

## Section 3.17 Environmental Justice

### Introduction

This section discusses the environmental setting and effects of the alternatives with regard to environmental justice. Impacts and benefits of transportation projects result from the physical placement and operation of such transportation facilities relative to neighborhoods and the region. The environmental justice analysis examines whether adverse effects across all environmental resource areas are experienced disproportionately higher in areas with a concentration of minority and/or low income populations, pursuant to Executive Order 12198 issued by President Clinton in 1994.

### Affected Environment

#### REGULATORY SETTING

##### Executive Order 12898

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations”, was signed by President Clinton on February 11, 1994. This order requires each federal agency, as part of its mission, to achieve environmental justice by identifying and addressing disproportionately high and adverse human health or environmental effects of its activities on minority and low income populations.

##### U.S. Department of Transportation Order 5610.2

In April 1997, the U.S. Department of Transportation (DOT) issued the DOT Order entitled “*Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*” (DOT Order 5610.2) to expand on the requirements of Executive Order 12898. The order generally describes the process for incorporating environmental justice principles into all DOT existing programs, policies, and activities. DOT and FTA provides that transit agencies:

- Ensure that new investments and changes in transit facilities, services, maintenance, and vehicle replacement deliver equitable levels of service and benefits to minority and low-income populations;
- Avoid, minimize, or mitigate disproportionately high and adverse effects on minority and low-income populations; and
- Enhance public involvement activities to identify and address the needs of minority and low-income populations in making transportation decisions.

### FTA Circular 4702.1

FTA Circular 4702.1, *Title VI and Title VI-Dependent Guidelines for Federal Transit Administration Recipients*, published May 13, 2007, provides guidance on conducting analysis of projects to integrate environmental justice analysis into NEPA documentation for FTA projects. In FTA Circular 4702.1 “disproportionately high and adverse effect on minority and low-income populations” means an adverse effect that:

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

This analysis was also developed under the Council on Environmental Quality’s (CEQ) *Environmental Justice – Guidance Under the National Environmental Policy Act* (CEQ 1997) (FHWA 2006), which clarifies that environmental justice concerns may arise from effects on the natural or physical environment that produce human health or ecological outcomes, or from adverse social or economic changes.

## **EXISTING CONDITIONS**

The information in this section is based on 2010 U.S. Census data, which became available in mid-2011 during the review of the Administrative Supplemental Draft EIS. In general, the 2010 U.S. Census data reflects a continuation of trends in the 2000 U.S. Census data with the study area continuing to experience increased growth in minority populations in addition to lower income levels relative to the City of San Jose.

Impacts and benefits of transportation projects result from the physical placement of such facilities, and also from their ability to improve or impede access to neighborhoods. The proposed project is located within Santa Clara County, and entirely within the City of San Jose. Eight U.S. Census tracts located adjacent to the project alignment were analyzed in order to determine the presence or absence of environmental justice populations. Figure 3.17-1 shows the environmental justice characteristics for the study area.<sup>1</sup>

### *Demographic Characteristics*

Race and income are socioeconomic characteristics critical to the consideration of a project’s impacts on minority and low-income populations, or Environmental Justice

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<sup>1</sup> A map of the census tracts in San Jose is found on the San Jose Planning Services Division website at <<http://www.sanjoseca.gov/planning/Census/Citywide%20census.pdf>>. The 2005 FEIR considered 10 census tracts. This analysis has been refined to include 8 census tracts immediately adjacent to the Capitol Expressway Corridor in the vicinity of the project alignment.

