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.

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 .

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

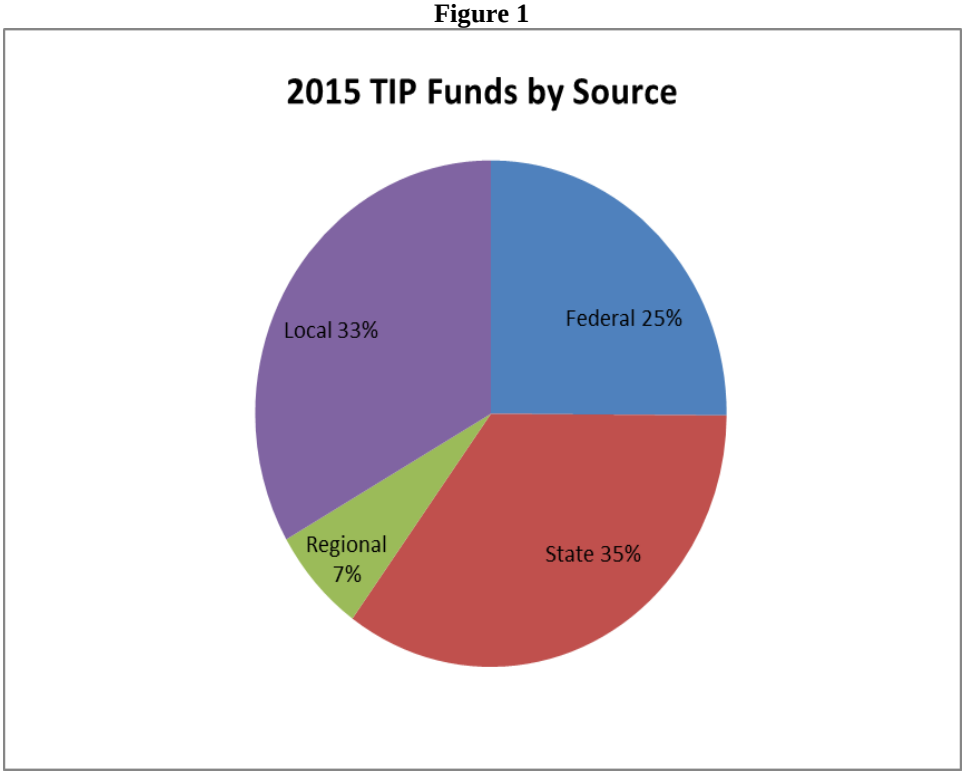
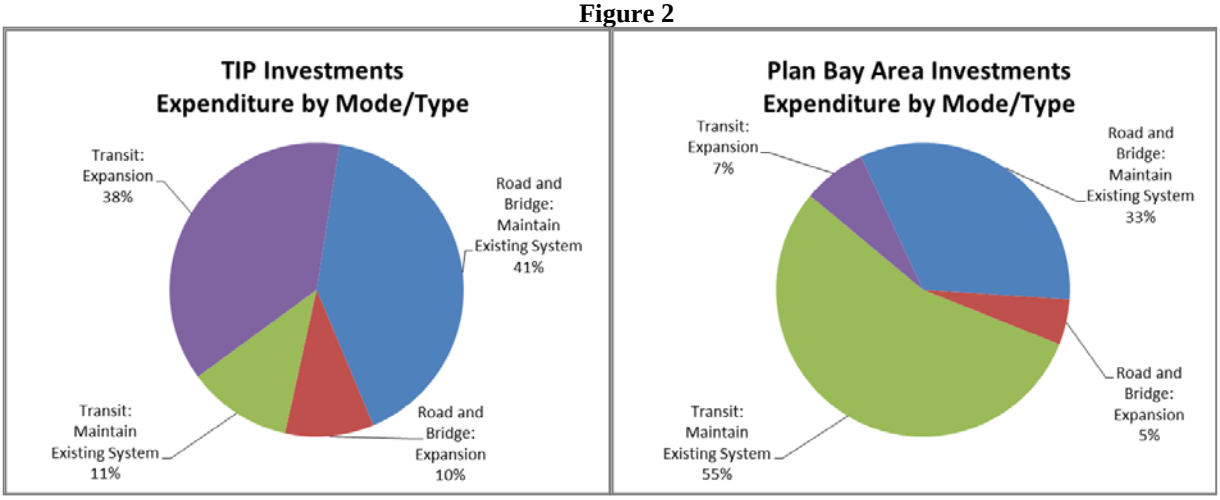


Figure 2 below at left shows the planned investments in the 2015 TIP by transportation mode (road/bridge or transit) and type of expenditure (maintenance/management or capital expansion). The TIP investments for bicycle and pedestrian improvements are included under the road/bridge category as elements 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

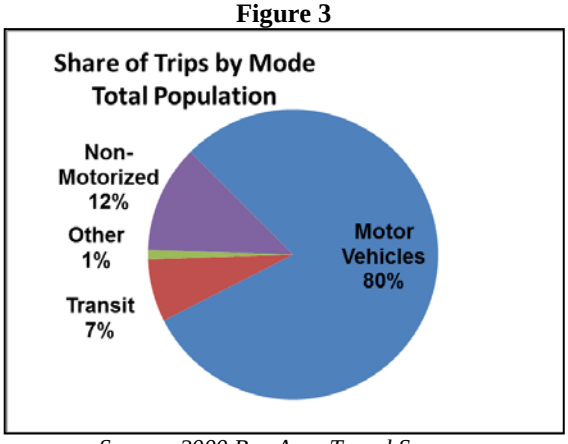
Population Distribution by Household Income		
	Population	**% of Total**
Low-Income (≤ $50,000)	2,211,080	31%
Not Low-Income (> $50,000)	4,843,266	69%
Total	7,054,346	100%
Population Distribution by Race/Ethnicity		
	Population	**% of Total**
Minority	4,117,836	58%
Non-Minority	3,032,903	42%
Total	7,150,739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

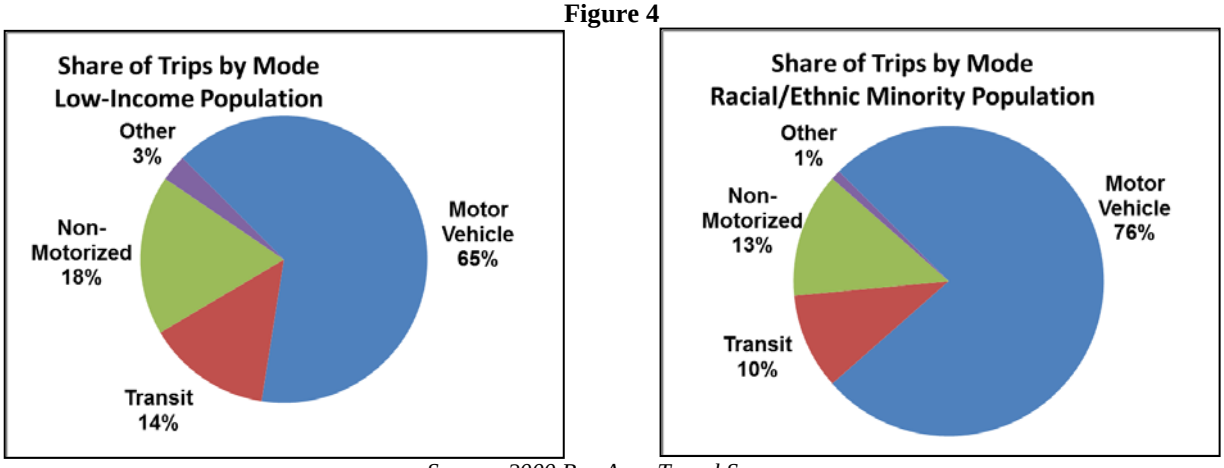
Most notably in terms of travel patterns, Figure 3 illustrates that trips by all Bay Area residents are overwhelmingly made by motor vehicle (80 percent) by the population at large, followed by non-motorized trips (12 percent), and transit (7 percent). While there are real differences for travel patterns 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.

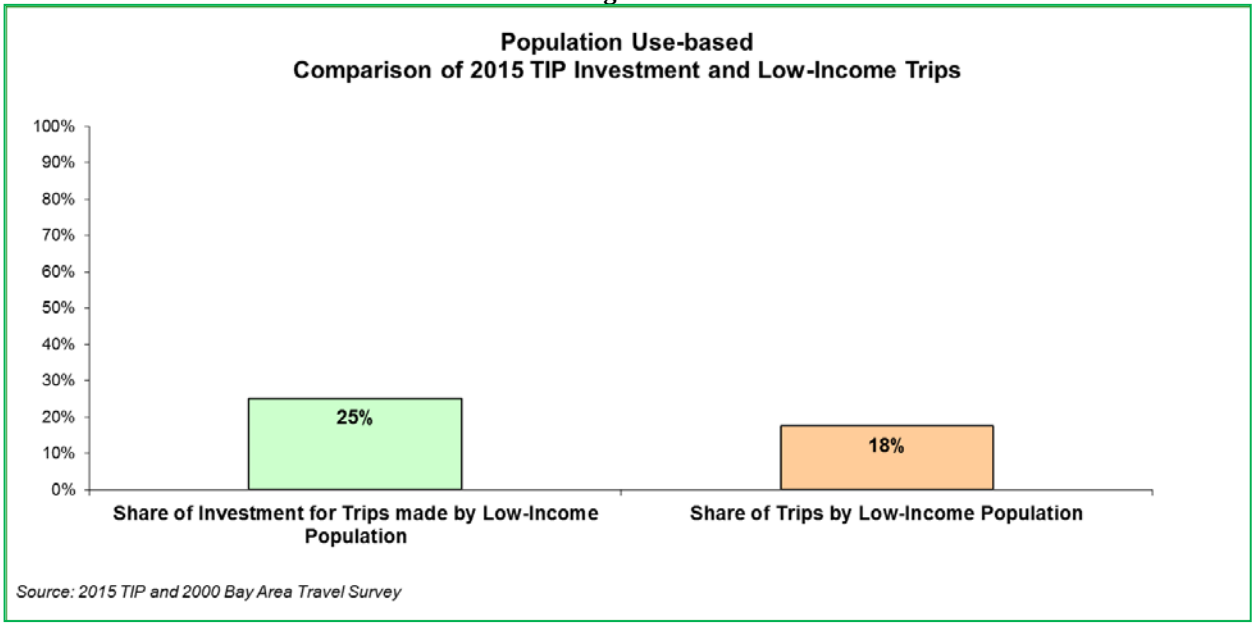
- Investments were allocated in each category to low-income and minority populations, and other populations according to each groups' usage share of each mode at the county or transit operator level.
    - First, to analyze what share of each mode (transit and roads/highways) low-income and minority 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%
Total	$9,352,306,893	100%	100%

Figure 5

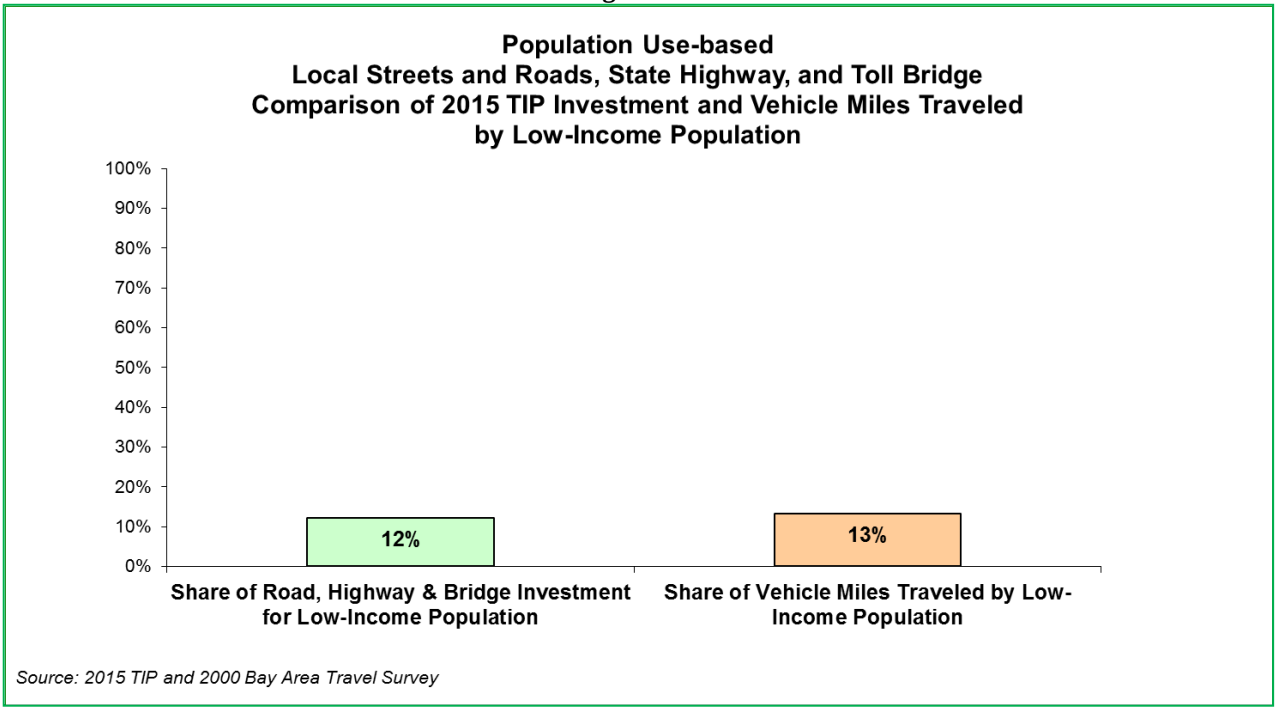


Observations

- 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%
Total	$4,764,914,137	100%	100%

