

4.9 ENVIRONMENTAL JUSTICE

4.9.1 INTRODUCTION

Impacts and benefits of transportation projects result from the physical placement of such facilities, and also from their ability to impede or improve access to neighborhoods or portions of the region. The following analysis examines whether ethnic, minority, or low-income populations in the project area would experience disproportionately high adverse impacts and if they are inconsistent with the benefits created.

A review of socio-economic information for the corridor shows that populations in all but 5 out of 40 block groups¹ adjacent to the Baseline and BART alternatives qualify as environmental justice communities based on ethnicity and/or income level. Due to these disproportionately higher percentages of minority and low-income populations along the corridor, the entire study area, which includes all block groups adjacent to the Baseline or BART alternative, is being considered for this environmental justice analysis. A more detailed analysis of socioeconomic data is found in Section 4.15, *Socioeconomics*.

4.9.2 EXISTING CONDITIONS

4.9.2.1 Existing Setting

The SVRTC as a whole comprises a variety of neighborhoods and a diverse, multi-ethnic population. The ethnic composition for the area, as described in Section 4.15.2.3, *Socioeconomics/Ethnic Mix*, is more diverse, with higher percentages of Asian and Hispanic populations, than either Alameda or Santa Clara county. As shown in Table 4.9-1, approximately 72 percent of study area residents are members of minority groups, including individuals of Hispanic/Latino origin. This compares to a 59 percent minority population in Alameda County and the City of Fremont. In Santa Clara County, 56 percent of the population is represented by minorities, with 76 percent in the City of Milpitas, 64 percent in the City of San Jose, and 52 percent in the City of Santa Clara. Table 4.9-1 also shows that the percentage of households under the poverty level is higher for the area adjoining the corridor (10 percent) than in entire cities or counties through which the corridor passes. Table 4.15-3 and Table 4.15-4 in Section 4.15, *Socioeconomics*, provide additional background data on population characteristics.

Table 4.9-1: Minority and Low-Income Populations in the SVRTC (2000)

	Study Area	Alameda County	City of Fremont	Santa Clara County	City of Milpitas	City of San Jose	City of Santa Clara
% Minority:	72%	59%	59%	56%	76%	64%	52%
% Low-Income	10%	10%	4%	6%	4%	7%	7%

Source: 2000 U.S. Census Data.

¹ Called "block groups" by the U.S. Census Bureau. "Block groups" were selected as the geographic area to be evaluated given that they represent a smaller area than a census tract, and direct impacts are more likely to be limited to these smaller geographic areas adjoining the corridor.

4.9.2.2 Regulatory Setting

Federal Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, dated February 11, 1994, calls on federal agencies to identify and address disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority and low-income populations. Attached to EO 12898 is a memorandum that allows for the use of certain provisions of existing laws, such as Title VI of the Civil Rights Act of 1964, to be used to pursue environmental justice goals. The memorandum reiterates the language of Title VI, which prohibits recipients of federal financial assistance from discriminating based on race, color, or national origin in their programs or activities.

In 1997, the United States Department of Transportation (USDOT) issued its Order to establish procedures for use in complying with EO 12898 for its operating administrations, including FTA. The USDOT Order defines key terms and provides guidance for identifying and addressing disproportionately high and adverse impacts to minority and low-income populations. If such impacts would result from the SVRTC project, mitigation measures or alternatives must be developed to avoid or reduce the impacts, unless the agency finds that such measures are not practicable. The FTA [and FHWA] issued a circular in 1999 clarifying ways to ensure that environmental justice is considered during the planning process.

In 1999, Senate Bill 115 was passed in California, which codified the definition of environmental justice and established the Governor's Office of Planning and Research (OPR) as the lead agency for implementing environmental justice programs in the state. The bill further required the California Environmental Protection Agency (Cal EPA) to take specified actions in designating its mission for programs, policies, and standards within the agency and to develop a model environmental justice mission statement for its boards, departments, and offices. In 2000, Senate Bill 89 was passed as a companion bill to SB 115. The law requires the Secretary for Environmental Protection to convene a working group (supported by an advisory committee) before January 15, 2002, to assist Cal EPA in developing an interagency strategy for identifying and addressing gaps in existing programs, policies, or activities that might hinder the goal of achieving environmental justice and making recommendations in translating environmental documents and policies for limited English-speaking populations.

4.9.3 IMPACT ASSESSMENT AND MITIGATION MEASURES

The following sections review the direct impacts of the SVRTC alternatives, such as physical displacement of existing uses, and increases in air pollution, noise, and traffic. These types of impacts typically are of most concern to communities because they affect people's quality of life. While considering these impacts, the analysis also takes into account the increased access to regional transit services that either the Baseline Alternative or the BART Alternative would provide to these same communities.

VTA has conducted extensive public outreach, including a comprehensive program to coordinate and communicate with these communities throughout the MIS/AA and this environmental review process. Community members have provided substantive input into the current project design, alignment choices, station area planning, and construction approach, as discussed more fully in Chapter 9, *Agency and Community Participation*.

The following discussion provides an overall summary of potential effects related to displacement, air quality, noise, and traffic for the Baseline and BART alternatives.

