

## 4.8 ENVIRONMENTAL JUSTICE

This section describes the existing Environmental Justice communities in the Study Area for the SEIS and presents the results of the evaluation of the potential construction impacts of the tunneling method alternatives. The environmental analysis assumes a conservative, worst-case, condition when determining potential impacts. Background information in this section is based on the Environmental Justice Technical Memorandum (Appendix EE) and Section 4.17 Environmental Justice Impacts presented in the Final EIS.

### 4.8.1 Affected Environment

This section describes the affected environment as it relates to an analysis of environmental justice for the two tunneling method alternatives being analyzed in this SEIS. General construction activities for the Project for locations other than along Flower Street and the Mangrove site area in Little Tokyo remain unchanged from the Final EIS.

The general boundaries of the Study Area are illustrated in Figure 4.8-1. While the Study Area encompasses those census blocks within the general boundaries, the purpose of this SEIS effort is to analyze potential impacts of the two tunneling method alternatives. Environmental justice analysis conducted for the two tunneling alternatives pertains specifically to those populations located along Flower Street and in Little Tokyo.

The affected environment along Flower Street includes the alignment-adjacent areas of the Financial District and Bunker Hill in downtown Los Angeles. These areas are characterized largely by business activities with high rise office buildings, hotels, and commercial properties. A limited number of high rise apartment buildings are located on Flower Street, along with the Los Angeles Public Library, the California Club, and smaller ground floor retail businesses. The Mangrove portal site is located on the eastern edge of Little Tokyo – a thriving historic and cultural destination characterized by a mix of retail businesses, housing, and cultural institutions.

The Final EIS was based on 2008 census information. The analytical information presented and used in this SEIS has been updated to reflect 2010 census information, which has identified significant growth in downtown residential population and employment since 2008.

#### Minority Populations

The racial and ethnic character of the populations within the Study Area by census block is listed in Table 4.8-1 (Racial and Ethnic Character by Census Block, 2008 to 2012), and shown on Figure 4.8-1 (Minority Populations in the Study Area by Census Block, 2008 to 2012). Based on U.S. Census Bureau data, all census block groups in the study area were identified as environmental justice areas due to higher minority averages in comparison to the surrounding community (i.e., Los Angeles County), or because 50 percent or more of the population was considered minority. However, census blocks are much larger than the area affected by the Project and tunneling method alternatives. Field

work confirmed that the Flower Street corridor is predominantly commercial and has limited residents, while Little Tokyo is an identified environmental justice community.

