

Appendix A. Detailed Methodology

This appendix summarizes the methodology used by MTC and ABAG staff to create the equity analysis measures analyzed for the Draft Plan Bay Area Equity Analysis. The purpose of the equity analysis is to analyze the distribution of benefits and burdens of the draft Preferred Scenario between communities of concern and the remainder of the region using a set of five technical performance measures detailed in this appendix.

The methodology stems from more than a year's worth of work by MTC and ABAG staff, including extensive input from the Equity Working Group and other interested stakeholders, on both the identification of target populations (both low-income households and communities of concern) as well as equity performance measures to be analyzed for the Preferred Scenario and a base year for comparison. Staff is extremely grateful for the time and efforts put forth by Equity Working Group members to improve the equity analysis.

Results for the measures described here are presented in the Draft Equity Analysis Report for Plan Bay Area in Chapter 4, Analysis Results.

TARGET POPULATIONS

Conducting an equity analysis requires dividing the regional population into different groups on some demographic or socioeconomic basis, so that comparisons between different groups can be made across the same set of measures (performance measures analyzed are described below under the heading **Performance Measures**).

Income-Based Analysis: 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 2000 dollars (approximately \$38,000 in 2010 dollars); non-low-income households as a basis for comparison are defined as having incomes of \$30,000 or more per year in 2000 dollars.

Geographic-Based Analysis: 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 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 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, and a recommendation to consider senior and disabled populations in addition to low-income and minority, staff proposed a revised 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 the various target populations while minimizing inclusion of non-target population members. Concentration thresholds generally fall between the regional average and one standard deviation above the mean. The list of factors, reviewed by the Equity Working Group and approved by MTC's Planning Committee in October 2011, are summarized in Table A-1.

Communities of concern are defined as **those tracts having concentrations 4 or more factors listed below, or that have concentrations of both low-income and minority populations.**

Table A-1. Target Populations and Thresholds Used in Overlapping-Factor Analysis.

Disadvantage Factor	% of Regional Population	Concentration Threshold
1. Minority Population	54%	70%
2. Low Income (<200% of Poverty) Population	23%	30%
3. Limited English Proficiency Population	9%	20%
4. Zero-Vehicle Households	9%	10%
5. Seniors Aged 75 and Over	6%	10%
6. Population with a Disability	18%	25%
7. Single-Parent Families	14%	20%
8. Rent-Burdened Households	10%	15%

Source: 2005–09 American Community Survey and 2000 Census (#6).

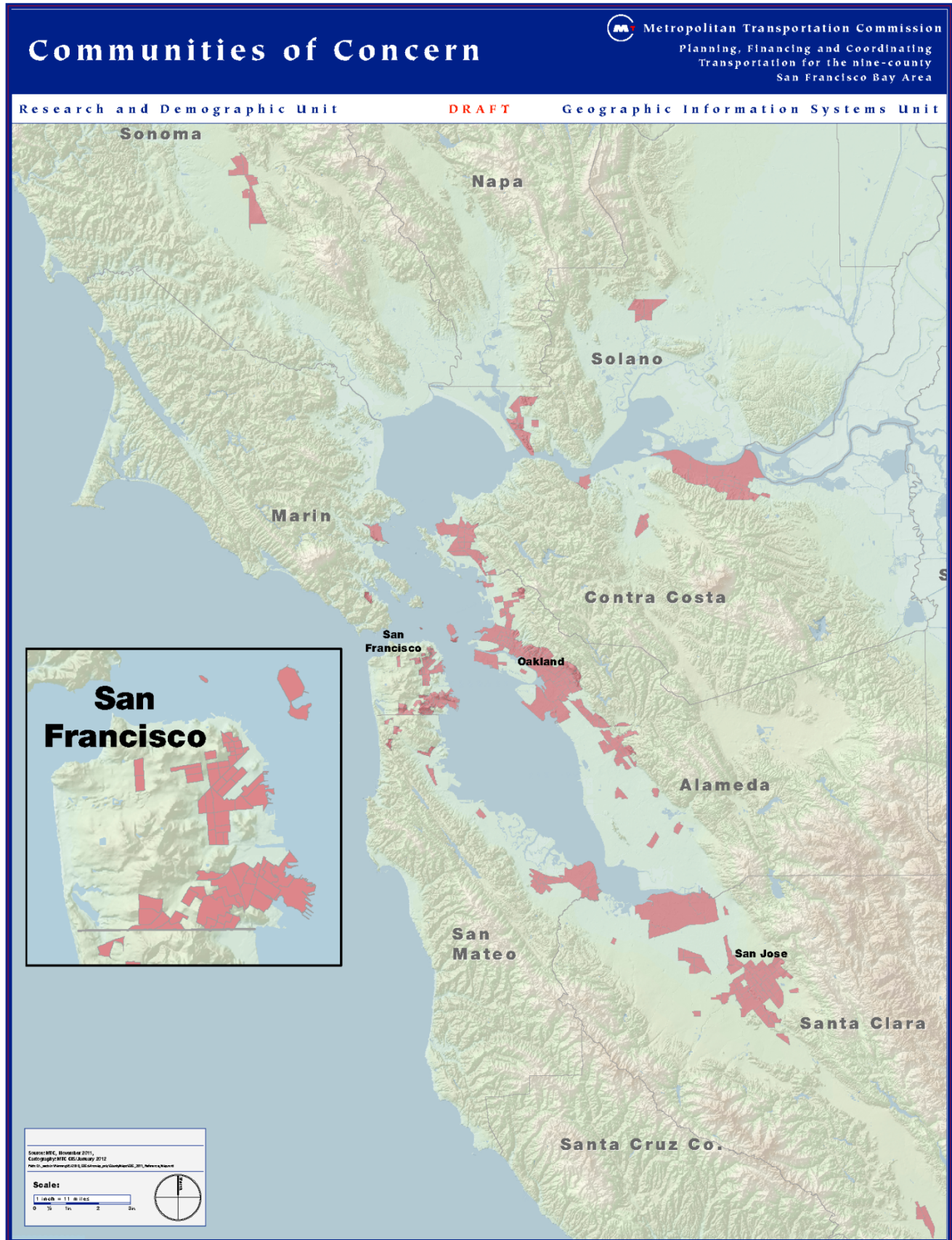
A total of 305 out of 1,405 tracts were identified as communities of concern. These locations, shown in , were then corresponded to 323 out of the region’s 1,454 travel analysis zones for the purpose of extracting and tabulating travel model output on a geographic basis in order to summarize results for communities of concern. Most TAZs in the region correspond to census tract boundaries, except for some locations in the region’s densest areas where more than one TAZ may “nest” within a single census tract.

An interactive map showing locations of communities of concern with detailed data as of the 2005-09 American Community Survey timeframe can be found at <http://geocommons.com/maps/118675>.

An interactive map showing the varying degrees of overlap among the 8 different population concentrations can be found at: <http://geocommons.com/maps/121158>.

Descriptions of the potential disadvantage factors contributing to the community-of-concern definition are provided below. Generally speaking, to define “concentrations” of various populations, thresholds are established at a value between the regional average (mean) share of a tract’s total population belonging to a given group, and one standard deviation above the mean, and reflect differences between how different populations are distributed spatially throughout the region. Some populations, such as zero-vehicle households, are highly concentrated in a relatively small number of tracts; other populations, such as seniors over 75+, are much more evenly spread out throughout the region.

Figure A-1. Communities of Concern



Minority Community

A **minority community** is defined as having 70% or more residents who are members of any of the following groups defined by the Census Bureau: Black or African-American, Asian, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, some other race, two or more races, or Hispanic/Latino of any race.

Low-Income Community

A **low income community** is defined as having 30% or more residents who are identified by the Census Bureau as being 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; the Census Bureau does not adjust the poverty level for different parts of the continental U.S. with different costs of living to factor into the varying affordability of basic necessities.

The Census Bureau establishes poverty status based on a combination of both household size and income. As of 2010, the 200% threshold represents a household income of roughly \$22,000 a year for a single person living alone, and \$44,000 a year for a family of four.¹ The definition of a **low-income community** based on the Census Bureau's characterization of populations in relation to poverty thresholds is distinct from the definition of a **low-income household** described under "income-based analysis" above.

Limited English Proficiency Community

A **Limited English Proficiency community** is defined as a community where 20% or more of residents speak English "not well" or "not at all" according to the Census Bureau.

Zero-Vehicle Households

A concentration of **zero-vehicle households** is defined as a community where 10% or more of households do not have access to at least one vehicle according to the Census Bureau.

Seniors 75+

A concentration of **seniors** is defined as a community where 10% or more of residents are age 75 and over according to the Census Bureau. Although area-specific data on driving habits, mobility, and travel independence by specific ages is not available, age 75 was chosen to approximate a point at which seniors' mobility and independence may soon begin or have already begun to diminish relative to that of younger adults.

¹ For a complete listing of poverty guidelines used by the Census Bureau, see <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>.

Persons with Disabilities

A concentration of **persons with disabilities** is defined as a community where 25% or more of persons over the age of 5 has one or more disabilities according to the Census Bureau. Because the Census Bureau redefined how questions regarding disability are asked in 2008, data for this definition is from the 2000 Census, the most recent year that disability data is available at the tract level.

Single-Parent Families

A concentration of **single-parent-family households** is defined as a community where 20% or more of family households are headed by a single parent with children present. Inclusion of this group is intended to capture households with unique economic vulnerability, as well as distinct travel needs and patterns from other household types.

Overburdened Renters

A concentration of **overburdened renters** is defined as a community where 15% or more of occupied housing units (including both renters and owners) are occupied by renters paying more than 50% of their income in rent. This definition is also incorporated into the Displacement Risk equity measure described in the following section on performance measures.

PERFORMANCE MEASURES

This section describes the methodology used to produce results for each of the performance measures across the different scenarios.

Housing and Transportation (H+T) Affordability

Housing and Transportation Affordability is expressed as the share of average household income spent on housing and transportation costs. Results for this measure are produced/approximated for low-income households (less than \$30,000 per year in 2000 dollars) vs. non-low-income households (incomes greater than \$30,000 per year in 2000 dollars).

The Affordability metric is expressed as a percentage in terms of

$$H + T \% = \frac{\text{Average household housing costs} + \text{Average household transportation costs}}{\text{Average household income}}$$

Generating these estimates relies on a combination of observed, estimated, and forecast values for each of four income levels are shown in Table A-2:

Table A-2. Sources for H+T Estimates/Forecasts.

Variable	Base Year Data Source	Forecast Year Data Source
Avg. Housing Cost by Income Level	American Community Survey 2005-09	ABAG Forecasts
Avg. Transportation Cost by Income Level	MTC Travel Model	MTC Travel Model
Avg. Household Income by Income Level	American Community Survey 2005-09	ABAG Forecasts

Base Year Housing and Income Data

Base Year housing and income data are developed based on the Census Bureau's 2005-09 American Community Survey data on share of income spent on housing. The data for monthly housing costs as a percentage of household income are developed from a distribution of "Selected Monthly Owner Costs as a Percentage of Household Income" for owner-occupied and "Gross Rent as a Percentage of Household Income" for renter-occupied units, which includes any utilities included in rent. The owner-occupied categories are further separated into those with a mortgage and those without a mortgage.

"Household income" reported by the Census Bureau includes both earned income as well as cash benefits received, both public and private, by all household members, but **does not include** certain other kinds of income, transfers, and non-cash public benefits, including most notably for the purposes of this analysis, in-kind public housing subsidies. All forms of income included and excluded from Census Bureau data are summarized in Table A-3.²

Table A-3. Items Included in and Excluded from Household Incomes Reported by the Census Bureau.

Included as income	Not included as income
<ul style="list-style-type: none"> • wage or salary income; • net self-employment income; • interest, dividends, or net rental or royalty income or income from estates and trusts; • Social Security or railroad retirement income; • Supplemental Security Income (SSI); • public assistance or welfare payments; • retirement, survivor, or disability pensions; and all other income. 	<ul style="list-style-type: none"> • capital gains, money received from the sale of property; • the value of income "in kind" from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; • withdrawal of bank deposits; money borrowed; • tax refunds; exchange of money between relatives living in the same household; • gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts.

² For more information on housing cost and income data in the American Community Survey, see http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2009_ACSSubjectDefinitions.pdf.

Adjustment for Subsidized Housing

In order to reflect housing affordability in terms of existing housing subsidies not reported to the Census Bureau as either income or housing costs in the analysis, the share of income spent on housing was adjusted to account for the provision of subsidized housing.

According to regional data obtained by ABAG staff, there were 118,229 HUD-funded subsidized units in the region, and an additional 19,491 Section 8 units, for a total of 137,720 subsidized units. Housing costs for these units were assigned to low income households with costs assumed to be fixed at 30% of household income. The regional average income spent on housing for low-income households of 50% reported by the ACS data was then applied to the remaining households assumed to be unsubsidized, and an adjusted total calculated by weighting by number of households. For the forecast year, the same approach was applied assuming the same share of low-income housing would remain subsidized at 19% of housing units, as shown in Table A-4. This adjustment resulted in a drop of roughly 4 percentage points in the effective share of income spent on housing by low-income households as reported in the ACS, from 50% to 46% in the base year, and from 49% to 45% in the forecast year.

Table A-4. Low-Income Subsidized Housing Adjustment for Base and Forecast Years

	Base Year		Draft Preferred Scenario	
	# Households	% of Income Spent on Housing	# Households	% of Income Spent on Housing
Subsidized (19%)	137,720	30%	179,299	30%
Unsubsidized (81%)	581,040	50%	756,461	49%
Low Income Total (100%)	718,760	46%	935,760	45%

Source: MTC/ABAG estimates

Forecasted Incomes

The analysis translated industry sector-level employment forecasts by county into estimated growth in households in four income groups: very low (less than 50% of median county household incomes), low income (50-80%), moderate income (80% to 120%), and above moderate income (greater than 120%). The model linked ABAG's sector-level employment forecasts with occupations and median wages for those occupations. From median wages, household incomes were derived (Table A-5).³

³ For more information, see Chapple, Karen and Jacob Wegmann, *Evaluating the Effects of Projected Job Growth on Housing Demand*, 2012.

www.onebayarea.org/pdf/KC_Effects_of_Projected_Job_Growth_on_Housing.pdf

Table A-5. Employment Growth by Income Category, 2040

Employment	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
Profess. Bus. Svc	24%	34%	14%	29%	365,673
Health, Education	16%	27%	22%	35%	244,482
Arts, Rec., Other	87%	5%	3%	4%	185,686
Construction	4%	55%	27%	14%	80,694
Government	6%	11%	25%	59%	72,595
Retail	78%	6%	11%	6%	52,396
Finance and Leasing	0%	37%	4%	60%	48,596
Information	-4%	5%	57%	42%	36,497
Transport., Utilities	48%	40%	4%	7%	28,898
Manufact., Whole	113%	-112%	-40%	139%	5,700
Agriculture	106%	-32%	32%	-5%	-1,300
Total	32%	25%	16%	28%	1,119,918

Source: ABAG forecasts

This resulted in a slight increase in the share of very low and low income groups while those in the moderate and above moderate categories decreased between 2010 and 2040 (Table A-6).

Table A-6. Total Households by Income Group, 2010 and 2040

	Very Low	Low	Moderate	Above Moderate	Total
2010	25%	15%	18%	42%	100%
2040	26%	17%	17%	39%	100%

Source: ABAG forecasts

Future Housing Costs

Across the Plan Bay Area EIR alternatives, Alternatives 2, 3 and 4, retain existing housing policies and subsidies and new ones are created that support the development of affordable housing in the region. As a result of the new policies and subsidies, the share of household income spent on housing for Alternatives 2, 3 and 4 remains the same as the base year after assuming that housing cost as a percentage of income follows recent trends⁴ and increases 1% per decade, or 3% overall, for low and moderately low income households, as shown in Table A-7.

⁴ For more, see John M. Quigley and Steven Raphael, 2004. "Is Housing Unaffordable? Why isn't it More Affordable?" *Journal of Economic Perspectives*, 18:1, pp. 191-214.
<http://urbanpolicy.berkeley.edu/pdf/QRJEP04PB.pdf>

Table A-7. Projected Housing Cost to Income Ratio: Base Year and 2040 EIR Alternatives

		1	2	3	4	5
Income Group	Base Year	No Project	Preferred (Draft Plan Bay Area)	Transit Priority Focus	Network of Communities	Environment, Equity & Jobs
Low	0.46	0.49	0.46	0.46	0.46	0.42
Moderately Low	0.37	0.40	0.37	0.37	0.37	0.37
Moderately High	0.27	0.27	0.27	0.27	0.27	0.27
High	0.20	0.20	0.20	0.20	0.20	0.20
All households	0.33	0.34	0.33	0.33	0.33	0.32

The estimated, average affordable unit cost for the region is \$350,000 per unit. A key feature of the Alternative 5 land use pattern is that it distributes a high proportion of new housing to “Communities of Opportunity.” These jurisdictions provide residents extensive services and highly ranked schools and also have high land costs. The per-unit development cost in these communities is estimated to be significantly higher than the estimated average per unit housing cost for the region. For Alternative 5, it is assumed that a higher subsidy level would provide for double the level of affordable housing produced for low income households, relative to Alternatives 2, 3 and 4.

Transportation Costs

A household’s estimated transportation costs include fixed costs related to owning automobiles (such as car payments and insurance), and variable costs (such as fuel, parking charges, and/or transit fares) related to how much and what kind of travel people choose to make day-to-day. Travel costs are forecast as out-of-pocket expenses incurred by travelers on a “typical day” for:

- Bridge tolls
- High Occupancy Toll (HOT) lane prices
- Transit fares
- Auto operating costs, which include assumptions about the price of fuel and fuel economy of vehicles based on modeled vehicle travel
- Parking costs

Out-of-pocket travel costs for a typical day of travel are annualized by multiplying these costs by 300. These annualized costs are then added to a household’s annual auto ownership costs (derived from Bureau of Labor Statistics’ Consumer Expenditure Survey

data by household income level, as shown in Table A-8), which vary by scenario as different land use and transportation inputs will result in differing levels of automobile ownership per household.

Table A-8. Automobile Ownership Costs per Auto by Income Level (2000 dollars)

Household Income Category	Annual Automobile Ownership Costs
Less than \$30,000	\$2,392
\$30,000 to \$60,000	\$2,999
\$60,000 to \$100,000	\$3,347
More than \$100,000	\$4,376

Source: 2009 Bureau of Labor Statistics Consumer Expenditure Survey

Potential for Displacement

Examining Potential for Displacement ties the proposed new development in the Preferred Scenario to the probability that current residents may be adversely impacted by changes in the housing market. Very low, low, and even moderate income renters may experience displacement if new investment in a neighborhood leads to increased desirability, higher demand for housing and rising rents.

This metric captures the number of households currently considered “over-burdened renters” in relationship to the proposed growth. In a given census tract, if more than 15% of the housing units are occupied by renters who pay more than 50% of their income for housing (as characterized in the community of concern definition described in Section .0 above), *and* the projected household growth in the travel analysis zone (TAZ) corresponding to that tract is more than 30% above current conditions, the over-burdened households in that area are considered as having potential for displacement.

Thresholds for over-burdened renters are set based on the regional mean and standard deviation from the regional average, identical to the threshold used to define Communities of Concern as described in the preceding section. The 30% threshold for growth highlights those areas whose percent growth exceeds the regional average for the Preferred Scenario. A higher-than-average percentage of growth is assumed to reflect future market interest in the area, which may yield upward pressure on housing costs. The number of households at risk for displacement includes over-burdened renters in all income categories, since in many cases moderate-income or even upper income households may move in response to rising rents.

The measure does not predict affordability levels of future housing, nor take into account policies to preserve existing levels of affordability. Bay Area jurisdictions with strong rent protections have still seen large migration shifts in low-income populations.⁵ It is also important to emphasize that while the measure focuses on potential displacement tied to significant increases in development, rising housing costs may also increase displacement pressure where growth has been constrained.

VMT and Emissions Density

The unit of measurement for this analysis is total VMT per day per sq. km of developed area

Where:

- **VMT** includes vehicular traffic on roadway facilities carrying 10,000 or more vehicles per day
- **Per day** means a “typical” weekday
- **Developed area** includes residential, commercial, or industrial land within 1,000 feet of the centerline of roadway facilities carrying 10,000 or more vehicles per day

Calculating this measure relies on identifying affected roadway links as those carrying 10,000 or more vehicles per day, and identifying areas of developed land proximate to these roadway links, to include areas of residential, commercial, or industrial land within 1,000 feet of the centerline of the selected roadway links. This calculation methodology is consistent with the Bay Area Air Quality Management District’s (BAAQMD) “Recommended Methods for Screening and Modeling Local Risks and Hazards” (May 2011, version 2.0) as part of their California Environmental Quality Act (CEQA) review guidance for proposed land use projects.

The vehicle-miles of travel (VMT) for each affected roadway link are forecasted using MTC’s travel model across different scenarios. This estimate provides the VMT Density measure according to the following formula:

$$\text{VMT} / \text{Developed land area} = \text{VMT Density}$$

Because different scenarios analyzed may capture slightly different subsets of roadway links meeting the threshold of carrying 10,000 or more vehicles per day, analysis across all scenarios (both the base year and the forecast year) will use the same land area captured,

⁵ Association of Bay Area Governments. Development without Displacement. December 2009. <http://www.bayareavision.org/initiatives/dwd-final.pdf>

defined as the union of all buffers within 1,000 feet of the centerline of any roadway link that carries 10,000 or more vehicles per day in any scenario.

To supplement the more generic measure of VMT density, complementary measures of specific types of emissions are also presented, including coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and particulates from diesel exhaust (diesel PM). Unlike smog-forming pollutants which have regional effects on air quality (and which are analyzed regionally in the Plan Bay Area Environmental Impact Report), each of these forms of emissions can have or are suspected of having localized effects on those exposed to roadways carrying high volumes of vehicles emitting them. Exposure to fine particulate matter and diesel particulates (a specific kind of pollutant known as a toxic air contaminant, or TAC) at sufficient concentrations is believed to increase people's risk of getting cancer or experiencing other serious adverse health effects.⁶

How much of what kinds of pollutants are emitted from on-road vehicles depends on a variety of factors in addition to how many vehicles are traveling on the region's major roadways (measured in vehicle-miles traveled, or VMT): how fast the vehicle is traveling (either in terms of free-flowing average speeds or based on the effects of congestion), whether the vehicle's engine is warmed up, the vehicle's fuel economy and weight class, and the type of engine fuel used. In addition, brake and tire wear are included as on-road mobile sources of PM₁₀ and PM_{2.5} in this analysis.