Figure 6

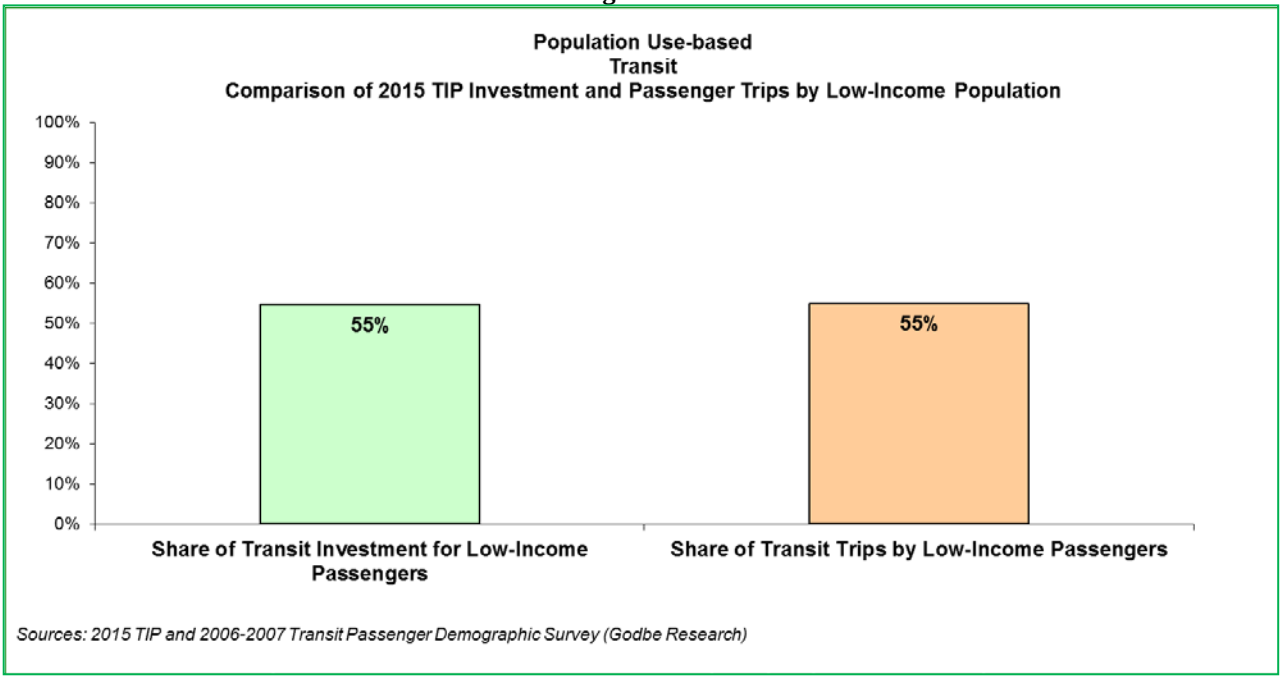


Observations

- 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%
Total	$4,587,392,756	100%	100%

Figure 7

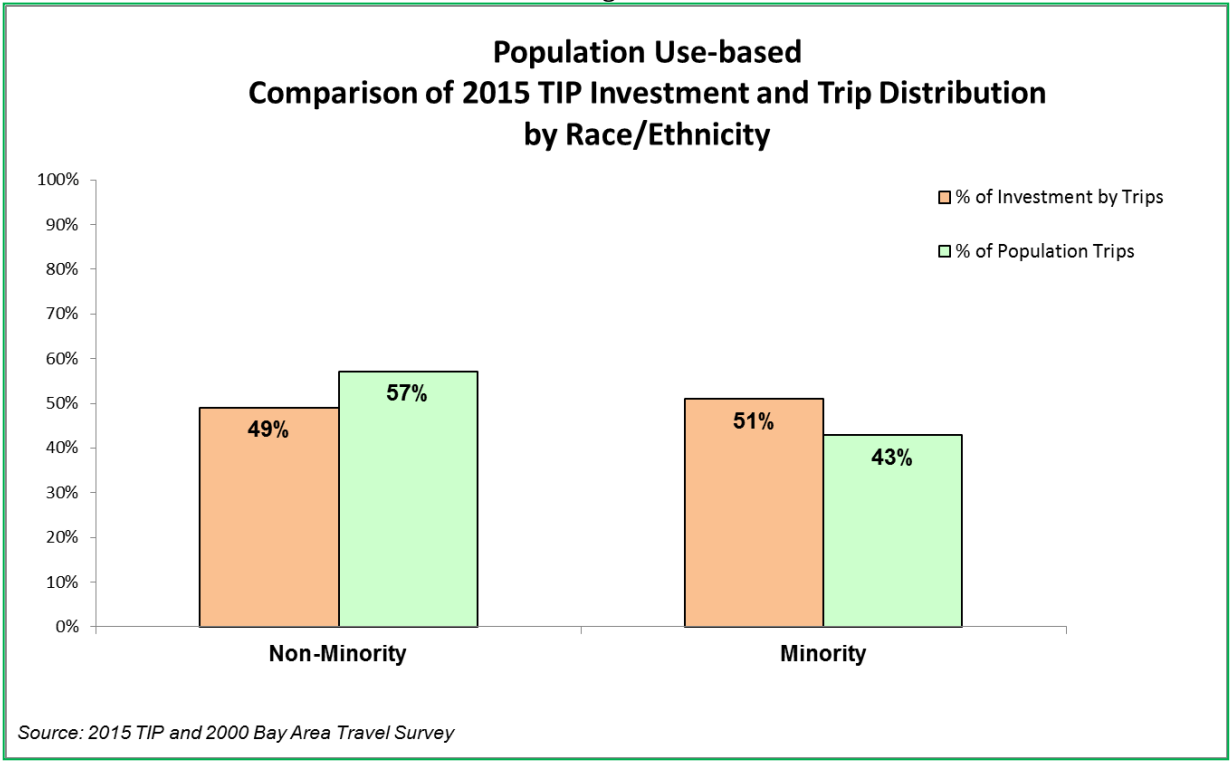


Observations

- 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%
Total	$9,352,306,893	100%	100%

Figure 8

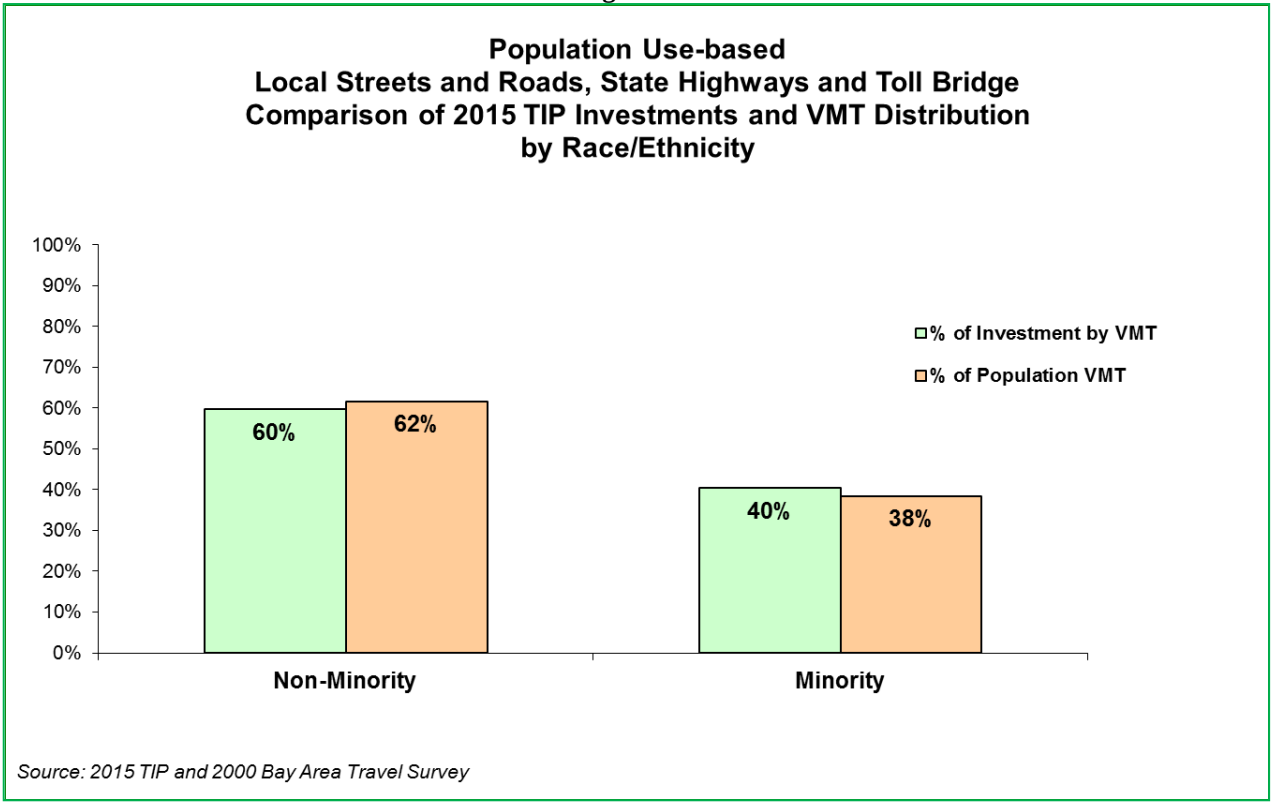


Observations

- 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%
Total	$4,764,914,137	100%	100%

Figure 9



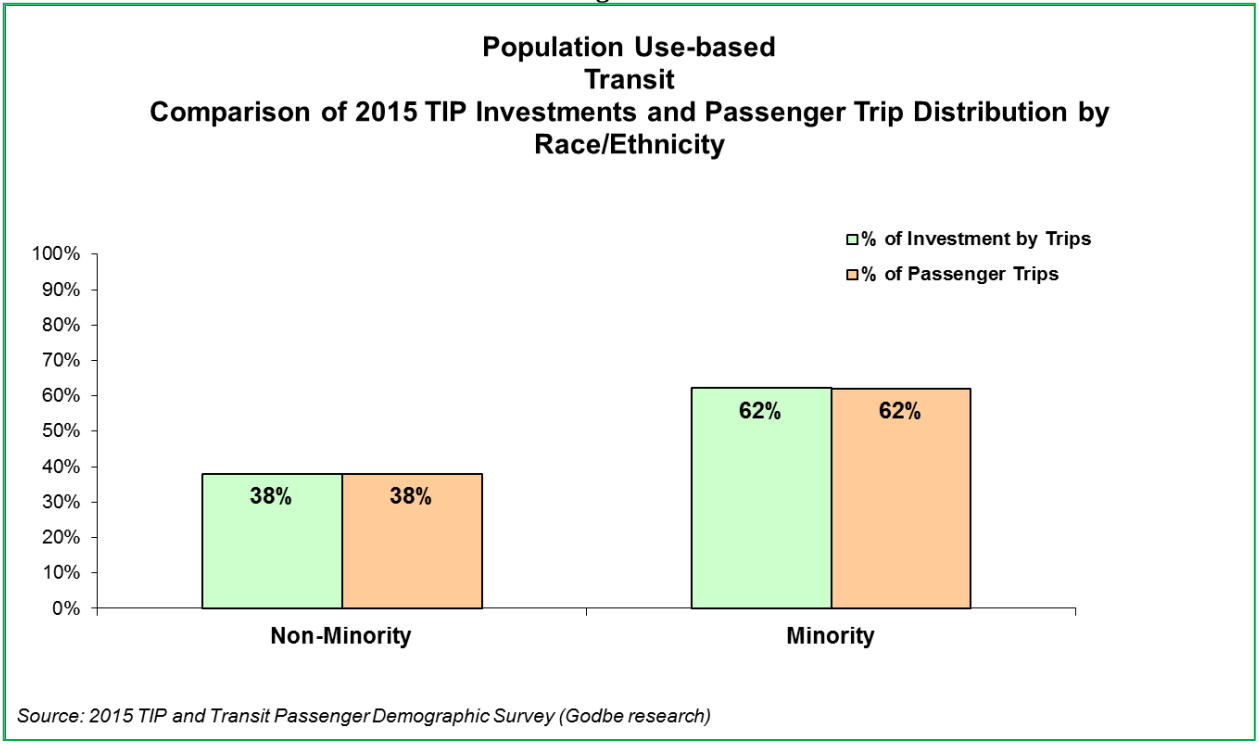
Source: 2015 TIP and 2000 Bay Area Travel Survey

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%
Total	$4,587,392,756	100%	100%

Figure 10



Source: 2015 TIP and Transit Passenger Demographic Survey (Godbe research)

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
"Demographic maps that overlay the percent minority and non-minority populations as identified by Census or ACS data …"	(1) **Project mapping analysis** overlaying mappable TIP projects against 2010 Census tracts with above-average concentrations of minority residents.
"[C]harts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes…"	(2) **Population/use-based analysis** of only public transit investments using State and Federal funding sources.
"An analysis of impacts identified in paragraph [above] that identifies any disparate impacts on the basis of race, color, or national origin"[1]	(3) **Disparate impact analysis** 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.

