holly Interchange modification
- 32 US 101 Aux Lanes from Sierra Point to SF County Line
- 33 I-280/Route 1 Interchange Safety Improvements
- 34 Woodside Road Widening - El Camino to Broadway
- 35 Improve SR-92 from SM Bridge to I-280
- 36 Route 1 Improvements in Half Moon Bay
- 37 WETA: Redwood City Ferry Service
- 38 US 101/Produce Avenue Interchange
- 39 San Bruno Street Medians and Grand Blvd Imps
- 40 San Bruno Transit Corridor Pedestrian Imps
- 41 CSRT South of Dam Conversion
- 42 East Side Community Transit Connectivity Imps
- 43 SR-92/El Camino Real (SR-82) Ramp Modifications
- 44 Reconfiguration of San Carlos Transit Center
- 45 Middlefield Rd and Woodside Rd Intersection Improvements
- 46 FY 2014-15 Linda Mar Boulevard Pavement Rehab
- 47 Atherton-Fair Oaks-Middlefield Preservation
- 48 Crestview Drive Pavement Rehabilitation-Phase 2
- 49 Dumbarton Bridge Seismic Retrofit
- 50 Redwood City Various Streets Overlay
- 51 Mount Diablo Ave. Rehabilitation
- 52 Callan Boulevard and King Drive Resurfacing
- 53 Belmont Pavement Reconstruction Program
- 54 Menlo Park-Variou Streets Bike /Ped Improvements
- 55 Millbrae Various Streets and Roads Preservation
- 56 Menlo Park Various Streets and Roads Preservation
- 57 John Daly Boulevard Bicycle /Ped Improvements
- 58 San Carlos Streetscape and Ped Improvements
- 59 South San Francisco Grand Blvd Ped Improvements
- 60 El Camino Real Pedestrian Upgrades
- 61 Semicircular Rd Bicycle / Ped Access Improvements
- 62 Palmetto Avenue Streetscape
- 63 Ralston Avenue Pedestrian Route Improvements
- 64 Old County Road Bicycle/Pedestrian Improvements
- 65 San Bruno Ave Street Medians Improvements
- 66 Carolan Ave Complete Streets and Road Diet
- 67 Middlefield Road Bicycle / Ped Improvements
- 68 Menlo Park - Willow Rd Traffic Signal Modification
- 69 US-101 Pedestrian/Bicycle Overcrossing
- 70 Daly City BART Station Intermodal Improvements
- 71 Grand Boulevard Initiative Complete Street Program
- 72 Midcoast Multi-Modal Trail
- 73 SR-1 Devils Slide Bypass