To approximate the potential of risk from exposure to PM₁₀, PM_{2.5}, and diesel particulates, from on-road mobile sources, this analysis uses a localized emissions inventory as a proxy for exposure risk.⁷ MTC uses a California-specific transportation emission-factor analysis tool, EMFAC2011, to model these emissions based on estimated VMT and vehicle speeds in each planning alternative. Vehicle travel and associated emissions are assigned either to communities of concern or the remainder of the region, depending on where the travel takes place on the region's network of freeways, expressways, and major arterials.

⁶ For more information specifically on mobile-source air toxics, see the U.S. Environmental Protection Agency's web page on Mobile Source Air Toxics at <http://www.epa.gov/otaq/toxics.htm>.

⁷ Typically, exposure risk is estimated from a variety of factors including total emissions inventory (on-road mobile, other mobile, and stationary sources), distance from source, prevailing wind direction, and other socioeconomic and demographic risk factors. The Bay Area Air Quality Management District, through its Community Air Risk Evaluation (CARE) Program, evaluates localized exposure risks to air toxics based on air quality models that more accurately predict the location and extent of concentrations, but these models do not produce estimates for the Plan Bay Area forecast year of 2040. For more information on the CARE Program, see <http://www.baaqmd.gov/CARE/index.htm>.

Commute Time

This measure provides average travel time per trip for commute trips by all modes, based on the location of a worker's residence and place of work.

Commute travel time is analyzed separately because travel time between home and work generally provides an indication of the proximity of jobs and housing for different socioeconomic groups.

Factors that go into estimating travel time are similar for both commute trips as well as non-mandatory tours (which are described in the following section). Across all kinds of trips, decisions about how, where, and when to travel are complex; MTC's travel model attempts to represent some of this complex behavior by operating on a synthetic population that includes representative households and persons for each actual household and person in the nine-county Bay Area – both in the base year and in forecast years. Travelers move through a space that is segmented into “travel analysis zones.”⁸ A series of travel-related choices are simulated for each household and person within each household; these choices are simulated in the following sequence:

- Usual workplace and school location – Each worker, student, and working student in the synthetic population selects a travel analysis zone in which to work or attend school (or one zone to work and another to attend school);
- Household automobile ownership – Each household, given the household location and demographics as well as each members' work and/or school locations, decides how many vehicles to own;
- Daily activity pattern – Each household determines, together, the daily activity pattern of each household member, the choices being mandatory (go to work or school), non-mandatory (leave the house, but not for work or school), or stay at home.
- Work/school tour frequency and scheduling – Each worker, student, and working student decides how many round-trips they will make to work and/or school, and then schedules a time to leave home for work and/or school as well as a time to return home;
- Joint non-mandatory tour frequency, party size, participation, destination, and scheduling – Each household determines the number and type (e.g. to eat, to visit friends, etc.) of “joint” (i.e. two or more members of the same household traveling together) non-mandatory (i.e. not work or school) round trips in which to engage,

⁸ An interactive map of MTC's travel analysis zones is available here:

<http://geocommons.com/maps/58264>

then determines which members of the household will participate, where and at what time the tour (i.e. the time leaving home and the time returning home) will occur;

- Non-mandatory tour frequency, destination, and scheduling – Each person determines the number and type of non-mandatory (e.g. to eat, to visit friends, to shop, etc.) round trips to engage in during the model day, where to engage in them, and at what time to leave and return home;
- Tour travel mode – The tour-level travel mode choice (e.g. drive alone, walk, take transit, etc.) decision is simulated separately for each tour and represents the best⁹ mode of travel for the round trip (a “tour” is a round trip from either home or the workplace);
- Stop frequency and location – Each traveler or group of travelers decide whether to make a stop on an outbound (from home) or inbound (to home) leg of a travel tour, and if a stop is to be made, where the stop is made, all given the round trip tour mode;
- Trip travel mode – A trip is a portion of a tour, either from the tour origin to a stop, a stop to another stop, or a stop to a tour destination, and a separate mode choice decision is made for each trip, doing so with awareness of the prior tour mode choice decision;
- Assignment – Vehicle trips for each synthetic traveler are aggregated to build time-of-day-specific matrices (i.e. tables of trips segmented by origin and destination) that are assigned via the standard static user-equilibrium procedures to the highway network (i.e. each vehicle is assigned to his or her shortest cost – both monetary and non-monetary – path between the origin and destination); transit trips are assigned to time-of-day-specific transit networks.

Non-Commute Travel Time

This measure provides average travel time per trip for non-mandatory tours by all modes. Non-commute trips are analyzed because:

- Commute travel to work is analyzed separately as a measure of jobs-housing fit.
- Low-income travelers are more likely than higher-income travelers to be non-workers, students, or retirees, who have distinct trip-making patterns.¹⁰

⁹ The choice of travel mode, as well as most other choices represented in the model, is simulated within a random utility theory framework – additional information available here:

http://en.wikipedia.org/wiki/Choice_modelling.

¹⁰ Source: Bay Area Travel Survey 2000, as cited in MTC’s Snapshot Analysis Development Report, June 2010. <http://www.mtc.ca.gov/planning/snapshot/Snapshot%20Development%20Report-0609.pdf>. Note “Low Income” is defined as travelers living in households with incomes below \$35,000 per year.

- Non-commute trips outnumber commute trips for low-income travelers¹¹ (though commute trips are generally longer than non-commute trips in terms of time and distance). Non-commute trips are also more likely to occur at off-peak travel times.
- Non-commute trips capture a wider variety of travel purposes including shopping, accessing health care and social services, and social and recreational trips, and as such provide a better indication of whether residents live in “complete communities” where a wide variety of daily needs are located nearby.

Results of this measure in average number of minutes per trip are produced for

- Communities of concern and the remainder of the region (all residents of each)
- Low-income travelers vs. non-low-income travelers, regardless of community of residence.

“Non-commute” travel defined for the purposes of this analysis includes travel not associated with a tour involving work or school. For example, going to the grocery store and back home would be included in this definition. These “non-mandatory” tour purposes include such activities as shopping, recreational trips, visiting, escorting others, eating out, and “other” trips.

This measure provides average travel time per trip for commute trips by all modes, based on

Results of this measure in average number of minutes per trip are produced for:

- Communities of concern and the remainder of the region (all residents of each)
- Low-income travelers vs. non-low-income travelers, regardless of community of residence.

Details regarding how travel decisions are made for all kinds of trips, including commute trips, are described above under “**Commute Time.**”

¹¹ See April 6, 2011 staff memorandum to Equity Working Group “Additional Initial Vision Scenario Data Results,” Figures 4 and 6. http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1649/April_13_Equity_Working_Group_packet.pdf

Appendix B. Demographic and Socioeconomic Data by County

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Table B-1. Detailed Demographic and Socioeconomic Profile of Communities of Concern and Remainder of Counties: 2005-09

CoC ID	County	Name	Total Population	Total Households	Minority Population	Low-Income Population	Limited-English-Proficient Population	Zero-Vehicle Households	Population 75+	Population with a Disability	Single-Parent Families	HHs Paying >50% of Income on Housing	Sum of Factors
		Regional Thresholds	--	--	70%	30%	20%	10%	10%	25%	15%	15%	4
1	SF	Dntwn / Chinatown / North Beach / Treasure Is.	27,333	12,749	76%	57%	42%	71%	13%	25%	10%	22%	7
2	SF	Tenderloin / Civic Center	24,255	14,746	68%	62%	21%	88%	7%	36%	15%	30%	5
3	SF	South of Market	17,095	8,389	60%	50%	17%	51%	9%	38%	12%	17%	4
4	SF	Western Addition / Inner Richmond	22,587	10,806	58%	36%	18%	43%	15%	26%	10%	19%	5
5	SF	Inner Mission	41,676	15,414	63%	37%	25%	43%	5%	26%	20%	14%	5
6	SF	Bayview / Hunters Point	59,402	16,184	92%	40%	23%	22%	7%	26%	24%	14%	6
7	SF	Outer Mission / Crocker-Amazon / Ocean View	46,468	11,217	84%	29%	25%	10%	9%	25%	13%	8%	2
--	SF	Remainder of San Francisco County	558,455	234,680	47%	20%	10%	23%	7%	17%	10%	11%	1
8	SM	Daly City	18,029	6,592	85%	34%	15%	20%	6%	22%	15%	24%	5
9	SM	South San Francisco / San Bruno	14,442	4,376	85%	37%	21%	11%	4%	17%	21%	19%	6
10	SM	North Central San Mateo	7,321	2,212	88%	42%	32%	10%	4%	34%	21%	18%	7
11	SM	East Palo Alto / North Fair Oaks	81,099	23,773	82%	46%	23%	10%	4%	21%	28%	19%	5
--	SM	Remainder of San Mateo County	580,995	215,907	48%	14%	6%	5%	7%	15%	9%	7%	0
12	SC	Mountain View	5,095	1,966	77%	46%	25%	11%	2%	9%	13%	22%	5
13	SC	Alviso / Shoreline / Sunnyvale	2,295	747	83%	36%	24%	5%	10%	33%	13%	13%	5
14	SC	Santa Clara	11,675	4,114	75%	36%	21%	9%	5%	17%	20%	14%	4
15	SC	Central / East San Jose	260,843	72,789	88%	45%	26%	10%	4%	24%	23%	17%	5
16	SC	Gilroy	14,783	3,913	80%	49%	23%	8%	10%	22%	22%	15%	4
17	SC	Milpitas	1,950	730	79%	34%	17%	15%	14%	6%	2%	27%	5
--	SC	Remainder of Santa Clara County	1,432,737	501,165	56%	16%	8%	4%	5%	15%	11%	7%	0
18	Ala	Fremont / Newark	11,674	3,748	77%	29%	14%	10%	6%	19%	8%	14%	2
19	Ala	Hayward / Union City	71,622	21,192	84%	41%	19%	9%	4%	24%	27%	19%	4
20	Ala	San Leandro / Ashland / Castro Valley	51,615	18,153	75%	38%	15%	12%	5%	23%	30%	15%	5
21	Ala	Fruitvale / East Oakland	198,728	64,370	91%	51%	23%	17%	4%	25%	31%	22%	7
22	Ala	West / North Oakland	61,267	28,405	79%	53%	16%	33%	8%	28%	33%	23%	6
23	Ala	Alameda	7,539	2,786	71%	43%	12%	18%	4%	21%	32%	18%	5
24	Ala	Berkeley / Albany	29,870	11,319	55%	47%	4%	23%	4%	19%	24%	26%	4
--	Ala	Remainder of Alameda County	1,028,384	371,697	54%	16%	7%	6%	6%	16%	12%	8%	0
25	CC	El Cerrito	6,863	2,887	65%	35%	14%	14%	12%	19%	21%	19%	5
26	CC	Richmond	51,227	15,936	90%	48%	17%	14%	4%	24%	34%	17%	5
27	CC	San Pablo / North Richmond	32,193	9,391	91%	49%	22%	15%	6%	25%	25%	17%	6
28	CC	Martinez	1,413	384	48%	48%	4%	30%	2%	35%	22%	18%	5
29	CC	Concord	22,123	7,556	76%	51%	30%	17%	3%	25%	24%	23%	7
30	CC	Bay Point / Pittsburg / Antioch	67,660	20,897	80%	44%	17%	9%	4%	23%	26%	15%	3
--	CC	Remainder of Contra Costa County	830,488	305,711	41%	16%	4%	4%	6%	15%	12%	6%	0
31	Sol	Vallejo	27,424	10,963	71%	48%	10%	16%	7%	26%	31%	19%	6
32	Sol	Fairfield / Suisun City	36,591	11,885	74%	42%	13%	7%	4%	24%	32%	15%	4
--	Sol	Remainder of Solano County	342,446	114,058	53%	20%	5%	4%	5%	18%	15%	8%	0
--	Nap	Napa County	132,173	48,094	40%	25%	10%	5%	8%	19%	12%	7%	0
33	Son	Santa Rosa	33,371	12,376	54%	45%	17%	11%	5%	24%	25%	22%	4
--	Son	Remainder of Sonoma County	430,847	166,685	29%	24%	6%	5%	7%	17%	14%	9%	0
34	Mar	San Rafael Canal Area	10,367	3,060	87%	63%	40%	9%	1%	34%	24%	32%	6
35	Mar	Marin City	2,498	1,153	68%	34%	1%	11%	3%	31%	37%	20%	5
--	Mar	Remainder of Marin County	233,846	96,873	22%	14%	3%	5%	8%	14%	11%	8%	0
	Reg	All Communities of Concern	1,380,393	457,178	81%	45%	21%	21%	5%	24%	25%	19%	6
	Reg	Remainder of Region	5,570,371	2,054,870	48%	17%	7%	7%	6%	16%	12%	8%	0
	Reg	Bay Area Total	6,950,764	2,512,048	54%	23%	9%	9%	6%	18%	14%	10%	

Source: MTC analysis of American Community Survey 2005-09 5-Year Sample Tables B03002, C17002, B16004, B 25044, B01001, B11004, B25070, and B25003. Data on population with a disability is from Census 2000 SF3 Table P42.

Note: Values in boldface indicate the share of population/households exceeds the established regional threshold.

Note: Due to aggregation of tract-level data, some population percentages fall below the regional thresholds where individual tracts with slightly varying demographics have been aggregated into larger communities of concern. Each individual tract within each aggregated community of concern nevertheless meets the definition of having either 4 or more concentration factors or else having concentrations of both minority and low-income populations.

Table B-2. Bay Area Population by Race and Hispanic or Latino Origin by County: 2010

		Hispanic or Latino			Not Hispanic or Latino						
			American Indian/ Alaska Native alone	Asian alone	Black or African-American alone	Native Hawaiian or Pacific Islander alone	Some Other Race alone	Two or More Races	Minority Persons Subtotal	Non-Hispanic White alone	Total Population
County		All Persons									
Alameda	Population	339,889	4,189	390,524	184,126	11,931	4,191	60,862	995,712	514,559	1,510,271
	% of Total	22.5%	0.3%	25.9%	12.2%	0.8%	0.3%	4.0%	65.9%	34.1%	100.0%
Contra Costa	Population	255,560	2,984	148,881	93,604	4,382	3,122	39,569	548,102	500,923	1,049,025
	% of Total	24.4%	0.3%	14.2%	8.9%	0.4%	0.3%	3.8%	52.2%	47.8%	100.0%
Marin	Population	39,069	531	13,577	6,621	436	1,034	7,311	68,579	183,830	252,409
	% of Total	15.5%	0.2%	5.4%	2.6%	0.2%	0.4%	2.9%	27.2%	72.8%	100.0%
Napa	Population	44,010	544	8,986	2,440	313	221	3,003	59,517	76,967	136,484
	% of Total	32.2%	0.4%	6.6%	1.8%	0.2%	0.2%	2.2%	43.6%	56.4%	100.0%
San Francisco	Population	121,774	1,828	265,700	46,781	3,128	2,494	26,079	467,784	337,451	805,235
	% of Total	15.1%	0.2%	33.0%	5.8%	0.4%	0.3%	3.2%	58.1%	41.9%	100.0%
San Mateo	Population	182,502	1,125	175,934	18,763	9,884	2,709	23,925	414,842	303,609	718,451
	% of Total	25.4%	0.2%	24.5%	2.6%	1.4%	0.4%	3.3%	57.7%	42.3%	100.0%
Santa Clara	Population	479,210	4,042	565,466	42,331	6,252	3,877	53,555	1,154,733	626,909	1,781,642
	% of Total	26.9%	0.2%	31.7%	2.4%	0.4%	0.2%	3.0%	64.8%	35.2%	100.0%
Solano	Population	99,356	1,864	59,027	58,743	3,243	1,463	21,020	244,716	168,628	413,344
	% of Total	24.0%	0.5%	14.3%	14.2%	0.8%	0.4%	5.1%	59.2%	40.8%	100.0%
Sonoma	Population	120,430	3,584	17,777	6,769	1,434	913	12,944	163,851	320,027	483,878
	% of Total	24.9%	0.7%	3.7%	1.4%	0.3%	0.2%	2.7%	33.9%	66.1%	100.0%
Bay Area Total	Population	1,681,802	20,691	1,645,874	460,179	41,003	20,024	248,268	4,117,840	3,032,907	7,150,747
	% of Total	23.5%	0.3%	23.0%	6.4%	0.6%	0.3%	3.5%	57.6%	42.4%	100.0%

Source: 2010 Census SF1 Table P9.

Table B-3. Bay Area Population by Race and Hispanic or Latino Origin by Age by County: 2010

Hispanic or Latino				Not Hispanic or Latino																	
County	Age Group	All Persons		American Indian/ Alaska Native alone		Asian alone		Black/ African American alone		Native Hawaiian/ Pacific Islander alone		Some Other Race alone		Two or More Races		Minority Persons Subtotal		Non-Hispanic White alone		Total Population	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Alameda	Under 18	108,716	31.9%	848	0.2%	82,867	24.3%	40,932	12.0%	3,044	0.9%	1,315	0.4%	25,226	7.4%	262,948	77.2%	77,673	22.8%	340,621	100.0%
	18 to 64	213,611	21.3%	2,919	0.3%	266,230	26.6%	121,977	12.2%	8,132	0.8%	2,633	0.3%	32,789	3.3%	648,291	64.7%	353,613	35.3%	1,001,904	100.0%
	65 and Over	17,562	10.5%	422	0.3%	41,427	24.7%	21,217	12.6%	755	0.5%	243	0.1%	2,847	1.7%	84,473	50.4%	83,273	49.6%	167,746	100.0%
Contra Costa	Under 18	87,856	33.7%	595	0.2%	32,789	12.6%	24,660	9.5%	1,104	0.4%	1,068	0.4%	18,779	7.2%	166,851	64.0%	93,654	36.0%	260,505	100.0%
Costa	18 to 64	154,877	23.5%	2,081	0.3%	99,848	15.2%	59,778	9.1%	2,986	0.5%	1,905	0.3%	19,087	2.9%	340,562	51.8%	317,520	48.2%	658,082	100.0%
	65 and Over	12,827	9.8%	308	0.2%	16,244	12.5%	9,166	7.0%	292	0.2%	149	0.1%	1,703	1.3%	40,689	31.2%	89,749	68.8%	130,438	100.0%
Marin	Under 18	11,407	21.8%	86	0.2%	2,414	4.6%	1,083	2.1%	75	0.1%	277	0.5%	3,448	6.6%	18,790	36.0%	33,424	64.0%	52,214	100.0%
	18 to 64	26,018	16.5%	398	0.3%	9,469	6.0%	5,016	3.2%	320	0.2%	709	0.4%	3,483	2.2%	45,413	28.7%	112,590	71.3%	158,003	100.0%
	65 and Over	1,644	3.9%	47	0.1%	1,694	4.0%	522	1.2%	41	0.1%	48	0.1%	380	0.9%	4,376	10.4%	37,816	89.6%	42,192	100.0%
Napa	Under 18	15,307	48.6%	95	0.3%	1,992	6.3%	519	1.6%	72	0.2%	57	0.2%	1,241	3.9%	19,283	61.2%	12,203	38.8%	31,486	100.0%
	18 to 64	26,809	31.8%	372	0.4%	5,994	7.1%	1,697	2.0%	212	0.3%	143	0.2%	1,556	1.8%	36,783	43.6%	47,621	56.4%	84,404	100.0%
	65 and Over	1,894	9.2%	77	0.4%	1,000	4.9%	224	1.1%	29	0.1%	21	0.1%	206	1.0%	3,451	16.8%	17,143	83.2%	20,594	100.0%
San Francisco	Under 18	24,301	22.6%	157	0.1%	36,756	34.2%	7,584	7.1%	832	0.8%	605	0.6%	8,343	7.8%	78,578	73.1%	28,946	26.9%	107,524	100.0%
	18 to 64	87,324	14.9%	1,503	0.3%	182,589	31.1%	31,917	5.4%	2,086	0.4%	1,776	0.3%	16,435	2.8%	323,630	55.1%	264,239	44.9%	587,869	100.0%
	65 and Over	10,149	9.2%	168	0.2%	46,355	42.2%	7,280	6.6%	210	0.2%	113	0.1%	1,301	1.2%	65,576	59.7%	44,266	40.3%	109,842	100.0%
San Mateo	Under 18	55,092	34.5%	206	0.1%	33,753	21.1%	3,305	2.1%	2,747	1.7%	876	0.5%	11,324	7.1%	107,303	67.2%	52,469	32.8%	159,772	100.0%
Mateo	18 to 64	116,119	25.1%	793	0.2%	122,088	26.4%	12,396	2.7%	6,381	1.4%	1,697	0.4%	11,412	2.5%	270,886	58.6%	191,531	41.4%	462,417	100.0%
	65 and Over	11,291	11.7%	126	0.1%	20,093	20.9%	3,062	3.2%	756	0.8%	136	0.1%	1,189	1.2%	36,653	38.1%	59,609	61.9%	96,262	100.0%
Santa Clara	Under 18	157,184	36.6%	928	0.2%	130,334	30.3%	8,653	2.0%	1,454	0.3%	1,355	0.3%	24,851	5.8%	324,759	75.6%	104,786	24.4%	429,545	100.0%
Clara	18 to 64	296,097	25.6%	2,734	0.2%	382,013	33.1%	30,100	2.6%	4,332	0.4%	2,331	0.2%	26,287	2.3%	743,894	64.4%	411,259	35.6%	1,155,153	100.0%
	65 and Over	25,929	13.2%	380	0.2%	53,119	27.0%	3,578	1.8%	466	0.2%	191	0.1%	2,417	1.2%	86,080	43.7%	110,864	56.3%	196,944	100.0%
Solano	Under 18	35,396	34.9%	347	0.3%	11,886	11.7%	14,116	13.9%	691	0.7%	265	0.3%	9,961	9.8%	72,662	71.6%	28,873	28.4%	101,535	100.0%
	18 to 64	59,137	22.3%	1,314	0.5%	39,360	14.9%	38,964	14.7%	2,252	0.8%	1,102	0.4%	10,229	3.9%	152,358	57.5%	112,604	42.5%	264,962	100.0%
	65 and Over	4,823	10.3%	203	0.4%	7,781	16.6%	5,663	12.1%	300	0.6%	96	0.2%	830	1.8%	19,696	42.0%	27,151	58.0%	46,847	100.0%
Sonoma	Under 18	43,081	40.5%	812	0.8%	3,500	3.3%	1,535	1.4%	281	0.3%	291	0.3%	5,373	5.0%	54,873	51.5%	51,598	48.5%	106,471	100.0%
	18 to 64	72,709	23.5%	2,427	0.8%	12,346	4.0%	4,653	1.5%	1,032	0.3%	553	0.2%	6,952	2.2%	100,672	32.5%	209,371	67.5%	310,043	100.0%
	65 and Over	4,640	6.9%	345	0.5%	1,931	2.9%	581	0.9%	121	0.2%	69	0.1%	619	0.9%	8,306	12.3%	59,058	87.7%	67,364	100.0%
Bay Area	Under 18	538,340	33.9%	4,074	0.3%	336,291	21.2%	102,387	6.4%	10,300	0.6%	6,109	0.4%	108,546	6.8%	1,106,047	69.6%	483,626	30.4%	1,589,673	100.0%
	18 to 64	1,052,701	22.5%	14,541	0.3%	1,119,937	23.9%	306,498	6.5%	27,733	0.6%	12,849	0.3%	128,230	2.7%	2,662,489	56.9%	2,020,348	43.1%	4,682,837	100.0%
	65 and Over	90,759	10.3%	2,076	0.2%	189,644	21.6%	51,293	5.8%	2,970	0.3%	1,066	0.1%	11,492	1.3%	349,300	39.8%	528,929	60.2%	878,229	100.0%

Source: 2010 Census SF1 PCT12A-O.