[1] 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:

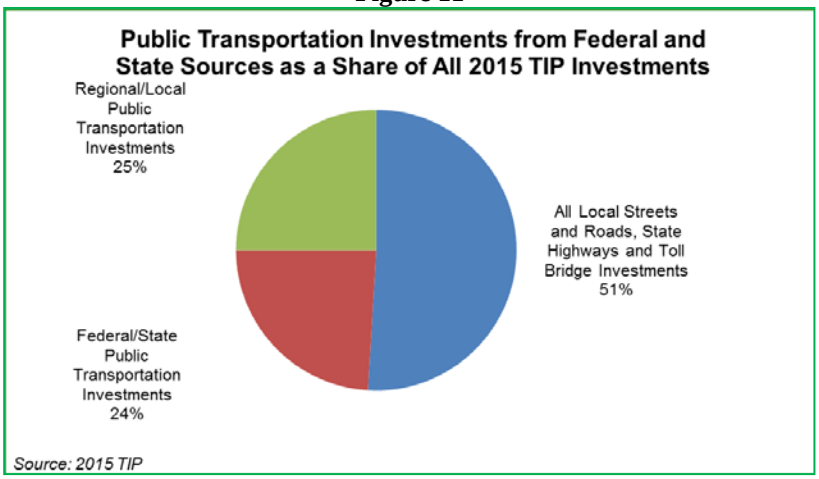
$$\text{Result (\%)} = \frac{\text{Minority benefit per capita}}{\text{Non-minority benefit per capita}}$$

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."[2]

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



[2] 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.

Table 8. Comparison of Federal and State Transit 2015 TIP Investments by Minority Status

Race/Ethnicity	Total Federal/ State Transit Funding (Millions $)	% of Total Federal/ State Transit Funding	% of Regional Transit Ridership	% of Total Regional Population
Minority	$1,369	61%	62%	58%
Non-minority	$879	39%	38%	42%
Total	$2,248	100%	100%	100%

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.

Table 9. Disparate Impact Analysis of 2015 TIP Investments: Population Analysis

Race/Ethnicity	Total Federal/ State Transit Funding (Millions $)	Regional Population (2010)	Per-Capita Benefit	Minority Per-Capita Benefit as % of Non-minority Per-Capita Benefit
Minority	$1,369	4,117,836	$ 332	115%
Non-minority	$879	3,032,903	$ 290	
Total	$2,248	7,150,739		

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

Table 10. Disparate Impact Analysis of 2015 TIP Investments: Ridership Analysis

Race/Ethnicity	Total Federal/ State Transit Funding (Millions $)	Avg. Daily Transit Ridership (2006)	Per-Rider Benefit	Minority Per-Capita Benefit as % of Non-minority Per-Capita Benefit
Minority	$1,369	816,059	$1,677	95%
Non-minority	$879	498,303	$1,764	
Total	$2,248	1,314,362		

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
Population Use-Based		
Low-Income	**25%**	**18% (total trips)**
Minority	**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.*"[3] 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[4] (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.

[3] **42 U.S.C §2000d.**
[4] 49 CFR part 21.

Transit Administration issued a new Circular with guidance to its recipients for compliance with federal Title VI requirements.[5] 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."[6]

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.[7]

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

[5] 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.
[6] FTA Circular 4702.1B, page VI-1*f*.
[7] For more information, see MTC's Title VI page at: 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…"[8] 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,"[9] 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

[8] Executive Order 12898 (1994, Clinton).
[9] 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*.[10] 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.[11] 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:

[10] FHWA Order 6640.23A, available at: http://www.fhwa.dot.gov/legsregs/directives/orders/664023a.htm.
[11] 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.

- 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.

Disadvantage Factor	% of Regional Population[1]	Proposed Concentration Threshold
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[2]	10%	15%

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

[2]*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.

Appendix C: Maps

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Draft 2015 Transportation Improvement Program:

Projects by County

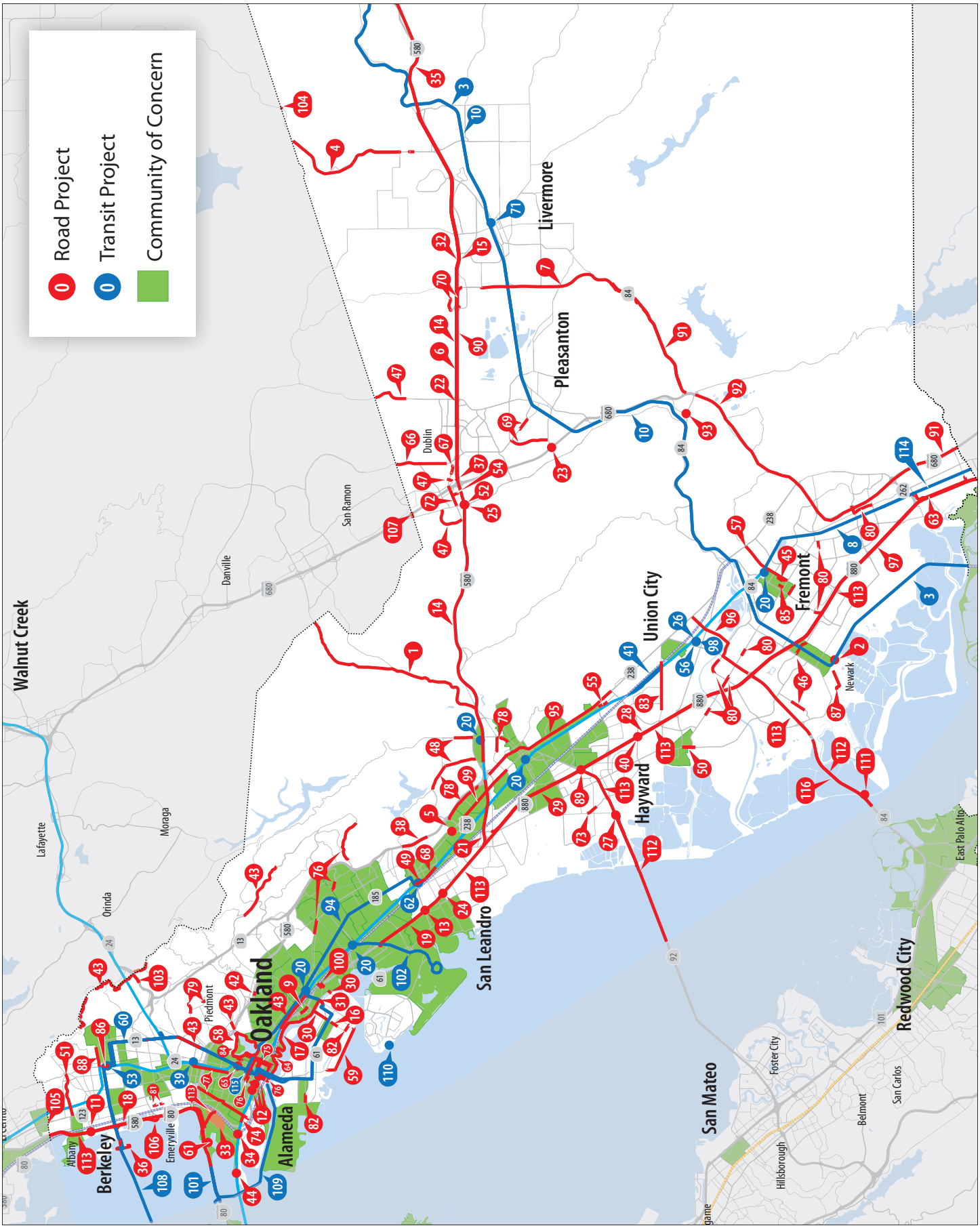
June 2014

Alameda County TIP Projects

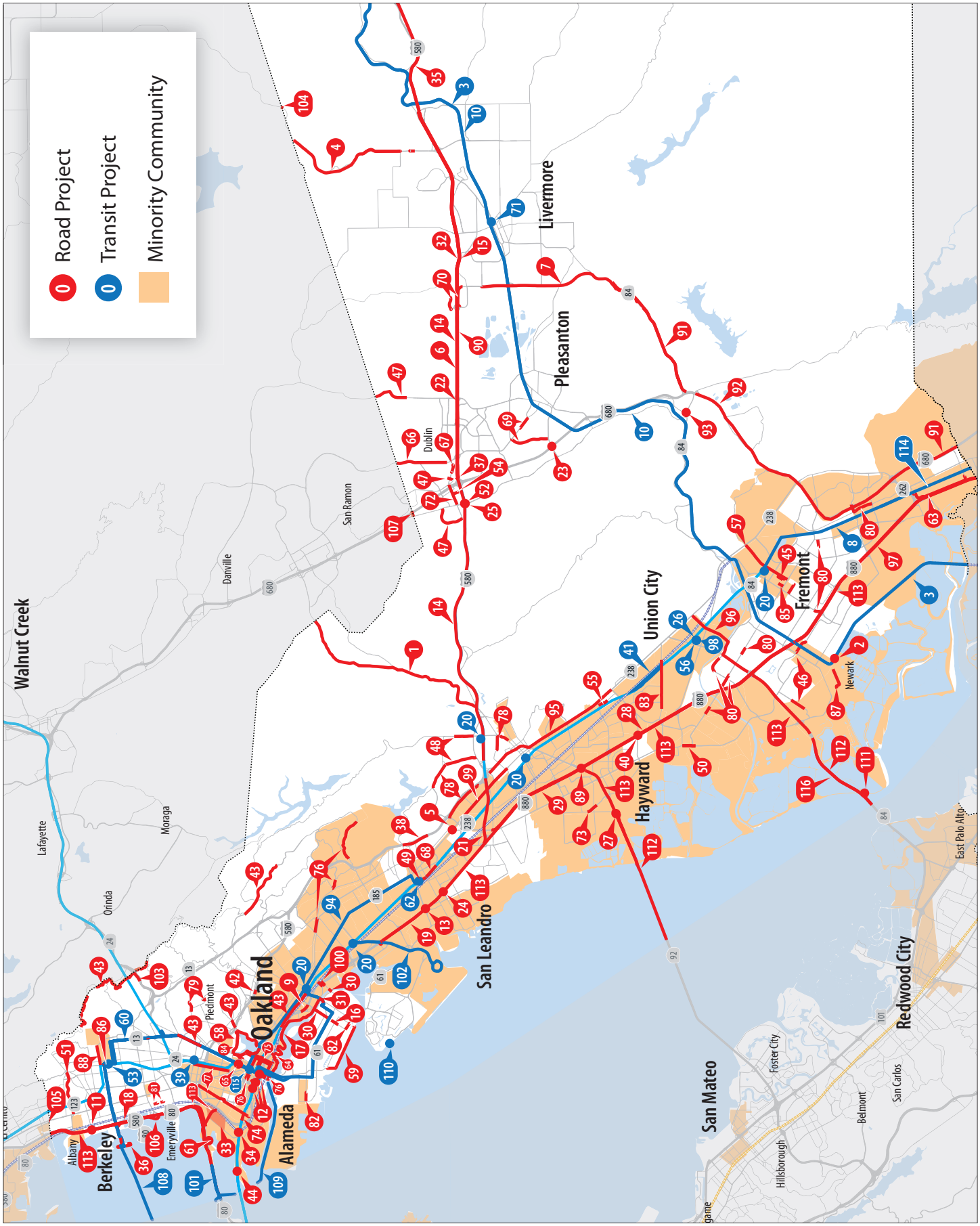
1 Crow Canyon Safety Improvements
2 Central Avenue Railroad Overpass at UPRR
3 ACE Track Improvements
4 Alameda: Vasco Road Safety Improvements
5 SR-185 - E. 14th St/ Hesperian Blvd/150th Ave
6 I-580 (TriValley) Right of Way Preservation
7 SR-84 Expressway Widening
8 BART - Warm Springs Extension
9 I-880 North Safety Improvements
10 ACE Signal System Rehabilitation
11 I-80 Gilman Interchange Reconfiguration
12 I-880/Broadway-Jackson Interchange
13 I-880/SR-112 Overcrossing Replacement
14 I-580 (TriValley) Corridor - WB HOV & Connectors
15 I-580 (TriValley) Corridor - EB HOV Lanes
16 City of Alameda - Park St Streetscape
17 Oakland Waterfront Bay Trail
18 I-80 Integrated Corridor Mobility Project
19 I-880 SB HOV Lanes - Marina Blvd to Hegenberger
20 BART Station Electronic Bike Lockers, Ph. 2
21 I-238 Widening Replacement Planting
22 I-580 WB HOT Corridor Project
23 I-680/Bernal Avenue Interchange Improvements
24 I-880/Marina Blvd Interchange and Overcrossing Rep
25 I-580 / Foothill Road Interchange Improvements
26 Union City Intermodal Station Infrastructure
27 SR-92/Clawiter/Whitesell Interchange Improvements
28 I-880 Auxiliary Lanes at Industrial Parkway
29 I-880 NB and SB Auxiliary Lanes
30 Estuary Bridges Seismic Retrofit and Repairs
31 Fruitvale Ave Roadway Bridge Retrofit
32 I-580 WB Auxiliary Lane, First to Isabel
33 Outer Harbor Intermodal Terminals (OHIT)
34 7th Street Grade Separation and Roadway Improvement
35 I-580 N. Flynn-Greenville EB Truck Climbing Lane
36 Berkeley Bay Trail Extension - Segment One
37 Alamo Canal Regional Trail, I-580 Undercrossing
38 I-580 Landscaping in the City of San Leandro
39 MacArthur BART Plaza Remodel
40 I-880/Industrial Parkway West Interchange
41 Hayward Shop and Yard Expansion
42 I-580 Oakland 14th to Ardley Noise Barriers
43 Various Streets Resurfacing and Bikeway Facilities
44 Shore Power Initiative
45 Fremont CBD/Midtown Streetscape
46 Newark - Cedar Blvd and Jarvis Ave Pavement Rehab
47 Dublin Citywide Street Resurfacing
48 Alameda Co - Central Unincorporated Pavement Rehab
49 San Leandro Downtown-BART Pedestrian Interface
50 Union City Blvd Corridor Bicycle Imp, Phase 1
51 Albany - Buchanan Bicycle and Pedestrian Path
52 Pleasanton - Foothill/I-580 IC Bike/Ped Facilities
53 Downtown Berkeley BART Plaza/Transit Area Imps.
54 West Dublin BART Golden Gate Drive Streetscape
55 South Hayward BART Area/Dixon Street Streetscape
56 Union City BART East Plaza Enhancements
57 Walnut Argonaut Lane Reduction & Roundabout
58 Lake Merritt Improvement Project
59 Shoreline Dr, Westline Dr and Broadway Bike Lanes
60 AC Transit: Line 51 Corridor
61 SFOBB Gateway Park
62 AC Transit: San Leandro BART Improvements
63 Widen Kato Rd from Warren Avenue to Milmont Drive
64 Oakland Bay Trail to Lake Merritt Bike/Ped Bridge
65 Oakland 19th Street Uptown Bike Station
66 Dougherty Road Widening
67 Dublin Boulevard Widening
68 San Leandro Boulevard Preservation
69 Pleasanton Complete Streets
70 Livermore Various Streets Preservation
71 Livermore Relocation and Restoration of R/R Depot
72 Dublin Boulevard Preservation
73 Hayward - Industrial Boulevard Preservation
74 7th Street West Oakland Transit Village, Phase II
75 Lake Merritt BART Bikeways
76 Oakland Complete Streets
77 Oakland - Peralta and MLK Blvd Streetscape Phase I
78 Alameda Co-Various Streets and Roads Preservation
79 Piedmont Complete Streets (CS)
80 Fremont Various Streets and Roads Preservation
81 Emeryville - Hollis Street Preservation
82 Alameda City Complete Streets
83 Whipple Road Pavement Rehabilitation
84 Lakeside Complete Streets and Road Diet
85 Fremont City Center Multi-Modal Improvements
86 Shattuck Complete Streets and De-couplet
87 Enterprise Drive Complete Streets and Road Diet
88 Hearst Avenue Complete Streets
89 Reconstruct I-880/SR-92 I/C- Replace Planting & Irrigation
90 I-580 Eastbound Express/HOT Lanes