# San Mateo County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



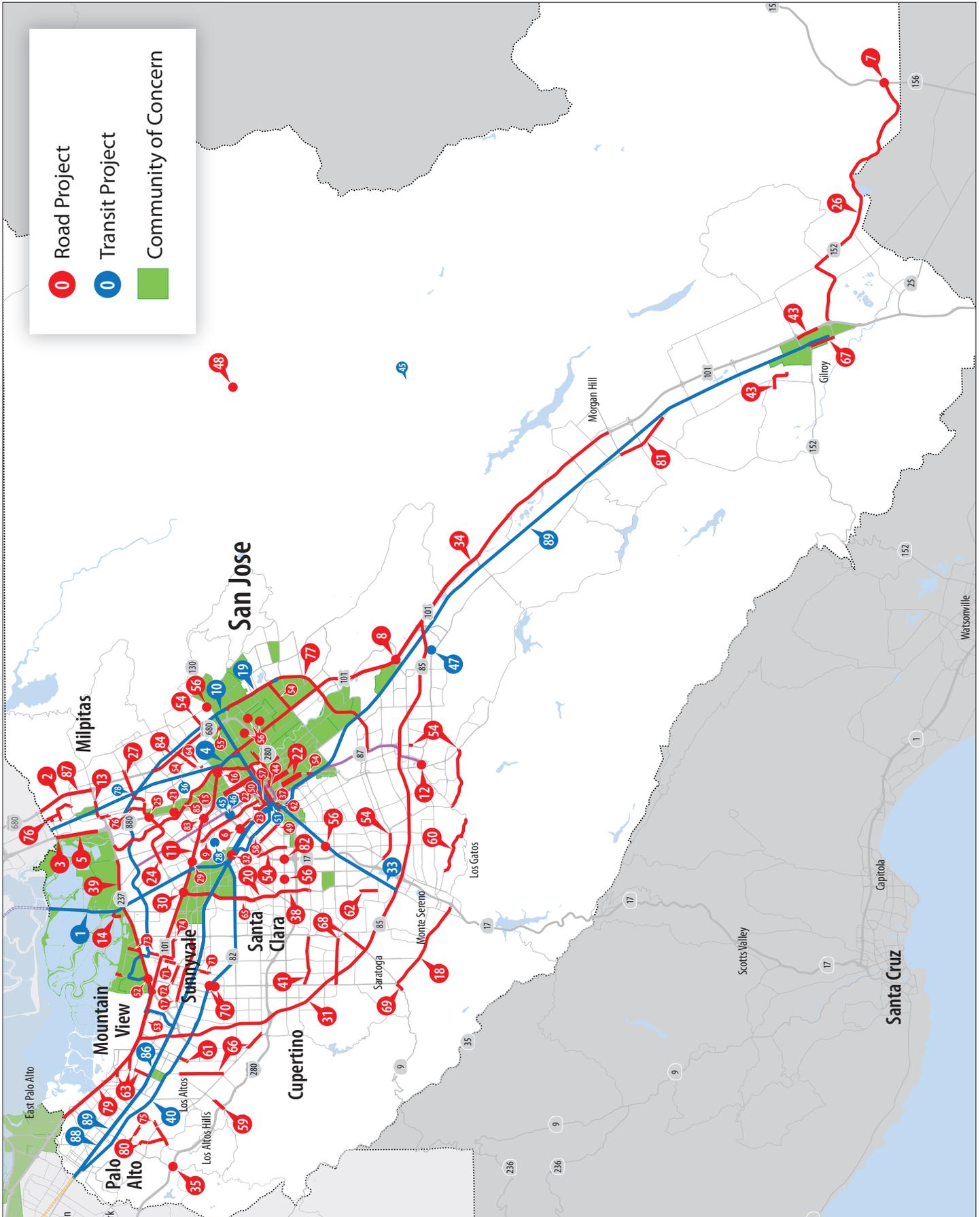
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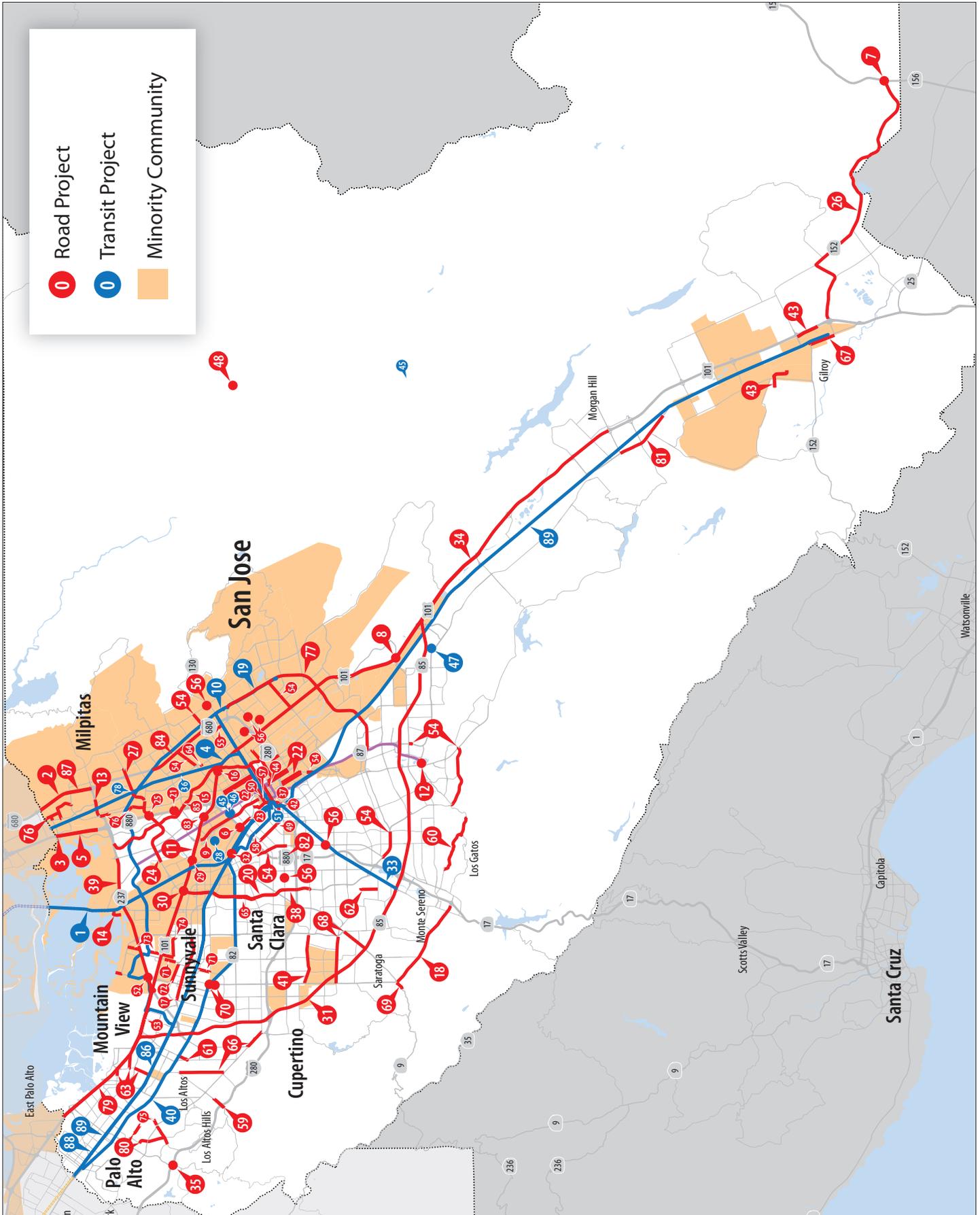
# Santa Clara County TIP Projects

