

**Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report**

APPENDIX O



COMMUNITY AND NEIGHBORHOOD IMPACTS

**Regional Connector Transit Corridor
Community and Neighborhood Impacts
Technical Memorandum**

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Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

CCA & DCBID	Central City Association and Downtown Center Business Improvement District
CEQA	California Environmental Quality Act
JANM	Japanese American National Museum
LADOT	Los Angeles Department of Transportation
LOS	Level of Service
LRT	Light Rail Transit
L RTP	Long Range Transportation Plan
MOCA	Museum of Contemporary Art
NEPA	National Environmental Policy Act
SCAG	Southern California Association of Governments
TBM	Tunnel Boring Machine
TSM	Transportation Management System

1.0 SUMMARY

This technical memorandum analyzes potential impacts of the Regional Connector Transit Corridor project on communities and neighborhoods in the central downtown area of Los Angeles. For purposes of this analysis, the central downtown area is defined as the area bounded on the north by Sunset Boulevard/Cesar Chavez Avenue, on the south by the Santa Monica Freeway (I-10), on the west by the Harbor Freeway (SR 110), and on the east by Alameda Street.

The project area encompasses seven communities (or neighborhoods) including the Financial District, Bunker Hill, Civic Center, Historic Core, Little Tokyo, and the Arts District. The alternatives analyzed include the No Build Alternative, the Transportation System Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2.

The No Build Alternative would not involve any construction and is presented to show potential impacts of not building the proposed project. The TSM Alternative involves creating two new shuttle bus routes to connect the Metro Gold and Blue Lines. This alternative would involve minimal construction and would create a new bus public transportation route through the central downtown area; however, the TSM Alternative would not substantially decrease commute times or reduce the number of transfers required. Therefore, it is not expected to encourage new growth in population, housing, or employment.

The At-Grade Emphasis LRT Alternative would potentially have construction and operational impacts in the project area. The major potential community and neighborhood impacts associated with this alternative would be reduced mobility and access to businesses during construction and elimination of mid-block left turn lanes along 2nd Street in the Civic Center and Bunker Hill neighborhoods during operation. Some partial property acquisitions, including both temporary and permanent easements, would also be necessary. (Temporary easements are used during construction, and permanent easements are obtained to provide for operations.)

Overall, the improved transit infrastructure, coupled with the city's transit-oriented growth policies, could encourage new residential and commercial development, thus improving the supply of housing and job opportunities in the downtown area.

The Underground Emphasis LRT Alternative would have similar potential construction impacts as the At-Grade Emphasis LRT Alternative. It would require displacing several existing businesses in Little Tokyo and the Historic Core area.

Operation of the Underground Emphasis LRT Alternative would not adversely affect existing businesses because the alignment would not run along existing streets. The project would bring additional pedestrians to the downtown area, providing opportunities for businesses to attract new customers.

The new transit infrastructure of the Underground Emphasis LRT Alternative could attract development to the immediate area of the stations and alignment. The number of housing units and jobs could increase if coupled with the City's transit-oriented land use policies. Access to and from the project area communities and within the entire Los Angeles region would be greatly enhanced.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 would also have potential construction and operational impacts. West of Central Avenue, the impact would be identical to that of the Underground Emphasis LRT Alternative when built with the 2nd Street station - Broadway option. East of Central Avenue, additional property would need to be acquired, and additional buildings would need to be displaced. These displacements would include removing existing businesses.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 include a new underground station in Little Tokyo. This station would connect train service from more branches of the rail system than other alternatives. Therefore, these alternatives provide the most access to the community from other parts of the county.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 would bring more pedestrians to the downtown area, benefitting businesses and housing developments, and providing opportunities for businesses to attract new customers. Communities near stations along the project corridor will have direct light rail access to four different corridors throughout the County.

2.0 INTRODUCTION

As the second largest metropolitan region in the United States, Los Angeles is home to approximately 15 million people and contains diverse cultures, world-renowned entertainment venues, and unique industries. At the heart of Los Angeles is the central downtown, considered the industrial, governmental, and financial core of the City.

Los Angeles was originally established in 1781 beginning in the area now known as central downtown (City of Los Angeles 2003a). The area saw a large increase in growth in the 1800s as the transcontinental railway was constructed. By the 1900s, the population continued to grow with development of manufacturing, industrial, and commercial industries.

While the Great Depression and World War II resulted in slower population growth, the economic and suburban expansion after the war helped the City to rebound. Recently, the central downtown area has been the center of the City's revitalization plans and continues to undergo redevelopment to improve the economic vitality and quality of life for those living and working in the area (City of Los Angeles Planning Department 2003a).

The central downtown community area, defined in the Central City Community Plan (City of Los Angeles 2003a), encompasses approximately three square miles south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of Harbor Freeway (SR 110), and west of Alameda Street. It is bounded by the Central Downtown North, Silver Lake-Echo Park, Westlake, Southeast, and South Central Los Angeles communities (City of Los Angeles Planning Department 2003a). In addition to housing many of the City's government and financial institutions, central downtown has important architecture, unique ethnic communities, historic landmarks, and growing residential areas.