(EJ) populations. CEQ’s 1997 Guidance defines minority and low-income populations are defined as follows:

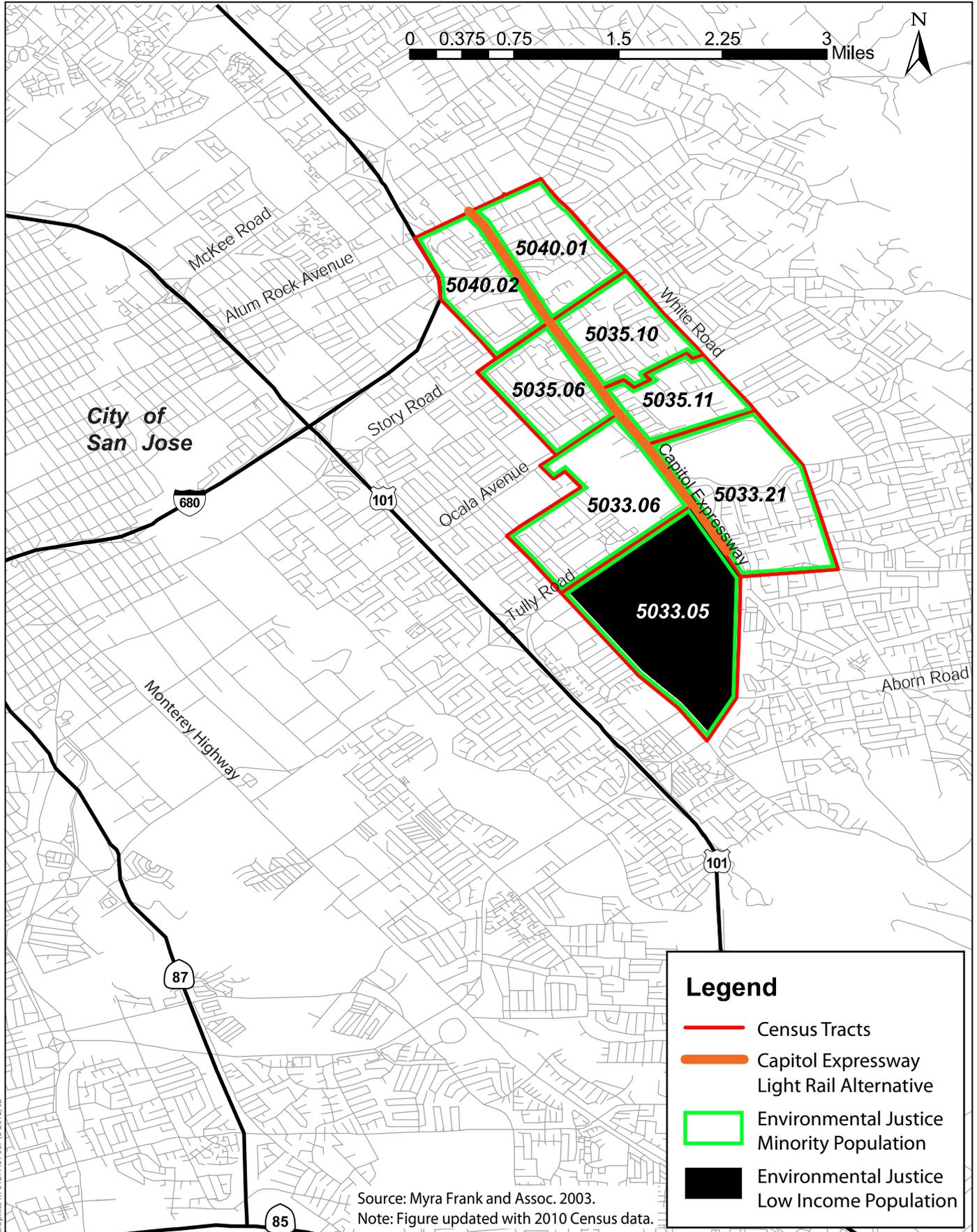
- Minority means a person who is:
  - Black (having origins in any of the black racial groups of Africa);
  - Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
  - Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
  - American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).
- Low-Income means a person whose median household income is at or below the Department of Health and Human Services (DHHS) poverty guidelines;
- Minority populations—Minority populations are identified where (a) the minority population of the affected area exceeds 50 percent of the total population or (b) when the minority population percentage in a community is meaningfully greater than the majority in the general population.
- Low-income populations—Low-income populations are identified where (a) more than 50 percent of households are below the poverty line or (b) the low-income population percentage in a community is meaningfully greater than the low-income population in the general population. According to the DHHS, the 2011 poverty line for a family of four is \$22,350 (<http://aspe.hhs.gov/poverty/11poverty.shtml>).