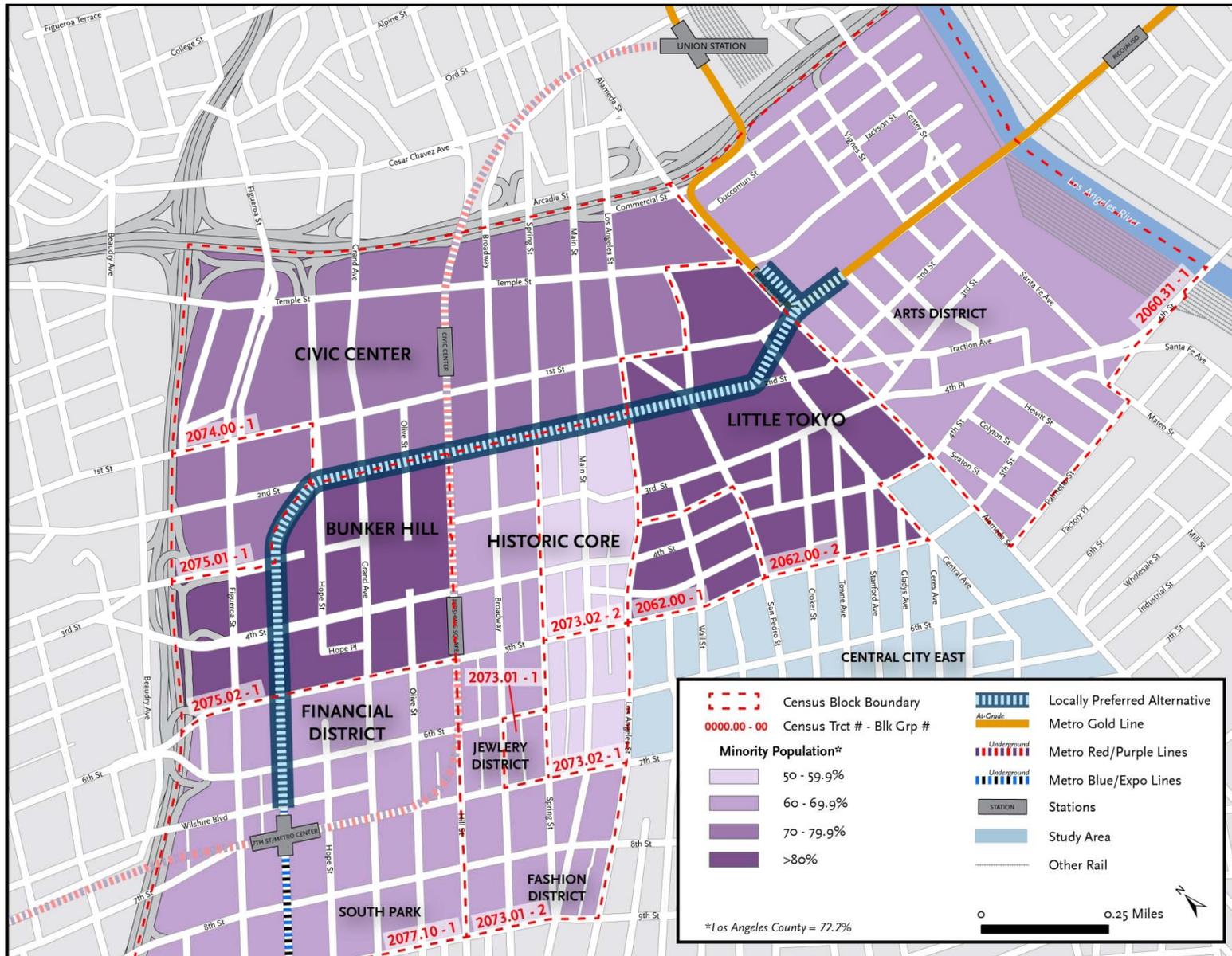
**Table 4.8-1: Racial and Ethnic Character by Census Block, 2008 to 2012**

Census Tract	Census Block Group	Total Population	White	Black or African American	Asian	Hispanic or Latino	Amer. Indian/Alaskan Native	Nat. Hawaiian/Other Pacific Islander	Other Races	Two or More Races	Percent Minority
2060.31	1	2,088	31.4%	4.8%	50.1%	9.2%	0.1%	0.1%	0.6%	3.7%	<b>68.6%</b>
2062	1	1,028	16.4%	47.5%	2.4%	31.1%	0.7%	0.1%	0.1%	1.7%	<b>83.6%</b>
2062	2	2,358	10.4%	16.5%	55.8%	14.5%	0.3%	0.1%	0.2%	2.3%	<b>89.6%</b>
2073.01	1	1,115	34.5%	24.5%	10.6%	25.2%	1.0%	0.1%	0.2%	4.0%	<b>65.5%</b>
2073.01	2	3,406	38.1%	18.8%	17.5%	19.4%	0.9%	0.2%	0.3%	4.8%	<b>61.9%</b>
2073.02	1	2,209	48.7%	18.4%	8.9%	17.5%	1.0%	0.0%	0.4%	5.3%	<b>51.4%</b>
2073.02	2	1,501	45.6%	20.0%	9.6%	19.7%	1.1%	0.1%	0.6%	3.3%	<b>54.4%</b>
2074	1	1,363	20.6%	21.9%	7.3%	48.4%	0.3%	0.0%	0.2%	1.3%	<b>79.4%</b>
2075.01	1	2,218	27.6%	7.9%	46.3%	14.5%	0.3%	0.1%	0.2%	3.1%	<b>72.5%</b>
2075.02	1	2,589	19.9%	4.9%	60.0%	12.4%	0.1%	0.2%	0.2%	2.4%	<b>80.2%</b>
2077.1	1	2,490	35.0%	11.7%	34.5%	15.5%	0.2%	0.2%	0.2%	2.7%	<b>65.0%</b>
<b>Total Study Area</b>		<b>22,446</b>	<b>30.4%</b>	<b>15.6%</b>	<b>31.1%</b>	<b>18.6%</b>	<b>0.5%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>3.3%</b>	<b>69.6%</b>
Los Angeles County		9,818,605	27.8%	8.3%	13.5%	47.7%	0.2%	0.2%	0.3%	2.0%	<b>72.2%</b>