91 I-680 NB HOV/HOT Lane
92 Route 84 Widening, Pigeon Pass to I-680
93 Niles Canyon Rd (SR-84)/Pleasanton-Sunol Rd Interchange Imps
94 AC Transit: East Bay Bus Rapid Transit
95 Route 238 Corridor Improvement
96 East-West Connector in Fremont & Union City
97 I-880/SR-262 I/C and HOV Lanes
98 Union City Intermodal Station Infrastructure
99 E. 14th St/Mission Blvd Streetscape
100 42nd Ave. & High St. I-880 Access Improvements.
101 BART Transbay Tube Seismic Retrofit
102 BART Oakland Airport Connector
103 SR-24 - Caldecott Tunnel 4th Bore
104 Contra Costa County Vasco Road Safety Improvements
105 San Pablo Avenue Streetscape
106 Interstate 80 Corridor Real Time Rideshare
107 I-680 Express Lane: Alcosta to Livorna/Rudgear
108 Ferry Service - Berkeley/Albany
109 Treasure Island Ferry Service
110 WETA: Facilities Rehabilitation
111 Toll Bridge Maintenance
112 Toll Bridge Rehabilitation Program
113 Regional Express Lane Network
114 BART - Warm Springs to Berryessa Extension
115 Regional Real-Time Transit Information at BART
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

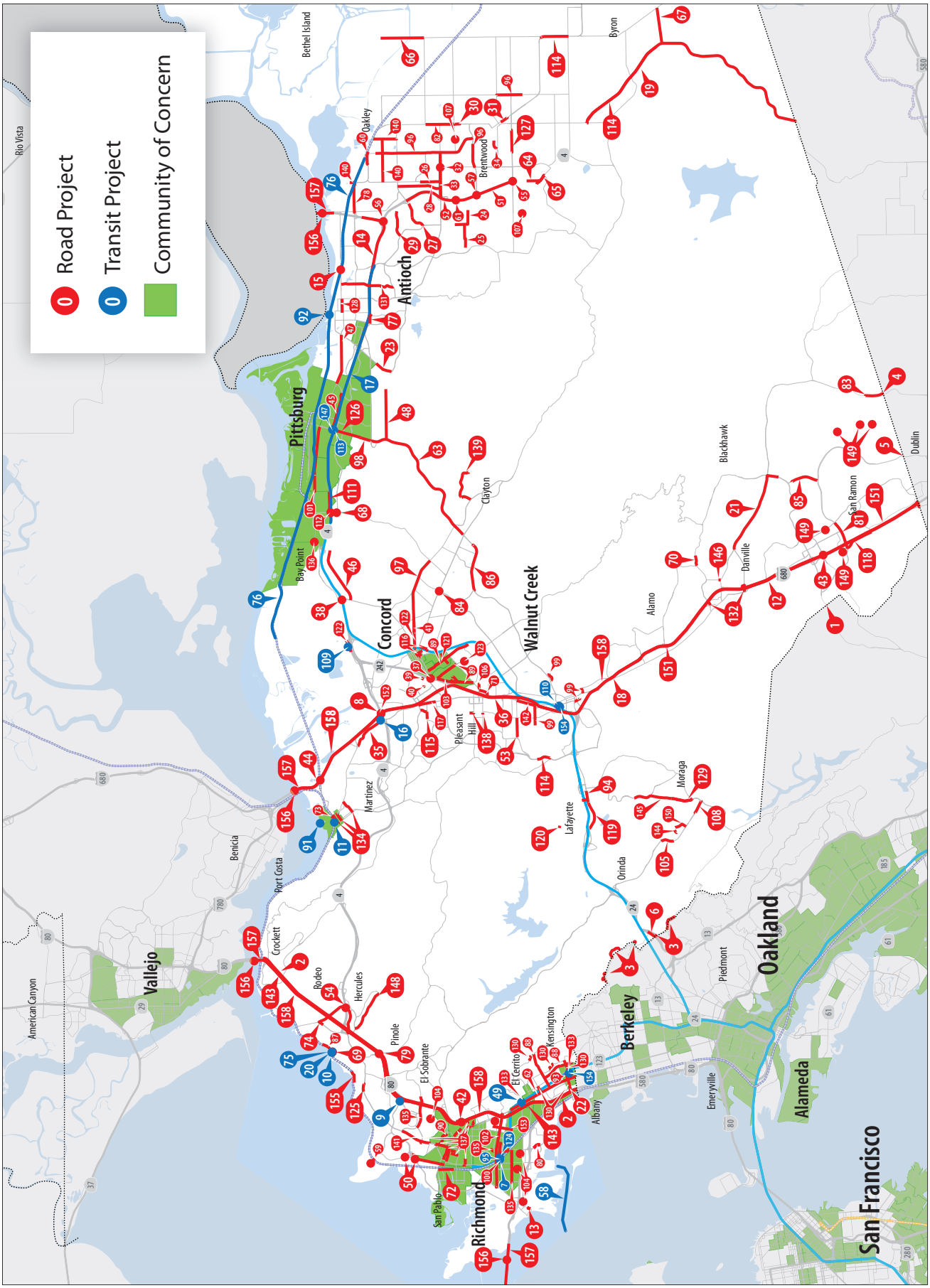


Contra Costa County TIP Projects

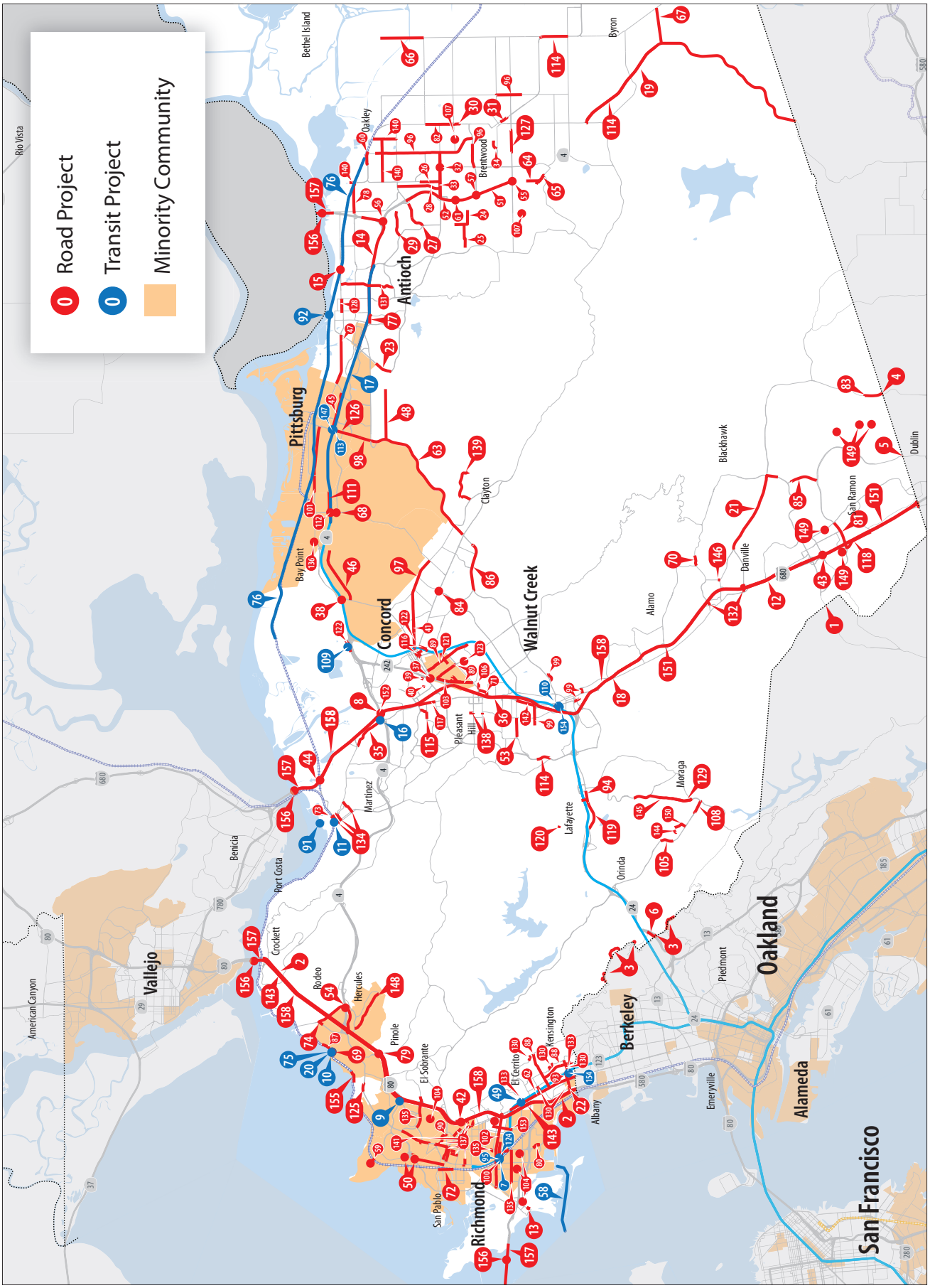
1 Crow Canyon Safety Improvements
2 I-80 Integrated Corridor Mobility Project
3 Various Streets Resurfacing and Bikeway Facilities
4 Dublin Citywide Street Resurfacing
5 Dougherty Road Widening
6 SR-24 - Caldecott Tunnel 4th Bore
7 Richmond Transit Village Transit & Ped Imps
8 I-680/SR-4 I/C Reconstruction - 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-2S - 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-2S
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



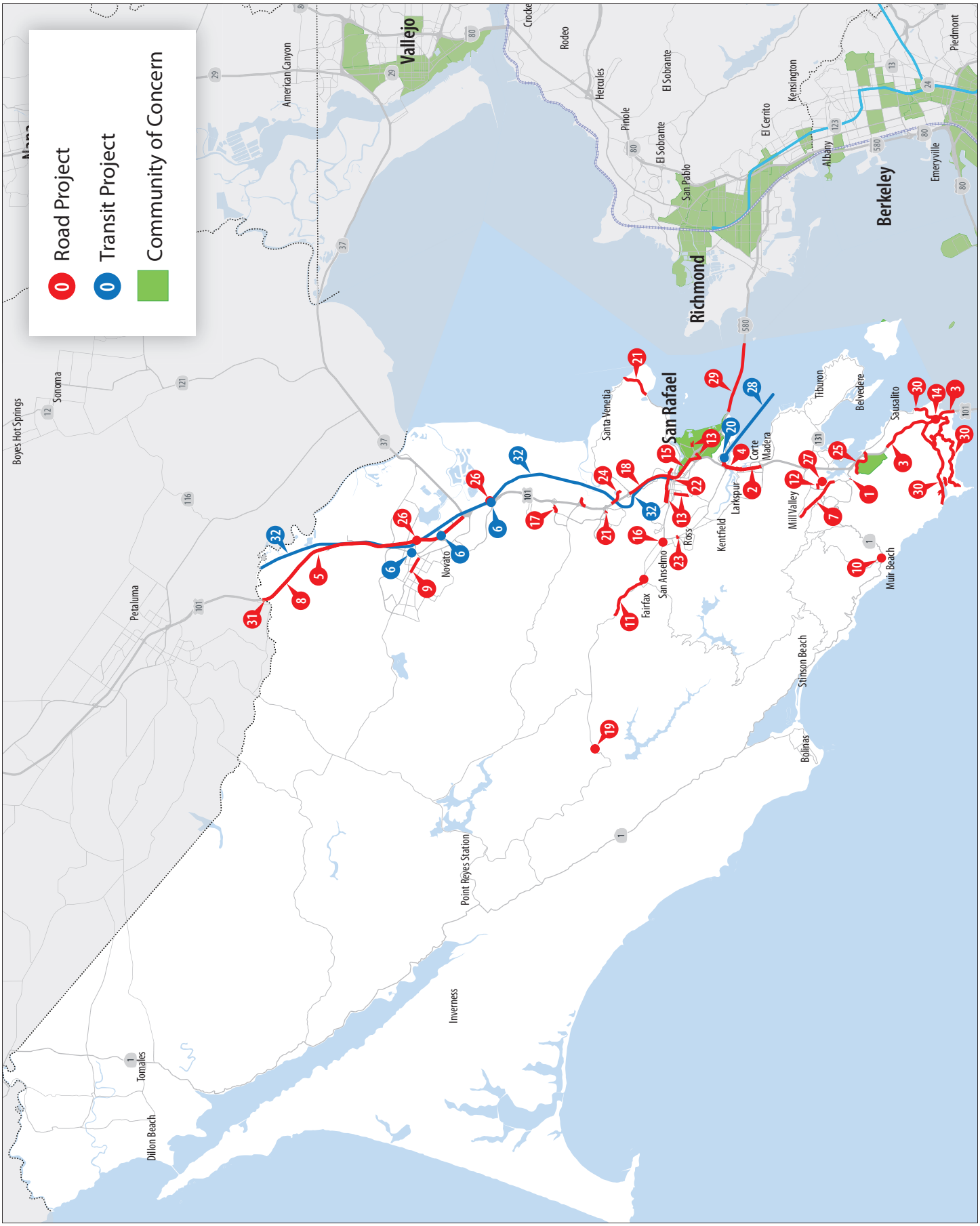
Contra Costa County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