The Regional Connector Transit Corridor project would provide a public transit option through central downtown, linking the Metro Gold Line to the City of Azusa via Pasadena and I-605 via the Eastside Extension with the Metro Blue Line to Long Beach, and the proposed Metro Expo Line to Santa Monica. Currently, public transit users must transfer to the Metro Red Line to connect from the Metro Gold Line to or from the Metro Blue Line. Thus, this project would help commuters by providing them a means to travel directly through the central downtown, reducing the number of necessary transfers.

The project would provide residents and businesses in the communities of downtown with greatly expanded access to and from the entire Los Angeles region. Up to four new landmark rail stations would enhance the visibility and identity of downtown communities. While the overall project is expected to provide many beneficial impacts, it also has the potential to adversely affect the quality of life for the diverse neighborhoods and communities that make up central downtown.

This document discusses the potential adverse and beneficial, direct and indirect construction and operation impacts of the Regional Connector Transit Corridor project on the various affected communities and neighborhoods. The document also discusses possible mitigation measures that could be implemented to offset potential impacts.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section discusses the community and neighborhood-related regulatory requirements potentially relevant to the project.

3.1 Federal Regulatory Requirements

3.1.1 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and implementing regulations (49CFR24) outline minimum standards for federally funded projects that acquire real property or displace persons from their homes or businesses. The purpose of the Act is to provide fair and equitable treatment and relocation assistance to those whose property is acquired or who have been displaced. The Regional Connector Transit Corridor project will comply with this Act in the event that properties must be acquired or any persons are displaced.

3.1.2 Americans with Disabilities Act of 1990

The Americans with Disabilities Act of 1990 ensures equal rights to all those with disabilities. The regulations implementing this Act (49CFR38) outline specific requirements for buses and light rail vehicles, including access ramps, handrails, priority seats for persons with disabilities, auditory and visual warnings for door closings, and minimum door widths to ensure persons with disabilities can safely use public transit facilities. The Regional Connector Transit Corridor project will comply with the Americans with Disabilities Act and will ensure adequate access to persons with disabilities.

3.2 State Regulatory Framework

The California State Environmental Quality Act (CEQA) requires an analysis of potential project impacts on communities and neighborhoods. CEQA guidelines include standards of significance that provide a framework for evaluating potential impacts. These standards are discussed in further detail in Section 3.4.

3.3 Local Regulatory Framework

3.3.1 Central City Community Plan

The Central City Community Plan is part of the City of Los Angeles General Plan Land Use Element and guides future development within the central downtown area. All proposed build alternatives would be consistent with the transportation objectives and policies stated in the Central City Community Plan, specifically:

Objective: 11-2.10 Extend light rail transit northerly from the existing 7th Street/Metro Center terminal to serve Bunker Hill and Little Tokyo connecting to Union Station.

Policies:

- Provide additional bus routes to link businesses and housing districts with existing and planned cultural/entertainment districts. Coordinate additional routes with extended hours of operation.

- Provide for the efficient circulation into and within downtown.

Small portions of the build alternatives' alignments near the Little Tokyo/Arts District Station are located east of Alameda Street, in the Central City North Community Plan area. Both the Central City Community Plan and the Central City North Community Plan are consistent in their treatment of this location.

3.3.2 Zoning Code Provisions Encouraging Density Around Transit Stations

The City of Los Angeles Planning and Zoning Code includes incentives for development within 1,500 feet of transit station entrances. For example, the City may permit developments in these areas to include more square footage and fewer off-street parking spaces than zoning would otherwise allow (Los Angeles, California, Planning and Zoning Code art. II, § 12-24 [2000]).

By adding new rail stations to downtown Los Angeles, the Regional Connector would expand the number of parcels eligible for density and parking incentives. This could enhance economic activity in the downtown area, encourage growth in locations served by the rail system, and provide new opportunities for increased transit use.

3.4 Significance Criteria

Under CEQA, a project would create a significant adverse impact to communities and neighborhoods if it would physically divide an established community or neighborhood.

According to the U.S. Department of Transportation NEPA guidance for assessing transportation project impacts on communities, a significant adverse impact to communities and neighborhoods could result if it would:

- Adversely alter the social and physical character of the community or neighborhood; or
- Degrade the quality of life by:
 - Adversely affecting public health or safety
 - Increasing the potential for crime

- Adversely affecting important community resources and events (such as festivals, parades, landmarks, parks, or community centers)
- Adversely affecting senior citizens or disabled persons
- Adversely affecting viability of local businesses (through loss of parking, re-routing of vehicles, decreasing pedestrian access, relocation)
- Reducing mobility (pedestrian, bicycle, or vehicle) in and between communities or neighborhoods
- Adversely affecting existing community public services (emergency services)
- Substantially changing the population or employment of the area

3.5 Methodology

The analysis of impacts on existing communities and neighborhoods was conducted according to the “*Community Impact Assessment: A Quick Reference For Transportation*” (U.S. Department of Transportation, Federal Highway Administration 1996).