Table B-4. Bay Area Population by Poverty Ratio by County and Age: 2010

County	Age Group	Below 100%		Below 200%		Above 200%		Total Population	
		#	%	#	%	#	%	#	%
Alameda	Under 18	58,630	17%	117,028	35%	219,672	65%	336,700	100%
	18 to 64	125,147	13%	264,702	27%	721,376	73%	986,078	100%
	65 and Over	4,453	3%	47,444	29%	118,191	71%	165,635	100%
	Total	188,230	13%	429,174	29%	1,059,239	71%	1,488,413	100%
Contra Costa	Under 18	32,721	13%	77,612	30%	182,066	70%	259,678	100%
	18 to 64	56,670	9%	141,044	22%	512,545	78%	653,589	100%
	65 and Over	2,599	2%	23,734	18%	104,846	82%	128,580	100%
	Total	91,990	9%	242,390	23%	799,457	77%	1,041,847	100%
Marin	Under 18	6,213	12%	11,514	22%	40,741	78%	52,255	100%
	18 to 64	13,877	9%	28,205	19%	121,865	81%	150,070	100%
	65 and Over	1,045	2%	7,363	17%	35,249	83%	42,612	100%
	Total	21,135	9%	47,082	19%	197,855	81%	244,937	100%
Napa	Under 18	4,774	15%	12,055	39%	18,903	61%	30,958	100%
	18 to 64	9,577	12%	22,489	28%	58,305	72%	80,794	100%
	65 and Over	193	1%	5,098	25%	15,335	75%	20,433	100%
	Total	14,544	11%	39,642	30%	92,543	70%	132,185	100%
San Francisco	Under 18	12,336	12%	34,930	33%	70,737	67%	105,667	100%
	18 to 64	71,980	12%	159,598	27%	424,857	73%	584,455	100%
	65 and Over	3,639	3%	42,184	39%	66,541	61%	108,725	100%
	Total	87,955	11%	236,712	30%	562,135	70%	798,847	100%
San Mateo	Under 18	11,303	7%	33,821	21%	124,345	79%	158,166	100%
	18 to 64	30,593	7%	83,287	18%	377,345	82%	460,632	100%
	65 and Over	2,565	3%	19,840	21%	74,853	79%	94,693	100%
	Total	44,461	6%	136,948	19%	576,543	81%	713,491	100%
Santa Clara	Under 18	57,341	13%	125,655	29%	300,602	71%	426,257	100%
	18 to 64	113,364	10%	254,491	22%	890,709	78%	1,145,200	100%
	65 and Over	4,907	3%	48,512	25%	146,723	75%	195,235	100%
	Total	175,612	10%	428,658	24%	1,338,034	76%	1,766,692	100%
Solano	Under 18	19,384	19%	36,706	37%	63,409	63%	100,115	100%
	18 to 64	26,530	10%	58,499	23%	196,189	77%	254,688	100%
	65 and Over	679	1%	9,819	21%	36,580	79%	46,399	100%
	Total	46,593	12%	105,024	26%	296,178	74%	401,202	100%
Sonoma	Under 18	15,580	15%	37,841	36%	65,834	64%	103,675	100%
	65 and Over	42,845	14%	89,616	29%	217,935	71%	307,551	100%
	18 to 64	1,263	2%	14,142	21%	53,023	79%	67,165	100%
	Total	59,688	12%	141,599	30%	336,792	70%	478,391	100%
Bay Area	Under 18	218,282	14%	487,162	31%	1,086,309	69%	1,573,471	100%
	18 to 64	490,583	11%	1,101,931	24%	3,521,126	76%	4,623,057	100%
	65 and Over	21,343	2%	218,136	25%	651,341	75%	869,477	100%
	Total	730,208	10%	1,807,229	26%	5,258,776	74%	7,066,005	100%

Source: American Community Survey 2010 1-Year Estimates Table C17024.

Table B-5. Means of Transportation to Work for Workers by Community of Concern: 2005-2009

County	ID Name	Drive Alone	Carpool	Bus	Rail/ Ferry	Bicycle	Walk	Taxi/ Motor- cycle/ Other	Work at Home	Total Workers
SF	1 Downtwn / Chinatown / N Beach / Treas Is	2,693	439	3,459	780	107	4,415	251	641	12,785
SF	2 Tenderloin / Civic Center	796	211	4,917	614	453	3,201	121	786	11,099
SF	3 South of Market	2,169	275	1,669	1,043	288	1,727	267	556	7,994
SF	4 Western Addition / Inner Richmond	2,994	810	3,602	311	86	1,218	209	721	9,951
SF	5 Inner Mission	5,806	1,680	7,317	3,881	2,108	3,078	528	1,313	25,711
SF	6 Bayview / Hunters Point	11,436	2,756	6,191	719	106	663	237	813	22,921
SF	7 Outer Miss. / Crocker-Amazon / OceanView	9,923	2,190	5,530	2,401	192	382	274	863	21,755
SF	91 Remainder of San Francisco County	132,054	25,680	63,859	33,759	8,027	26,863	6,233	23,209	319,684
SM	8 Daly City	4,444	1,307	1,443	896	10	248	236	74	8,658
SM	9 South San Francisco / San Bruno	4,726	745	523	204	73	861	45	19	7,196
SM	10 North Central San Mateo	2,093	870	548	191	0	129	0	127	3,958
SM	11 East Palo Alto / North Fair Oaks	25,357	5,253	1,645	142	1,148	1,614	817	1,203	37,179
SM	92 Remainder of San Mateo County	207,699	30,440	8,666	14,253	2,512	6,675	3,243	15,505	288,993
SC	12 Mountain View	1,718	168	464	85	168	50	117	32	2,802
SC	13 Alviso / Shoreline / Sunnyvale	684	140	53	0	16	31	19	11	954
SC	14 Santa Clara	4,387	371	231	31	6	138	116	189	5,469
SC	15 Central / East San Jose	79,890	15,009	5,830	1,004	1,176	3,226	3,753	3,300	113,188
SC	16 Gilroy	3,787	936	264	41	51	216	255	176	5,726
SC	17 Milpitas	609	96	0	17	0	0	13	17	752
SC	93 Remainder of Santa Clara County	537,023	65,655	11,638	8,322	9,732	15,001	8,470	30,874	686,715
Ala	18 Fremont / Newark	3,997	578	274	343	0	147	75	207	5,621
Ala	19 Hayward / Union City	20,749	5,091	1,211	1,336	246	489	843	974	30,939
Ala	20 San Leandro / Ashland / Castro Valley	14,854	3,376	870	2,214	162	611	361	719	23,167
Ala	21 Fruitvale / East Oakland	47,713	9,912	7,327	5,046	497	2,648	2,988	2,895	79,026
Ala	22 West / North Oakland	12,968	1,905	2,922	3,523	1,251	2,407	123	1,788	26,887
Ala	23 Alameda	2,071	540	604	131	57	232	27	156	3,818
Ala	24 Berkeley / Albany	4,827	828	1,275	1,715	1,084	2,112	174	839	12,854
Ala	94 Remainder of Alameda County	353,577	51,482	17,015	32,813	6,791	15,984	6,973	25,085	509,720
CC	25 El Cerrito	1,869	165	198	825	81	63	40	160	3,401
CC	26 Richmond	10,826	3,507	1,610	2,223	51	401	159	549	19,326
CC	27 San Pablo / North Richmond	7,883	2,480	910	589	79	166	57	216	12,380
CC	28 Martinez	264	8	0	0	0	22	0	0	294
CC	29 Concord	5,562	2,530	846	556	242	927	180	273	11,116
CC	30 Bay Point / Pittsburg / Antioch	17,132	5,297	555	1,447	9	554	648	854	26,496
CC	95 Remainder of Contra Costa County	283,751	42,843	5,900	25,935	2,106	6,009	4,386	21,385	392,315
Sol	31 Vallejo	7,636	1,391	612	215	43	554	268	246	10,965
Sol	32 Fairfield / Suisun City	10,149	3,324	178	81	17	376	143	334	14,602
Sol	96 Remainder of Solano County	120,061	22,480	1,752	1,862	524	1,689	1,819	5,489	155,676
Nap	97 Napa County	45,912	7,634	1,294	210	520	2,718	1,073	3,226	62,587
Son	33 Santa Rosa	10,480	2,564	761	0	180	537	294	450	15,266
Son	98 Remainder of Sonoma County	155,450	22,518	4,089	69	2,280	7,002	1,961	14,983	208,352
Mar	34 San Rafael Canal Area	2,393	1,362	1,212	82	62	183	165	186	5,645
Mar	35 Marin City	706	143	143	0	33	87	8	170	1,290
Mar	99 Remainder of Marin County	78,230	9,942	6,114	2,558	1,403	3,301	1,347	11,380	114,275
Reg	-- Community of Concern Total	345,591	78,257	65,194	32,686	10,082	33,713	13,811	21,857	601,191
Reg	-- Remainder of Region Total	1,913,757	278,674	120,327	119,781	33,895	85,242	35,505	151,136	2,738,317
Reg	-- Bay Area Total	2,259,348	356,931	185,521	152,467	43,977	118,955	49,316	172,993	3,339,508

Source: MTC staff tabulation of ACS 2005-2009 5-Year Estimates Table B08031.

Table B-6. Means of Transportation to Work As a Share of All Workers by Community of Concern: 2005-2009

County	ID Name	Drive Alone	Carpool	Bus	Rail/ Ferry	Bicycle	Walk	Taxi/ Motor- cycle/ Other	Work at Home	Total Workers
SF	1 Downtwn / Chinatown / N Beach / Treas Is	21%	3%	27%	6%	1%	35%	2%	5%	100%
SF	2 Tenderloin / Civic Center	7%	2%	44%	6%	4%	29%	1%	7%	100%
SF	3 South of Market	27%	3%	21%	13%	4%	22%	3%	7%	100%
SF	4 Western Addition / Inner Richmond	30%	8%	36%	3%	1%	12%	2%	7%	100%
SF	5 Inner Mission	23%	7%	28%	15%	8%	12%	2%	5%	100%
SF	6 Bayview / Hunters Point	50%	12%	27%	3%	0%	3%	1%	4%	100%
SF	7 Outer Miss. / Crocker-Amazon / OceanView	46%	10%	25%	11%	1%	2%	1%	4%	100%
SF	91 Remainder of San Francisco County	41%	8%	20%	11%	3%	8%	2%	7%	100%
SM	8 Daly City	51%	15%	17%	10%	0%	3%	3%	1%	100%
SM	9 South San Francisco / San Bruno	66%	10%	7%	3%	1%	12%	1%	0%	100%
SM	10 North Central San Mateo	53%	22%	14%	5%	0%	3%	0%	3%	100%
SM	11 East Palo Alto / North Fair Oaks	68%	14%	4%	0%	3%	4%	2%	3%	100%
SM	92 Remainder of San Mateo County	72%	11%	3%	5%	1%	2%	1%	5%	100%
SC	12 Mountain View	61%	6%	17%	3%	6%	2%	4%	1%	100%
SC	13 Alviso / Shoreline / Sunnyvale	72%	15%	6%	0%	2%	3%	2%	1%	100%
SC	14 Santa Clara	80%	7%	4%	1%	0%	3%	2%	3%	100%
SC	15 Central / East San Jose	71%	13%	5%	1%	1%	3%	3%	3%	100%
SC	16 Gilroy	66%	16%	5%	1%	1%	4%	4%	3%	100%
SC	17 Milpitas	81%	13%	0%	2%	0%	0%	2%	2%	100%
SC	93 Remainder of Santa Clara County	78%	10%	2%	1%	1%	2%	1%	4%	100%
Ala	18 Fremont / Newark	71%	10%	5%	6%	0%	3%	1%	4%	100%
Ala	19 Hayward / Union City	67%	16%	4%	4%	1%	2%	3%	3%	100%
Ala	20 San Leandro / Ashland / Castro Valley	64%	15%	4%	10%	1%	3%	2%	3%	100%
Ala	21 Fruitvale / East Oakland	60%	13%	9%	6%	1%	3%	4%	4%	100%
Ala	22 West / North Oakland	48%	7%	11%	13%	5%	9%	0%	7%	100%
Ala	23 Alameda	54%	14%	16%	3%	1%	6%	1%	4%	100%
Ala	24 Berkeley / Albany	38%	6%	10%	13%	8%	16%	1%	7%	100%
Ala	94 Remainder of Alameda County	69%	10%	3%	6%	1%	3%	1%	5%	100%
CC	25 El Cerrito	55%	5%	6%	24%	2%	2%	1%	5%	100%
CC	26 Richmond	56%	18%	8%	12%	0%	2%	1%	3%	100%
CC	27 San Pablo / North Richmond	64%	20%	7%	5%	1%	1%	0%	2%	100%
CC	28 Martinez	90%	3%	0%	0%	0%	7%	0%	0%	100%
CC	29 Concord	50%	23%	8%	5%	2%	8%	2%	2%	100%
CC	30 Bay Point / Pittsburg / Antioch	65%	20%	2%	5%	0%	2%	2%	3%	100%
CC	95 Remainder of Contra Costa County	72%	11%	2%	7%	1%	2%	1%	5%	100%
Sol	31 Vallejo	70%	13%	6%	2%	0%	5%	2%	2%	100%
Sol	32 Fairfield / Suisun City	70%	23%	1%	1%	0%	3%	1%	2%	100%
Sol	96 Remainder of Solano County	77%	14%	1%	1%	0%	1%	1%	4%	100%
Nap	97 Napa County	73%	12%	2%	0%	1%	4%	2%	5%	100%
Son	33 Santa Rosa	69%	17%	5%	0%	1%	4%	2%	3%	100%
Son	98 Remainder of Sonoma County	75%	11%	2%	0%	1%	3%	1%	7%	100%
Mar	34 San Rafael Canal Area	42%	24%	21%	1%	1%	3%	3%	3%	100%
Mar	35 Marin City	55%	11%	11%	0%	3%	7%	1%	13%	100%
Mar	99 Remainder of Marin County	68%	9%	5%	2%	1%	3%	1%	10%	100%
Reg	-- Community of Concern Total	57%	13%	11%	5%	2%	6%	2%	4%	100%
Reg	-- Remainder of Region Total	70%	10%	4%	4%	1%	3%	1%	6%	100%
Reg	-- Bay Area Total	68%	11%	6%	5%	1%	4%	1%	5%	100%

Source: MTC staff tabulation of ACS 2005-2009 5-Year Estimates Table B08031.

Table B-7. Means of Transportation to Work for Workers by County and Race/Ethnicity: 2006-2010

		Drive Alone		Carpool		Public Transit		Walk		Bicycle/ Motorcycle/ Taxi/ Other		Work at Home		Total	
Alameda	Black/Af.-Am.	47,834	65%	5,158	7%	12,560	17%	3,019	4%	1,350	2%	3,593	5%	73,514	100%
	Amer. Ind.	2,008	65%	395	13%	338	11%	78	3%	124	4%	135	4%	3,078	100%
	Asian	122,863	67%	23,261	13%	21,394	12%	5,705	3%	3,577	2%	6,223	3%	183,023	100%
	Pac. Islander	3,647	67%	740	14%	538	10%	131	2%	177	3%	207	4%	5,440	100%
	Other/Multiple	58,305	66%	12,277	14%	8,525	10%	3,181	4%	3,337	4%	2,462	3%	88,087	100%
	Hispanic/Latino	91,094	65%	20,524	15%	14,047	10%	4,669	3%	5,494	4%	4,000	3%	139,828	100%
White, non-Hisp.		183,562	67%	21,916	8%	27,968	10%	10,639	4%	10,010	4%	20,457	7%	274,552	100%
Contra Costa	Black/Af.-Am.	25,267	68%	3,657	10%	5,671	15%	761	2%	591	2%	1,388	4%	37,335	100%
	Amer. Ind.	1,423	72%	338	17%	40	2%	22	1%	11	1%	129	7%	1,963	100%
	Asian	45,947	65%	11,216	16%	8,996	13%	936	1%	857	1%	3,209	5%	71,161	100%
	Pac. Islander	1,615	72%	326	15%	142	6%	47	2%	13	1%	89	4%	2,232	100%
	Other/Multiple	35,520	64%	10,771	20%	4,609	8%	1,341	2%	1,112	2%	1,761	3%	55,114	100%
	Hispanic/Latino	64,983	64%	20,215	20%	8,506	8%	2,182	2%	2,397	2%	2,899	3%	101,182	100%
White, non-Hisp.		181,940	74%	19,341	8%	17,570	7%	3,888	2%	3,952	2%	17,636	7%	244,327	100%
Marin	Black/Af.-Am.	1,416	59%	301	12%	311	13%	139	6%	87	4%	162	7%	2,416	100%
	Amer. Ind.	160	52%	48	16%	64	21%	0	0%	14	5%	21	7%	307	100%
	Asian	4,581	67%	961	14%	685	10%	277	4%	15	0%	297	4%	6,816	100%
	Pac. Islander	143	54%	57	21%	0	0%	11	4%	0	0%	56	21%	267	100%
	Other/Multiple	6,688	58%	1,684	14%	1,608	14%	665	6%	441	4%	529	5%	11,615	100%
	Hispanic/Latino	9,945	57%	2,814	16%	2,407	14%	987	6%	586	3%	811	5%	17,550	100%
White, non-Hisp.		63,493	69%	7,250	8%	6,402	7%	2,671	3%	2,267	2%	10,302	11%	92,385	100%
Napa	Black/Af.-Am.	613	63%	186	19%	47	5%	98	10%	0	0%	27	3%	971	100%
	Amer. Ind.	338	78%	23	5%	0	0%	10	2%	0	0%	63	15%	434	100%
	Asian	2,740	63%	592	14%	518	12%	184	4%	0	0%	349	8%	4,383	100%
	Pac. Islander	172	91%	4	2%	0	0%	13	7%	0	0%	0	0%	189	100%
	Other/Multiple	3,571	69%	943	18%	72	1%	342	7%	50	1%	192	4%	5,170	100%
	Hispanic/Latino	12,683	69%	3,818	21%	278	2%	719	4%	240	1%	555	3%	18,293	100%
White, non-Hisp.		29,316	78%	3,228	9%	381	1%	1,526	4%	854	2%	2,367	6%	37,672	100%
San Francisco	Black/Af.-Am.	7,571	40%	1,073	6%	6,615	35%	1,893	10%	715	4%	865	5%	18,732	100%
	Amer. Ind.	615	31%	130	7%	713	36%	415	21%	61	3%	26	1%	1,960	100%
	Asian	52,863	41%	14,660	11%	43,493	33%	10,453	8%	2,946	2%	5,517	4%	129,932	100%
	Pac. Islander	520	34%	34	2%	479	32%	185	12%	0	0%	291	19%	1,509	100%
	Other/Multiple	9,553	32%	2,100	7%	11,544	39%	3,564	12%	1,410	5%	1,622	5%	29,793	100%
	Hispanic/Latino	20,868	34%	5,481	9%	23,773	38%	7,162	12%	2,739	4%	2,119	3%	62,142	100%
White, non-Hisp.		80,209	38%	12,520	6%	62,733	30%	21,734	10%	14,636	7%	18,896	9%	210,728	100%
San Mateo	Black/Af.-Am.	6,625	72%	991	11%	788	9%	242	3%	277	3%	225	2%	9,148	100%
	Amer. Ind.	865	72%	174	14%	82	7%	56	5%	23	2%	9	1%	1,209	100%
	Asian	60,317	66%	14,097	15%	10,997	12%	2,113	2%	1,189	1%	3,175	3%	91,888	100%
	Pac. Islander	3,536	80%	595	13%	129	3%	30	1%	0	0%	146	3%	4,436	100%
	Other/Multiple	20,767	64%	5,314	16%	3,936	12%	1,277	4%	579	2%	811	2%	32,684	100%
	Hispanic/Latino	53,105	64%	12,434	15%	8,036	10%	4,033	5%	2,783	3%	2,316	3%	82,707	100%
White, non-Hisp.		118,526	76%	9,928	6%	8,603	6%	3,314	2%	3,916	3%	11,057	7%	155,344	100%
Santa Clara	Black/Af.-Am.	16,234	77%	1,960	9%	940	4%	547	3%	604	3%	675	3%	20,960	100%
	Amer. Ind.	3,038	73%	578	14%	138	3%	128	3%	140	3%	121	3%	4,143	100%
	Asian	206,164	78%	32,022	12%	7,593	3%	3,536	1%	3,722	1%	9,910	4%	262,947	100%
	Pac. Islander	2,269	79%	259	9%	115	4%	86	3%	95	3%	64	2%	2,888	100%
	Other/Multiple	74,313	70%	13,936	13%	5,503	5%	3,846	4%	5,010	5%	3,147	3%	105,755	100%
	Hispanic/Latino	140,899	71%	26,321	13%	9,749	5%	6,169	3%	8,770	4%	5,639	3%	197,547	100%
White, non-Hisp.		252,697	79%	21,894	7%	7,815	2%	6,984	2%	10,427	3%	20,055	6%	319,872	100%
Solano	Black/Af.-Am.	17,360	74%	3,094	13%	1,317	6%	433	2%	291	1%	851	4%	23,346	100%
	Amer. Ind.	696	73%	185	19%	17	2%	0	0%	30	3%	21	2%	949	100%
	Asian	21,551	74%	5,053	17%	875	3%	538	2%	251	1%	711	2%	28,979	100%
	Pac. Islander	1,280	80%	267	17%	6	0%	39	2%	7	0%	11	1%	1,610	100%
	Other/Multiple	19,452	70%	6,300	23%	389	1%	516	2%	437	2%	642	2%	27,736	100%
	Hispanic/Latino	27,142	70%	8,625	22%	615	2%	759	2%	518	1%	884	2%	38,543	100%
White, non-Hisp.		67,544	79%	9,564	11%	1,885	2%	1,092	1%	1,329	2%	3,555	4%	84,969	100%
Sonoma	Black/Af.-Am.	2,136	70%	220	7%	249	8%	112	4%	98	3%	236	8%	3,051	100%
	Amer. Ind.	1,716	75%	383	17%	65	3%	70	3%	29	1%	27	1%	2,290	100%
	Asian	6,630	73%	1,253	14%	278	3%	257	3%	89	1%	574	6%	9,081	100%
	Pac. Islander	591	65%	84	9%	14	2%	140	15%	0	0%	80	9%	909	100%
	Other/Multiple	17,478	70%	4,549	18%	821	3%	703	3%	592	2%	832	3%	24,975	100%
	Hispanic/Latino	33,871	68%	9,816	20%	1,328	3%	1,589	3%	1,354	3%	1,823	4%	49,781	100%
White, non-Hisp.		121,327	77%	13,413	8%	2,452	2%	4,846	3%	2,982	2%	13,165	8%	158,185	100%
Bay Area	Black/Af.-Am.	125,056	66%	16,640	9%	28,498	15%	7,244	4%	4,013	2%	8,022	4%	189,473	100%
	Amer. Ind.	10,859	66%	2,254	14%	1,457	9%	779	5%	432	3%	552	3%	16,333	100%
	Asian	523,656	66%	103,115	13%	94,829	12%	23,999	3%	12,646	2%	29,965	4%	788,210	100%
	Pac. Islander	103,989	70%	22,076	15%	7,194	5%	4,919	3%	5,637	4%	4,658	3%	148,473	100%
	Other/Multiple	245,647	64%	57,874	15%	37,007	10%	15,435	4%	12,968	3%	11,998	3%	380,929	100%
	Hispanic/Latino	454,590	64%	110,048	16%	68,739	10%	28,269	4%	24,881	4%	21,046	3%	707,573	100%
White, non-Hisp.		1,098,614	70%	119,054	8%	135,809	9%	56,694	4%	50,373	3%	117,490	7%	1,578,034	100%