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

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



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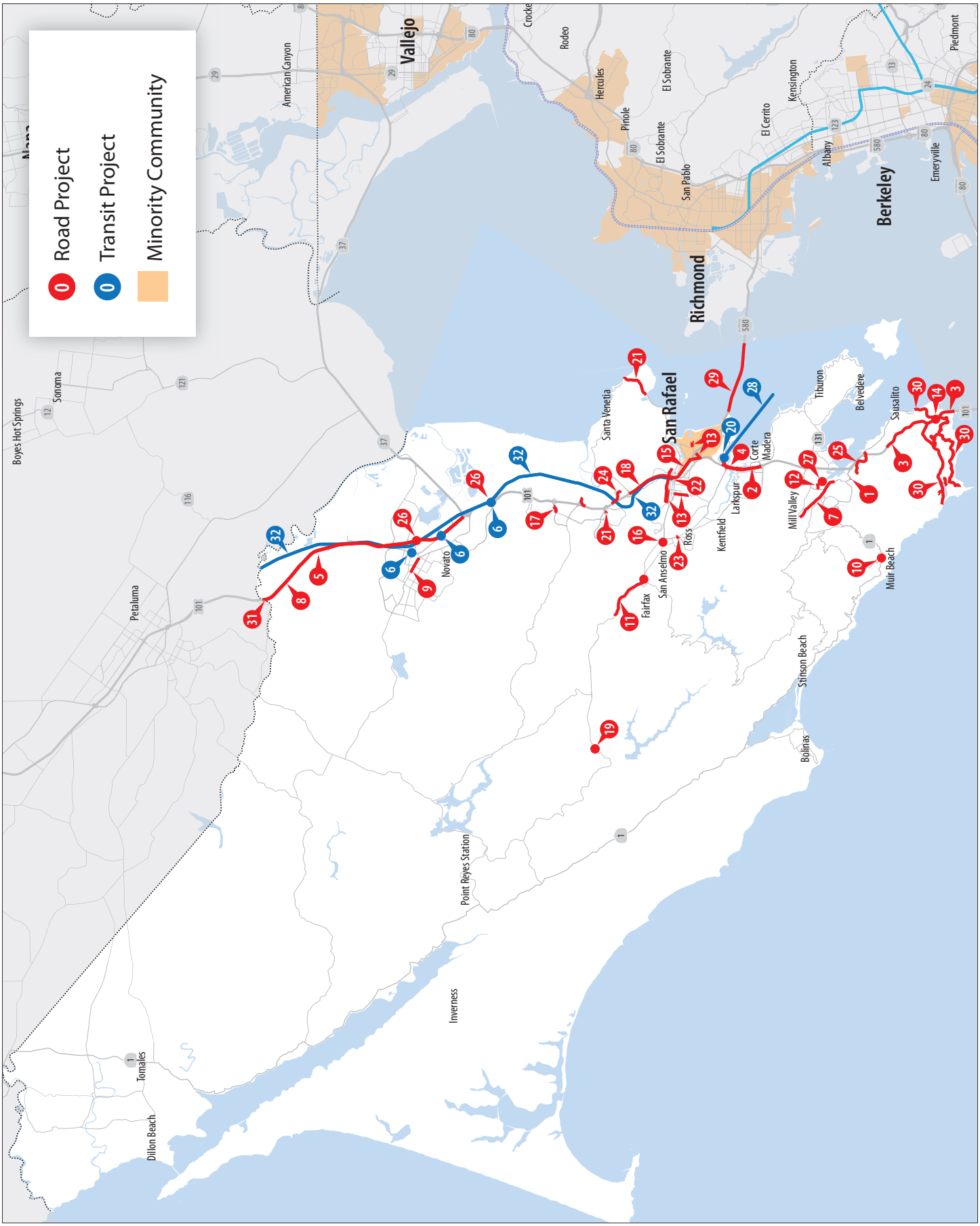
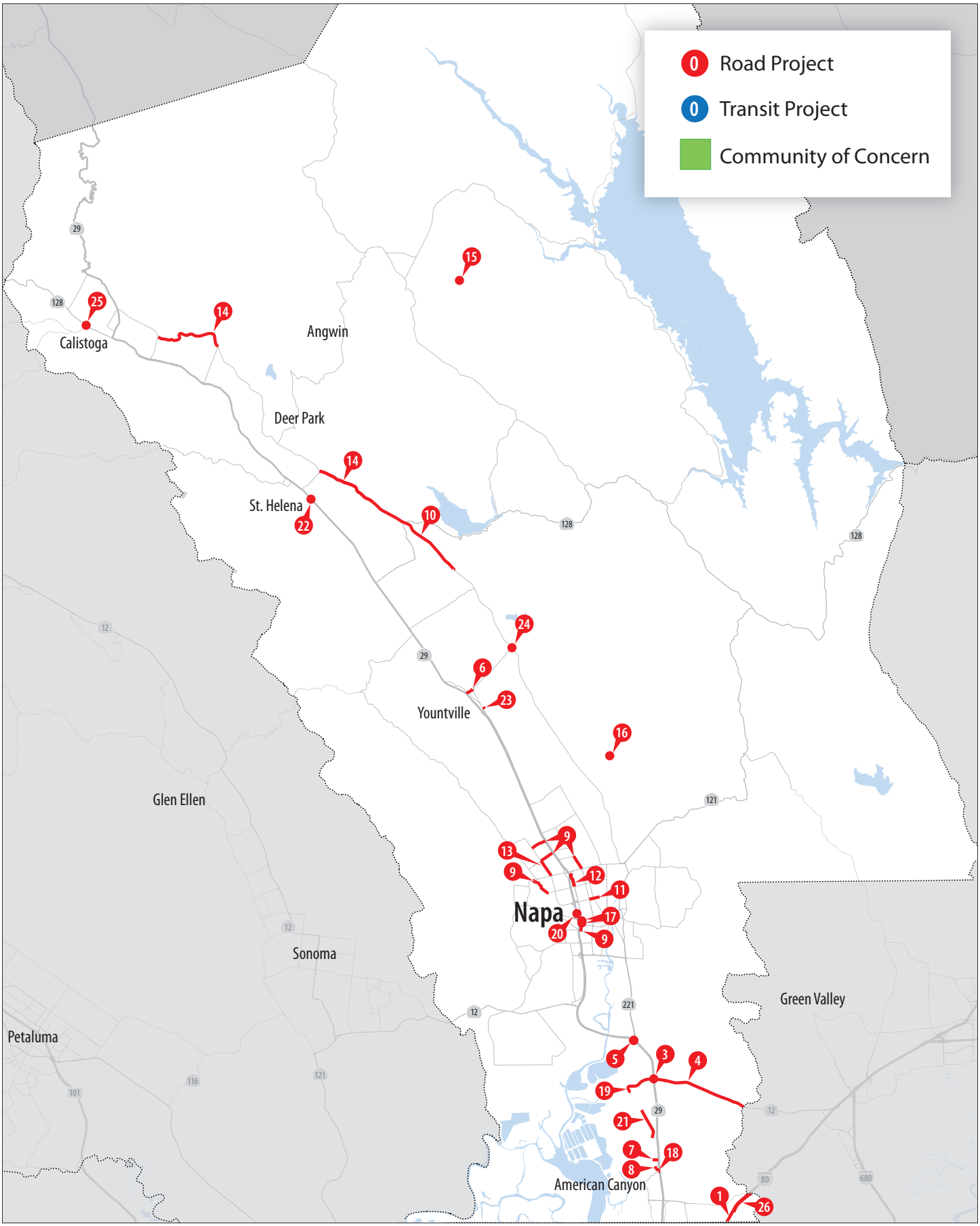