The analysis includes a description of community profiles to identify population, housing, and employment characteristics; unique community features and events; community linkages and mobility; crime; and important public services. These community profiles have been established using the Central City Community Plan of the Los Angeles General Plan, the Central City Association of Los Angeles resources, site visits, U.S. Census Bureau statistics, Southern California Association of Governments (SCAG) data, information from local neighborhood councils, and public comments and input received on the project from ongoing meetings and outreach activities.

Communities have a set of identifiable elements (both perceptual and physical) within a specific geographic area. Once a profile has been described for each of the potentially affected communities, the analysis describes short-term (temporary) and long-term (permanent) effects from both construction and operation of the project alternatives on each community. The analysis includes several aspects: creation of physical, social, or psychological barriers within an established community or neighborhood; disruption of access to community assets; and displacement effects on the community assets. The analysis describes qualitative, and where possible, quantitative impacts associated with potential changes to the local communities.

Each impact is examined based on the profile of the community or neighborhood in which it would occur. The significance of each impact is determined based on the significance criteria listed above, the nature of the impact (temporary or permanent), both direct and indirect

impacts on each local community or neighborhood, and the potential mitigation measures that could be implemented to reduce or avoid the impact.

3.6 Project Area

The project area for the community and neighborhood analysis includes all communities and neighborhoods that would be potentially directly and/or indirectly impacted by the construction and operation of the proposed project. The communities that could be potentially beneficially or adversely impacted by the proposed project include:

- Financial District
- Bunker Hill
- Toy District
- Arts District
- Civic Center
- Historic Core
- Little Tokyo

A map of these communities is provided in Figure 3-1. Other areas that would be indirectly affected by the project include communities along the Metro Gold Line and the Metro Blue Line because they would be linked by the Regional Connector Project. Indirect effects to these communities are discussed at a qualitative level.

The area analyzed is slightly larger than the actual footprint of the proposed alternatives because communities near the area also have the potential to be affected by project construction and operation. This analysis includes all of the central downtown area, defined as south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of Harbor Freeway (I-110), and west of Alameda Street. For purposes of this community and neighborhood impact analysis, the area examined includes the following census tracts within central downtown: 2074, 2062, 2063, 2073, 2075, 2077.10, 2060.30, and 2060.40. Figure 3-2 presents a map of the census tracts included in this analysis.