- 1 ACETrack Improvements
- 2 I-680 NB HOV/HOT Lane
- 3 I-880/SR-262 I/C and HOV Lanes
- 4 BART - Berryessa to San Jose Extension
- 5 Regional Express Lane Network
- 6 I-880 Coleman Avenue I/C Reconfiguration
- 7 SR-152/SR-156 Interchange Improvements
- 8 US 101 / Blossom Hill I/C Reconstruction & Road Widening
- 9 SR-87 Guadalupe Freeway Corridor Landscaping
- 10 Capitol Expressway LRT Extension- Phase II
- 11 US 101 / SR-87 - Trimble Road Landscaping
- 12 Almaden Expressway Trail
- 13 SR-237 - Calaveras Blvd Widening
- 14 Bay Trail Reach 9 & 9B
- 15 Coyote Creek Trail
- 16 US 101 / Mabury New Interchange
- 17 Central Expressway Auxiliary Lanes
- 18 Highway 9 Safety Improvements
- 19 Santa Clara/Alum Rock Transit Improvement/BRT
- 20 San Tomas Expressway Box Culvert Rehabilitation
- 21 San Jose Charcot Avenue Extension Over I-880
- 22 Downtown San Jose Bike Lanes and De-couplet
- 23 Coleman Avenue Widening from I-880 to Taylor St.
- 24 Montague Expwy Widening - Lick Mill-Trade Zone
- 25 I-880/Montague Expressway Interchange Improvements
- 26 New SR-152 Alignment Study
- 27 Montague Expwy Widening - Trade Zone - I-680
- 28 San Jose International Airport People Mover
- 29 US 101 SB Trimble Road/De La Cruz Boulevard/Centra
- 30 US 101/Montague Expressway Interchange
- 31 SR-85 Express Lanes
- 32 Santa Clara Caltrain Station Bike/Ped Tunnel
- 33 LRT Extension to Vasona Junction
- 34 Santa Clara County - US 101 Express Lanes
- 35 Page Mill Road/I-280 Interchange Reconfiguration
- 36 BART - Warm Springs to Berryessa Extension
- 37 San Jose - Autumn Street Extension
- 38 San Tomas Expressway Widening
- 39 SR-237 Express Lanes: Zanker Rd to Mathilda Ave
- 40 El Camino Real Bus Rapid Transit
- 41 Innovative Bicycle Detection System
- 42 San Jose: Los Gatos Creek Reach 5 Underpass
- 43 Gilroy New Ronan Channel and Lions Creek Trails
- 44 San Jose - San Carlos Multimodal Phase 2
- 45 VTA: LRV Body Shop Dust Separation Wall
- 46 VTA: LRV Maintenance Shop Hoist
- 47 VTA: Update Santa Teresa Interlock Signal House
- 48 Isabel Bridge Replacement (37C0089)
- 49 Park Avenue Multi-Modal Improvements
- 50 St. John Street Multi-Modal Improvements - Phase 1
- 51 South Terminal Wayside Power
- 52 SR-237/US 101/Mathilda Interchange Modifications
- 53 SR-237 Express Lanes : Mathilda Avenue to SR-85
- 54 San Jose Citywide Pavement Management Program
- 55 Jackson Ave Bicycle and Pedestrian Improvements
- 56 San Jose Pedestrian Oriented Traffic Signals
- 57 St. Johns Bikeway and Pedestrian Improvements
- 58 The Alameda Grand Blvd. Phase 2
- 59 El Monte Road Preservation
- 60 Hillside Road Preservation
- 61 Mountain View Castro Street Complete Streets
- 62 Virginia Avenue Sidewalks
- 63 Mountain View Various Rd Preservation & Bike Lanes
- 64 Upper Penitencia Creek Multi-Use Trail
- 65 San Tomas Aquino Spur Multi-Use Trail Phase 2
- 66 Los Altos Various Streets and Roads Preservation
- 67 Egleberry Street Resurfacing
- 68 Prospect Rd Complete Streets
- 69 Saratoga Village Sidewalk Rehabilitation
- 70 Sunnyvale/Saratoga Road Bike/Ped Safety Enhancements
- 71 Fair Oaks Avenue Bikeway and Streetscape
- 72 Maude Avenue Bikeway and Streetscape
- 73 Sunnyvale East and West Channel Multi-Use Trails
- 74 Duane Avenue Roadway Preservation
- 75 Arastradero Road Schoolscape/Multiuse Trail
- 76 Milpitas Various Streets and Roads Preservation
- 77 Capitol Expressway ITS and Bike/Ped Improvements
- 78 Montague Expwy Ped Bridge at Milpitas BART Study
- 79 Adobe Creek/ Highway 101 Bicycle Pedestrian Bridge
- 80 Palo Alto Various Street Resurfacing & Streetscape
- 81 Monterey Road Preservation
- 82 I-880 Stevens Creek Landscaping
- 83 US 101 Zanker Road /North 4th Street/Skyport Drive
- 84 I-680 Soundwalls - Capitol Expwy to Mueller Ave
- 85 Coyote Creek Trail Reach 5.3 (Brokaw to UPRR)
- 86 Mountain View Double Track Improvements - Phase II
- 87 I-680 Sunol Grade Southbound HOV Lanes - SCL Final
- 88 Caltrain Electrification
- 89 Caltrain: Systemwide Security