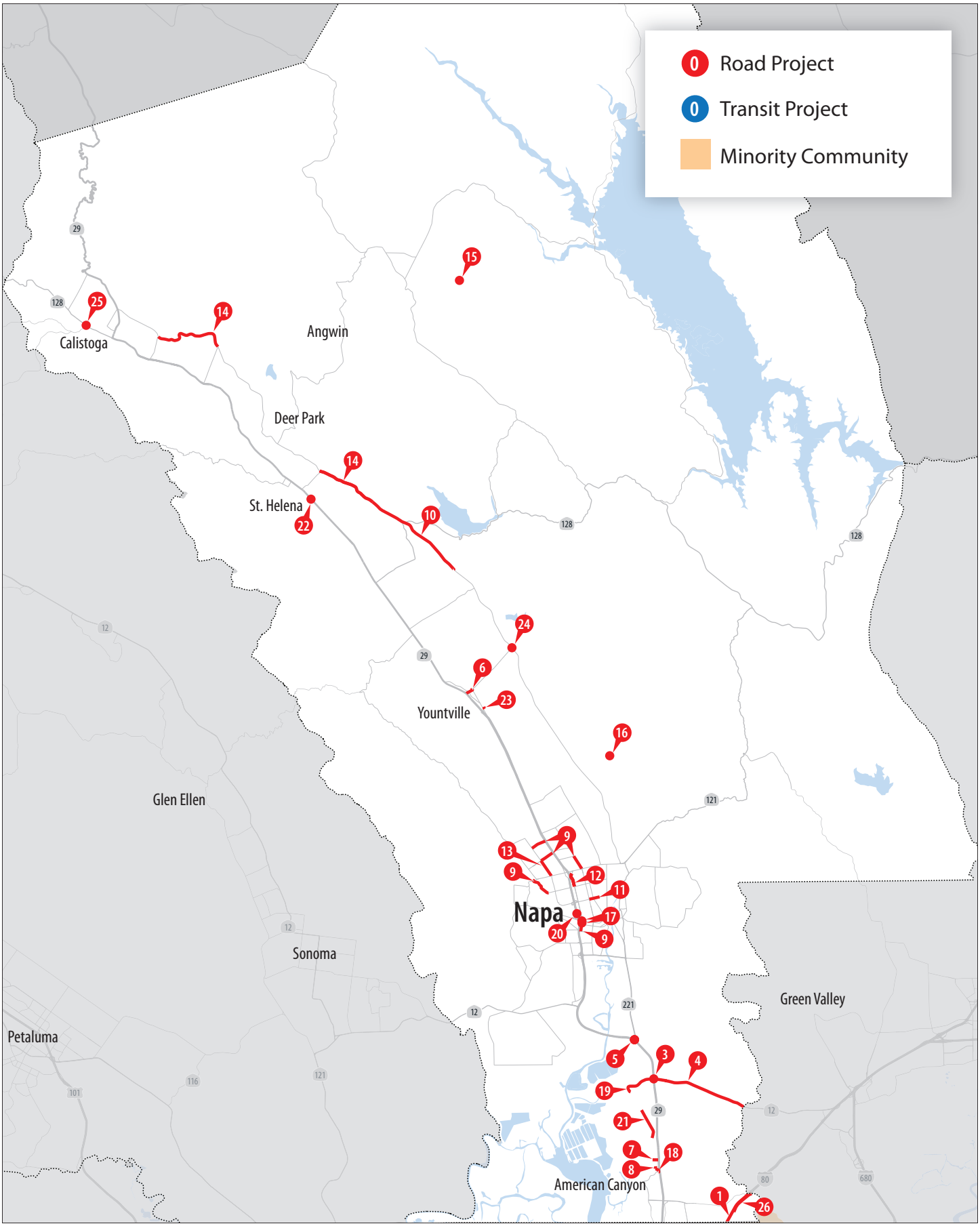
Napa County TIP Projects

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



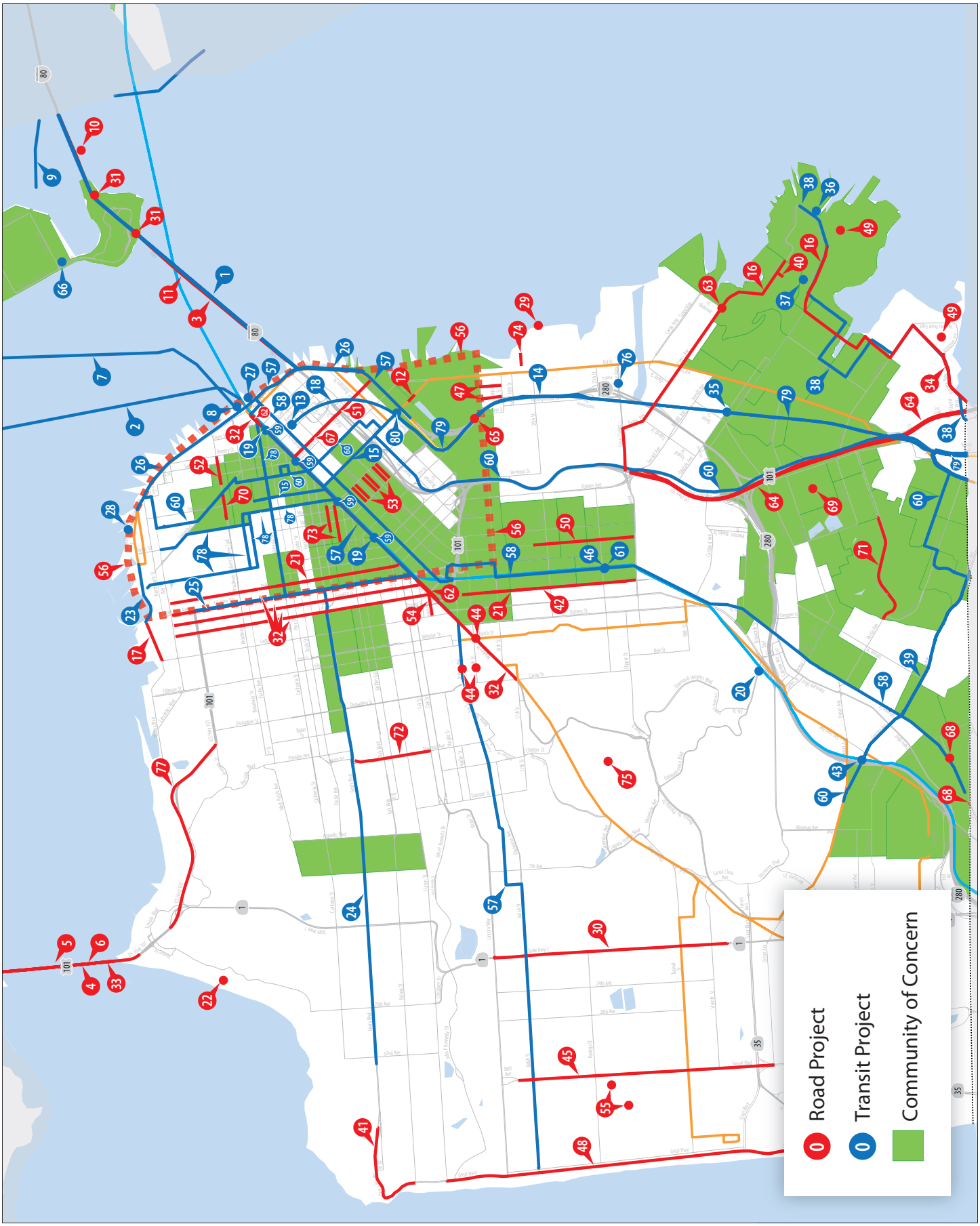
Napa County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



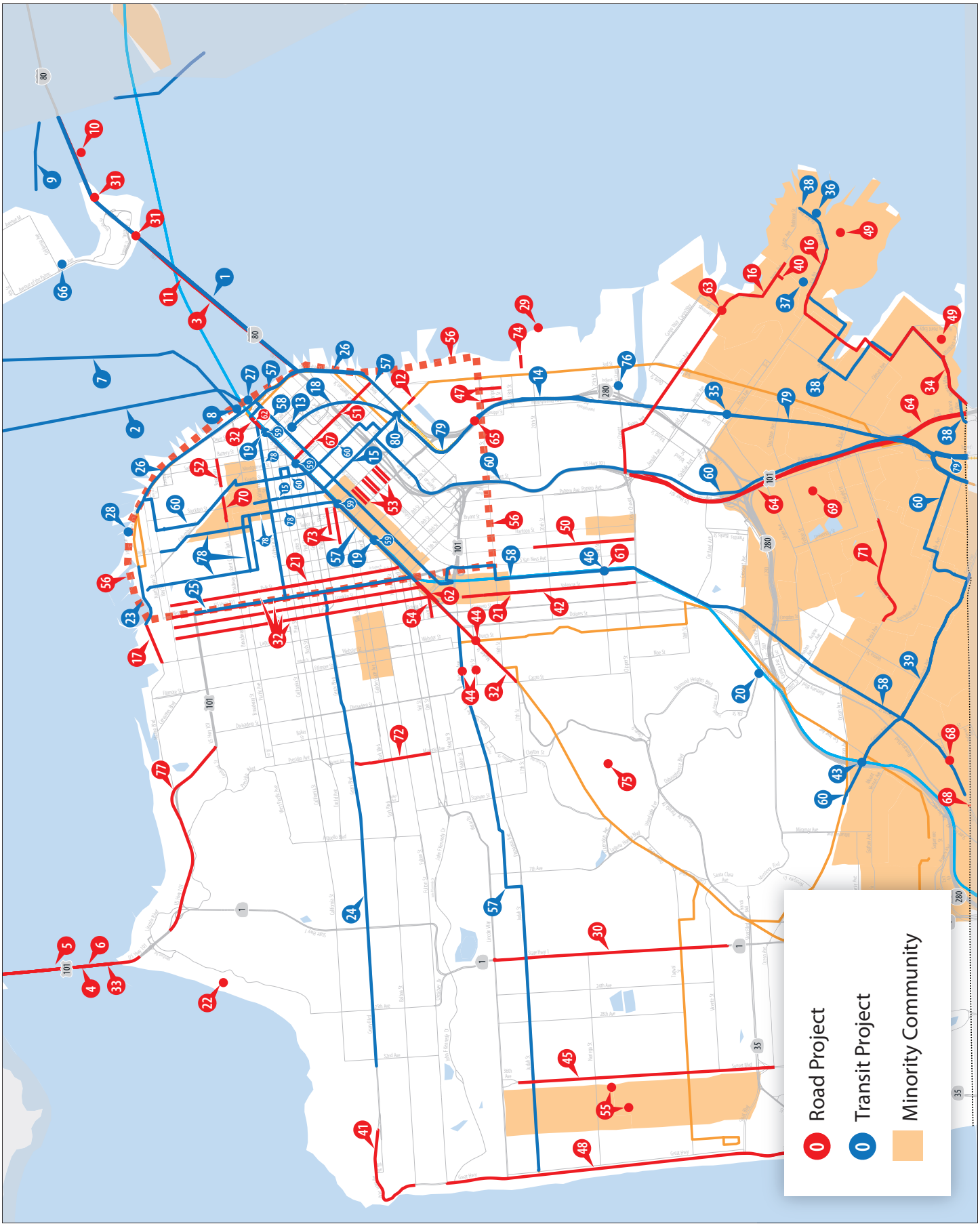
San Francisco County TIP Projects

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



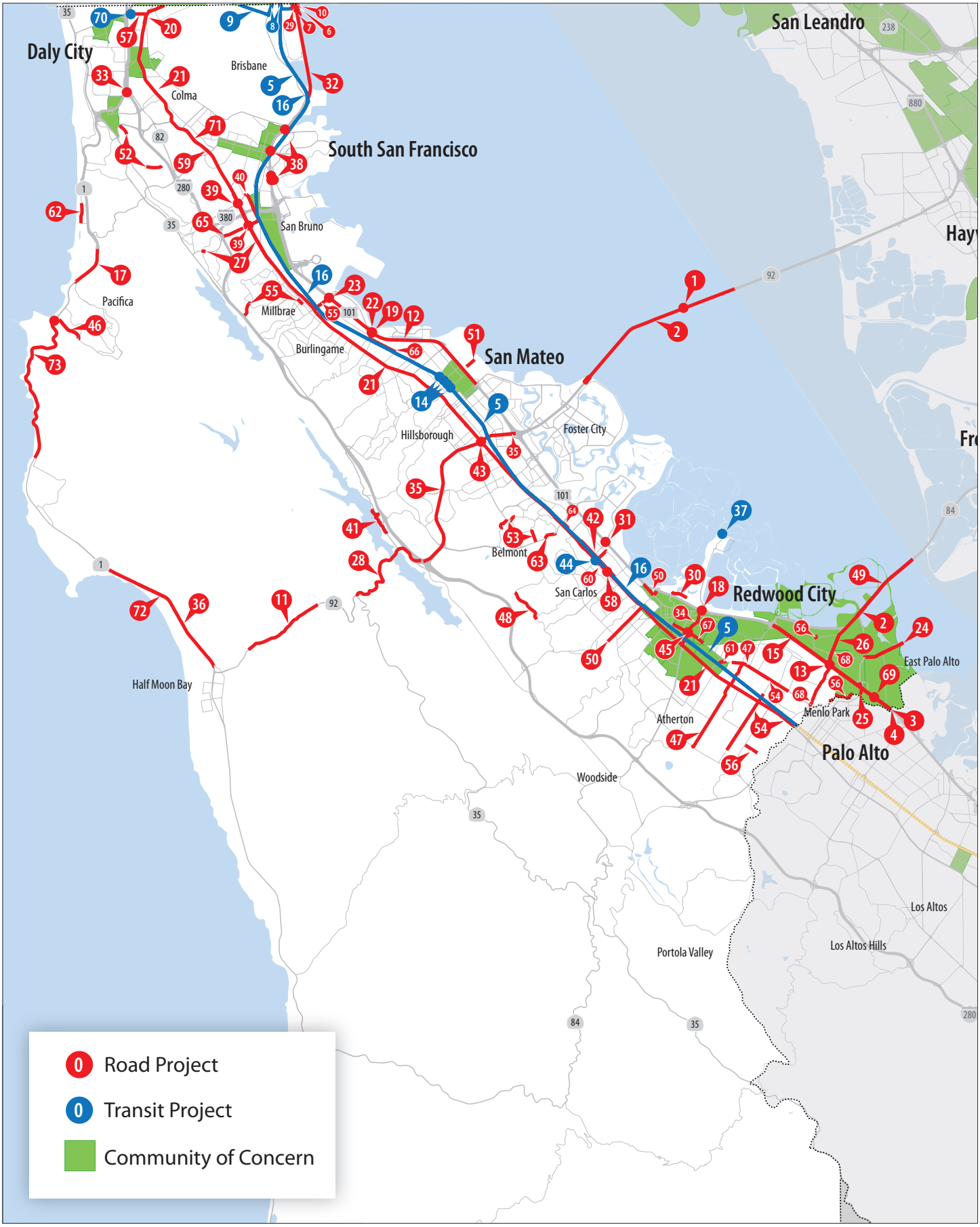
San Francisco County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



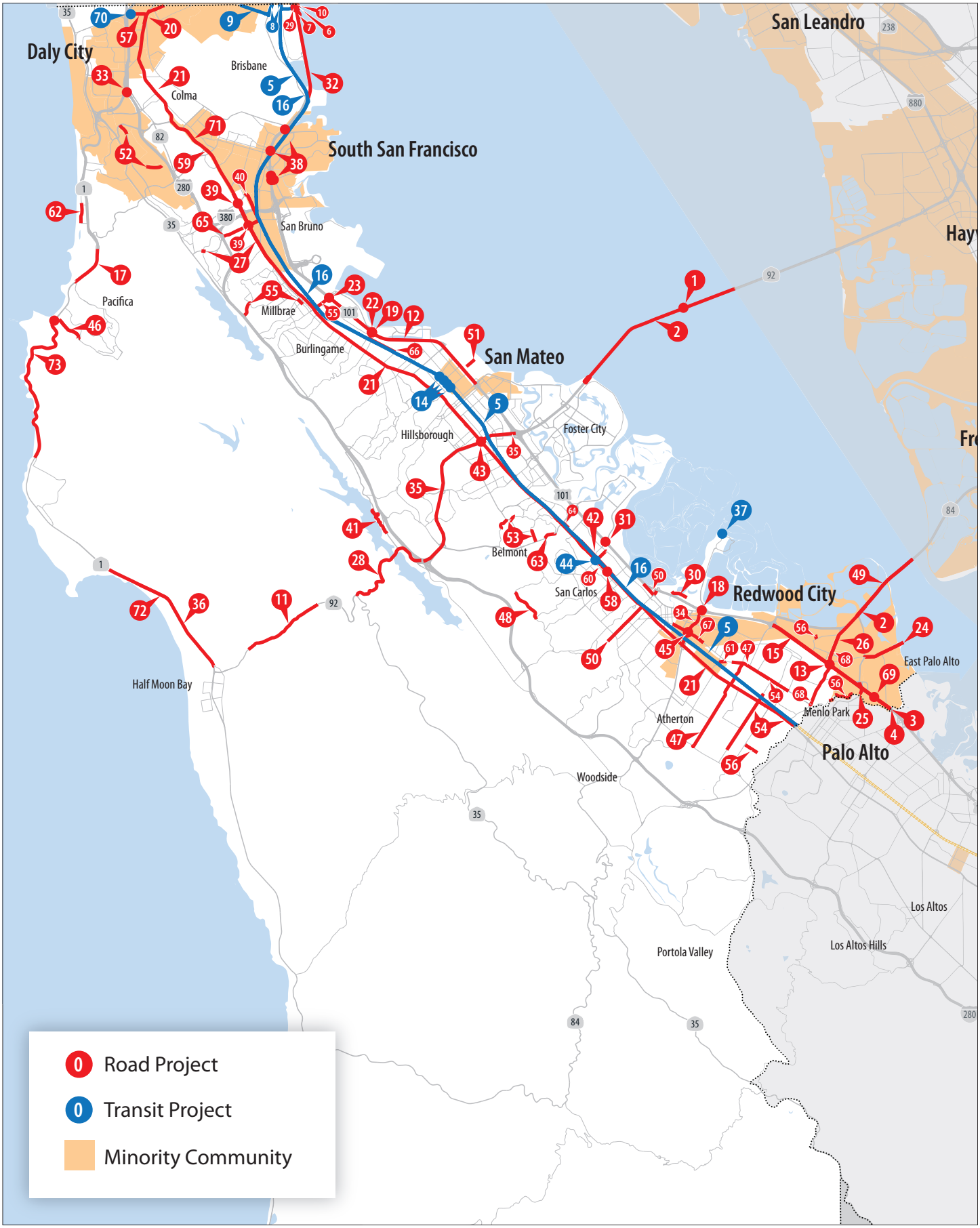
San Mateo County TIP Projects

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-Various 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