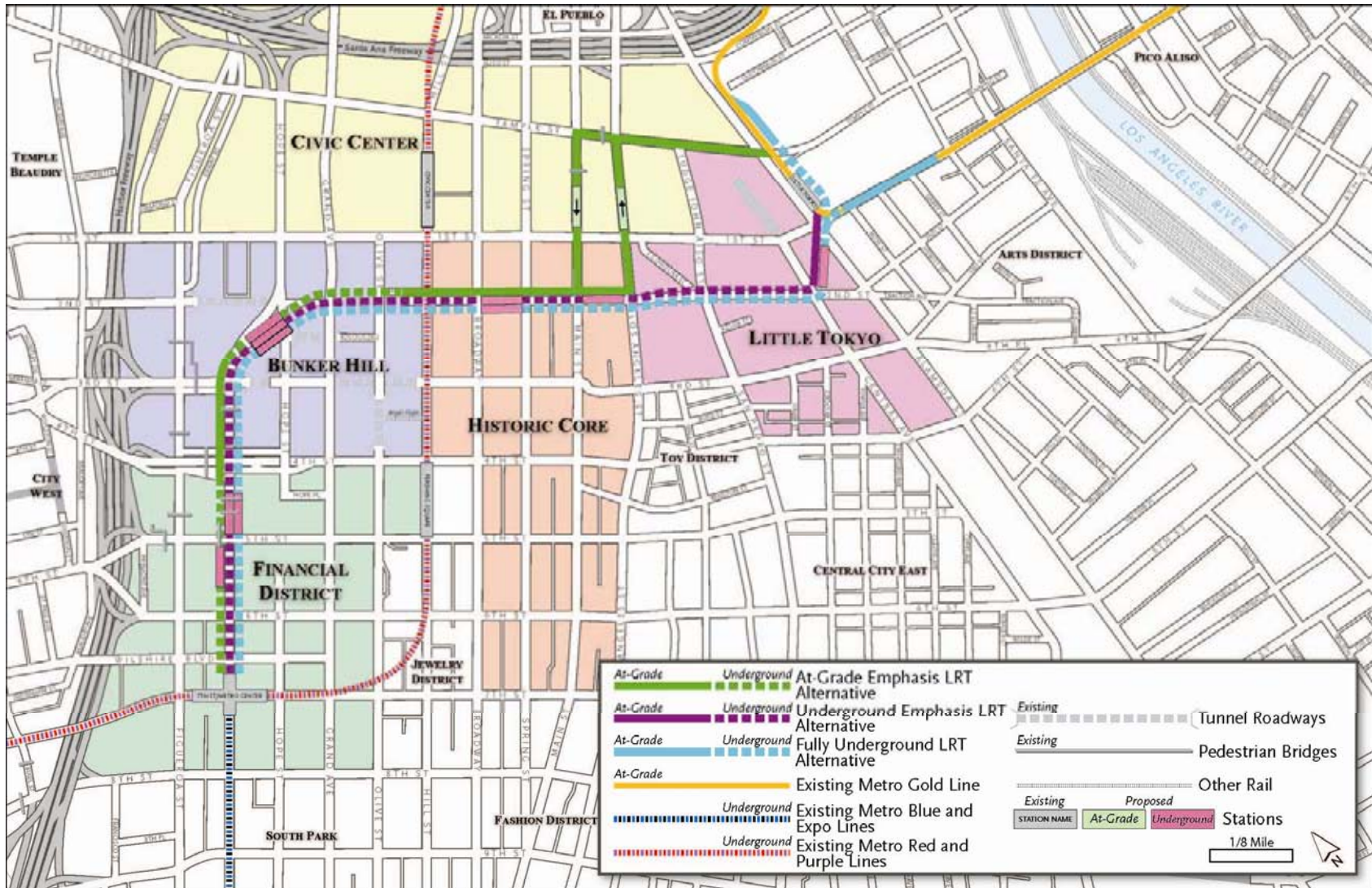


Figure 3-1. Central Downtown Communities

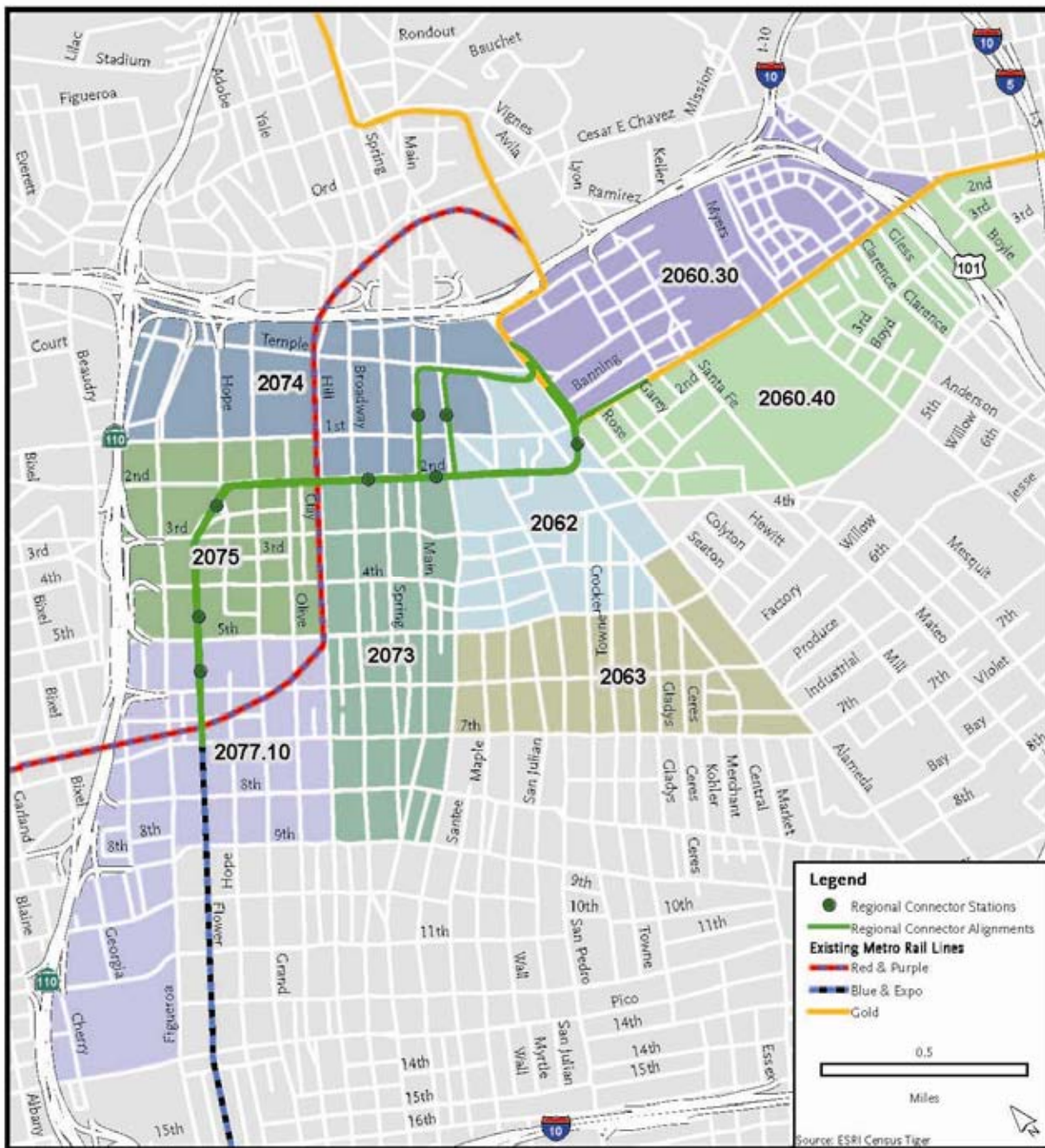


Figure 3-2. Census Tracts Analyzed

4.0 AFFECTED ENVIRONMENT

This section describes the current conditions of the central downtown area, including general demographics and community profiles.