Note: EJ – Environmental Justice; N/A – Not Applicable

Source: U.S. Census Bureau, American Community Survey 5-Year Estimate (2008-2012)

Figure 4.8-1: Minority Populations in the Study Area by Census Block, 2008 to 2012



## Low-Income Households

The median household income and households living below the poverty level (i.e., low-income households) within the Study Area are listed in Table 4.8-2 (Low-Income Households by Census Block, 2008 to 2012) and shown on Figure 4.8-2 (Low-Income Households in the Project Area by Census Block, 2008 to 2012). The average median household income is \$32,076. Table 4.8-2 also shows the percentage of households in each block group that are transit-dependent. All census block groups except one have greater percentages of transit-dependent households than Los Angeles County. Field work identifies that the project-adjacent areas of Flower Street and Little Tokyo do not appear to meet the criterion of being below the Los Angeles County median income level, as there is no low-income housing, rather both areas have only moderate and high rent housing.

**Table 4.8-2: Low-Income Households by Census Block, 2008 to 2012**

Census Tract	Census Block Group	Total Households	Median Household Income	Percent Households Living Below Poverty Level	Percent Households Transit-Dependent
2060.31	1	932	\$61,042	18.9%	7.0%
2062	1	226	\$4,589	76.6%	88.1%
2062	2	1,204	\$17,320	36.5%	47.3%
2073.01	1	861	\$7,682	65.7%	74.0%
2073.01	2	2,191	\$21,753	31.5%	46.4%
2073.02	1	1,266	\$32,241	24.0%	24.6%
2073.02	2	890	\$30,990	37.2%	49.7%
2074	1	15	\$10,795	100.0%	100.0%
2075.01	1	1,353	\$56,169	8.1%	22.5%
2075.02	1	1,741	\$19,698	35.8%	41.6%
2077.1	1	1,553	\$51,803	19.3%	30.4%
<b>Total Study Area</b>		<b>12,232</b>	<b>\$32,076</b>	<b>30.5%</b>	<b>38.9%</b>
Los Angeles County		3,218,511	\$56,241	15.6%	9.7%

Notes: EJ – Environmental Justice; N/A – Not Applicable

Source: U.S. Census Bureau, American Community Survey 5-Year Estimate (2008-2012)

## Little Tokyo

Los Angeles’s Little Tokyo is one of only three remaining “Japantowns” in the US, and is a historic cultural center of national importance. Prior to World War II, Little Tokyo was the largest Japanese American community in the country. Its Japanese-American population has since decreased in size as a majority of the Japanese-American population has migrated to the suburbs, but Little Tokyo remains a historic and cultural focal point for Japanese Americans both in Los Angeles and throughout the US. It houses important cultural institutions, such as the Japanese American National Museum (JANM),

and a portion of the neighborhood is designated as a historic district on the National Register of Historic Places. Impacts to Little Tokyo would affect not only local residents, but also the cultural footings of Japanese-Americans nationwide.

Throughout the planning and environmental review process for the Regional Connector project, residents of Little Tokyo have continuously expressed concern that construction of the project alternatives would negatively affect the community's cultural identity and economic viability. The Little Tokyo community has experience based on the impacts from the three-year construction effort for the Metro Gold Line Eastside Extension. This included the construction of a new Little Tokyo/Arts District Station, as well as construction along Alameda Street between US-101 and 1st Street.

## **4.8.2 Environmental Consequences**

This section summarizes the potential construction impacts of the two tunneling method alternatives evaluated in this SEIS as compared to the Project. The mitigation measures identified in the Final EIS for the Project would apply for Alternative A and B, and are described below in Section 4.8.3.