4.9.3.1 Impacts

No Action Alternative

Although the No-Action Alternative may not adversely impact local communities, it would not provide these communities with the benefits of accessibility to transit services, as would the Baseline or BART alternative. Regardless, projects planned under the No-Action Alternative would undergo separate environmental review to define whether ethnic, minority, or low-income populations in project areas would experience disproportionately high adverse impacts. (See Section 3.2.1.2 for a list of future projects under the No-Action Alternative.)

Baseline Alternative

The geographic area of concern for the Baseline Alternative includes areas adjacent to the proposed busway connectors from the planned BART Warm Springs Station to both I-680 and I-880, and from I-880 to the Montague Expressway. The area between the planned BART Warm Springs Station and I-880 includes two existing residences located along the north and south sides of South Grimmer Road. The remaining area is principally vacant or industrial in nature. The aerial connection from I-880 to Montague Expressway would occur within an existing highway interchange. The Baseline Alternative would therefore not have disproportionate effects on minority or low-income neighborhoods, as detailed below.

Displacement. Construction of the Baseline Alternative would not require displacement or relocation of any residential uses. The Baseline Alternative would displace one industrial facility, one flower and fruit stand, and a commercial sign. Displacement and relocation activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as described in Section 4.15.3.4, *Socioeconomics/Design Requirements and Best Management Practices*. This would minimize any adverse effects of the necessary property acquisition associated with the Baseline Alternative.

Air Quality. Operation of the Baseline Alternative would reduce the amount of air emissions generated in the region. This benefit is directly related to a projected reduction in the number of vehicle miles traveled once the busway connectors are operating. Construction of the Baseline Alternative would generate dust and other pollutant emissions associated with construction and earthmoving activities. These potential impacts will be reduced by actions outlined in Section 4.19.4.2, *Construction/Design Requirements and Best Management Practices for Air Quality Impacts*.

Noise/Vibration. The Baseline Alternative would result in noise and vibration impacts associated with construction equipment, and would also result in noise generated by operation of the buses once construction is complete. These effects will be mitigated by construction of noise barriers identified in Section 4.13.3.3, *Noise and Vibration/Mitigation Measures*. Construction period impacts will be mitigated through measures identified in Section 4.19.11.3, *Construction/Mitigation Measures for Noise Impacts*. These mitigation measures will reduce adverse noise impacts.

Traffic. The Baseline Alternative busways, by design, would be separate from local streets and on their own guideway. Bus operations on these busways therefore would not result in local traffic impacts.

BART Alternative

As discussed previously, a majority of the block groups adjoining the BART Alternative corridor qualify as environmental justice communities, i.e., they have a higher level of ethnic and low-income populations than the surrounding communities.

Prior to application of mitigation measures identified in this EIS/EIR, construction and operation of the BART Alternative would have adverse effects on adjoining communities. However, the mitigation

measures identified in this EIS/EIR would reduce the majority of these impacts to acceptable levels. For traffic intersection impacts, mitigation does not appear to be practicable in some cases.

Operation of the BART Alternative would provide a direct and positive benefit to these same communities. By providing more convenient access to regional rapid transit and improving connectivity to other transit services, members of the community who may not have access to a private automobile will be better served, with improved access to employment, recreational, shopping, and public services, facilities, and opportunities. Impacts of the BART Alternative in terms of displacement, air quality, noise, traffic, and ongoing bus services in the SVRTC are discussed in more detail below.

Displacement. Construction of the BART Alternative would require displacement and relocation of 5 residential rental units. The project would also displace up to an estimated 101 businesses, 1 to 5 residential units, approximately 400 flea market vendor stalls, 1,025 rental storage tenants, 3 advertising signs, and 1 utility facility. All displacement and relocation activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 and VTA's Relocation Program, as described in Section 4.15.3.2, *Socioeconomics/Design Requirements and Best Management Practices*, to minimize adverse effects of the property acquisitions associated with the BART Alternative.

The MOS scenarios would require the same residential and business displacements as the full-build BART Alternative. However, by deferring the construction of the Berryessa Station, MOS-1E could temporarily retain 400 vendors at the San Jose Flea Market, primarily minority-operated businesses, for three years until MOS-2E is implemented.

Air Quality. When compared to the No-Action and Baseline alternatives, the BART Alternative would provide a greater reduction in the number of vehicle miles traveled in the region resulting in overall air quality improvements. This is a beneficial impact for the entire region, including the environmental justice communities.

Vehicular trips to BART stations would produce localized air emissions (principally CO) in the station areas, but the addition of these trips would not produce air emissions exceeding the federal or state ambient air quality standards, as described in Section 4.3, *Air Quality*.

The MOS scenarios would provide air quality benefits for the region similar to the full-build BART Alternative. In addition, vehicle trips to BART stations included in the MOS scenarios are not expected to produce emissions that exceed federal or state ambient air quality standards. Thus, the design requirements and best management practices for the full-build BART Alternative and MOS Scenarios would reduce adverse air quality impacts on environmental justice communities.