4.1 Population and Ethnicity

In 2000, the central downtown area's¹ population was approximately 23,175, representing less than 0.6 percent of the entire City of Los Angeles' population (Census Bureau 2000). In 2005 SCAG estimated that the central downtown area's population was approximately 24,794, about 0.6 percent of the City's population (City of Los Angeles Planning Department /Demographic Research Unit 2009). Table 4-1 shows the 2000 and 2005 population by census tract for central downtown.

Census Tract	Approximate Neighborhoods	2000¹ Population	2005² Estimated Population
2060.30	Little Tokyo, Arts District, Boyle Heights*	955	1,029
2060.40	Little Toyko, Arts District, Boyle Heights*	3,445	3,753
2062	Little Tokyo, Central City East*	3,477	3,638
2063	Central City East*, Central Industrial District*	4,995	5,320
2073	Historic Core	3,739	4,068
2074	Civic Center	1,237	1,344

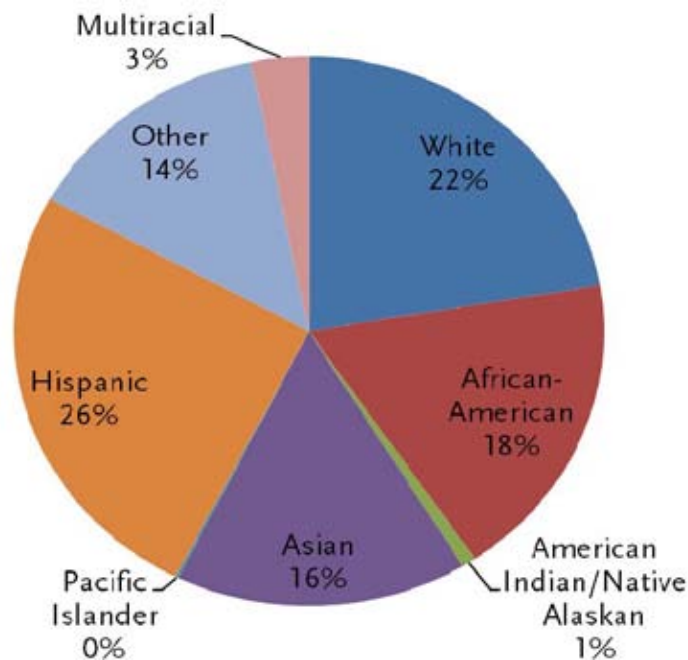
¹ Note: The total population of the analysis area for community and neighborhood impacts is shown. The area and population defined in the Central City Community Plan and the Central City North Community Plan will vary. Also, some of the census tracts included in the demographic data extend beyond the boundaries of the communities to be analyzed.

Census Tract	Approximate Neighborhoods	2000¹ Population	2005² Estimated Population
2075	Bunker Hill	4,098	4,326
2077.10	Financial District, South Park	1,229	1,316
Total		23,175	24,794

Source: ¹Census Bureau, Summary File 1, 2000; ²SCAG 2009.

* Neighborhood included in census tract data, but is too far from proposed alternatives to be impacted. More specific data is not available.

Central downtown has a diverse ethnic population. As shown in Figure 4-1, 26 percent of the population in 2000 was Hispanic, 18 percent was African-American, 16 percent was Asian, 22 percent was White, 1 percent was American Indian/Native American, 3 percent was designated as multiple race, and less than 1 percent was designated as Pacific Islander and Other Race (Census Bureau 2000).



Source: Census Bureau 2000.

Figure 4-1. Ethnicity for Central Downtown

The age of the population in the central downtown area varies considerably throughout the different communities. In 2000 there were three main areas with relatively higher populations of seniors (over the age of 65): the Bunker Hill area, the Little Tokyo area, and the northern portion of central downtown.

Table 4-2 shows the median age of the downtown population by census tract for the year 2000. An area around the Historic Core and Jewelry District had a median age of 49, while the northern portion of the Arts District had a median age of just 28. The Little Tokyo area had a median age of 45 (Census Bureau 2000).

4.2 Languages Spoken At Home

The most common language spoken at home throughout the central downtown area in 2000 was English, followed by Asian/Pacific Isle languages, Spanish, Indo-European languages, and other languages (Census Bureau 2000). Each community within the downtown area varies considerably regarding the language spoken at home.

Census Tract	Both Sexes	Male	Female
2060.30	28.2	28.7	27.1
2060.40	32.3	31.5	33.1
2062	45.1	43.6	50.4
2063	42.1	43.3	38.4
2073	49.2	49.2	49.4
2074	35	34.5	38
2075	48.5	43.1	53.4
2077.10	45.4	43.6	48

Source: Census Bureau, Summary File 1, 2000.