# Santa Clara County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



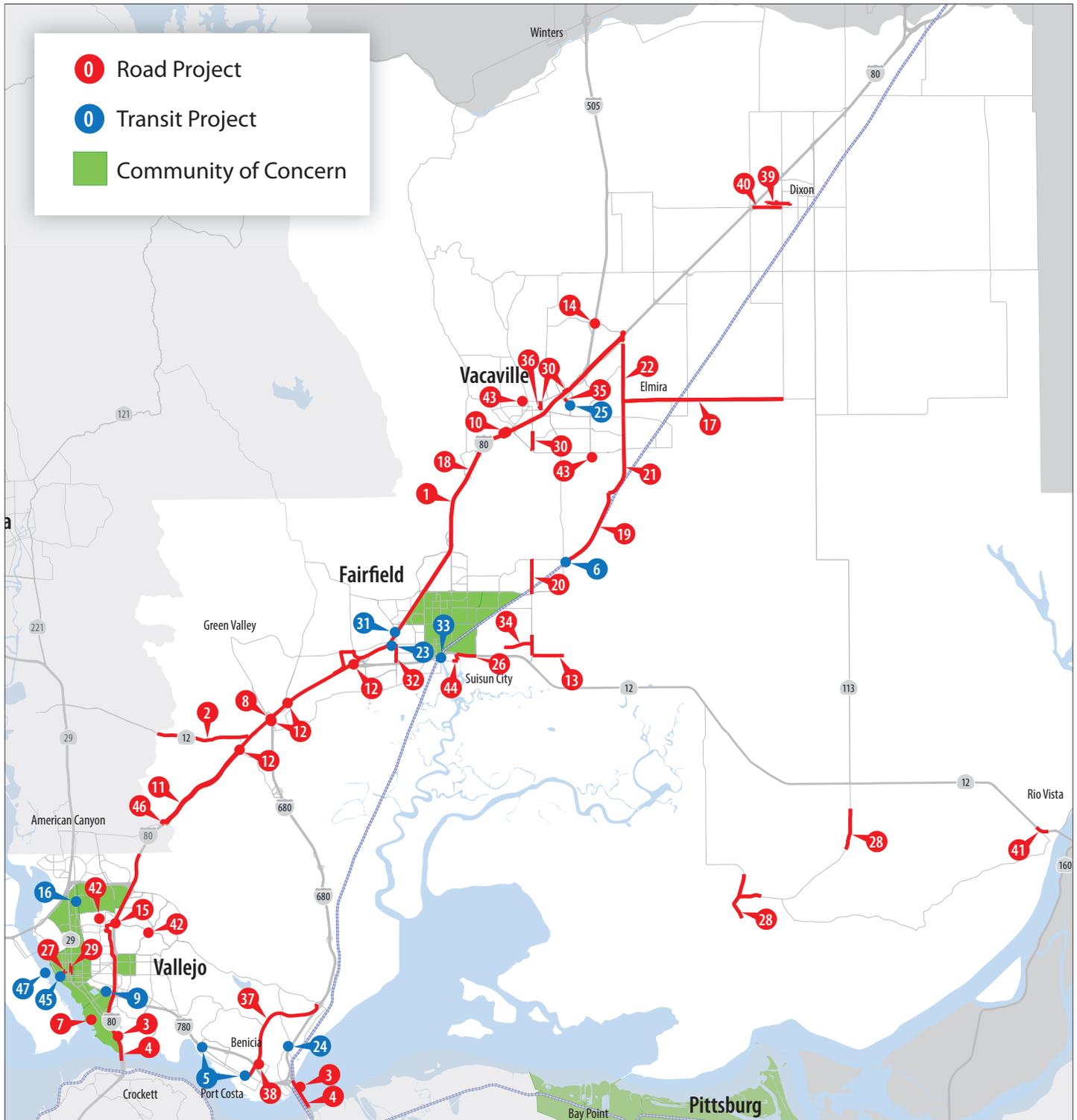
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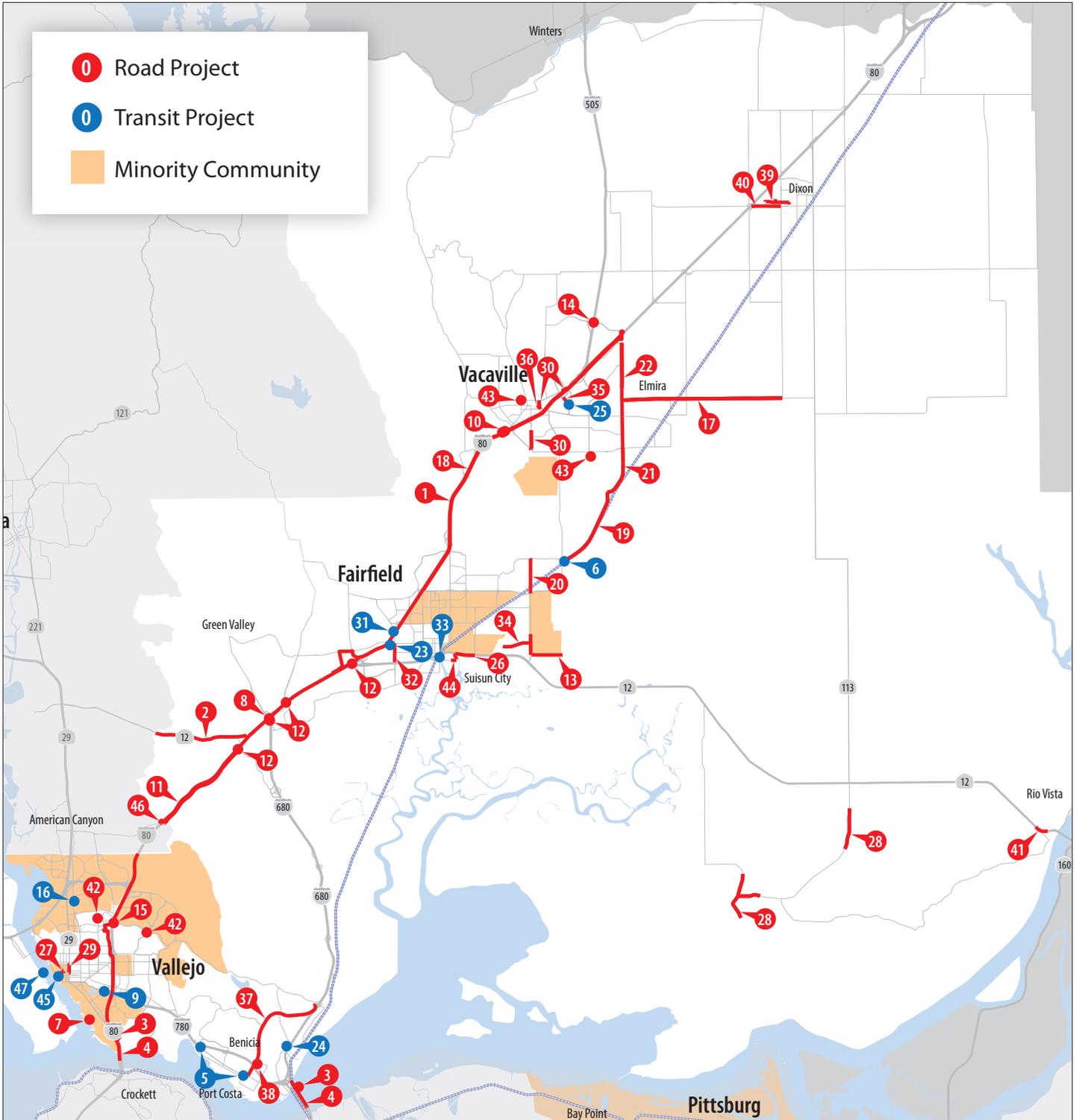
# Solano County TIP Projects