Source: American Community Survey 2006-2010 5-year estimates, Tables B08122B, B08122C, B08122D, B08122E, B08122F, B08122G, B08122H, B08122I.

Note: "Amer. Ind." includes American Indians and Alaska Natives. "Pac. Islander" includes Native Hawaiians and Pacific Islanders. "Other/Multiple" includes respondents reporting "Some Other Race" or "Two or More Races." Totals do not sum to the universe of workers because some respondents are included in multiple categories. Totals for Black/African-American, American Indian/Alaska Native, Asian, and Native Hawaiian/Pacific Islander include both Hispanic/Latino and non-Hispanic/Latino respondents. Hispanic/Latino includes respondents from all racial groups.

Table B-8. Means of Transportation to Work for Workers by County and Minority Status: 2006-2010

								Bicycle/ Motorcycle/ Taxi/ Other							
Minority Status		Drive Alone		Carpool		Public Transit		Walk		Work at Home		Total			
Alameda	Minority	277,777	66%	51,700	12%	50,965	12%	14,506	3%	11,311	3%	15,127	4%	421,386	100%
	Non-minority	183,562	67%	21,916	8%	27,968	10%	10,639	4%	10,010	4%	20,457	7%	274,552	100%
Contra Costa	Minority	145,771	65%	37,072	17%	24,319	11%	4,147	2%	3,989	2%	8,546	4%	223,844	100%
	Non-minority	181,940	74%	19,341	8%	17,570	7%	3,888	2%	3,952	2%	17,636	7%	244,327	100%
Marin	Minority	17,474	60%	4,299	15%	3,652	13%	1,383	5%	732	3%	1,429	5%	28,969	100%
	Non-minority	63,493	69%	7,250	8%	6,402	7%	2,671	3%	2,267	2%	10,302	11%	92,385	100%
Napa	Minority	16,926	68%	4,751	19%	826	3%	1,046	4%	250	1%	1,088	4%	24,887	100%
	Non-minority	29,316	78%	3,228	9%	381	1%	1,526	4%	854	2%	2,367	6%	37,672	100%
San Francisco	Minority	85,162	38%	21,927	10%	78,436	35%	20,701	9%	7,043	3%	9,677	4%	222,946	100%
	Non-minority	80,209	38%	12,520	6%	62,733	30%	21,734	10%	14,636	7%	18,896	9%	210,728	100%
San Mateo	Minority	128,821	66%	28,848	15%	20,752	11%	6,449	3%	4,324	2%	5,998	3%	195,192	100%
	Non-minority	118,526	76%	9,928	6%	8,603	6%	3,314	2%	3,916	3%	11,057	7%	155,344	100%
Santa Clara	Minority	377,921	75%	61,995	12%	19,061	4%	11,027	2%	13,734	3%	17,212	3%	500,950	100%
	Non-minority	252,697	79%	21,894	7%	7,815	2%	6,984	2%	10,427	3%	20,055	6%	319,872	100%
Solano	Minority	72,543	73%	18,140	18%	2,938	3%	1,817	2%	1,239	1%	2,692	3%	99,369	100%
	Non-minority	67,544	79%	9,564	11%	1,885	2%	1,092	1%	1,329	2%	3,555	4%	84,969	100%
Sonoma	Minority	47,056	69%	12,070	18%	2,030	3%	2,238	3%	1,668	2%	2,996	4%	68,058	100%
	Non-minority	121,327	77%	13,413	8%	2,452	2%	4,846	3%	2,982	2%	13,165	8%	158,185	100%
Bay Area	Minority	1,169,451	65%	240,802	13%	202,979	11%	63,314	4%	44,290	2%	64,765	4%	1,785,601	100%
	Non-minority	1,098,614	70%	119,054	8%	135,809	9%	56,694	4%	50,373	3%	117,490	7%	1,578,034	100%

Source: Tabulation prepared by MTC staff based on data from the American Community Survey 2006-2010 5-year estimates, Tables B08006 and B08122H.

Table B-9. Means of Transportation to Work for Workers by County and Poverty Ratio: 2006-2010

Poverty Ratio		Drive Alone		Carpool		Public Transit		Walk		Bicycle/ Motorcycle/ Taxi/ Other		Work at Home		Total	
Alameda	Below 200%	54,771	52%	13,249	13%	15,437	15%	7,642	7%	6,223	6%	7,006	7%	104,328	100%
	Above 200%	405,229	69%	62,891	11%	62,093	11%	15,695	3%	15,004	3%	27,741	5%	588,653	100%
Contra	Below 200%	36,781	59%	11,598	19%	5,865	9%	3,010	5%	1,497	2%	3,226	5%	61,977	100%
Costa	Above 200%	288,446	71%	45,581	11%	36,582	9%	5,097	1%	6,587	2%	23,338	6%	405,631	100%
Marin	Below 200%	7,147	52%	2,207	16%	1,649	12%	1,068	8%	377	3%	1,184	9%	13,632	100%
	Above 200%	73,679	69%	9,468	9%	8,291	8%	3,008	3%	2,510	2%	10,289	10%	107,245	100%
Napa	Below 200%	6,475	65%	1,667	17%	568	6%	486	5%	297	3%	496	5%	9,989	100%
	Above 200%	39,419	76%	6,760	13%	604	1%	1,395	3%	729	1%	2,647	5%	51,554	100%
San Francisco	Below 200%	17,529	25%	4,345	6%	27,646	40%	11,160	16%	3,723	5%	5,206	7%	69,609	100%
	Above 200%	146,083	40%	29,900	8%	114,357	32%	30,348	8%	18,122	5%	24,073	7%	362,883	100%
San Mateo	Below 200%	23,867	58%	6,209	15%	5,366	13%	2,496	6%	1,571	4%	1,518	4%	41,027	100%
	Above 200%	223,095	72%	33,086	11%	24,103	8%	6,901	2%	6,862	2%	15,082	5%	309,129	100%
Santa Clara	Below 200%	69,260	65%	14,674	14%	7,728	7%	4,830	5%	5,161	5%	4,586	4%	106,239	100%
	Above 200%	561,609	79%	68,953	10%	18,780	3%	11,860	2%	16,801	2%	32,006	5%	710,009	100%
Solano	Below 200%	17,590	67%	4,857	19%	890	3%	1,189	5%	604	2%	974	4%	26,104	100%
	Above 200%	122,329	77%	22,753	14%	4,058	3%	1,926	1%	1,820	1%	5,641	4%	158,527	100%
Sonoma	Below 200%	24,956	63%	6,904	17%	1,179	3%	2,478	6%	1,513	4%	2,763	7%	39,793	100%
	Above 200%	142,976	77%	18,895	10%	3,137	2%	4,286	2%	3,277	2%	13,273	7%	185,844	100%
Bay Area	Below 200%	258,376	55%	65,710	14%	66,328	14%	34,359	7%	20,966	4%	26,959	6%	472,698	100%
	Above 200%	2,002,865	70%	298,287	10%	272,005	9%	80,516	3%	71,712	2%	154,090	5%	2,879,475	100%

Source: Tabulation prepared by MTC staff based on data from the American Community Survey 2006-2010 Public Use Microdata Sample (PUMS).

Table B-10. Work Location for Workers by County of Residence and Poverty Ratio: 2006-2010

		Worked in Different County							
		Worked in Same County		Not Transbay		Transbay		Total	
Alameda	Below 200%	83,639	81%	8,961	9%	10,631	10%	103,231	100%
	Above 200%	382,255	66%	94,523	16%	103,012	18%	579,790	100%
Contra	Below 200%	44,902	73%	9,190	15%	7,184	12%	61,276	100%
Costa	Above 200%	236,203	59%	93,869	24%	67,509	17%	397,581	100%
Marin	Below 200%	11,870	88%	427	3%	1,126	8%	13,423	100%
	Above 200%	66,194	62%	5,178	5%	34,628	33%	106,000	100%
Napa	Below 200%	8,532	86%	1,041	11%	312	3%	9,885	100%
	Above 200%	38,886	77%	6,568	13%	4,945	10%	50,399	100%
San Francisco	Below 200%	60,226	87%	5,899	9%	3,017	4%	69,142	100%
	Above 200%	271,483	76%	55,647	15%	32,320	9%	359,450	100%
San Mateo	Below 200%	28,076	69%	11,389	28%	1,463	4%	40,928	100%
	Above 200%	176,844	58%	113,201	37%	15,565	5%	305,610	100%
Santa Clara	Below 200%	95,392	92%	8,631	8%	202	0%	104,225	100%
	Above 200%	612,174	88%	84,364	12%	1,682	0%	698,220	100%
Solano	Below 200%	18,040	72%	3,342	13%	3,610	14%	24,992	100%
	Above 200%	91,278	62%	14,797	10%	41,601	28%	147,676	100%
Sonoma	Below 200%	35,344	90%	2,843	7%	1,072	3%	39,259	100%
	Above 200%	152,496	83%	19,924	11%	10,765	6%	183,185	100%
Bay Area	Below 200%	386,021	83%	51,723	11%	28,617	6%	466,361	100%
	Above 200%	2,027,813	72%	488,071	17%	312,027	11%	2,827,911	100%

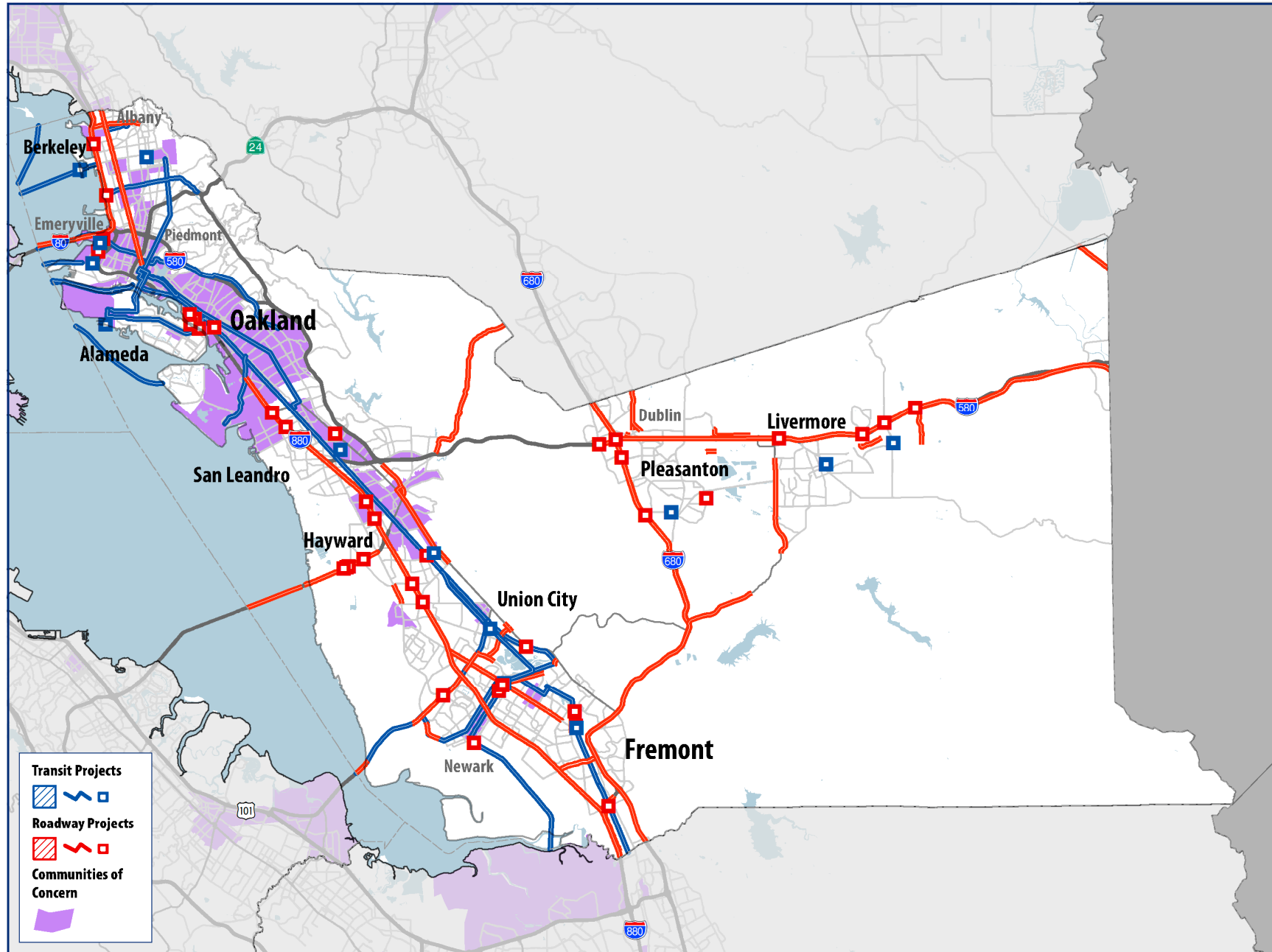
Source: Tabulation prepared by MTC staff based on data from the American Community Survey 2006-2010 Public Use Microdata Sample (PUMS).

Appendix C. County Maps

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Figure C-1. Alameda County RTP Projects Overlaid with Communities of Concern



This map illustrates the San Francisco Bay Area, highlighting transit and roadway projects and minority communities. The map includes the following elements:

- Transit Projects:** Represented by blue lines and squares, showing proposed transit routes and stations. Key areas include the San Francisco Peninsula, the East Bay, and the Central Valley.
- Roadway Projects:** Represented by red lines and squares, showing proposed roadway projects. These are primarily located along major highways like I-580, I-680, and I-880.
- Minority Community:** Indicated by pink shaded regions, representing areas where the minority population percentage is above the regional average. These communities are concentrated in the East Bay, Central Valley, and parts of the Peninsula.
- Geographic Labels:** Major cities and areas are labeled, including Berkeley, Albany, Emeryville, Piedmont, Oakland, Alameda, San Leandro, Hayward, Union City, Newark, Fremont, Dublin, Pleasanton, and Livermore.
- Highways:** Major highways are shown with their respective shields, including SR 24, SR 80, SR 580, SR 880, SR 101, SR 680, and SR 580.

Figure C-3. Contra Costa County RTP Projects Overlaid with Communities of Concern

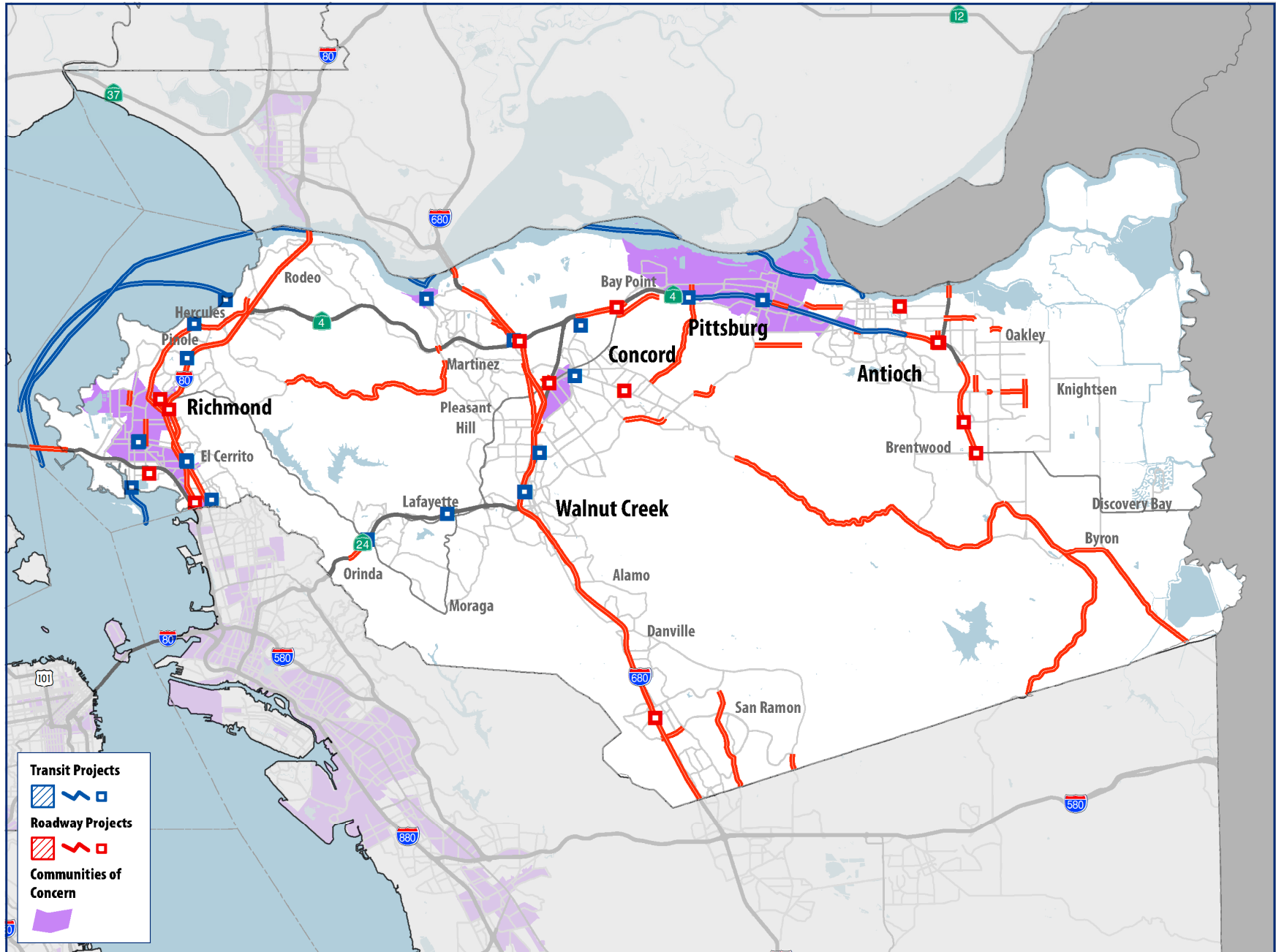


Figure C-4. Contra Costa County RTP Projects Overlaid with Above-Average Minority Communities