### Race/Ethnicity

Table 3.17-1 compares the racial makeup of the study area by census tract to the City as a whole. As shown in the table, the racial makeup of the study area is different than the City as a whole on several fronts. The study area has a substantially lower proportion of white population than elsewhere in the city, ranging from 9.8 – 37.1 percent, compared to 46.4 percent Citywide. The Hispanic/Latino percentage of the study area is between 12.9 – 77.2 percent, compared to about 28.8 percent Citywide. The Asian population in the study area ranges from 12.6 – 79.1 percent in the study area compared to 32.4 percent Citywide.

The minority population in the study area ranges from 63 – 90 percent, which is higher than the City of San Jose (54 percent). As such, both criteria used to determine the presence of an environmental minority justice population were met, as this percentage exceeds 50 percent of the total population for the affected area, and is meaningfully greater than the majority in the general population. Based on these criteria, all 8 census tracts in the study area contain a minority environmental justice population (see Figure 3.17-1).

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**Figure 3.17-1**  
**Environmental Justice and Minority Populations**

**Table 3.17-1. Racial and Ethnic Characteristics of City of San Jose and Study Area**

| <b>Census Tract</b>     | <b>White</b> | <b>Black or African American</b> | <b>American Indian and Alaska Native</b> | <b>Asian</b> | <b>Native Hawaiian and Other Pacific Islander</b> | <b>Other Race</b> | <b>Two or More Races</b> | <b>Hispanic or Latino (of any race)</b> | <b>Minority</b> |
|-------------------------|--------------|----------------------------------|--|--------------|---|-------------------|--------------------------|---|-----------------|
| <b>City of San Jose</b> | <b>46.4%</b> | <b>3.5%</b>                      | <b>0.7%</b>                              | <b>32.4%</b> | <b>0.3%</b>                                       | <b>12.2%</b>      | <b>4.5%</b>              | <b>28.8%</b>                            | <b>54%</b>      |
| 5033.05                 | 21.2%        | 1.9%                             | 1.1%                                     | 44.9%        | 0.2%  | 26.7%             | 4.1%                     | 48.4%                                   | 79%             |
| 5033.06                 | 34.1%        | 1.7%                             | 1.6%                                     | 30.9%        | 0.8%  | 27.0%             | 3.9%                     | 62.2%                                   | 66%             |
| 5033.21                 | 9.8%         | 1.4%                             | 0.5%                                     | 79.1%        | 0.5%  | 6.4%              | 2.2%                     | 12.9%                                   | 90%             |
| 5035.06                 | 29.4%        | 2.6%                             | 1.7%                                     | 25.3%        | 0.2%  | 35.8%             | 4.9%                     | 67.8%                                   | 71%             |
| 5035.10                 | 36.2%        | 1.7%                             | 1.2%                                     | 12.6%        | 0.5%  | 43.1%             | 4.8%                     | 77.2%                                   | 64%             |
| 5035.11                 | 21.9%        | 1.9%                             | 1.0%                                     | 42.5%        | 0.4%  | 27.2%             | 5.0%                     | 47.2%                                   | 78%             |
| 5040.01                 | 37.1%        | 2.3%                             | 1.5%                                     | 18.2%        | 0.3%  | 35.6%             | 5.0%                     | 71.4%                                   | 63%             |
| 5040.02                 | 29.3%        | 3.0%                             | 1.4%                                     | 25.7%        | 0.9%  | 35.5%             | 4.3%                     | 66.3%                                   | 71%             |

Source: <http://www.bayareacensus.ca.gov/index.html>, 2010 Census Summary File 1, Table: QT-P4, Race, Combinations of Two Races, and Not Hispanic.