- 1 Interstate 80 Corridor Real Time Rideshare
- 2 SR-12 (Jamieson Canyon Road) Widening
- 3 Toll Bridge Maintenance
- 4 Toll Bridge Rehabilitation Program
- 5 Military/Southampton & Military/First Intermodal
- 6 Fairfield/Vacaville Intermodal Rail Station
- 7 San Pablo Bay Entrance Rehabilitation
- 8 I-80/I-680 Aux Lanes Improvement Landscaping
- 9 Vallejo Curtola Transit Center
- 10 I-80 Alamo Creek On-Ramp and Bridge Widening
- 11 Cordelia Hills Sky Valley
- 12 I-80/I-680/SR-12 Interchange Project
- 13 Travis AFB: South Gate Improvement Project
- 14 I-505/Vaca Valley Off-Ramp and Intersection Improvements
- 15 Redwood-Fairgrounds Dr Interchange Imps (Study)
- 16 SolTrans: Bus Maintenance Facility Renovation
- 17 Vacaville-Dixon Bicycle Route (Phase 5)
- 18 I-80 Express Lanes - Fairfield & Vacaville Ph I&II
- 19 Jepson: Vanden Road from Peabody to Leisure Town
- 20 Jepson: Walters Rd Extension - Peabody Rd Widening
- 21 Jepson: Leisure Town Road from Vanden to Commerce
- 22 Jepson: Leisure Town Road (Commerce to Orange)
- 23 Fairfield Transportation Center - Phase 3
- 24 Benicia Industrial Park Bus Hub Project
- 25 Vacaville Intermodal Station - Phase 2
- 26 Grizzly Island Trail - Phase 1
- 27 Vallejo Downtown Streetscape
- 28 Roadway Preservation in Solano County
- 29 Sonoma Boulevard Improvements HSIP5-04-031
- 30 Vacaville Various Street and Roads Preservation
- 31 Oliver Road Park and Ride
- 32 Beck Avenue Preservation
- 33 Suisun-Fairfield Intercity Rail Station Access Imp
- 34 Walters Road-Pintail Drive Preservation
- 35 Allison Bicycle / Ped Improvements
- 36 Ulatis Creek Bike/Ped Path & Streetscape McCellan-Depot
- 37 Benicia - East 2nd Street Preservation
- 38 Benicia Safe Routes to Schools Infrastructure Imps
- 39 Dixon SR-2S Infrastructure Improvements
- 40 West A Street Preservation
- 41 SR-12 Crossing with Updated Lighting
- 42 Vallejo SRTS Infrastructure Improvements
- 43 Vacaville SRTS Infrastructure Improvements
- 44 Driftwood Drive Path
- 45 Vallejo Ferry Terminal (Intermodal Station)
- 46 I-80 / American Canyon Rd Overpass Improvements
- 47 North Bay Operations and Maintenance Facility