### **4.8.2.1 Alternative A – EPBM/Open Face Shield/SEM Project Profile**

#### **4.8.2.1.1 Construction Impacts**

##### **Transit**

Under Alternative A, there are no impacts to transit services in Little Tokyo beyond those identified for the Project. A majority of the potential construction impacts of Alternative A would be temporary and unavoidable. There would be no disproportionate adverse effect to Little Tokyo EJ populations with implementation of mitigation measures.

##### **Traffic Circulation**

Construction of Alternative A would increase the excavation truck trips in Little Tokyo from 19 percent under the Project to 75 percent, and would occur for 15 months longer than the Project. Under Alternative A, the number of trucks using the Flower Street route would decrease to approximately 10 trucks per day, while the number of trucks using the Little Tokyo haul routes would increase to approximately 30 trucks per day. Although the Level of Service (LOS) in the affected roadway segments would remain unchanged, travel times are expected to increase for vehicles traveling along the Little Tokyo haul routes. These increased travel times in and around Little Tokyo would be disproportionately borne by this community.

In summary, Alternative A would have a disproportionate adverse effect to the environmental justice population in Little Tokyo due to increased truck activity, and the longer duration of that truck activity as compared to the Project. This adverse effect would be temporary and unavoidable. This would be a disproportionate adverse effect to the Little Tokyo EJ community.

##### **Parking**

Parking impacts identified during construction of the Project would remain unchanged under construction of Alternative A. Parking would be adverse only in the Little Tokyo community portion of

the alignment, but, there would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Other Modes**

Pedestrian access to adjoining properties in Little Tokyo and bicycle traffic movements would be maintained during construction of Alternative A; however, portions of sidewalks may be temporarily closed adjacent to construction locations. Temporary closures of sidewalks and crosswalks may be necessary. Lane reductions and street closures would restrict bicycle traffic flow during construction. Impacts would be reduced after implementation of proposed mitigation. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Visual Quality**

As described in Section 4.1, construction of Alternative A would not result in impacts to scenic resources or in nighttime lighting or shade and shadow impacts over the Project in Little Tokyo. Construction equipment and staging set ups for Alternative A would have an adverse effect, however they would be temporary. Therefore, there would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