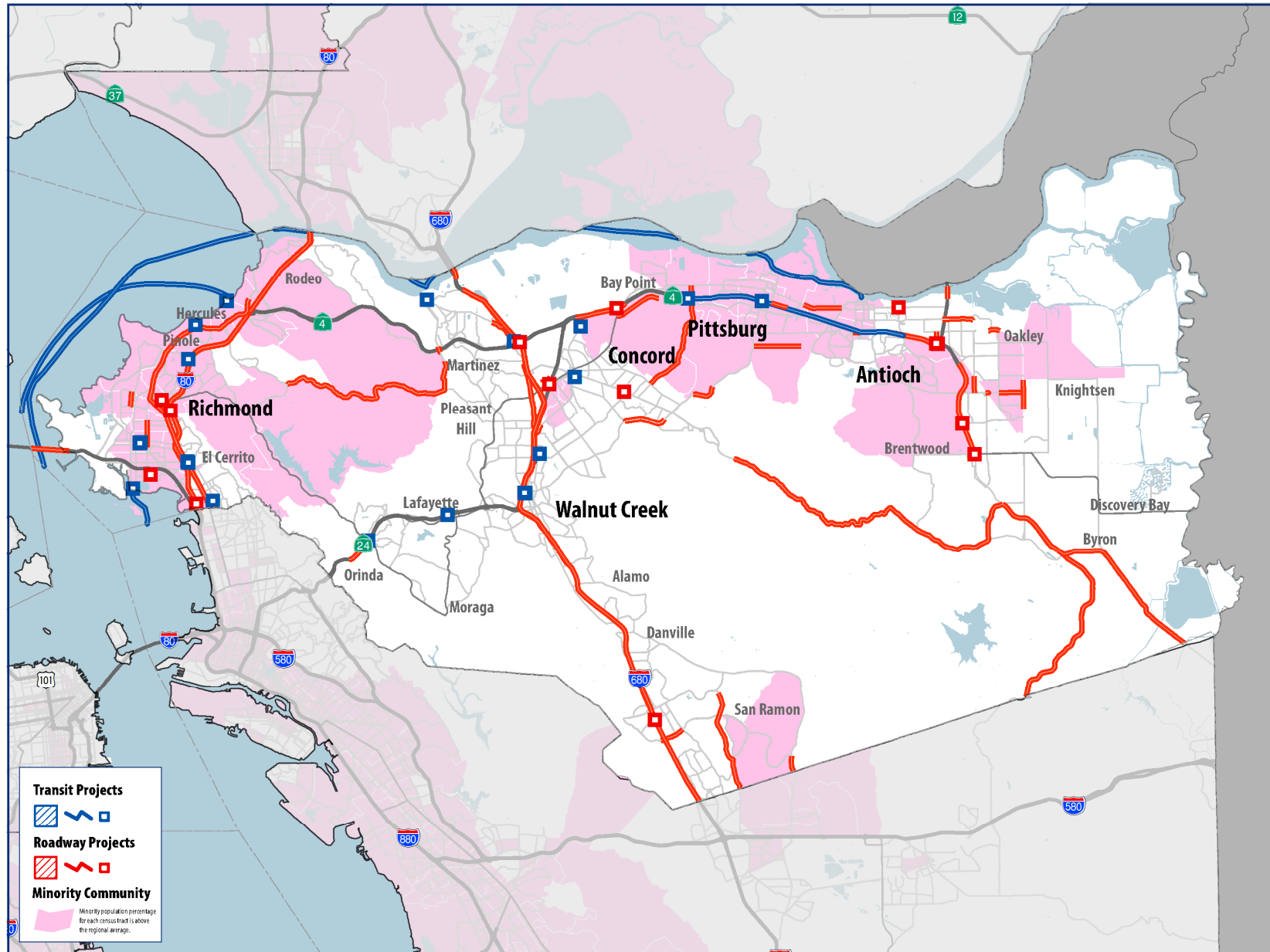


Figure C-5. Marin County RTP Projects Overlaid with Communities of Concern

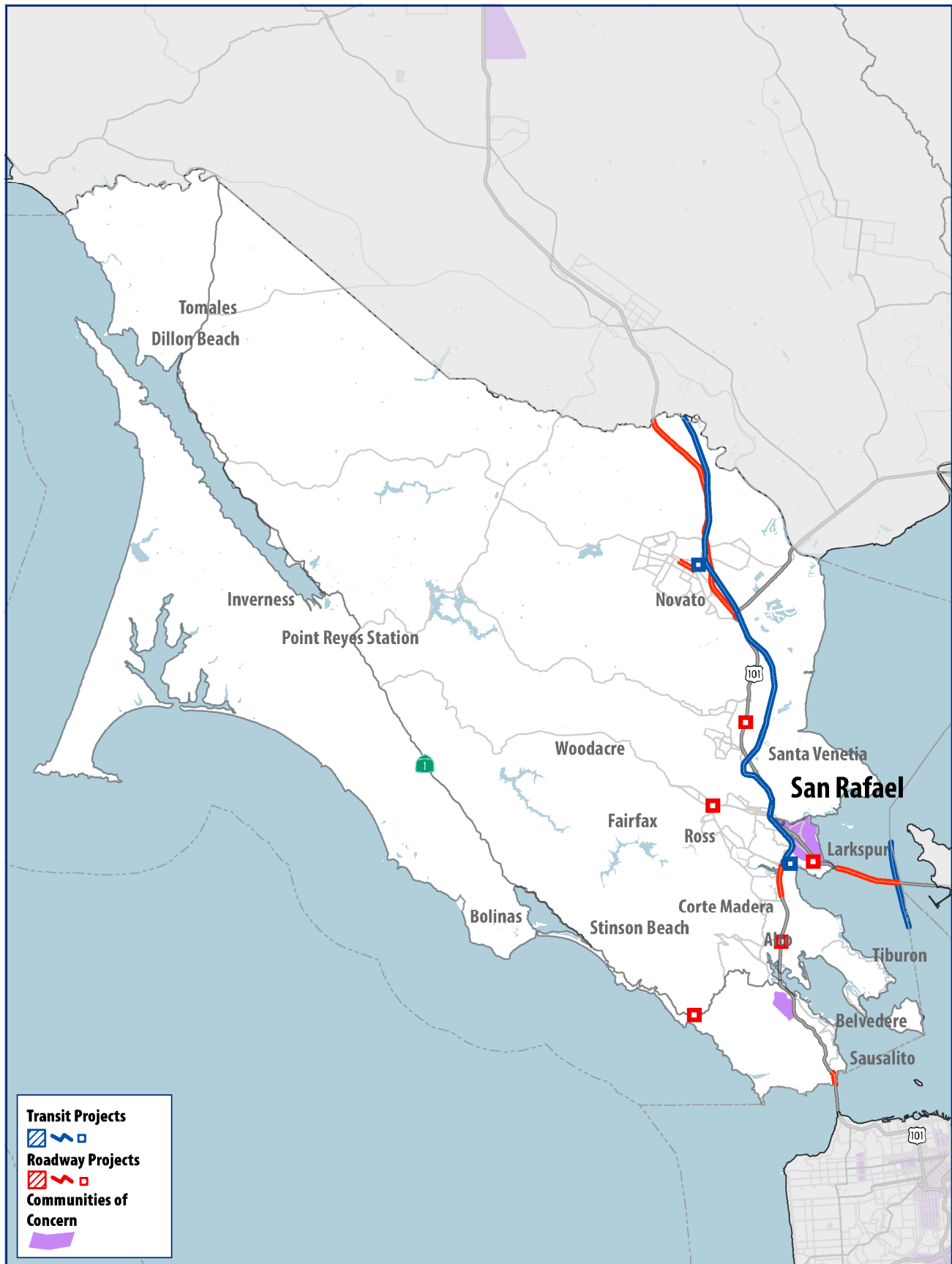


Figure C-6. Marin County RTP Projects Overlaid with Above-Average Minority Communities

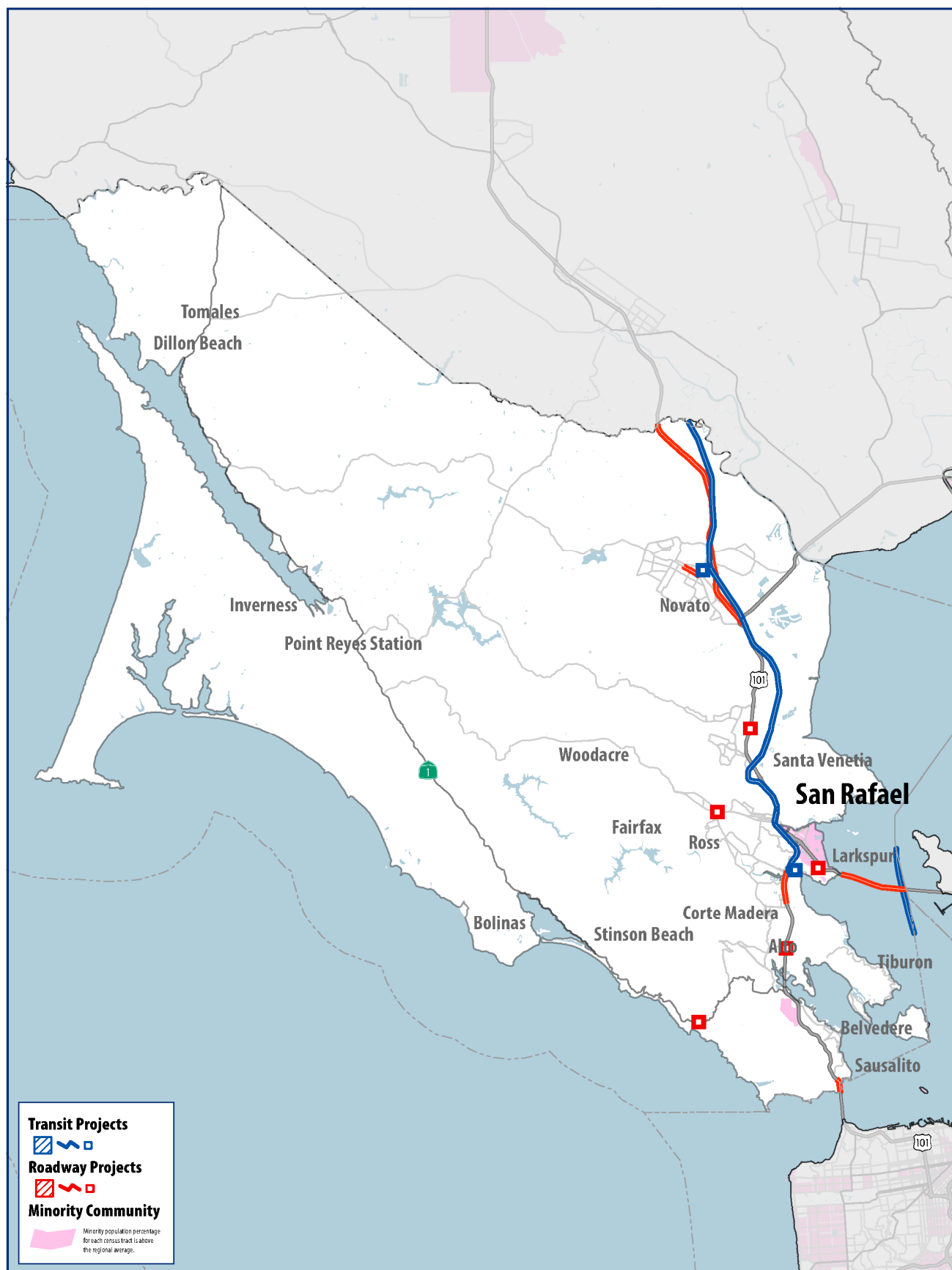
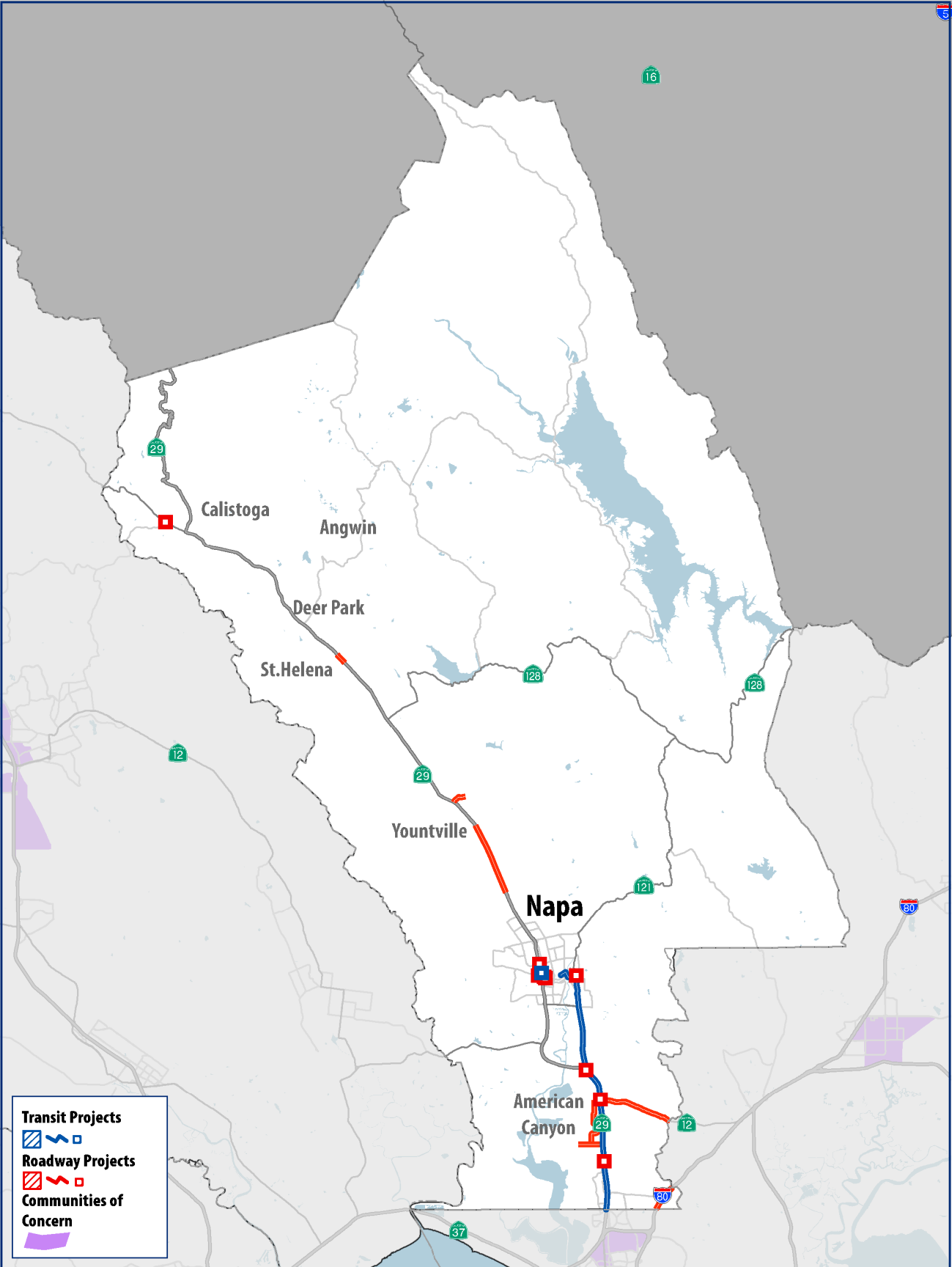


Figure C-7. Napa County RTP Projects Overlaid with Communities of Concern



Note: Napa County has no regionally identified communities of concern.

Figure C-8. Napa County RTP Projects Overlaid with Above-Average Minority Communities

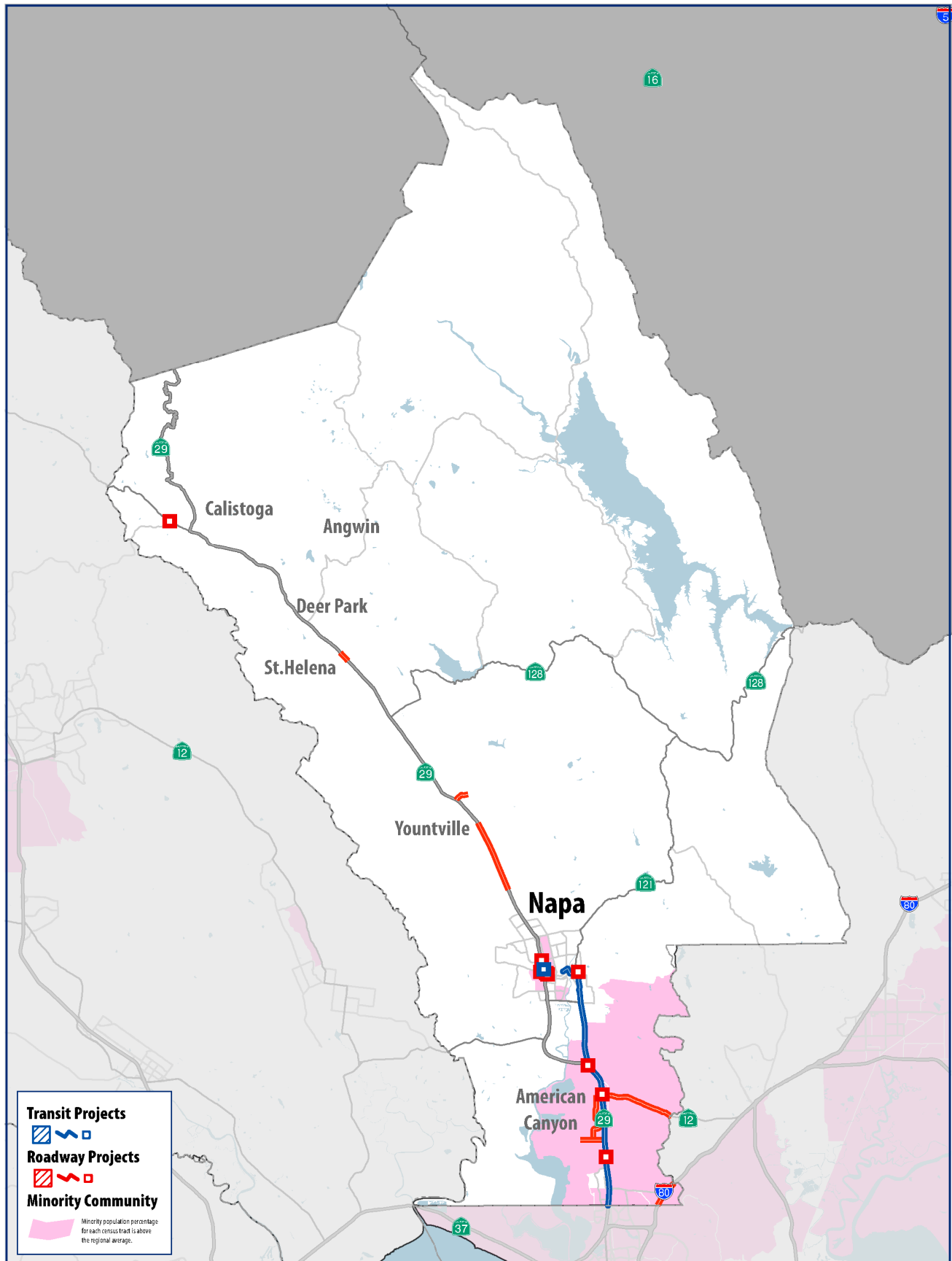


Figure C-9. San Francisco County RTP Projects Overlaid with Communities of Concern

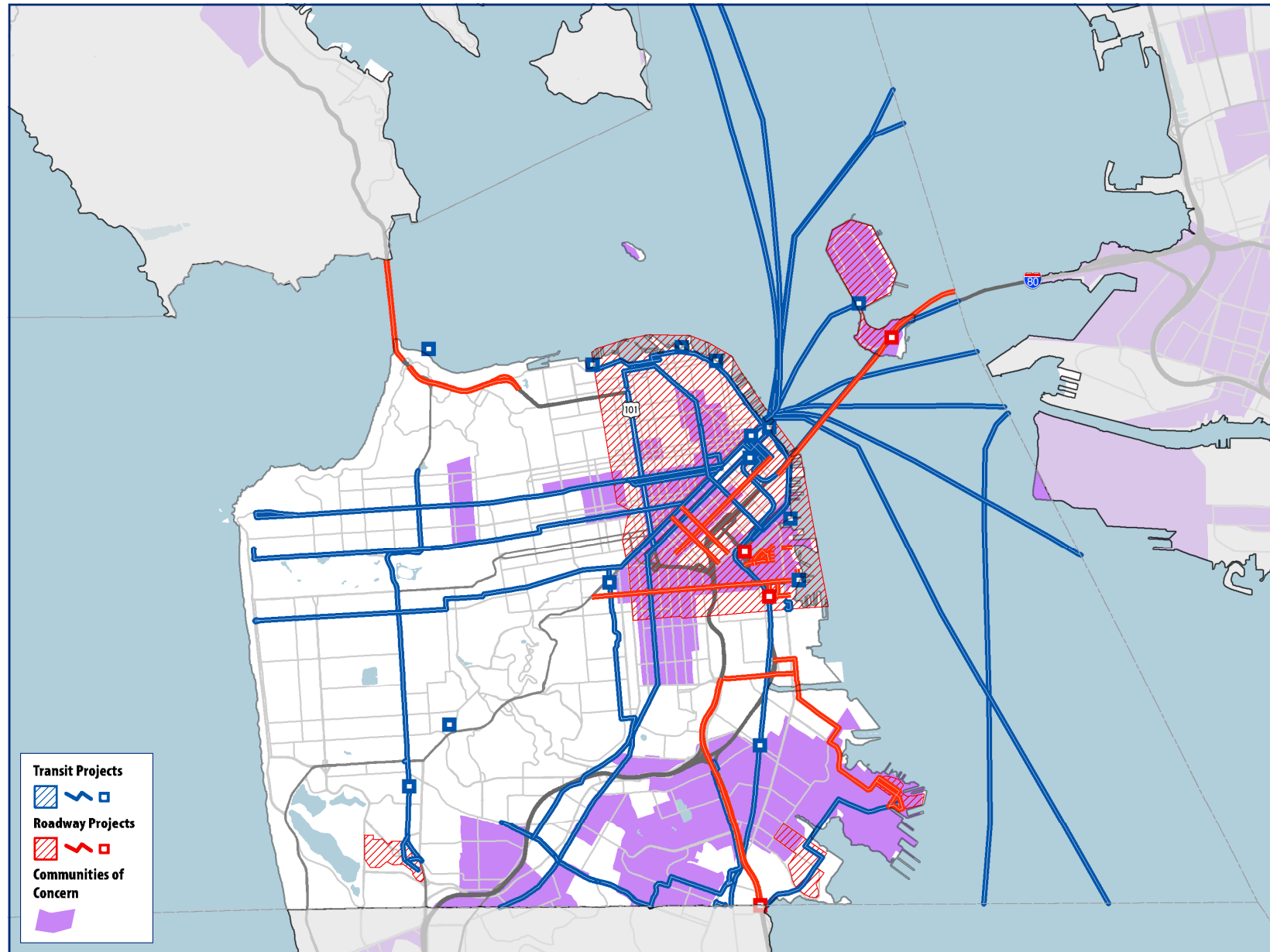


Figure C-10. San Francisco County RTP Projects Overlaid with Above-Average Minority Communities