# Solano County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



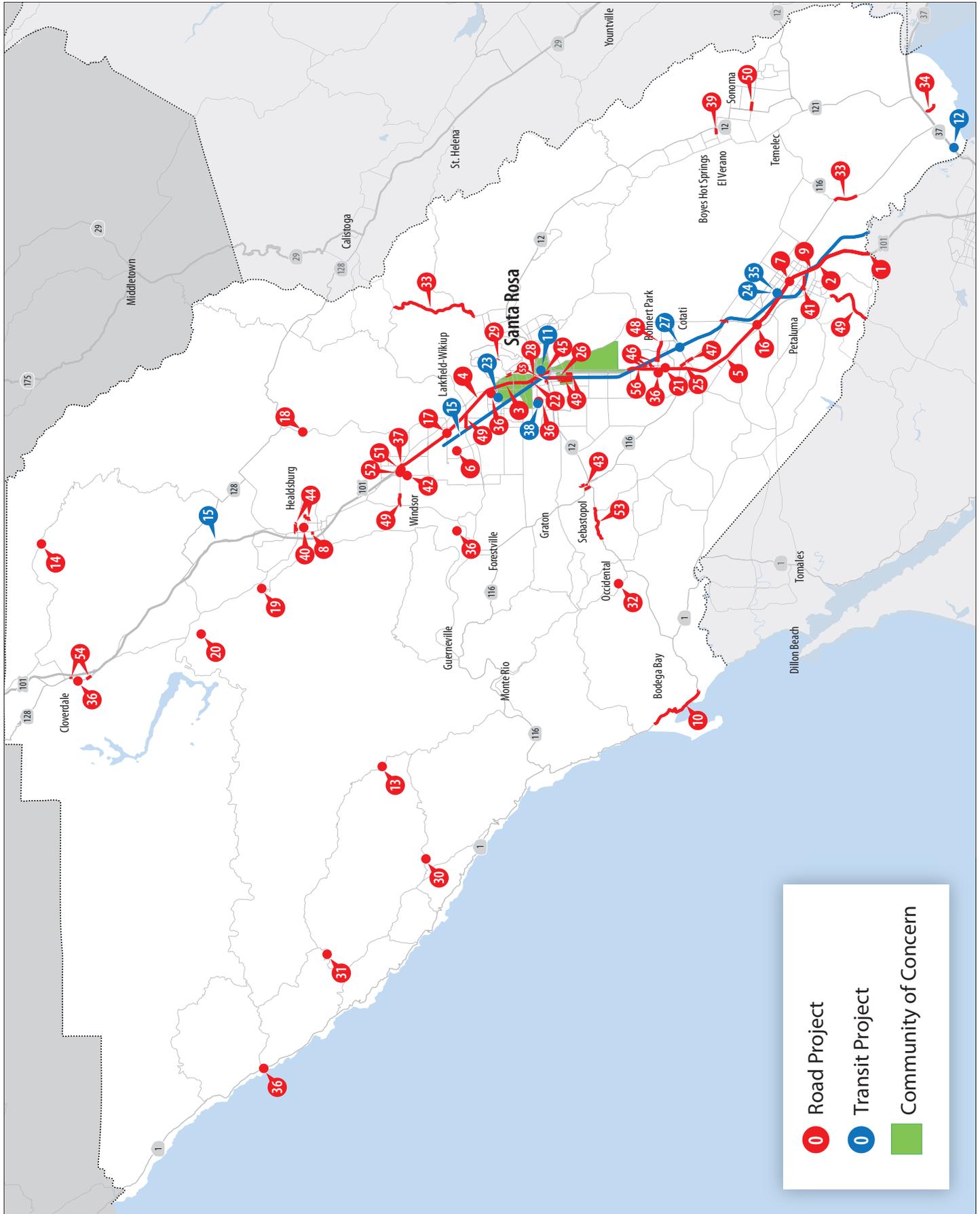
# Solano County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