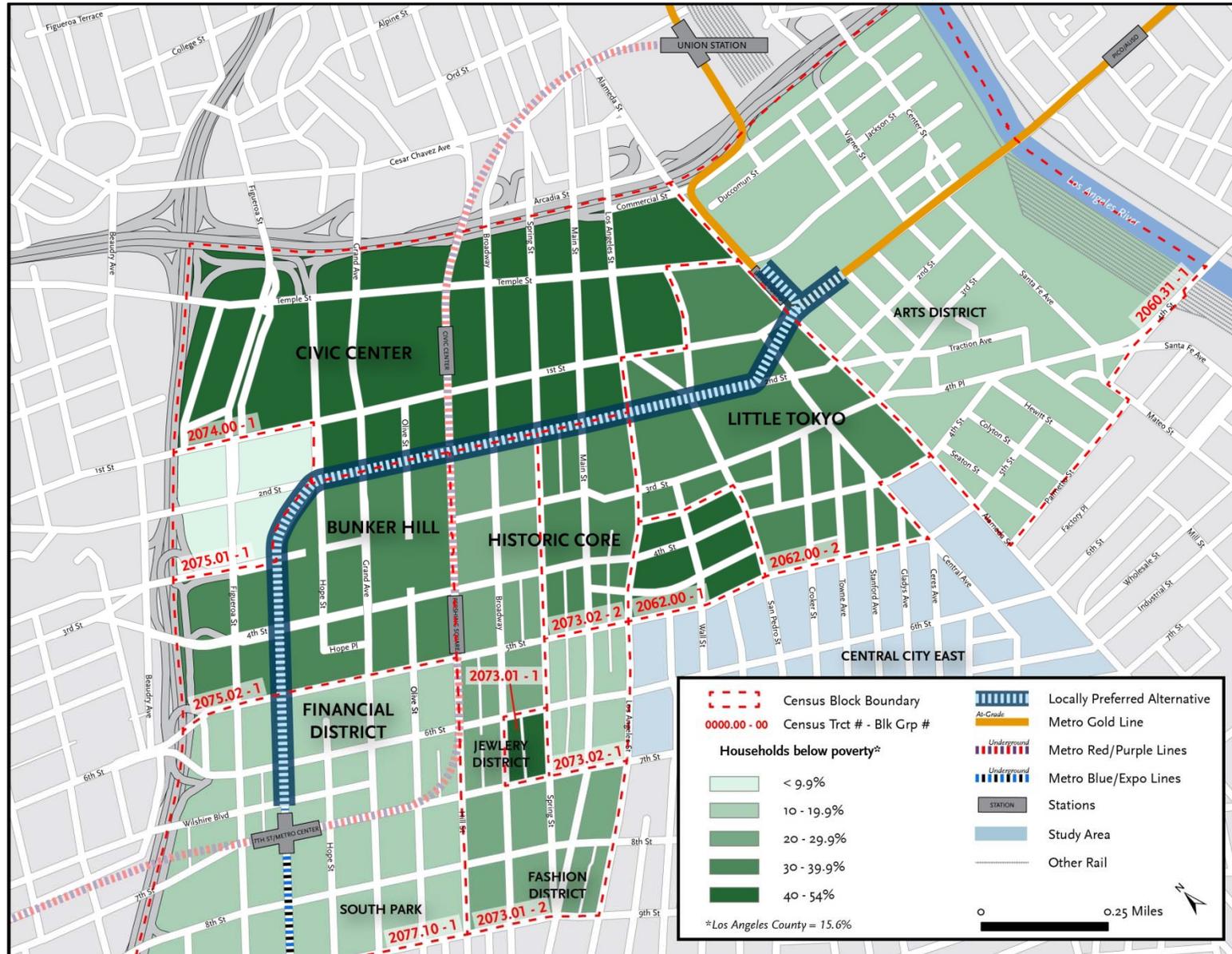
### **Air Quality**

As described in Section 4.2, along with Sections 2.3 and 3.0, during construction of Alternative A there may be no additional truck impacts to Little Tokyo beyond those of the Project. There would be an increase in the number and duration of daily truck traffic handling tunnel muck materials from the Flower Street segment. These impacts will not be adverse or have a disproportionate adverse effect on EJ populations with implementation of mitigation measures.

### **Climate Change**

As evaluated in Section 4.3, construction of Alternative A would result in a net increase in GHG emissions over a finite period. The increase in GHG emissions would be higher than the GHG emissions estimated for the Project. However, the amortized construction-related GHG emissions for Alternative A would be less than the proposed or adopted thresholds discussed in Section 4.3.1. The amortized construction emissions for Alternative A would also not exceed the GHG emissions threshold by the CEQ for evaluation of climate change impacts. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

Figure 4.8-2: Low-Income Households in the Study Area by Census Block, 2008 to 2012



### **Noise and Vibration**

As discussed in Section 4.4, Alternative A would shift muck truck activity from Flower Street to Little Tokyo for 15 months longer than the Project. The duration of construction and excavation efforts identified for Alternative A were taken into account for identifying impacts to receptors in the Little Tokyo area, due to extended duration of construction and increased haul truck activities. Although this is a temporary construction impact, this would be adverse to an environmental justice community. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Energy**

Construction of Alternative A would result in a temporary energy demand of 323 billion Btu's, which would be higher than the energy demand estimated for the Project. As discussed in Section 4.6, this impact would be temporary for the short-term duration of construction activities and would be offset by the long-term, beneficial decreases in energy use associated with operations. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Historic Resources**

As presented in Section 4.7, Alternative A would have essentially the same impacts and effects on historic properties as identified for the Project in the Final EIS, and, therefore, the confirmed mitigation measures in the Memorandum of Agreement (MOA) and the Mitigation Monitoring and Reporting Plan (MMRP) would reduce effects to no adverse effect when implemented. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

#### **4.8.2.2 Alternative B – EPBM/SEM Low Alignment**

##### **4.8.2.2.1 Construction Impacts**

### **Transit**

Under Alternative B, there would be no impacts to transit services in Little Tokyo beyond those identified for the Project. A majority of the potential construction impacts would be temporary and unavoidable. There would be no disproportionate adverse effect to Little Tokyo EJ populations with implementation of mitigation measures.