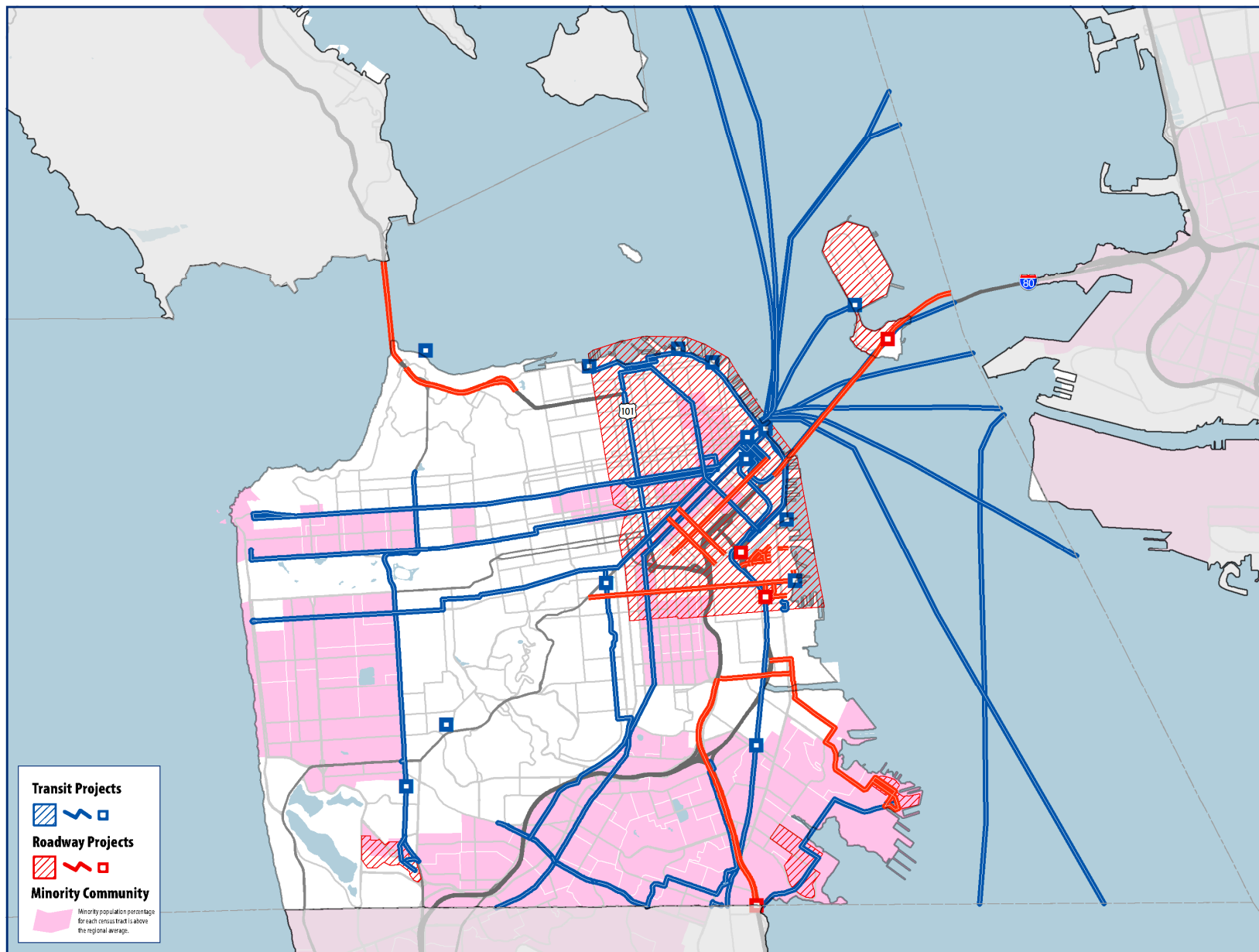


Figure C-11. San Mateo County RTP Projects Overlaid with Communities of Concern

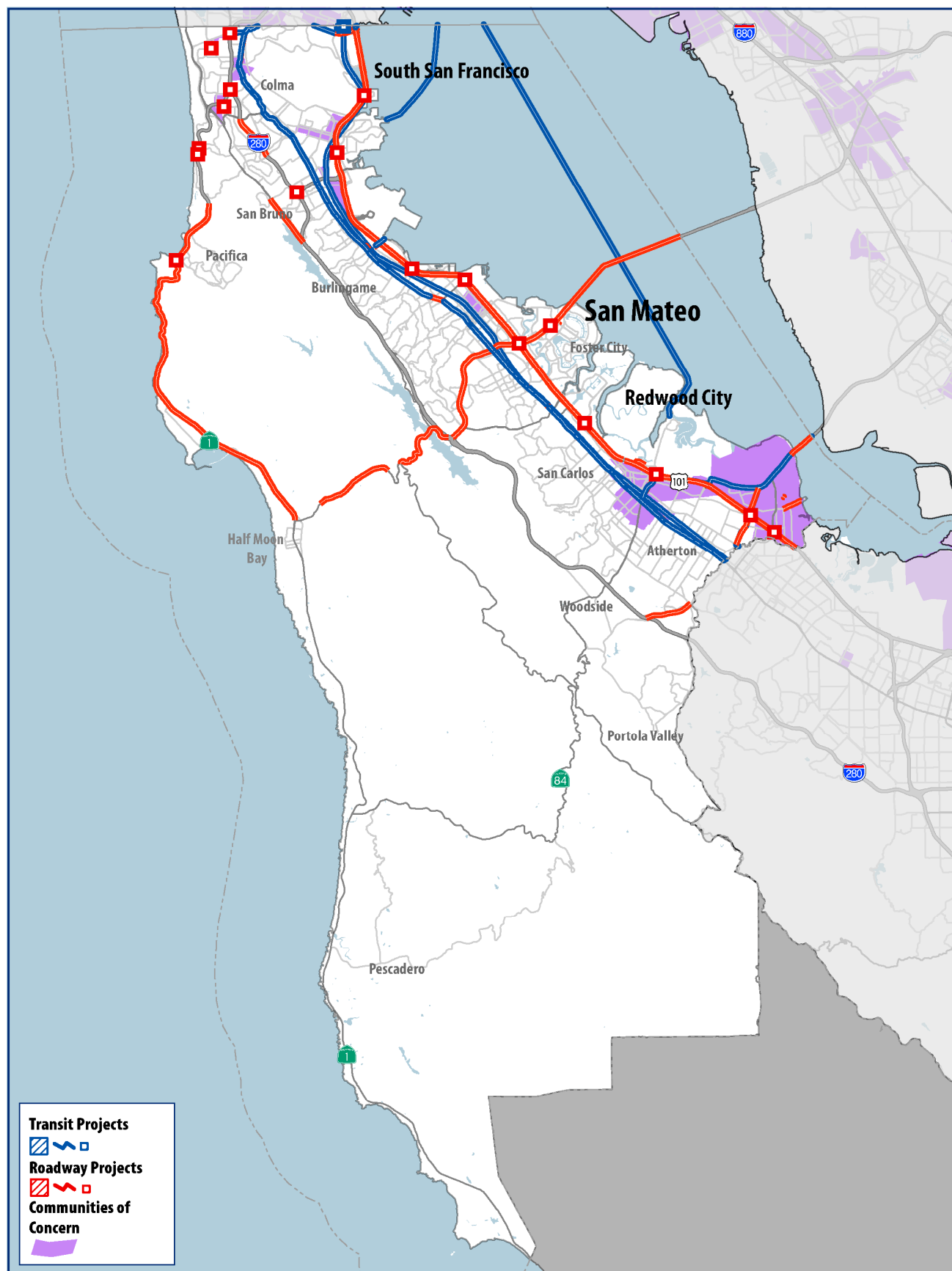


Figure C-12. San Mateo County RTP Projects Overlaid with Above-Average Minority Communities

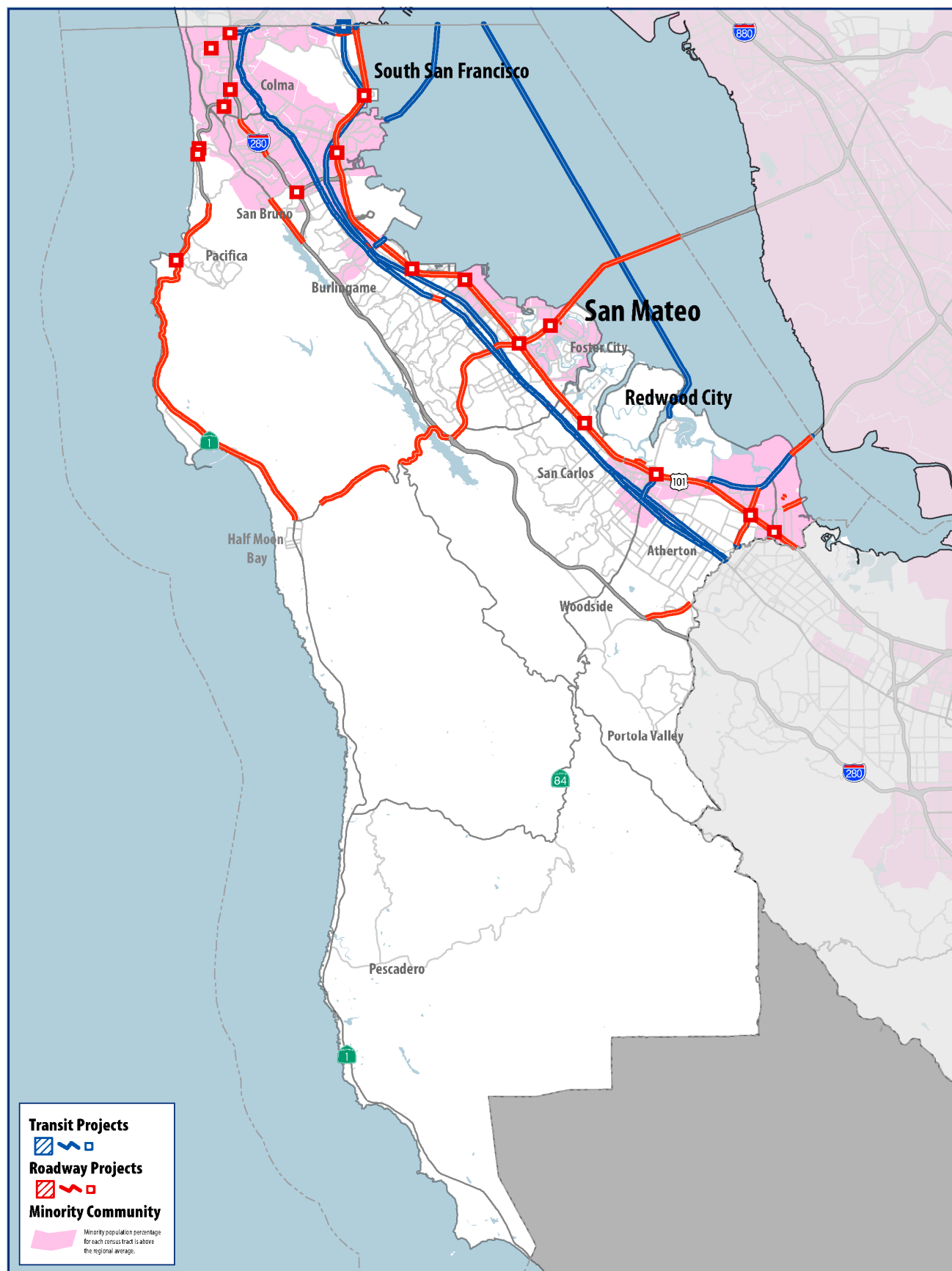


Figure C-13. Santa Clara County RTP Projects Overlaid with Communities of Concern

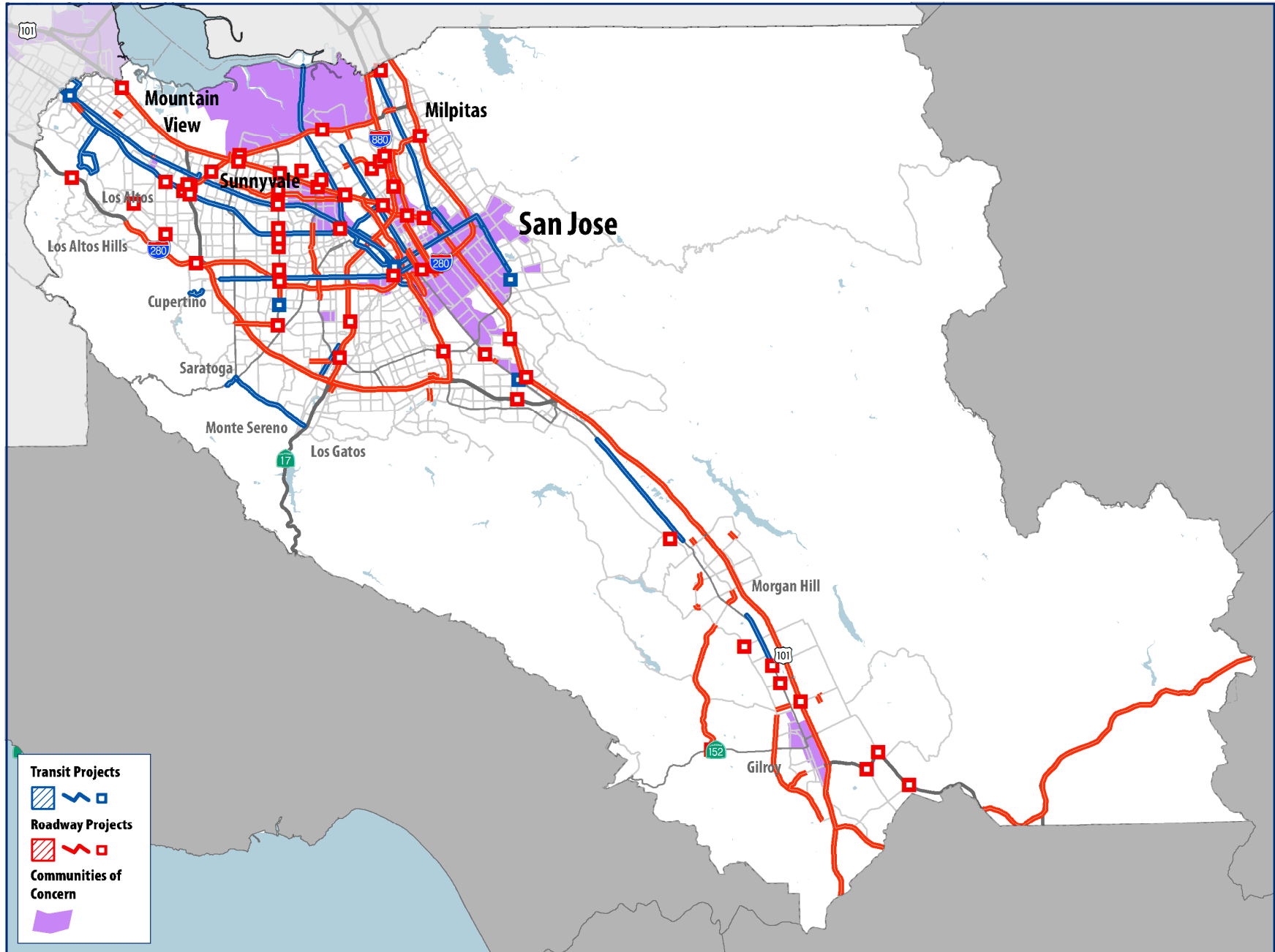


Figure C-14. Santa Clara County RTP Projects Overlaid with Above-Average Minority Communities

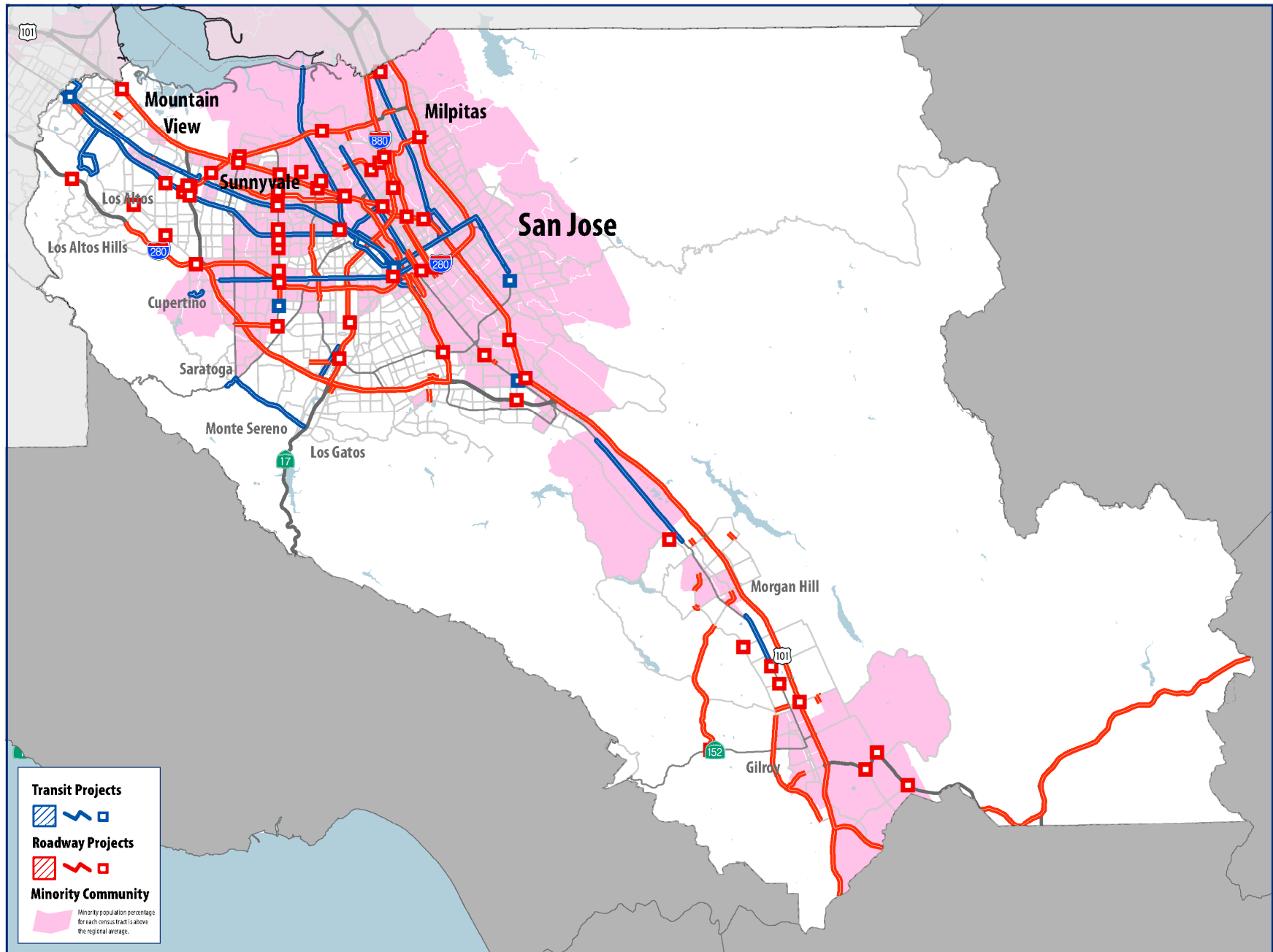


Figure C-15. Solano County RTP Projects Overlaid with Communities of Concern

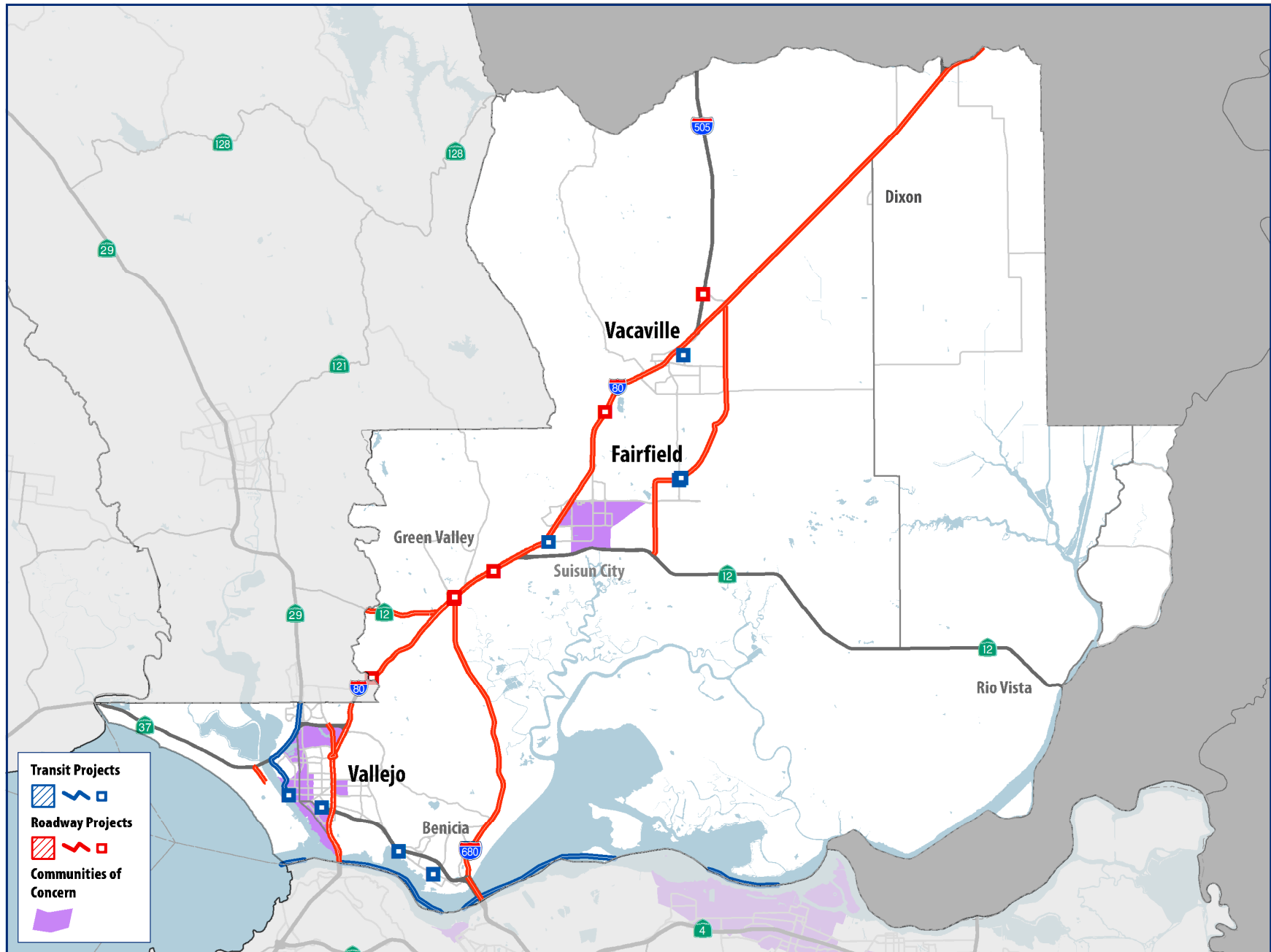


Figure C-16. Solano County RTP Projects Overlaid with Above-Average Minority Communities