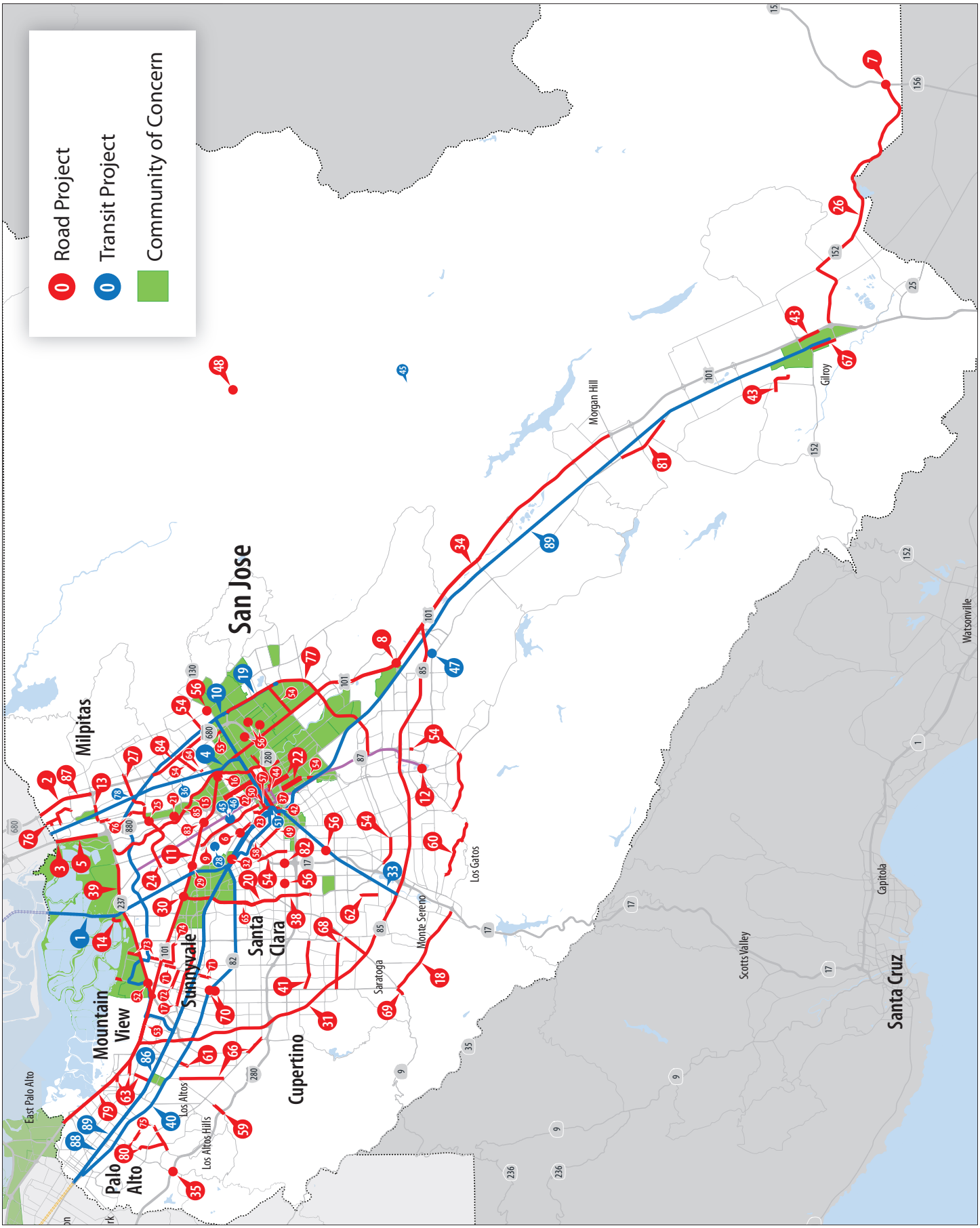
San Mateo County: Overlay of Draft 2015 TIP Mapped Projects over Census Tracts with Above Average Minority Population



Santa Clara County TIP Projects

1 ACE Track 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 Eigleberry 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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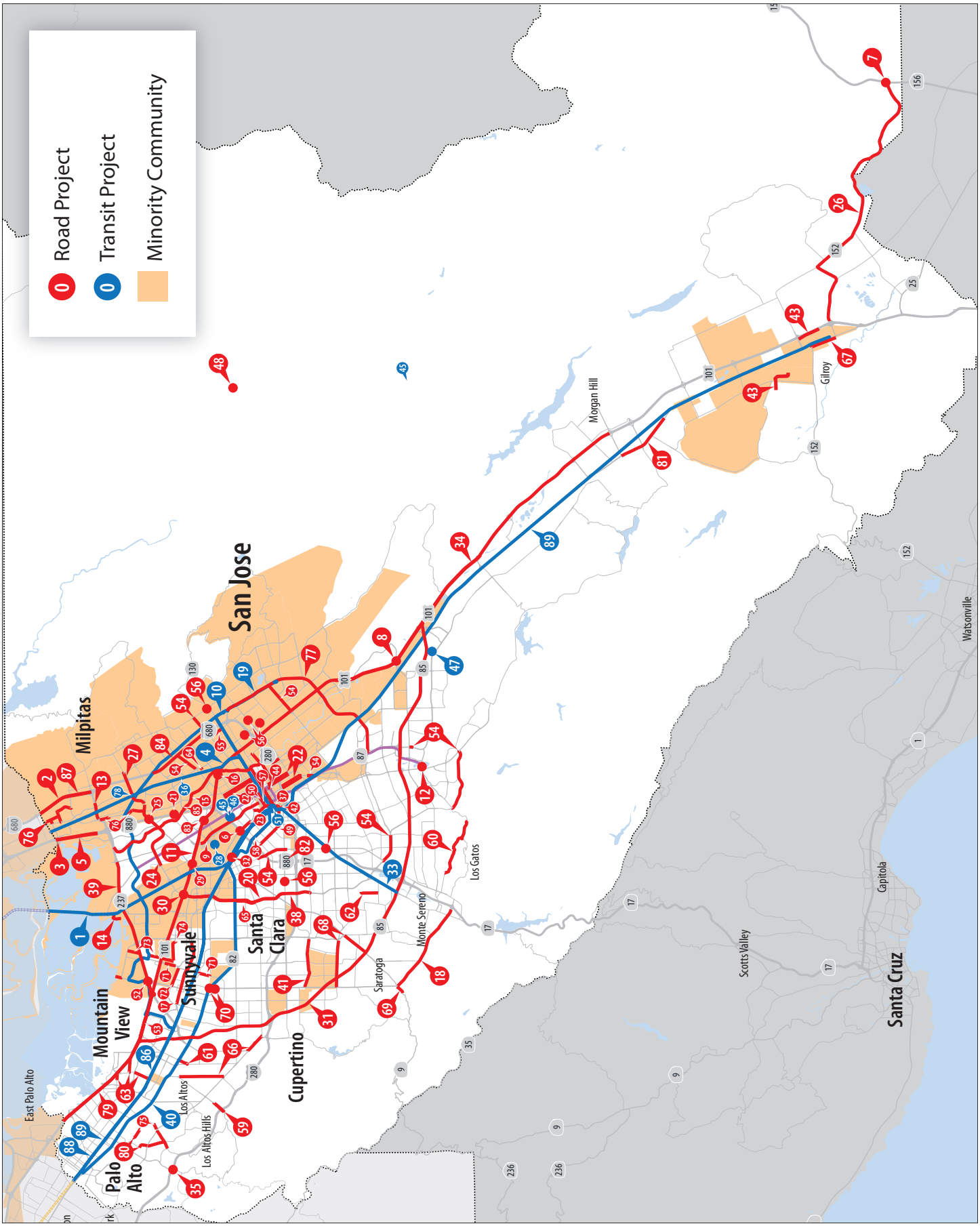
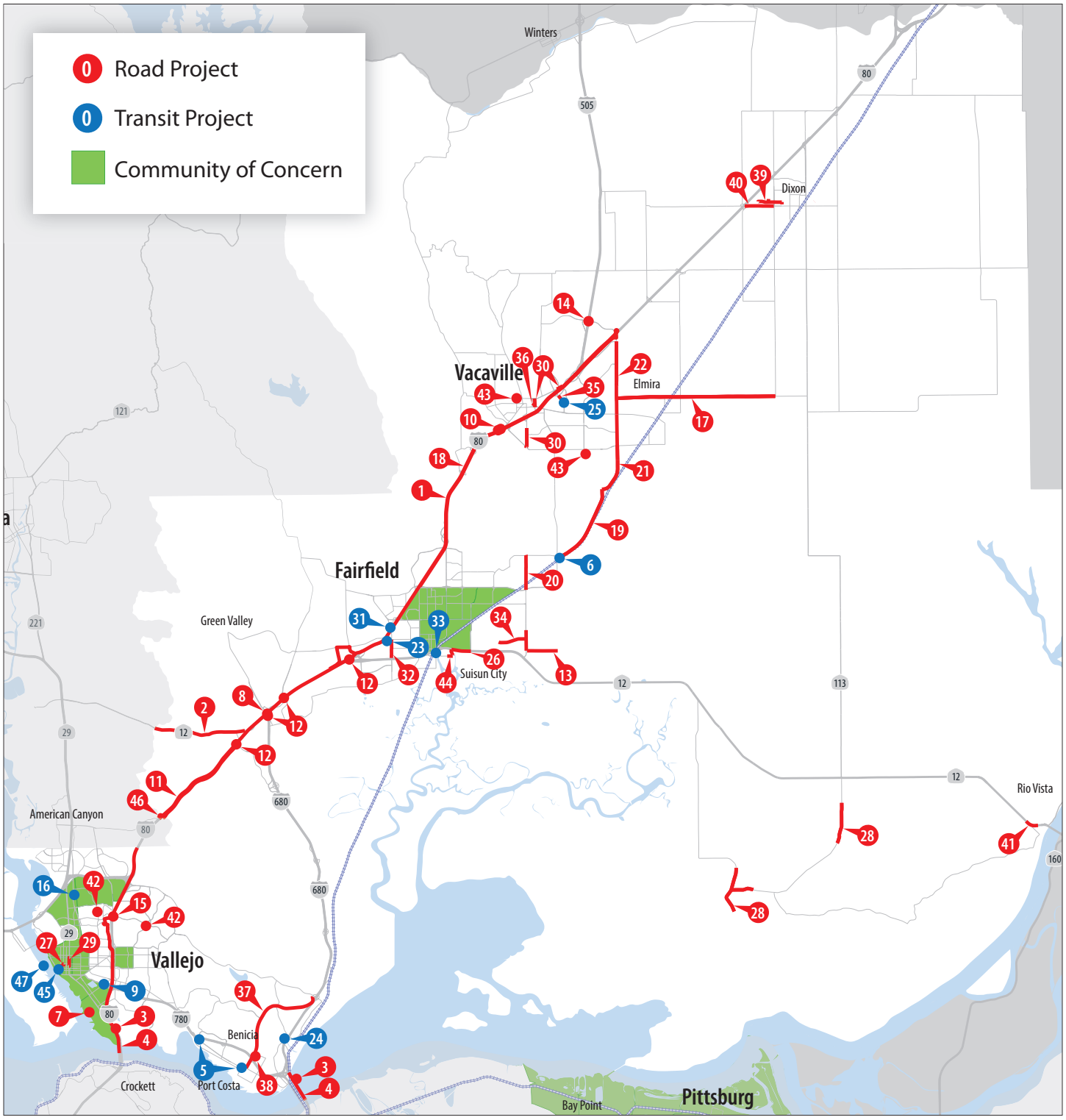