Construction of the BART Alternative and MOS Scenarios would generate dust and other pollutant emissions associated with construction and earthmoving activities. These impacts will be reduced by actions outlined in Section 4.19.4.2, *Construction/Design Requirements and Best Management Practices for Air Quality Impacts*. Implementation of these measures will reduce adverse air quality impacts on environmental justice communities during construction.

Noise/Vibration. The BART Alternative would result in noise and vibration impacts associated with construction equipment and operation of the trains once the project is complete. These impacts will be reduced by the use of specialized construction equipment to reduce construction vibration impacts (vibratory pile placement) and the construction of noise barriers and other mitigation measures, as identified in Section 4.13, *Noise and Vibration* and Section 4.19.11, *Construction/Noise and Vibration*. Implementation of these measures will reduce adverse noise and vibration impacts on environmental justice communities.

For the MOS scenarios, noise and vibration impacts on environmental justice communities would be the same as those described for the full-build BART Alternative. Design requirements and best management practices identified for the full-build BART Alternative, as well as implementation of mitigation measures, would reduce adverse impacts on environmental justice communities below FTA and BART thresholds, except for vibration impacts to 12 residences north of Berryessa Road.

Traffic. The BART Alternative would reduce overall vehicle miles traveled in the region. However, this alternative would also contribute to traffic congestion on local streets and highways in BART station areas, as discussed in Section 4.2, *Transportation and Transit*. Thirty intersections would experience adverse impacts due to additional station traffic associated with the BART Alternative. In 17 of these 30 cases, mitigation is not practicable given physical limitations at the intersections. (Refer to Section 4.2, *Transportation and Transit*, for additional discussion; however, in most cases, mitigating improvements would be required outside the roadway ROW necessitating displacement of businesses and demolition of major structures.)

It should be noted that the BART Alternative's contribution to traffic impacts at these intersections represents only a small percentage of the anticipated street traffic level increases that are projected to occur from anticipated growth by the year 2025.

The MOS scenarios would produce traffic impacts at the same intersections identified for the full-build BART Alternative due to additional vehicle trips accessing the BART stations. However, the deferral of the Berryessa Station would result in traffic levels in the vicinity of this station to be similar to those found under the No-Action Alternative, with a minor level of service change to one intersection at the Alum Rock Station. The design requirements and best management practices and mitigation measures for on-going operation, as well as during construction, would reduce traffic impacts except at the 17 intersections where mitigation is not practicable given physical limitations. Similar to the full-build BART Alternative, the MOS scenarios are not expected to generate additional traffic impacts on environmental justice communities, as they represent only a small percentage of the anticipated traffic by the year 2025.

Bus Services. VTA provides an integrated, multi-modal transit and transportation system, using local and express buses, light rail, heavy rail (potentially BART), and paratransit services along with an improved street and highway road system. Chapter 3, *Alternatives*, describes VTA's planned integrated system of roadway and transit improvements in the Year 2025 for all three alternatives – No-Action, Baseline, and BART. The roadway and transit components are described, reflecting the transportation plans that have been developed and adopted for the anticipated future transit and roadway system.

Under the BART Alternative, a corresponding expansion of supporting transportation components (light rail, bus, and roadway improvements) and capacity are assumed in the adopted plans for Santa Clara County and the Bay Area. Table 3.4-1 in Chapter 3, *Alternatives*, shows an assumed VTA bus fleet size for the BART Alternative of 642 buses in the Year 2025 – an increase of 136 buses compared to the current bus fleet size, and 42 buses more than assumed under the No-Action Alternative. Future bus route configuration, including “Valley Express” buses, for the BART Alternative would be refined to better integrate with the BART stations and service to maximize connectivity and accessibility. As a result, bus ridership levels increase under the BART Alternative when compared to the No-Action Alternative, even though the bus fleet size is smaller.

As with the full-build BART Alternative, bus service levels and ridership increase for the MOS Scenarios compared to the No-Action Alternative. This results in a benefit to environmental justice communities.

4.9.3.2 Design Requirements and Best Management Practices

No design requirements or best management practices are proposed for the Baseline or BART alternatives.

4.9.3.3 Mitigation Measures

No-Action Alternative

Projects planned under the No-Action Alternative would undergo separate environmental review to define impacts and to determine appropriate mitigation measures.

Baseline Alternative

Given current land uses adjoining the Baseline Alternative, and given the beneficial impacts associated with this alternative, the construction-period and operational impacts on the area adjoining the Baseline Alternative could be mitigated, and disproportionate impacts to low-income and minority communities would not occur. Additionally, the Baseline Alternative would result in overall improvements to transit services for the surrounding area, representing a benefit for the minority and low-income residents and businesses served.

BART Alternative

The construction and operational impacts of the BART Alternative and MOS Scenarios on environmental justice communities can be mitigated as discussed above (although some traffic mitigation measures are deemed not practicable). This mitigation, combined with increased access to regional mass transit and reduction in air pollutant emissions will compensate for the adverse effects. No disproportionately high and adverse impact on environmental justice communities would occur as a result of the BART Alternative and MOS Scenarios. Implementation of the BART Alternative and MOS Scenarios will enhance rather than adversely affect the integrated bus system, light rail, and roadway system.