Figure 4-2 shows the percentage breakdown of the languages spoken at home by census tract for the year 2000. Census tracts in the northwest and in the Little Tokyo area spoke predominantly Asian languages, and census tracts in the southern portion spoke mainly Spanish.

4.3 Housing

There were an estimated 10,500 housing units in the central downtown area in 2008. Of the 10,500 housing units, 10,200 were multi-family units and only 200 were single-family units. The vacancy rate for all housing units was about 11 percent (City of Los Angeles Planning Department /Demographic Research Unit 2009).

Land designated for residential use is found in the east and south portions of central downtown and makes up only about five percent of the total land use (City of Los Angeles Planning Department 2003a). The residentially-zoned properties in the central downtown area are found in Bunker Hill and Little Tokyo. Some residential uses are permitted within commercial buildings in the central downtown area as they are redeveloped into residential units to meet an increased demand for housing (City of Los Angeles Planning Department 2003a).

4.4 Employment

The central downtown area employs a substantial number of people; over 170,000 in 2005. As shown in Table 4-3, most of the people working in the downtown area do not live there and must commute to it each day. The areas within the central downtown that provide the largest number of jobs include the Financial District, the Civic Center, the Historic Core/Jewelry District, and the Fashion District.

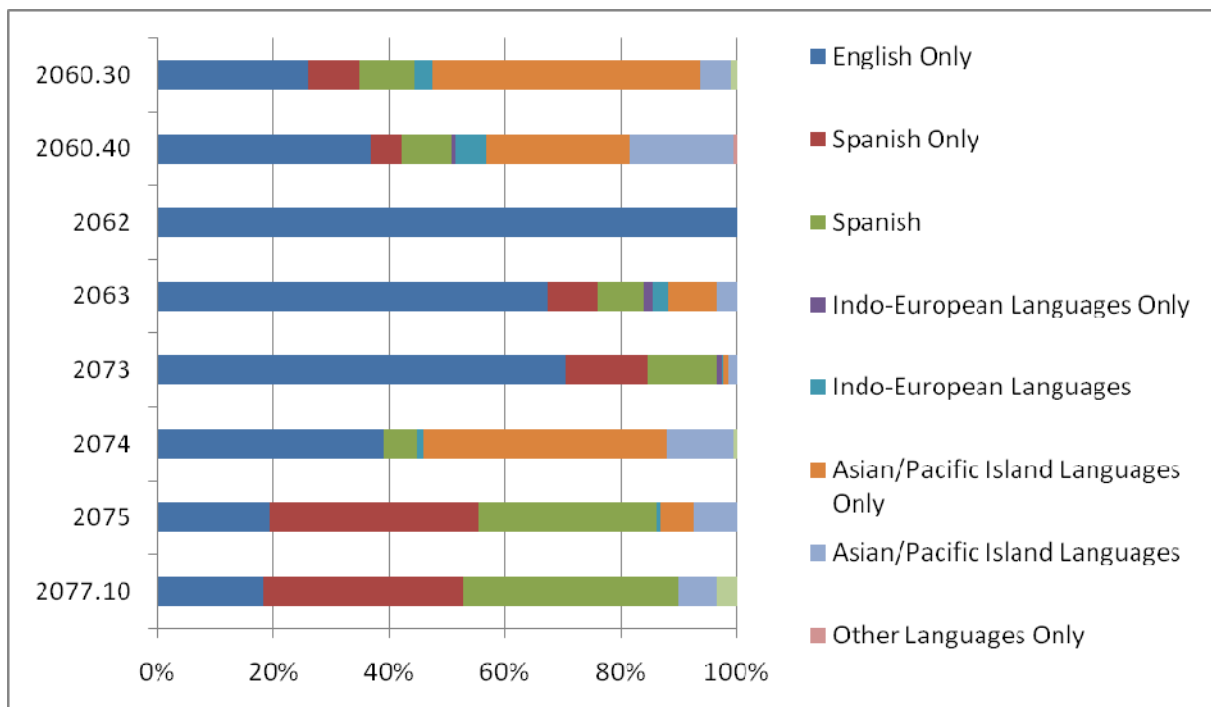


Figure 4-2. Languages Spoken at Home by Census Tract in Central Downtown

Source: Census Bureau, Summary File 3, 2000.

4.5 Community Mobility

The central downtown area experiences heavy pedestrian traffic on weekdays and during the lunch hours (City of Los Angeles Planning Department 2003a). Much of the pedestrian traffic occurs in areas with daytime employment such as Bunker Hill, the Financial District, and the Historic Core. Some pedestrian movement occurs between the Civic Center and Little Tokyo along Temple, 1st, and 2nd Streets (City of Los Angeles Planning Department 2003a).