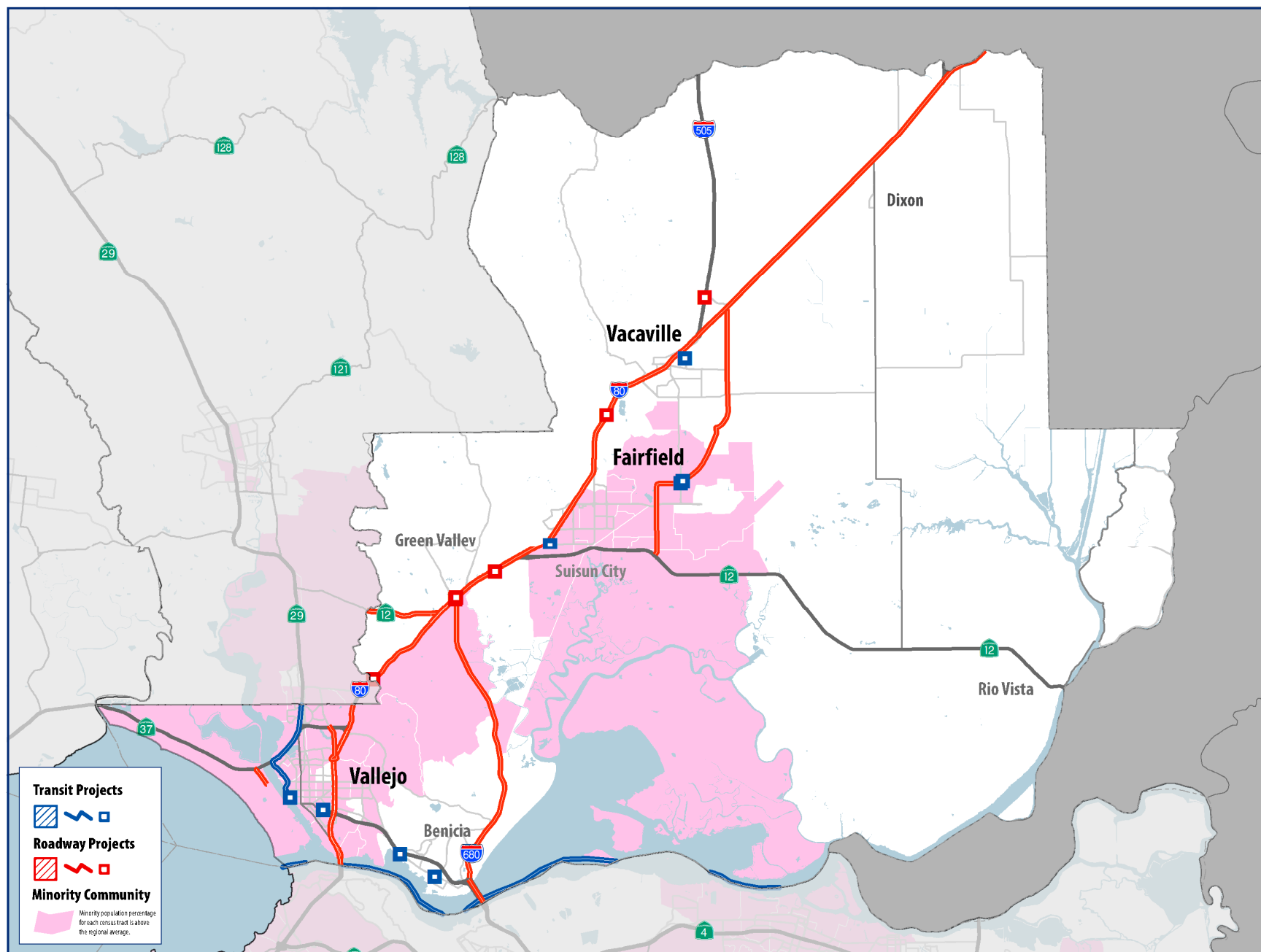


Figure C-17. Sonoma County RTP Projects Overlaid with Communities of Concern

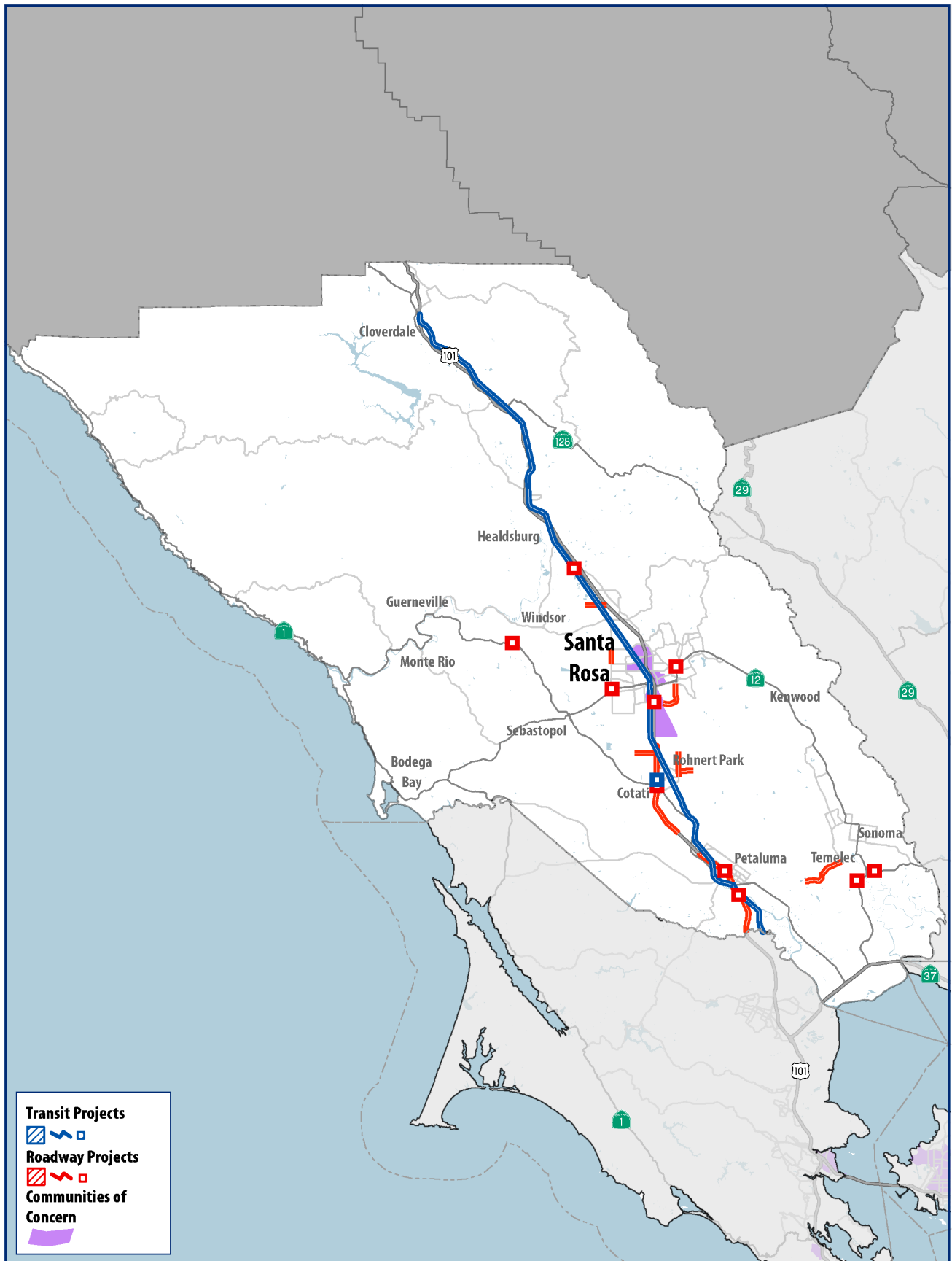
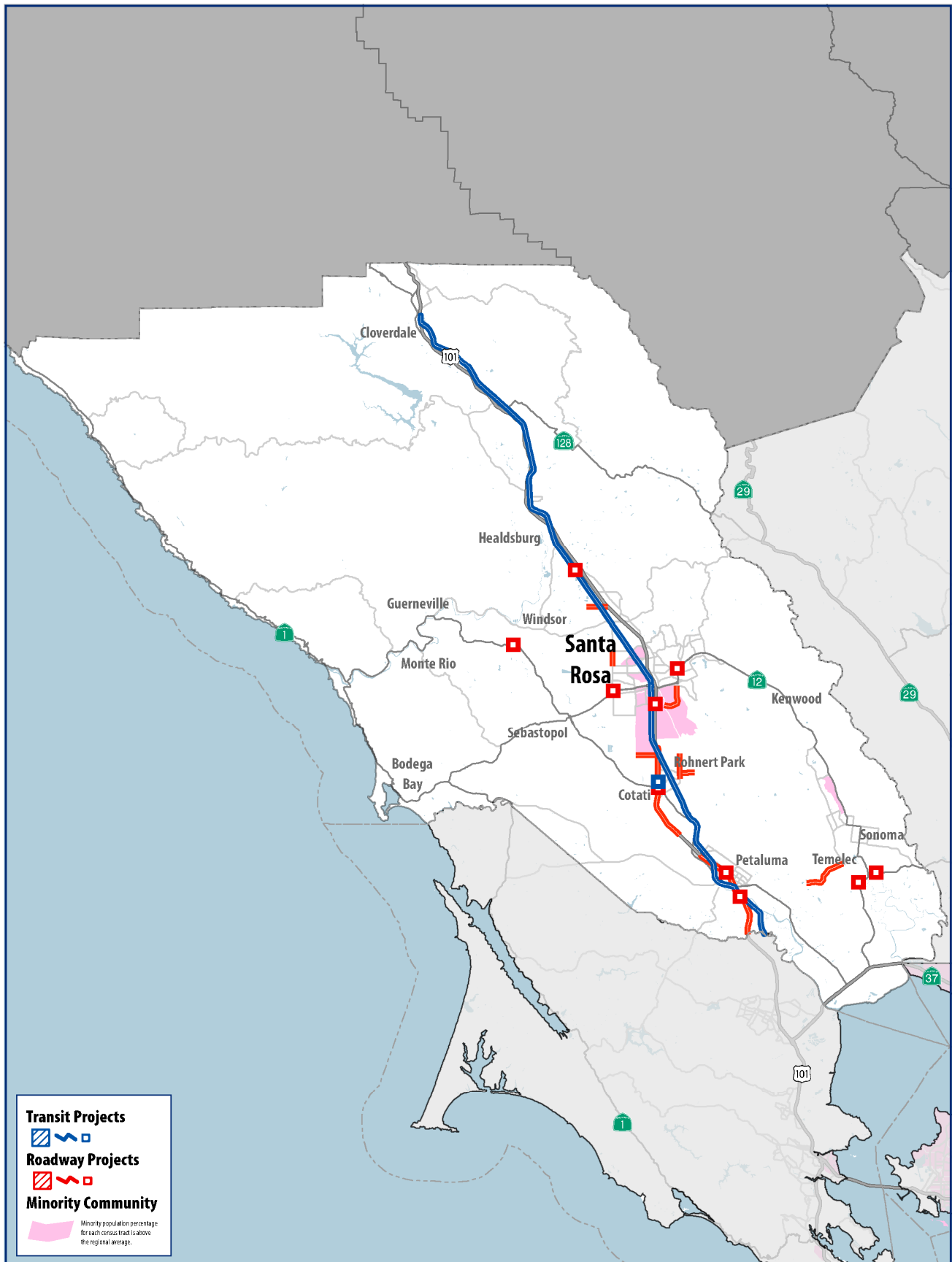


Figure C-18. Sonoma County RTP Projects Overlaid with Above-Average Minority Communities



Appendix D. Detailed Analysis Results

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Table D-1. Average Monthly Housing Costs and % of Income by Household Income Level (2010 dollars)

Scenario		1		2	3	4	5	% Change	
Income Level		Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Less Than \$38,000	\$	\$818	\$871	\$810	\$811	\$810	\$740	-1%	-7%
	%	46%	49%	46%	46%	46%	42%	0%	-6%
\$38K to \$76K	\$	\$1,814	\$1,951	\$1,807	\$1,806	\$1,806	\$1,806	0%	-7%
	%	37%	40%	37%	37%	37%	37%	0%	-8%
\$76K to \$126K	\$	\$2,331	\$2,329	\$2,328	\$2,328	\$2,331	\$2,329	0%	0%
	%	27%	27%	27%	27%	27%	27%	0%	0%
Over \$126K	\$	\$3,863	\$3,735	\$3,732	\$3,727	\$3,713	\$3,730	-3%	0%
	%	20%	20%	20%	20%	20%	20%	0%	0%

Source: MTC and ABAG estimates. Base Year data based on 2005-09 American Community Survey 5-Year estimates, as described further in Appendix A.

Table D-2. Average Monthly Transportation Costs and % of Income by Household Income Level (2010 dollars)

Scenario		1		2	3	4	5	% Change	
Income Level		Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Less Than \$38,000	\$	\$470	\$555	\$498	\$545	\$493	\$540	6%	-10%
	%	26%	31%	28%	31%	28%	31%	7%	-9%
\$38K to \$76K	\$	\$844	\$952	\$900	\$933	\$884	\$932	7%	-5%
	%	17%	20%	18%	19%	18%	19%	7%	-6%
\$76K to \$126K	\$	\$1,143	\$1,263	\$1,220	\$1,255	\$1,208	\$1,251	7%	-3%
	%	13%	15%	14%	15%	14%	14%	7%	-3%
Over \$126K	\$	\$1,557	\$1,721	\$1,651	\$1,728	\$1,661	\$1,720	6%	-4%
	%	8%	9%	9%	9%	9%	9%	10%	-4%

Source: MTC estimates.

Table D-3. Low-Income Household Auto Ownership by Number of Household Automobiles

Scenario		1		2	3	4	5	% Change	
Household Autos		Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Zero		22.0%	19.7%	24.5%	21.6%	23.2%	21.9%	11%	24%
One		50.6%	51.4%	48.7%	50.7%	49.6%	50.1%	-4%	-5%
Two		21.4%	22.7%	20.8%	22.0%	21.2%	22.1%	-3%	-8%
Three		4.8%	4.9%	4.7%	4.6%	4.7%	4.7%	-2%	-4%
Four or More		1.2%	1.3%	1.3%	1.2%	1.3%	1.2%	9%	5%
Total		100%	100%	100%	100%	100%	100%	0%	0%

Source: MTC estimates.

Table D-4. Potential for Displacement by County by Community Type
% of Today's Rent-Burdened Households Located in High-Growth Areas

Scenario		2005-09	1	2	3	4	5	% Change	
County	Community Type	Current Rent-Burdened Households	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	30,676	21%	38%	27%	36%	22%	n/a	78%
	Remainder of County	27,338	6%	13%	9%	15%	11%	n/a	117%
Contra Costa	Communities of Concern	9,588	7%	34%	5%	26%	3%	n/a	377%
	Remainder of County	18,859	6%	6%	4%	3%	0%	n/a	0%
Marin	Communities of Concern	1,205	0%	0%	0%	0%	19%	n/a	--
	Remainder of County	8,033	0%	0%	0%	0%	3%	n/a	--
Napa	Communities of Concern	--	--	--	--	--	--	n/a	--
	Remainder of County	3,381	0%	4%	0%	0%	0%	n/a	1563%
San Francisco	Communities of Concern	15,396	12%	33%	24%	14%	20%	n/a	174%
	Remainder of County	24,625	7%	11%	9%	7%	9%	n/a	61%
San Mateo	Communities of Concern	7,204	39%	20%	60%	35%	65%	n/a	-49%
	Remainder of County	14,451	10%	10%	15%	13%	10%	n/a	-2%
Santa Clara	Communities of Concern	13,993	28%	48%	30%	53%	19%	n/a	68%
	Remainder of County	36,551	4%	10%	10%	15%	8%	n/a	167%
Solano	Communities of Concern	3,882	3%	10%	0%	20%	3%	n/a	256%
	Remainder of County	8,410	0%	0%	0%	3%	0%	n/a	0%
Sonoma	Communities of Concern	2,693	85%	60%	11%	9%	11%	n/a	-29%
	Remainder of County	14,178	4%	4%	0%	2%	0%	n/a	-6%
Bay Area	Communities of Concern	84,637	21%	36%	25%	31%	21%	n/a	68%
	Remainder of County	155,826	5%	8%	7%	9%	6%	n/a	67%

Source: ABAG estimates.

Table D-5. VMT Density by County by Community Type

Average Daily Vehicle-Miles of Travel per Square Kilometer of Developed Area Within 1,000 Feet of Major Roadways

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	10,437	12,097	12,589	12,082	12,577	12,178	21%	4%
	Remainder of County	11,467	13,269	14,017	13,485	14,464	13,632	22%	6%
Contra	Communities of Concern	10,176	12,326	11,982	11,833	12,606	11,310	18%	-3%
Costa	Remainder of County	10,946	12,762	12,599	12,323	13,065	12,054	15%	-1%
Marin	Communities of Concern	12,755	13,393	13,491	13,412	13,663	12,696	6%	1%
	Remainder of County	10,906	11,707	11,460	11,139	11,661	10,901	5%	-2%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	5,263	6,720	5,860	6,234	5,737	6,052	11%	-13%
San Francisco	Communities of Concern	6,742	7,586	7,468	7,385	7,693	7,424	11%	-2%
	Remainder of County	7,584	8,415	8,394	8,434	8,583	8,379	11%	0%
San Mateo	Communities of Concern	11,454	14,094	13,608	13,948	13,794	14,344	19%	-3%
	Remainder of County	10,818	12,954	12,538	13,362	13,277	13,343	16%	-3%
Santa Clara	Communities of Concern	9,541	11,206	11,963	12,179	13,061	11,307	25%	7%
	Remainder of County	9,719	11,521	12,283	12,351	12,696	11,846	26%	7%
Solano	Communities of Concern	9,376	11,021	10,514	10,070	10,281	9,804	12%	-5%
	Remainder of County	7,869	10,764	10,109	10,080	10,090	10,027	28%	-6%
Sonoma	Communities of Concern	10,666	13,115	12,393	10,879	12,216	10,770	16%	-6%
	Remainder of County	7,121	9,506	8,657	8,158	8,708	8,144	22%	-9%
Bay Area	Communities of Concern	9,737	11,447	11,693	11,536	12,123	11,259	20%	2%
	Remainder of County	9,861	11,717	11,895	11,804	12,261	11,626	21%	2%

Source: MTC estimates.

Table D-6. PM10 Emissions Density by County by Community Type

Average Daily Kilograms of PM10 Emissions per Square Kilometer of Developed Area Within 1,000 Feet of Major Roadways

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.46	0.46	0.47	0.45	0.47	0.46	4%	4%
	Remainder of County	0.59	0.58	0.62	0.59	0.64	0.60	4%	5%
Contra Costa	Communities of Concern	0.45	0.47	0.45	0.45	0.48	0.43	0%	-3%
	Remainder of County	0.59	0.58	0.58	0.56	0.60	0.55	-2%	-1%
Marin	Communities of Concern	0.65	0.57	0.58	0.57	0.59	0.54	-12%	1%
	Remainder of County	0.58	0.53	0.52	0.50	0.53	0.49	-11%	-2%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.46	0.51	0.44	0.47	0.43	0.45	-5%	-13%
San Francisco	Communities of Concern	0.29	0.29	0.28	0.28	0.29	0.28	-3%	-2%
	Remainder of County	0.33	0.33	0.33	0.33	0.33	0.33	-1%	0%
San Mateo	Communities of Concern	0.51	0.54	0.52	0.53	0.52	0.55	1%	-4%
	Remainder of County	0.56	0.57	0.55	0.59	0.58	0.59	-2%	-3%
Santa Clara	Communities of Concern	0.42	0.42	0.45	0.46	0.49	0.43	7%	6%
	Remainder of County	0.46	0.47	0.50	0.50	0.52	0.48	8%	6%
Solano	Communities of Concern	0.44	0.44	0.42	0.40	0.41	0.39	-5%	-5%
	Remainder of County	0.57	0.65	0.61	0.61	0.61	0.60	7%	-6%
Sonoma	Communities of Concern	0.47	0.49	0.46	0.41	0.46	0.40	-1%	-6%
	Remainder of County	0.40	0.47	0.42	0.40	0.43	0.40	5%	-9%
Bay Area	Communities of Concern	0.43	0.43	0.44	0.44	0.46	0.43	3%	2%
	Remainder of County	0.52	0.52	0.53	0.53	0.55	0.52	3%	1%

Source: MTC estimates.