Solano County TIP Projects

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



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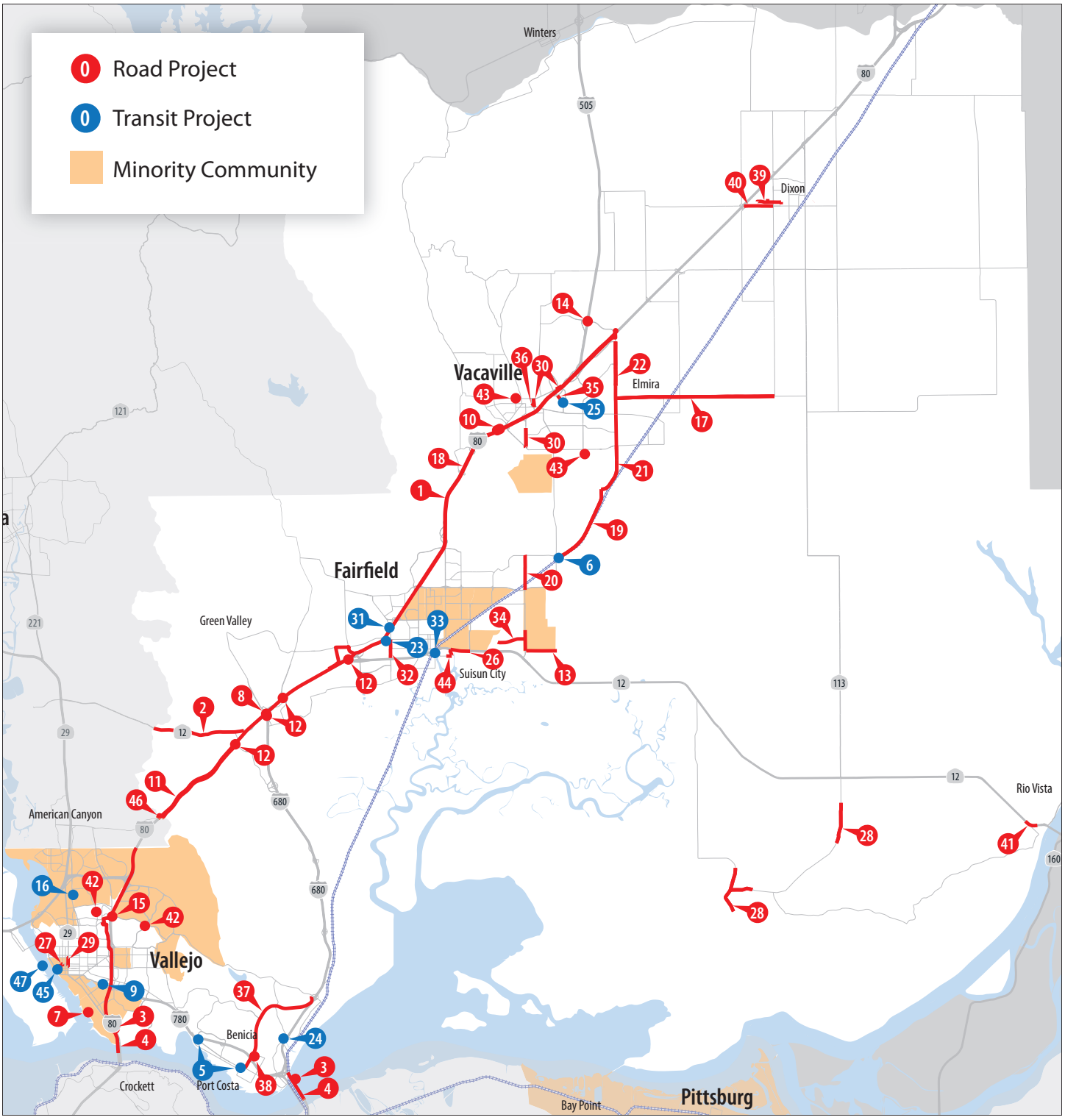
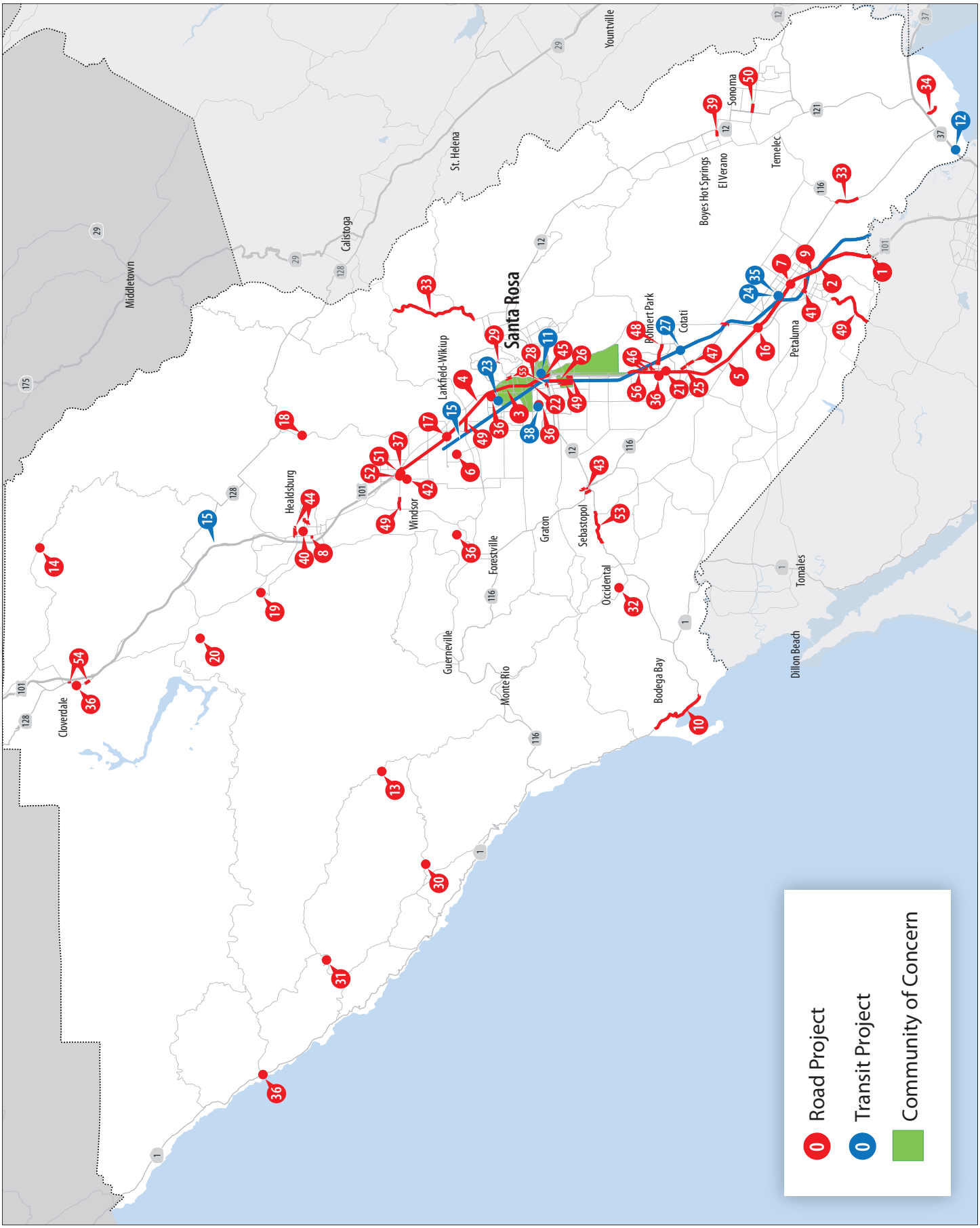


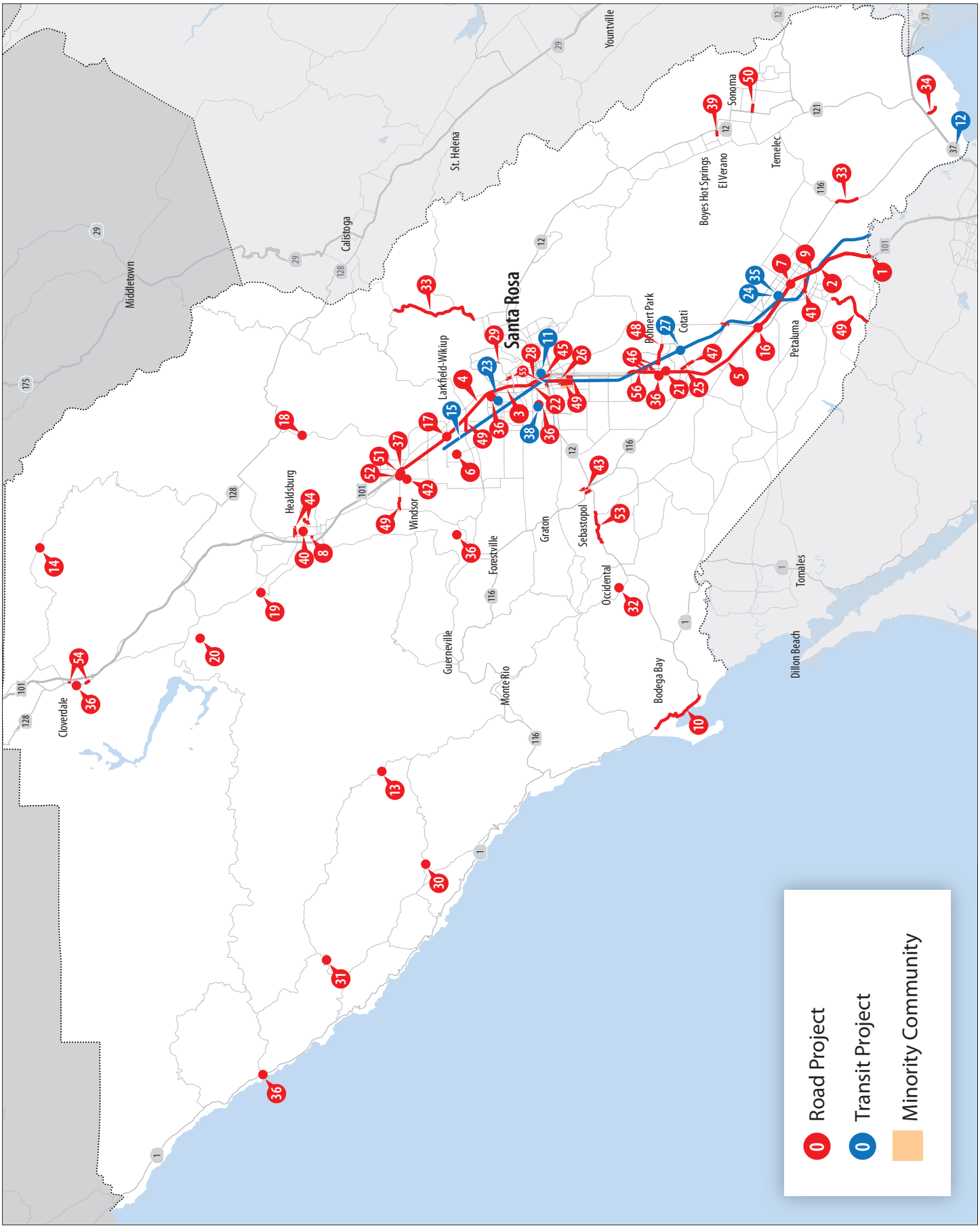
Sonoma County TIP Projects

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



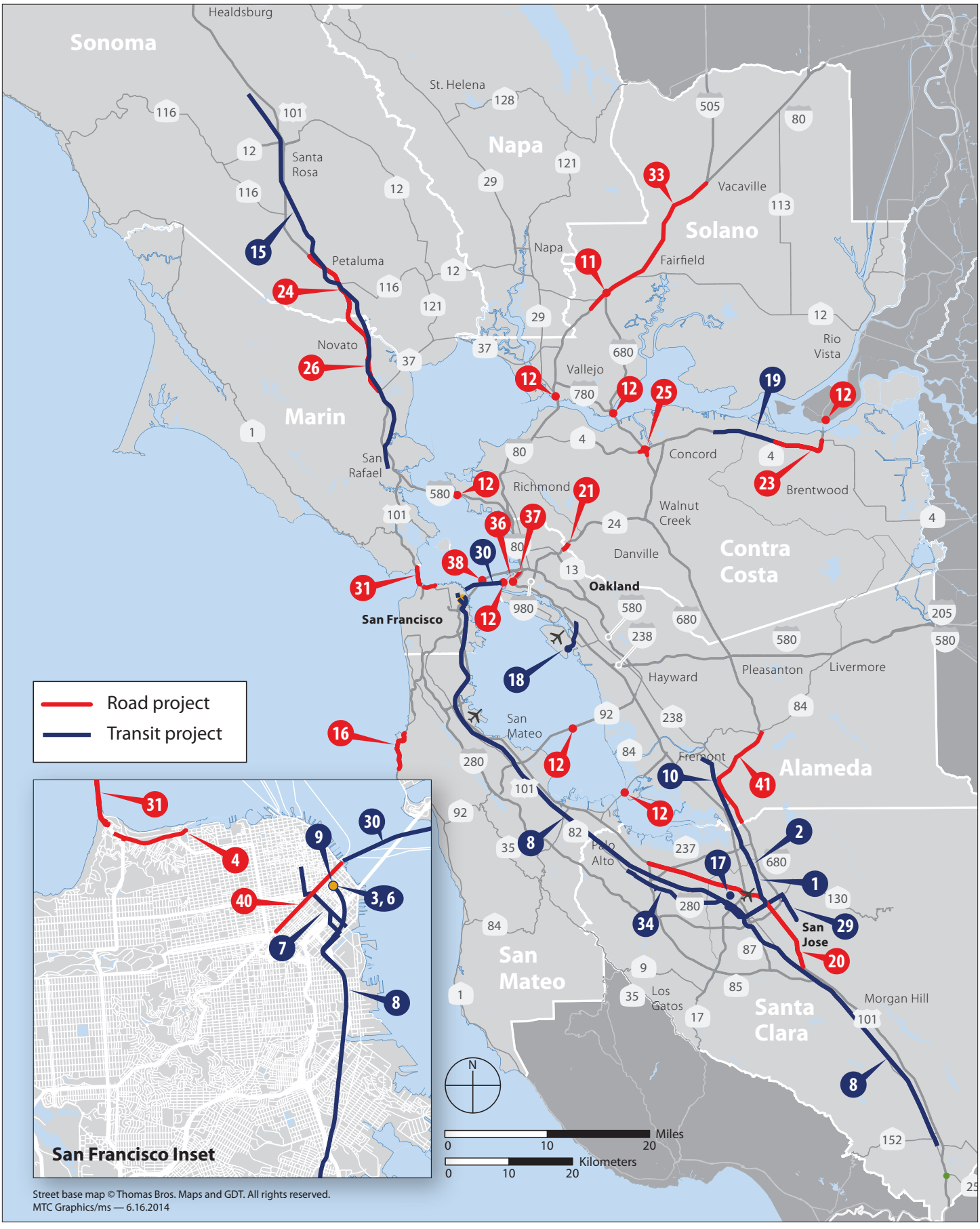
Projects in the 2015 TIP with Costs Greater than $200 Million

RED Road Project
BLUE Transit Project

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

** Project not mapped

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



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