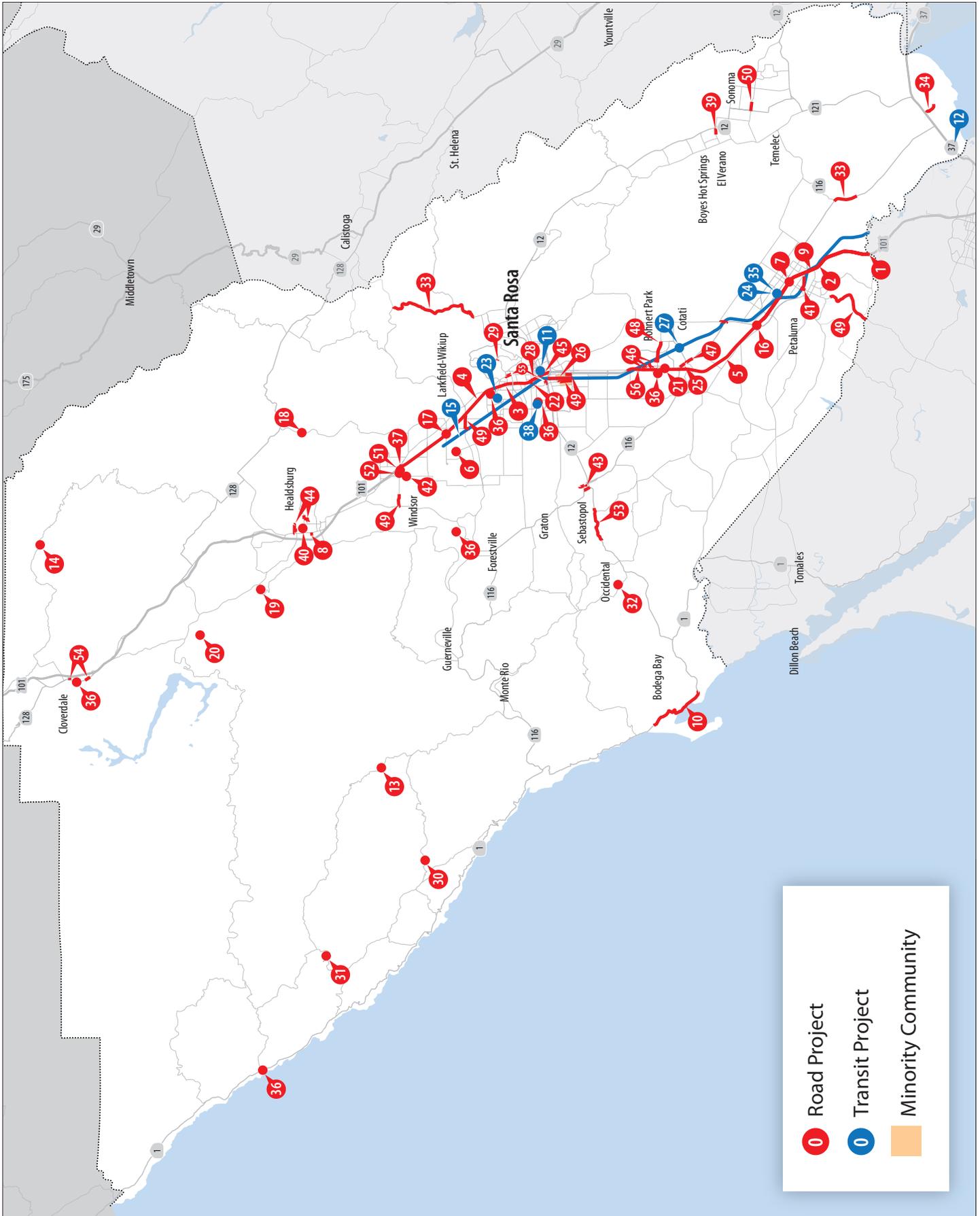
# Sonoma County TIP Projects

- 1 US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)
- 2 Marin Bike/Ped Facility North of Atherton Ave.
- 3 Son 101 HOV - SR-12 to Steele & Steele Lane I/C
- 4 Son 101 HOV - Steele Lane to Windsor (North)
- 5 Son 101 HOV - Redwood Hwy to Rohnert Park Expwy
- 6 Replace Laughlin Bridge over Mark West Creek 20C0246
- 7 US 101/East Washington I/C Reconfiguration
- 8 Healdsburg Foss Creek Bicycle/Ped Pathway
- 9 US 101 Marin/Sonoma Narrows (Sonoma)
- 10 Bodega Bay Trail Segments 1B and 1C
- 11 Downtown Transit Mall Connectivity Improvements
- 12 Ferry Service to Port Sonoma
- 13 Rehab King Ridge Bridge over Austin Creek 20C0433
- 14 Replace Geysers Bridge over Sulpher Creek 20C0005
- 15 Sonoma Marin Area Rail Corridor
- 16 Improve U.S. 101/Old Redwood Highway Interchange
- 17 US 101 Airport I/C (North B)
- 18 Replace Chalk Hill Bridge over Maacama Creek 20C0242
- 19 Replace Lambert Bridge over Dry Creek 20C0248
- 20 Replace West Dry Creek Bridge over Pena Creek 20C0407
- 21 Copeland Creek Bike Path Reconstruction
- 22 HWY 101 HOV Lane 12/Steele - Follow-up College Ave
- 23 Sonoma County Transit: Bus Yard Rehab.
- 24 Petaluma Transit Maintenance Facility Rehab: Ph 1
- 25 Downtown Specific Plan Area Revitalization
- 26 SMART Trail-Hearn Avenue to Joe Rodota Trail
- 27 City of Cotati Train Depot
- 28 SMART Bicycle and Pedestrian Path
- 29 Chanate Rd Pedestrian and Transit Improvements
- 30 Replace Bohan Dillon Bridge over Gualala 20C0435
- 31 Replace Hauser Bridge over Gualala River 20C0240
- 32 Replace Freestone Flat Bridge over Salmon 20C0440
- 33 2011/12 Asphalt Overlay Program
- 34 San Pablo Bay NWR Access Road in Petaluma
- 35 Petaluma Transit Maintenance Facility Rehab: Ph 2
- 36 Stewarts Point Rancheria EV Pilot Program
- 37 ORH at Lakewood Dr. Bike and Ped Facilities
- 38 Santa Rosa City Bus: Fast-fill CNG Fueling Station
- 39 Central Sonoma Valley Trail
- 40 Healdsburg Pedestrian Safety and Access Improvements
- 41 Petaluma Complete Streets
- 42 Jaguar Way/Windsor Road Bicycle /Ped Improvements
- 43 Sebastopol Various Streets and Roads Preservation
- 44 Healdsburg Various Streets & Roads Rehabilitation
- 45 Downtown Santa Rosa Streetscape
- 46 Rohnert Park Streetscape and Pedestrian Imps
- 47 Cotati - Old Redwood Highway S. Preservation
- 48 Rohnert Park Various Streets Preservation
- 49 Sonoma County Various Streets & Roads Preservation
- 50 Sonoma Various Streets and Roads Preservation
- 51 Conde Ln/Johnson St Pedestrian Improvements
- 52 Bell Rd/Market St/Windsor River Rd Ped Improvement
- 53 Bodega Highway Pavement Rehabilitation
- 54 Cloverdale - Safe Routes to School Phase 2
- 55 Santa Rosa Complete Streets Road Diet on Transit Corridor
- 56 Son 101 HOV - Rohnert Park Expwy to Santa Rosa Ave