Table D-7. PM2.5 Emissions Density by County by Community Type

Average Daily Kilograms of PM2.5 Emissions per Square Kilometer of Developed Area Within 1,000 Feet of Major Roadways

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.24	0.20	0.21	0.20	0.21	0.21	-10%	4%
	Remainder of County	0.31	0.26	0.28	0.27	0.29	0.27	-11%	5%
Contra Costa	Communities of Concern	0.24	0.21	0.20	0.20	0.21	0.19	-14%	-3%
	Remainder of County	0.31	0.26	0.26	0.25	0.27	0.25	-16%	-1%
Marin	Communities of Concern	0.35	0.26	0.26	0.26	0.27	0.25	-25%	1%
	Remainder of County	0.31	0.24	0.24	0.23	0.24	0.22	-24%	-2%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.24	0.23	0.20	0.21	0.20	0.21	-18%	-13%
San Francisco	Communities of Concern	0.15	0.13	0.13	0.12	0.13	0.13	-14%	-2%
	Remainder of County	0.16	0.15	0.15	0.15	0.15	0.15	-11%	0%
San Mateo	Communities of Concern	0.27	0.24	0.23	0.24	0.24	0.25	-13%	-4%
	Remainder of County	0.29	0.26	0.25	0.26	0.26	0.26	-15%	-3%
Santa Clara	Communities of Concern	0.22	0.19	0.20	0.21	0.22	0.19	-7%	6%
	Remainder of County	0.24	0.21	0.23	0.23	0.23	0.22	-6%	6%
Solano	Communities of Concern	0.23	0.20	0.19	0.18	0.19	0.18	-18%	-5%
	Remainder of County	0.31	0.29	0.28	0.28	0.28	0.27	-9%	-5%
Sonoma	Communities of Concern	0.24	0.22	0.21	0.18	0.21	0.18	-14%	-6%
	Remainder of County	0.21	0.21	0.19	0.18	0.19	0.18	-9%	-9%
Bay Area	Communities of Concern	0.22	0.20	0.20	0.20	0.21	0.19	-11%	2%
	Remainder of County	0.27	0.24	0.24	0.24	0.25	0.23	-11%	1%

Source: MTC estimates.

Table D-8. Diesel PM Emissions Density by County by Community Type

Average Daily Kilograms of Diesel PM Emissions per Square Kilometer of Developed Area Within 1,000 Feet of Major Roadways

Scenario		2010	1	2	3	4	5	% Change	
		Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.07	0.02	0.02	0.02	0.02	0.02	-69%	3%
	Remainder of County	0.11	0.03	0.03	0.03	0.03	0.03	-68%	5%
Contra	Communities of Concern	0.08	0.03	0.02	0.02	0.03	0.02	-69%	-3%
Costa	Remainder of County	0.11	0.03	0.03	0.03	0.03	0.03	-69%	1%
Marin	Communities of Concern	0.13	0.04	0.04	0.04	0.04	0.04	-71%	0%
	Remainder of County	0.11	0.03	0.03	0.03	0.03	0.03	-71%	-1%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.08	0.03	0.02	0.03	0.02	0.03	-69%	-8%
San Francisco	Communities of Concern	0.04	0.01	0.01	0.01	0.01	0.01	-70%	-1%
	Remainder of County	0.03	0.01	0.01	0.01	0.01	0.01	-70%	1%
San Mateo	Communities of Concern	0.09	0.03	0.03	0.03	0.03	0.03	-70%	-5%
	Remainder of County	0.10	0.03	0.03	0.03	0.03	0.03	-69%	-2%
Santa Clara	Communities of Concern	0.07	0.02	0.02	0.02	0.02	0.02	-68%	3%
	Remainder of County	0.08	0.03	0.03	0.03	0.03	0.03	-67%	3%
Solano	Communities of Concern	0.08	0.03	0.02	0.02	0.02	0.02	-69%	0%
	Remainder of County	0.12	0.04	0.04	0.04	0.04	0.04	-64%	1%
Sonoma	Communities of Concern	0.08	0.03	0.02	0.02	0.02	0.02	-70%	-6%
	Remainder of County	0.06	0.02	0.02	0.02	0.02	0.02	-66%	-10%
Bay Area	Communities of Concern	0.07	0.02	0.02	0.02	0.02	0.02	-69%	0%
	Remainder of County	0.09	0.03	0.03	0.03	0.03	0.03	-68%	2%

Source: MTC estimates.

Table D-9. VMT Distribution Index by County by Community Type

Index = (% of Total Regional VMT / % of Total Regional Population)

Value > 1 = Greater Share of Regional VMT Than Regional Population

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.98	0.94	0.88	0.91	0.93	0.95	-10%	-6%
	Remainder of County	1.30	1.32	1.37	1.32	1.30	1.25	5%	3%
Contra Costa	Communities of Concern	0.73	0.90	0.68	0.92	0.73	0.90	-8%	-25%
	Remainder of County	1.08	1.03	1.07	1.12	1.04	1.08	-1%	3%
Marin	Communities of Concern	1.07	1.28	1.09	1.42	1.12	1.31	2%	-15%
	Remainder of County	0.98	1.00	1.01	0.99	1.05	0.96	3%	1%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.46	0.49	0.47	0.50	0.50	0.50	2%	-3%
San Francisco	Communities of Concern	0.47	0.44	0.37	0.41	0.39	0.43	-23%	-16%
	Remainder of County	0.52	0.46	0.49	0.44	0.51	0.46	-5%	6%
San Mateo	Communities of Concern	1.12	1.21	0.99	1.16	1.04	1.14	-12%	-18%
	Remainder of County	0.96	0.95	0.98	0.90	0.98	0.86	2%	4%
Santa Clara	Communities of Concern	1.35	1.50	1.29	1.38	1.20	1.49	-5%	-14%
	Remainder of County	1.12	1.17	1.13	1.09	1.11	1.13	1%	-4%
Solano	Communities of Concern	0.75	0.82	0.74	0.80	0.72	0.78	-1%	-10%
	Remainder of County	1.10	1.08	1.26	1.30	1.26	1.29	15%	16%
Sonoma	Communities of Concern	1.77	1.51	1.51	1.99	1.86	2.06	-15%	0%
	Remainder of County	0.58	0.58	0.62	0.62	0.64	0.62	8%	8%
Bay Area	Communities of Concern	0.96	0.99	0.87	0.96	0.90	0.99	-10%	-13%
	Remainder of County	1.01	1.00	1.04	1.01	1.03	1.00	3%	4%

Source: MTC estimates.

Table D-10. PM10 Emissions Distribution Index by County by Community Type

Index = (% of Total Regional PM10 / % of Total Regional Population)

Value > 1 = Greater Share of Regional PM10 Than Regional Population

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.96	0.93	0.87	0.90	0.93	0.94	-10%	-6%
	Remainder of County	1.31	1.33	1.37	1.32	1.30	1.25	4%	3%
Contra Costa	Communities of Concern	0.73	0.90	0.68	0.92	0.73	0.90	-8%	-25%
	Remainder of County	1.09	1.04	1.07	1.12	1.04	1.09	-2%	3%
Marin	Communities of Concern	1.11	1.31	1.11	1.46	1.15	1.34	0%	-15%
	Remainder of County	1.00	1.01	1.02	0.99	1.06	0.97	2%	1%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.46	0.49	0.48	0.50	0.50	0.50	2%	-2%
San Francisco	Communities of Concern	0.45	0.43	0.36	0.40	0.38	0.42	-21%	-16%
	Remainder of County	0.48	0.45	0.48	0.43	0.50	0.45	-1%	7%
San Mateo	Communities of Concern	1.13	1.22	1.00	1.16	1.04	1.14	-12%	-18%
	Remainder of County	0.97	0.95	0.99	0.90	0.99	0.87	1%	4%
Santa Clara	Communities of Concern	1.34	1.50	1.29	1.37	1.20	1.49	-4%	-14%
	Remainder of County	1.12	1.17	1.13	1.09	1.11	1.13	1%	-4%
Solano	Communities of Concern	0.76	0.83	0.75	0.80	0.73	0.79	-2%	-10%
	Remainder of County	1.15	1.11	1.29	1.33	1.29	1.32	12%	17%
Sonoma	Communities of Concern	1.77	1.51	1.51	1.99	1.85	2.06	-15%	0%
	Remainder of County	0.57	0.58	0.62	0.61	0.64	0.61	9%	8%
Bay Area	Communities of Concern	0.95	0.99	0.86	0.96	0.89	0.99	-10%	-13%
	Remainder of County	1.01	1.00	1.04	1.01	1.03	1.00	3%	4%

Source: MTC estimates.

Table D-11. PM2.5 Emissions Distribution Index by County by Community Type

Index = (% of Total Regional PM2.5 / % of Total Regional Population)

Value > 1 = Greater Share of Regional PM2.5 Than Regional Population

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.95	0.92	0.87	0.89	0.92	0.94	-9%	-6%
	Remainder of County	1.32	1.33	1.36	1.32	1.30	1.25	4%	3%
Contra Costa	Communities of Concern	0.73	0.90	0.68	0.92	0.73	0.90	-8%	-25%
	Remainder of County	1.10	1.04	1.07	1.13	1.04	1.09	-2%	4%
Marin	Communities of Concern	1.14	1.32	1.13	1.47	1.17	1.35	-1%	-15%
	Remainder of County	1.01	1.01	1.03	1.00	1.07	0.97	2%	1%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.47	0.49	0.48	0.51	0.50	0.50	3%	-2%
San Francisco	Communities of Concern	0.44	0.43	0.36	0.40	0.38	0.42	-19%	-17%
	Remainder of County	0.46	0.44	0.47	0.43	0.49	0.44	3%	7%
San Mateo	Communities of Concern	1.14	1.21	0.99	1.16	1.04	1.14	-13%	-18%
	Remainder of County	0.98	0.95	0.99	0.90	0.99	0.87	1%	4%
Santa Clara	Communities of Concern	1.33	1.49	1.28	1.37	1.19	1.48	-4%	-14%
	Remainder of County	1.11	1.17	1.12	1.09	1.10	1.13	1%	-4%
Solano	Communities of Concern	0.77	0.84	0.76	0.81	0.74	0.80	-2%	-10%
	Remainder of County	1.19	1.11	1.31	1.35	1.30	1.33	10%	17%
Sonoma	Communities of Concern	1.77	1.51	1.51	1.99	1.86	2.07	-15%	0%
	Remainder of County	0.56	0.58	0.62	0.62	0.64	0.61	10%	8%
Bay Area	Communities of Concern	0.95	0.98	0.86	0.96	0.89	0.99	-9%	-13%
	Remainder of County	1.01	1.00	1.04	1.01	1.03	1.00	3%	4%

Source: MTC estimates.

Table D-12. Diesel PM Emissions Distribution Index by County by Community Type

Index = (% of Total Regional Diesel PM / % of Total Regional Population)

Value > 1 = Greater Share of Regional Diesel PM Than Regional Population

Scenario		2010	1	2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	0.89	0.83	0.77	0.81	0.83	0.84	-13%	-7%
	Remainder of County	1.36	1.36	1.40	1.37	1.31	1.26	3%	3%
Contra Costa	Communities of Concern	0.74	0.90	0.68	0.91	0.73	0.91	-8%	-24%
	Remainder of County	1.14	1.08	1.14	1.22	1.11	1.16	0%	6%
Marin	Communities of Concern	1.27	1.56	1.33	1.75	1.39	1.63	4%	-15%
	Remainder of County	1.07	1.11	1.13	1.10	1.19	1.08	6%	2%
Napa	Communities of Concern	--	--	--	--	--	--	--	--
	Remainder of County	0.46	0.49	0.50	0.53	0.53	0.51	8%	3%
San Francisco	Communities of Concern	0.35	0.32	0.27	0.30	0.29	0.31	-23%	-16%
	Remainder of County	0.30	0.27	0.29	0.25	0.30	0.27	-3%	9%
San Mateo	Communities of Concern	1.18	1.23	0.99	1.14	1.05	1.15	-16%	-19%
	Remainder of County	1.01	0.98	1.02	0.91	1.02	0.88	2%	5%
Santa Clara	Communities of Concern	1.29	1.44	1.19	1.27	1.10	1.43	-8%	-17%
	Remainder of County	1.09	1.17	1.09	1.06	1.08	1.11	0%	-6%
Solano	Communities of Concern	0.82	0.89	0.84	0.91	0.83	0.88	3%	-6%
	Remainder of County	1.41	1.36	1.69	1.72	1.71	1.67	20%	25%
Sonoma	Communities of Concern	1.74	1.45	1.45	1.99	1.83	2.07	-17%	0%
	Remainder of County	0.52	0.54	0.58	0.59	0.61	0.59	12%	7%
Bay Area	Communities of Concern	0.91	0.93	0.80	0.89	0.83	0.93	-12%	-14%
	Remainder of County	1.02	1.02	1.06	1.03	1.05	1.02	3%	4%

Source: MTC estimates.

Table D-13. Average Commute Time by County by Community Type

Scenario		1		2	3	4	5	% Change	
County	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Alameda	Communities of Concern	28	28	29	28	29	26	4%	1%
	Remainder of County	28	29	29	28	30	28	3%	-1%
Contra	Communities of Concern	32	31	32	25	30	28	3%	5%
Costa	Remainder of County	33	32	32	27	32	29	-2%	0%
Marin	Communities of Concern	26	32	27	28	23	29	3%	-17%
	Remainder of County	30	33	30	29	25	30	0%	-11%
Napa	Communities of Concern	-	-	-	-	-	-	--	--
	Remainder of County	28	29	25	23	25	25	-13%	-16%
San Francisco	Communities of Concern	23	25	25	25	23	24	8%	0%
	Remainder of County	25	26	26	27	25	26	4%	-3%
San Mateo	Communities of Concern	22	24	24	25	25	25	8%	-1%
	Remainder of County	26	27	28	28	28	30	4%	0%
Santa Clara	Communities of Concern	21	24	23	23	24	24	12%	-1%
	Remainder of County	22	25	24	24	25	25	12%	-3%
Solano	Communities of Concern	24	31	26	22	24	25	9%	-17%
	Remainder of County	26	36	27	24	25	26	3%	-26%
Sonoma	Communities of Concern	24	25	21	20	17	22	-13%	-19%
	Remainder of County	30	32	26	26	23	28	-13%	-20%
Bay Area	Communities of Concern	25	26	26	25	26	25	5%	-1%
	Remainder of County	27	29	27	26	27	27	2%	-6%

Source: MTC estimates.

Table D-14. Average Commute Time by Other Community Type

Scenario		1		2	3	4	5	% Change	
Community Type		Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Minority	Minority Pop. > 70%	25	27	27	26	27	26	6%	-1%
	Minority Pop. < 70%	27	29	27	26	27	27	1%	-7%
Low-Income	Low-Income Pop. > 30%	25	27	26	25	26	25	3%	-3%
	Low-Income Pop. < 30%	27	29	27	27	28	27	2%	-6%
Limited-English Proficiency	LEP Pop. > 20%	24	26	25	25	26	25	5%	-2%
	LEP Pop. < 20%	27	29	27	26	27	27	2%	-5%
Zero-Vehicle Households	Zero-Vehicle HHs > 10%	25	26	26	26	26	25	4%	-1%
	Zero-Vehicle HHs > 10%	27	29	27	26	28	27	2%	-6%
Seniors 75+	75+ Pop. > 10%	26	31	27	27	27	27	1%	-13%
	75+ Pop. < 10%	26	28	27	26	27	27	2%	-4%
Persons w/ a Disability	Pop. w/ Disability > 15%	25	27	26	25	26	25	5%	-1%
	Pop. w/ Disability < 15%	27	29	27	26	27	27	2%	-5%
Single-Parent Families	Single-Parent Fam > 15%	26	27	27	25	26	26	3%	-2%
	Single-Parent Fam < 15%	27	29	27	27	27	27	2%	-6%
Rent-Burdened Households	Rent-Burdened HHs > 15%	25	27	26	25	26	25	5%	-3%
	Rent-Burdened HHs < 15%	27	29	27	27	27	27	2%	-6%
6+ Disadv. Factors	6+ Disadvantage Factors	25	26	26	25	26	25	5%	-1%
	<6 Disadvantage Factors	27	29	27	26	27	27	2%	-5%
Regional Average		26	28	27	26	27	27	2%	-5%

Source: MTC estimates.

Table D-15. Average Commute Time by Mode by Community Type

Scenario		1		2	3	4	5	% Change	
Mode	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Drive Alone	Communities of Concern	20	21	20	20	20	19	0%	-2%
	Remainder of Region	24	25	23	22	23	23	-3%	-9%
Shared Ride	Communities of Concern	21	22	21	20	21	20	0%	-3%
	Remainder of Region	24	26	24	23	24	24	-3%	-10%
Drive to Transit	Communities of Concern	52	53	53	52	53	51	3%	1%
	Remainder of Region	59	63	59	57	60	58	1%	-5%
Walk to Rail/Ferry/Express Bus	Communities of Concern	48	49	51	50	50	49	5%	3%
	Remainder of Region	52	52	52	51	53	51	0%	0%
Walk to Local Bus	Communities of Concern	33	34	31	31	32	31	-4%	-9%
	Remainder of Region	37	39	35	36	36	35	-6%	-10%
Walk/Bike	Communities of Concern	18	17	18	17	18	17	-1%	1%
	Remainder of Region	18	17	17	17	18	17	-1%	0%
All Modes	Communities of Concern	25	26	26	25	26	25	5%	-1%
	Remainder of Region	27	29	27	26	27	27	2%	-6%

Source: MTC estimates.

Table D-16. Average Commute Time by Mode by Income Level

Scenario		1		2	3	4	5	% Change	
Mode	Income Level	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Drive Alone	Low-Income	20	24	20	19	19	19	-1%	-17%
	Not Low-Income	23	25	23	22	23	23	-2%	-7%
Shared Ride	Low-Income	21	26	21	20	20	21	-1%	-20%
	Not Low-Income	24	25	23	23	24	23	-3%	-8%
Drive to Transit	Low-Income	54	63	57	54	54	56	6%	-10%
	Not Low-Income	58	61	58	57	59	57	0%	-4%
Walk to Rail/Ferry/Express Bus	Low-Income	53	54	54	52	53	51	--	--
	Not Low-Income	51	50	51	50	52	50	1%	1%
Walk to Local Bus	Low-Income	35	38	33	34	34	34	-6%	-12%
	Not Low-Income	36	37	34	34	35	34	-6%	-9%
Walk/Bike	Low-Income	17	17	17	17	17	17	0%	1%
	Not Low-Income	18	17	17	17	18	17	-1%	0%
All Modes	Low-Income	24	28	25	24	24	25	5%	-11%
	Not Low-Income	27	28	27	27	27	27	2%	-4%

Source: MTC estimates.

Table D-17. Commute Mode Share by Community Type

Scenario		1	2	3	4	5	% Change		
Mode	Community Type	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Drive Alone	Communities of Concern	49%	46%	44%	45%	46%	44%	-10%	-3%
	Remainder of Region	59%	57%	56%	56%	56%	55%	-6%	-2%
Shared Ride	Communities of Concern	23%	22%	22%	21%	22%	21%	-7%	-1%
	Remainder of Region	25%	24%	24%	24%	24%	23%	-5%	-3%
Drive to Transit	Communities of Concern	5%	5%	5%	5%	6%	6%	16%	0%
	Remainder of Region	5%	5%	6%	5%	6%	6%	26%	8%
Walk to Rail/ Ferry/Express Bus	Communities of Concern	7%	9%	10%	10%	9%	10%	35%	8%
	Remainder of Region	4%	5%	6%	6%	5%	6%	51%	21%
Walk to Local Bus	Communities of Concern	8%	9%	10%	10%	9%	10%	25%	8%
	Remainder of Region	4%	4%	5%	4%	4%	4%	19%	14%
Walk/Bike	Communities of Concern	4%	5%	5%	5%	5%	5%	22%	1%
	Remainder of Region	4%	5%	5%	5%	5%	5%	22%	3%

Source: MTC estimates.

Table D-18. Commute Mode Share by Income Level

Scenario		1	2	3	4	5	% Change		
Mode	Income Level	Base Year	No Project	Project	Transit Priority	Network of Comm.	Env. Equity & Jobs	Base Year to Project	No Project to Project
Drive Alone	Low-Income	55%	53%	50%	51%	51%	51%	-8%	-5%
	Not Low-Income	58%	55%	54%	54%	55%	53%	-7%	-3%
Shared Ride	Low-Income	20%	20%	19%	19%	19%	19%	-7%	-6%
	Not Low-Income	25%	24%	24%	24%	24%	23%	-5%	-2%
Drive to Transit	Low-Income	3%	5%	4%	4%	4%	4%	22%	-17%
	Not Low-Income	5%	5%	6%	5%	6%	6%	25%	9%
Walk to Rail/ Ferry/Express Bus	Low-Income	6%	7%	9%	8%	8%	8%	42%	32%
	Not Low-Income	4%	6%	6%	7%	6%	7%	49%	15%
Walk to Local Bus	Low-Income	7%	7%	8%	8%	8%	8%	16%	20%
	Not Low-Income	4%	5%	5%	5%	5%	5%	24%	12%
Walk/Bike	Low-Income	8%	8%	10%	10%	9%	10%	15%	14%
	Not Low-Income	4%	5%	5%	5%	5%	5%	22%	1%

Source: MTC estimates.

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