The Fashion District attracts many pedestrians during both weekdays and weekends, as does Broadway between 2nd and 7th Streets. 7th Street often experiences large volumes of pedestrians due to the Wilshire Grand and Sheraton Hotels. There is much less pedestrian activity in the central downtown area at night because much of the daytime population leaves after business hours. The exceptions are Little Tokyo and the Arts District that have experienced a resurgence of evening activity due to increases in new housing in the area and a solid commercial base of restaurants.

The main pedestrian infrastructure in central downtown consists of sidewalks and crosswalks. There is an elevated pedestrian walkway on Bunker Hill that connects many of the large hotels and office buildings.

Census Tract	2005 Population	2005 Households	2005 Employment
2060.30	1,029	267	2,444
2060.40	3,753	1,125	2,855
2062	3,638	1,179	6,631
2063	5,320	1,591	4,670
2073	4,068	3,101	35,488
2074	1,344	8	38,760
2075	4,326	3,024	27,319
2077.10	1,316	635	53,760
Total	24,794	10,930	171,927

Source: SCAG, 2009.

The downtown area offers several Angels Walk tours, which were developed to promote pedestrian and public transit use in the City. Each Angels Walk encourages pedestrians to explore important cultural and historic areas of the City. Brochures and maps are provided for self-guided tours. Stanchions located throughout the Angels Walk routes mark important features and provide information in text and photographs.

The central downtown area is served by over 100 bus lines, operated by ten different transit agencies, and a network of commuter rail, light rail, and heavy rail lines. Metrolink operates commuter rail trains from Union Station to multiple points in Los Angeles, Ventura, Orange, San Bernardino, San Diego, and Riverside Counties. Metro operates the Metro Red Line heavy rail subway to North Hollywood, the Metro Purple Line heavy rail subway to Wilshire/Western Station, the Metro Blue Line light rail service to Long Beach, and the Metro Gold Line light rail service to Pasadena and East Los Angeles. The Metro Expo Line light rail service to Culver City is expected to open in 2011.

Transit mobility within downtown, to and from the communities of downtown, and within the region as a whole is impaired by the lack of a train connection between the Metro Gold and Blue Lines. Passengers travelling between these two LRT lines must currently transfer via the Metro Red and Metro Purple Lines. This lack of direct connection adversely affects travel times and the ability of transit to attract automobile commuters.

The Regional Connector project would eliminate transfers by enabling through service between the Metro Gold, Blue, and Expo Lines. The Regional Connector would add additional reliable transit service that, unlike buses, will not be subject to future deteriorating traffic conditions if surface street congestion increases.

For information on existing traffic patterns within the study area, see the Transportation Technical Memorandum.

4.6 Emergency Services

The Central Area Community Police Station is located on East 6th Street and serves an area in central downtown of 4.5 square miles, including the communities of Little Tokyo, South Park, Historic Core, Financial District, Jewelry District, Arts District, and Fashion District. There are approximately 400 sworn and civilian members of the Los Angeles Police Department stationed at this location (Los Angeles Police Department 2008).

Parker Center, the current Los Angeles Police Department headquarters, is located on Los Angeles Street between 1st and Temple Streets. A new headquarters building, scheduled to open in 2010, will replace Parker Center. The new building is currently under construction on the block bounded by 1st, Spring, 2nd, and Main Streets.

Los Angeles Fire Department Station 9 provides fire protection services for the central downtown area. Station 9 is located at 430 East 7th Street at the corner of 7th Street and San Julian. The station employs approximately 50 staff members (Fire Station 9 Skid Row 2006; City of Los Angeles Undated).

An additional fire station (Station 4) and emergency center are located on Temple Street east of Alameda Street. Fire Station 4 serves the Little Tokyo, El Pueblo, and Chinatown areas (Los Angeles Fire Department 2009). Fire Station 3 at 1st Street and Fremont Avenue serves the western portion of the downtown area.

4.7 Crime

Although many community groups have been working together to improve public safety, crime is an issue in the Central Downtown area. The downtown area is served by the Central Area Community Police.

There were 6,138 arrests made in 2007 and 5,497 in 2008. By the end of May 2009, 5,190 arrests had been made. The majority of the arrests from January 2007 through May 2009 were made for larceny and aggravated assault. The number of violent crimes was 397 in 2007 and 385 in 2008. By the end of May 2009, there were 437 violent crimes reported, a 14 percent increase since 2008 (Los Angeles Police Department 2009).

4.8 Community Events

There are many important community events that occur in the central downtown area each year, including music and cultural festivals, parades, arts/theatre performances, and exhibitions. These events often attract hundreds of people to downtown. Table 4-4 lists community events in the project area that were scheduled for 2009.

Event	Description
World City	Free performances and art workshops for children at the Disney Concert Hall
1 st Thursday San Pedro Art Walk	San Pedro Street between 4 th and 8 th Streets celebrates the arts by opening up galleries and studios, offering live entertainment with cafes and live street vendors in the evening of the first Thursday of each month.
Downtown Art Walk	A monthly self-guided tour of art exhibition venues in the Downtown.