### **Traffic Circulation**

Construction of Alternative B would increase excavation truck trips in Little Tokyo from 19 percent under the Project to 80 percent, and would occur for seven months longer than the Project. Conversely, the truck trips on Flower Street would decrease from 81 percent under the Project to 20 percent in Alternative B. Under this alternative, the number of trucks using the Flower Street route would decrease to 8 trucks (versus 32 trucks under the Project), while the number of trucks using the Little Tokyo haul routes would increase to 32 trucks (versus 8 trucks under the Project). Travel times are expected to increase for vehicles travelling along the Little Tokyo haul routes. These increased travel times in and around Little Tokyo would be disproportionately borne by this community.

In summary, Alternative B would have a disproportionate adverse effect to the environmental justice population in Little Tokyo due to increased truck activity, and the longer duration of that truck activity compared to the Project. This adverse effect would be temporary and unavoidable. This would be a disproportionate adverse effect to the Little Tokyo EJ community.

### **Parking**

Parking impacts identified during construction of the Project would remain unchanged under construction of Alternative B. Parking would only be affected in the Little Tokyo community portion of the alignment, but, there would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Other Modes**

Pedestrian access to properties in Little Tokyo and bicycle traffic movements would be maintained during construction of Alternative B; however, portions of sidewalks may be temporarily closed adjacent to construction locations. Temporary closures of sidewalks and crosswalks may be necessary. Lane reductions and street closures could inhibit bicycle traffic flow during construction. Impacts would be reduced after implementation of proposed mitigation. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Visual Quality**

As described in Section 4.1, construction of Alternative B would not result in impacts to scenic resources or in nighttime lighting or shade and shadow impacts over the Project in Little Tokyo. There would be no impact to Little Tokyo. Therefore, there would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Air Quality**

As described in Section 4.2, along with Sections 2.3 and 3.0, during construction of Alternative B there may be no additional truck impacts to Little Tokyo beyond those of the Project. There would be an increase in the number and duration of daily truck traffic handling tunnel muck materials from the Flower Street segment. These impacts will not be adverse or have a disproportionate adverse effect on EJ populations with implementation of mitigation measures.

### **Climate Change**

Construction of Alternative B would result in a net increase in GHG emissions over a finite period. The increase in GHG emissions would be lower than the GHG emissions estimated for the Project. However, the amortized construction-related GHG emissions for Alternative B would be less than the proposed or adopted thresholds discussed in Section 4.3.1. The amortized construction emissions for Alternative B would also not exceed the GHG emissions threshold by the CEQ for evaluation of climate change impacts. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Noise and Vibration**

As described in Section 4.4, Alternative B would shift muck truck activity from Flower Street to Little Tokyo and increase the duration of impacts by an additional 7 months over Project conditions. Although this is a temporary construction impact, this would be adverse to an environmental justice community. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Energy**

Construction of Alternative B would result in a temporary energy demand of 295 billion Btu's, which would be lower than the energy demand estimated for the Project. This impact would be temporary for the short-term duration of construction activities and would be offset by the long-term, beneficial decreases in energy use associated with operations of this alternative. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **Historic Resources**

Alternative B would have essentially the same impacts and effects on historic properties as identified for the Project in the Final EIS, and, therefore, the confirmed mitigation measures in the MOA and the MMRP would reduce to no adverse effect when implemented. There would be no disproportionate adverse effect to EJ populations with implementation of mitigation measures.