# Sonoma County: Overlay of Draft 2015 TIP Mapped Projects over Communities of Concern



# Sonoma County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



# Projects in the 2015 TIP with Costs Greater than \$200 Million

**RED** Road Project  
**BLUE** Transit Project

- |   |  |  |
|---|--|--|
| 1 <b>BART - Berryessa to San Jose Extension</b><br>Santa Clara County<br><b>\$3.96 billion</b>                    | 15 <b>Sonoma Marin Area Rail Corridor</b><br>Sonoma/Marin Counties<br><b>\$539 million</b>                               | 29 <b>Capitol Expressway LRT Extension, Phase 2</b><br>Santa Clara County<br><b>\$294 million</b>                    |
| 2 <b>BART - Warm Springs to Berryessa Extension</b><br>Santa Clara County<br><b>\$2.52 billion</b>                | 16 <b>SR-1 Devils Slide Bypass</b><br>San Mateo County<br><b>\$512 million</b>   | 30 <b>BART Transbay Tube Seismic Retrofit</b><br>Multiple Counties<br><b>\$276 million</b>                           |
| 3 <b>Transbay Terminal/Caltrain Downtown Extension, Phase 2</b><br>San Francisco County<br><b>\$2.29 billion</b>  | 17 <b>San Jose International Airport People Mover</b><br>Santa Clara County<br><b>\$508 million</b>                      | 31 <b>Golden Gate Bridge Seismic Retrofit, Phases 1-3A</b><br>Marin/San Francisco Counties<br><b>\$273 million</b>   |
| 4 <b>US-101 Doyle Drive Replacement</b><br>San Francisco County<br><b>\$1.99 billion</b>                          | 18 <b>BART Oakland Airport Connector</b><br>Alameda County<br><b>\$484 million</b>                                       | 32 <b>Southeast Waterfront Transportation Improvements**</b><br>San Francisco County<br><b>\$254 million</b>         |
| 5 <b>BART Railcar Procurement Program**</b><br>Multiple Counties<br><b>\$1.98 billion</b>                         | 19 <b>E-BART - East Contra Costa County Rail Extension</b><br>Contra Costa County<br><b>\$460 million</b>                | 33 <b>I-80 Express Lanes in Fairfield &amp; Vacaville, Phases 1 &amp; 2</b><br>Solano County<br><b>\$237 million</b> |
| 6 <b>Transbay Terminal/Caltrain Downtown Extension, Phase 1</b><br>San Francisco County<br><b>\$1.90 billion</b>  | 20 <b>US 101 Express Lanes in Santa Clara County</b><br>Santa Clara County<br><b>\$425 million</b>                       | 34 <b>El Camino Real Bus Rapid Transit</b><br>Santa Clara County<br><b>\$234 million</b>                             |
| 7 <b>SF Muni Third St LRT Phase 2 - Central Subway</b><br>San Francisco County<br><b>\$1.58 billion</b>           | 21 <b>SR-24 - Caldecott Tunnel Fourth Bore</b><br>Alameda/Contra Costa County<br><b>\$420 million</b>                    | 35 <b>Caltrain Positive Train Control System**</b><br>Multiple Counties<br><b>\$231 million</b>                      |
| 8 <b>Caltrain Electrification</b><br>Multiple Counties<br><b>\$1.23 billion</b>                                   | 22 <b>AC Transit: Preventive Maintenance Program**</b><br>Alameda/Contra Costa County<br><b>\$392 million</b>            | 36 <b>7th Street Grade Separation and Roadway Improvements</b><br>Alameda County<br><b>\$221 million</b>             |
| 9 <b>Transbay Transit Center - TIFIA Loan Debt Service</b><br>San Francisco County<br><b>\$1.08 billion</b>       | 23 <b>SR-4 East Widening from Somersville to SR-160</b><br>Contra Costa County<br><b>\$385 million</b>                   | 37 <b>Oakland Army Base Infrastructure Improvements</b><br>Alameda County<br><b>\$215 million</b>                    |
| 10 <b>BART - Warm Springs Extension</b><br>Alameda County<br><b>\$890 million</b>                                 | 24 <b>US-101 Marin-Sonoma Narrows (Sonoma)</b><br>Sonoma County<br><b>\$373 million</b>                                  | 38 <b>Yerba Buena Island (YBI) Ramp Improvements</b><br>San Francisco County<br><b>\$212 million</b>                 |
| 11 <b>I-80/I-680/SR 12 Interchange Project</b><br>Solano County<br><b>\$718 million</b>                           | 25 <b>I-680/SR-4 Interechange Reconstruction - Phases 1, 2, 4 &amp; 5</b><br>Contra Costa County<br><b>\$369 million</b> | 39 <b>SFMTA ADA Paratransit Operating Support**</b><br>San Francisco County<br><b>\$207 million</b>                  |
| 12 <b>Toll Bridge Rehabilitation Program</b><br>Multiple Counties<br><b>\$629 million</b>                         | 26 <b>US-101 Marin-Sonoma Narrows (Marin)</b><br>Marin County<br><b>\$341 million</b>                                    | 40 <b>SF- Better Market Street Transportation Elements</b><br>San Francisco County<br><b>\$206 million</b>           |
| 13 <b>BART Car Exchange (Preventive Maintenance)**</b><br>Multiple Counties<br>\$607 million                      | 27 <b>Freeway Performance Initiative (FPI)**</b><br>Multiple Counties<br><b>\$341 million</b>                            | 41 <b>I-680 NB HOV/HOT Lane</b><br>Alameda/Santa Clara Counties<br><b>\$205 million</b>                              |
| 14 <b>Valley Transportation Authority: Preventive Maintenance**</b><br>Santa Clara County<br><b>\$572 million</b> | 28 <b>Hunters Point Shipyard and Candlestick Point Local Roads**</b><br>San Francisco County<br><b>\$338 million</b>     |  |

\*\* Project not mapped

# Projects in the 2015 TIP with Costs Greater than \$200 Million