**Table 3.17-2. Low Income Characteristics of City of San Jose and the Study Area**

| Census Tract            | Median Household Income | Average Household Size | DHHS Poverty Guideline | Percent Below Poverty Level | EJ Low Income |
|-------------------------|-------------------------|------------------------|------------------------|-----------------------------|---------------|
| <b>City of San Jose</b> | <b>\$79,405</b>         | <b>3.09</b>            | <b>\$18,530</b>        | <b>15.3</b>                 | No            |
| 5033.05                 | \$47,731                | 4.30                   | \$22,350               | 20.5                        | Yes           |
| 5033.06                 | \$60,583                | 4.97                   | \$26,170               | 8.3                         | No            |
| 5033.21                 | \$117,303               | 4.34                   | \$22,350               | 3.3                         | No            |
| 5035.06                 | \$59,083                | 5.23                   | \$26,170               | 12.7                        | No            |
| 5035.10                 | \$44,831                | 4.57                   | \$26,170               | 11.4                        | No            |
| 5035.11                 | \$74,375                | 4.55                   | \$26,170               | 12.2                        | No            |
| 5040.01                 | \$60,893                | 4.12                   | \$22,350               | 7.6                         | No            |
| 5040.02                 | \$48,885                | 4.46                   | \$26,170               | 11.8                        | No            |

Source: Median Household Income: 2006-2010 American Community Survey 5-Year Estimates (B09013).

Average HH Size: US Census 2010, Summary File 1

HHS 2011 Poverty Guidelines: <http://aspe.hhs.gov/poverty/11poverty.shtml>

Percent Below Poverty Level: 2006-2010 American Community Survey 5-Year Estimates (S1701)

### Low-Income

Median household income for the study area ranges from \$44,831 to \$117,303, which is generally lower than the City of San Jose (\$79,405). The exception is census tract 5033.21, which has a higher median household income (\$117,303) than the City of San Jose. For all census tracts in the study area, the median household income is higher than the DHHS 2011 poverty guideline, which is one of the criteria used to define a low income population. The DHHS Poverty Guideline varies by average household size and is shown in Table 3.17-2.

The percentage of the population in the study area below the poverty level as defined by the U.S. Census Bureau ranges from 3.3 percent to 20.5 percent. Only one census tract, 5033.05, has a higher percentage of residents below the poverty level (20.5 percent) than the City of San Jose (15.3 percent). Since this census tract has a low-income percentage that is meaningfully greater than the low income population in the City of San Jose, it meets one of the criteria used to define a low income environmental justice population.

## Environmental Consequences

### APPROACH AND METHODS

This analysis was based on a qualitative assessment of adverse effects on the environment that would result from the proposed alternatives for each resource area evaluated. Impacts to environmental justice populations that could potentially occur with implementation of the proposed action were evaluated using the following criteria:

- a) whether the project would adversely and disproportionately affect a minority population (a minority environmental justice population is defined as any geography containing a minority population of 50 percent or more); or
- b) whether the project would adversely and disproportionately affect a low-income population group (a low-income group is defined as any geography containing a low income population that is meaningfully greater than the low-income population in the general population).

The methodology for analyzing the effects of the proposed project on EJ populations (any populations meeting the requirements for minority or low-income) consists of the following steps:

- Define the project area boundary and identify census tracts in the study area;
- Determine thresholds for minority and low-income populations to identify potential locations of EJ populations based on data from the 2010 Census;
- Identify the location of EJ populations based on thresholds and additional information;
- Analyze the location and severity of impacts associated with the alternatives; and
- Determine disproportionately high and adverse impacts (if any).

### EFFECTS AND MITIGATION MEASURES

#### *No-Build Alternative*

Under the No-Build Alternative, conditions in the study area will continue to change as a result of growth in population and employment, and advances in technology. Traffic congestion will increase without transportation improvements. However, this effect would also occur both locally and regionally, so impacts would not be disproportionately high and adverse related to EJ populations. The delays to transit on Capitol Expressway will increase by 11 percent, but this increase is much less than the Build Alternative due to the presence of HOV lanes. Air quality will generally improve due to advances in engine technology and phasing out of older vehicles. With no project construction or property acquisition, there would be no hazardous

materials impact. Noise levels, which are primarily attributed to motor vehicles, will increase slightly. Vibration levels, which are also primarily attributed to motor vehicles, are anticipated to be similar to existing levels with no railroad improvements. In summary, there would be no disproportionately high and adverse impacts to EJ populations under the No-Build Alternative.