### **4.8.3 Mitigation Measures**

Mitigation measures to reduce potential environmental justice impacts during construction were identified in the Final EIS. Implementation of mitigation measures EJ-1 through EJ-35 identified for the Project would be followed for Alternatives A and B. Below is a summary of these mitigation measures and a detailed description can be found in Appendix G:

- EJ-1: Replacement of bus loading spaces on Alameda Street for JANM during construction
- EJ-2: Unmet demand for parking eliminated in Little Tokyo during construction shall be replaced within one block on reliant land uses
- EJ-3: Metro shall provide two acres of land on Mangrove property as alternative parking during construction
- EJ-4: Proper notices by Metro of traffic control plans, parking relocation, through typical communication devices
- EJ-5: Metro shall support efforts to curb non-legitimate use of disabled parking spaces
- EJ-6: Metro shall coordinate to develop a parking reservation system during construction
- EJ-7: Coordination with LADOT to open city parking lots for short-term use
- EJ-8: Coordination with the City to reduce impacts of government vehicles along 2<sup>nd</sup> Street during construction
- EJ-9: Coordination with the City and Little Tokyo Business Improvement District to facilitate financial incentives and priority parking to Little Tokyo patrons
- EJ-10: Coordination with Little Tokyo restaurants interested in curbside pickup

- EJ-11: Metro shall conduct annual parking needs assessment prior to construction and proper notification strategies to communicate parking to visitors and patrons
- EJ-12: Coordination to maintain visibility for businesses during construction
- EJ-13: Shall parcels used for construction staging be proposed for future redevelopment, Metro shall comply with the Joint Development Policy to involve the community
- EJ-14: Displaced commercial spaces in Little Tokyo shall be replaced with high quality commercial development consistent with community identity
- EJ-15: Coordination with Little Tokyo, Arts District, and City CRA to create joint development opportunities
- EJ-16: Metro shall implement various strategies to support affected services/businesses in Little Tokyo
- EJ-17: Surface level construction activities to be curtailed to extent possible during major Little Tokyo festivities and outdoor events
- EJ-18: Metro shall work with Little Tokyo Business Association to help offset neighborhood impacts associated with reduced revenue during construction
- EJ-19: Metro shall work with Little Tokyo community to minimize adverse impacts during utility relocation and protection of utilities
- EJ-20: Communication and advertising on transit buses and other means to announce construction plans and alternatives to travel and parking in Little Tokyo
- EJ-21: Avoidance of haul routes along 1st or Alameda Streets between 3rd St and US-101
- EJ-22: Publishing of safety and security information at stations in Japanese, Korean, and Spanish
- EJ-23: Publishing of project's safety education campaign in Japanese, Korean, and Spanish
- EJ-24: Involvement of Little Tokyo's Public Safety Association in development of safety and security plans
- EJ-25: Monitoring of committed mitigations designed to address safety and security concerns
- EJ-26: Appropriate orientation of system's ventilation equipment and minimizing of noise
- EJ-27: Implementation of receptor-based mitigation where needed to reduce construction-related pollutant levels
- EJ-28: maximize opportunities for enhancing access from existing land uses to new station
- EJ-29: Design of underground facilities to avoid subsurface impacts to buildings
- EJ-30: Proper monitoring of newly planted trees to ensure healthy growing
- EJ-31: Providing Little Tokyo and Arts District opportunities for input on 1st/Central design processes
- EJ-32: All information to be made available in Japanese and Korean
- EJ-33: TBM operations to be performed by contractor in 48 months
- EJ-34: Appropriate procedures for rapid shut-down should vibration thresholds be reached
- EJ-35: Preparation of a cost-benefit analysis of using one versus two TBMs

Adverse effects would remain after implementation of these mitigation measures for the tunneling method alternatives, which would have additional adverse effects beyond those identified for the

Project primarily due to the increased level and duration of the construction impacts on the Little Tokyo community.

### **Impacts after Mitigation and Environmental Justice Determination**

For the Project, there would be no disproportionately high and adverse effects to Environmental Justice populations after mitigation measures identified in the Final EIS are implemented for construction effects.

Little Tokyo would experience expanded traffic congestion and travel times due to an increase in truck activity handling a greater proportion of the tunneling excavation materials. Construction of both Alternatives A and B would have a longer duration than that of the Project, which would be disproportionately experienced in the Little Tokyo community and would be considered disproportionately high and adverse to residents of Little Tokyo. With the longer construction and the increase in truck activity resulting from the tunneling method alternatives, and the associated impacts to Little Tokyo residents and businesses, the potential off-setting benefits of improved access and connectivity that the community could experience during operations may not be of value to the community, which would be significantly affected by the disproportionately adverse construction impacts associated with Alternatives A and B.