### *Light Rail Alternative*

**Impact: Disproportionately High and Adverse Effects on Minority and Low-Income Populations**

As shown in Figure 3.17-1, all 8 census tracts in the study area contain populations that meet the minority criteria for environmental justice. One of the 8 census tracts meets the minority criteria. Implementation of the Light Rail Alternative could result in impacts to environmental justice populations specifically as it relates to transportation, and noise/vibration. No disproportionately adverse impacts related to air quality, contamination of soils or water, or other physical hazards are anticipated with mitigation. All potentially adverse effects are discussed in greater detail in the individual sections of Chapter 3 (Sections 3.1 to 3.19).

#### **Transportation**

As discussed in Section 3.1 *Transportation*, increased traffic congestion at local intersections in the corridor would have an adverse effect. Several intersections along Capitol Expressway would experience increases in volume delay and Level of Service (LOS) deterioration. Mitigation for traffic impacts (TRA-1) has been proposed where feasible, but impacts related to congestion at intersections would remain a substantially adverse effect, affecting corridor residents and non-residents traveling by automobile and bus through and along the Capitol Expressway corridor. In particular, target populations using Bus Rapid Transit (BRT) and High Occupancy Vehicle (HOV) lanes in the study area would be affected by increased traffic congestion (delay and LOS deterioration). However, it is possible that some bus riders will be able to switch to the Light Rail Alternative for a faster commute depending on their origin and destination, at no additional cost.

Although construction of the Light Rail Alternative would provide transit alternatives to target populations in the area (where they overlap with the routes of the BRT and express bus), as discussed in Section 3.1 *Transportation*, even with implementation of traffic mitigation, there could still be an adverse effect to HOV and bus travel times. Further mitigation is not proposed because it would require maintaining eight travel lanes, which would result in numerous

displacements and relocations along the corridor. It would also result in more severe noise and vibration impacts at adjacent residents. These impacts would be far worse than the traffic and travel time impacts of removing two travel lanes.

### **Noise/Vibration**

As described in Section 3.12 *Noise and Vibration*, study area residents would be exposed to increased noise and vibration levels related to construction and operation activities. Mitigation Measure NOI-2 would minimize vibration and noise impacts related to construction activities. NOI-1 would include sound insulation and quiet pavement at residences to minimize noise related to operational activities. As discussed in Section 3.12, even with implementation of noise/vibration mitigation, there could still be an adverse effect related to construction-period noise and vibration and vibration from rail operations. Further mitigation is not proposed at this time because additional information on the design and local soil conditions is needed to determine whether it is possible to cost-effectively mitigate these impacts.

VTA would continue to maintain the community information program as detailed in the January 2010 Coordination Plan for Agency and Public Involvement on the project website [http://www.vta.org/projects/capitol\\_rail\\_project/index.html](http://www.vta.org/projects/capitol_rail_project/index.html), and described in Chapter 6 *Agency and Community Participation*.

### **Adverse effects. No feasible mitigation.**

Traffic and noise/vibration impacts are discussed in Section 3.1, *Transportation*, and 3.12, *Noise and Vibration*, respectively. As described, even with implementation of mitigation measures, it is possible that traffic and noise/vibration could disproportionately affect minority and low-income populations in a way that is adverse. However, construction of the Light Rail Alternative would provide more transit options, and connection to transit hubs to transit-dependent populations in the study area, which is a beneficial effect.

### Proposed Options

The above discussion is inclusive of the Light Rail Alternative options.

## **CUMULATIVE EFFECTS**

### *No-Build Alternative*

The No-Build Alternative would not contribute to adverse cumulative effects on environmental justice.

### *Light Rail Alternative*

The Light Rail Alternative would not contribute to adverse cumulative effects on environmental justice.