Table 4-4. Community Events in Central Downtown

Event	Description
St. Patrick's Day and Parade	Annual celebration of St. Patrick's Day with a parade that starts on 5 th and Olive Streets.
Cherry Blossom Festival of Southern California	This event celebrates spring, cherry blossoms, and the Japanese American culture in Little Tokyo.
Azusa Street Festival	A music festival in Little Tokyo.
AT&T Fiesta Broadway	Cinco De Mayo Celebration on Broadway Street between 1 st and 11 th Streets
Annual Children's Day	Arts and crafts and activities for children of all ages at the Japanese American Cultural and Community Center in Little Tokyo.
Mixed Roots Film and Literary Festival	Celebration of the mixed racial and cultural through readings, live performances, and films at the Japanese American National Museum in Little Tokyo.
Shakespeare Festival/L.A. Romeo and Juliet	Live theatre and free outdoor shows influenced by Shakespeare at Cathedral of Our Lady of the Angels on Temple Street.
Grand Performances	Free afternoon and evening performing arts events at the California Plaza.
Nisei Week Japanese Festival	Cultural festival that celebrates community cultural diversity in Little Tokyo.
L.A. County Holiday Celebration	Choirs, instrumental groups, and dance are used to celebrate the season at the Music Center on Grand Avenue.

Source: City of Los Angeles Department of Cultural Affairs 2009

4.9 Community Profiles

This section presents brief profiles for each of the communities and districts within the central downtown area that have the potential to be directly affected by construction or operation of the Regional Connector Transit Corridor project. A map of the approximate locations of these communities is provided in Figure 3-1. While distinctions have been made

between the different districts, many districts continue to develop and expand their area of influence, often resulting in overlap with other districts or communities. The boundaries of the districts discussed below are for descriptive purposes and are not meant to delineate distinct borders.

4.9.1 Financial District

The Financial District generally extends between 3rd Street to the north, 6th Street to the south, Hill Street to the east, and SR 110 to the west. The Financial District contains most of the city's banks, large hotels, and skyscraper office buildings. It is also home to the Central Library, Maguire Gardens, retail stores, and clubs. This area experiences a high volume of traffic during daytime hours because of its location next to the SR 110 freeway.

While not as pedestrian friendly as some of the other districts, the Financial District lies within walking distance to the 7th Street retail area, Grand Avenue corridor, and Pershing Square. This neighborhood is within walking distance to the Metro Red Line, Metro Purple Line and the Metro Blue Line (CCA & DCBID 2003).

The Central Library, located at Hope Street, is one of the key features of the Financial District. North of the library is downtown's tallest building, Library Tower (City of Los Angeles Planning Department 2003a). At 73 stories high, the tower is visible for miles. The Bunker Hill Steps surround the building and connect the Financial District to Bunker Hill (City of Los Angeles Planning Department 2003a).

The proposed 2.7 million square foot Metropolis mixed-use development is located in the southwestern end of the Financial District. Phase I of this project will provide 360 residential units. Park Fifth is a major, planned, 76-story high-rise development across from Pershing Square and will provide over 700 condominiums and a 200 room hotel.

4.9.2 Bunker Hill

Located generally between 1st Street on the north, Hill Street on the east, 3rd Street on the south, and Figueroa Street on the west, Bunker Hill is a developed hill centered roughly around 3rd Street and Grand Avenue. Bunker Hill has a large portion of central downtown's population because of numerous apartments and condominiums. This district is within close walking and public transit distance to the Financial District, the Historic District, and the Civic Center.

Major downtown destinations located within Bunker Hill include the Walt Disney Concert Hall, Museum of Contemporary Art (MOCA), high-rise office towers, senior and market rate housing, hotels, and commercial/retail centers. Bunker Hill has over 3,200 residential units, mainly in mid- and high-rise buildings. Large development projects planned for this area include Civic Park and the Grand Avenue Development Project that will develop this area into

a regional arts, entertainment, and residential destination. The proposed Grand Avenue Development includes 3.6 million square feet, including 449,000 square feet of retail space. Plans call for 2,600 new housing units, almost doubling the existing number of units in the area.

4.9.3 Toy District

The Toy District is south of Little Tokyo and includes 12 blocks between 3rd, San Pedro, and 5th Streets, and Werdin Place. The Toy District is a wholesale and retail area with over 500 businesses offering silk flowers, incense/oils, craft supplies, luggage, electronics, and traditional toys like dolls, die-cast cars, action figures, and video games (Central City East Association 2009). This area experiences high volumes of pedestrians. The Medallion project proposed for this district is expected to provide 192 residential lofts and over 200,000 square feet of retail space.

4.9.4 Civic Center

The Civic Center contains federal, state, and local government offices and has the second largest concentration of civic buildings in the country (City of Los Angeles Planning Department 2003a). The Civic Center extends from US 101 in the north to 4th Street in the south, and from SR 110 in the west to Alameda Street in the east. Important community resources in this area include the Cathedral of Our Lady of the Angels on Temple Street, Los Angeles City Hall, the County Hall of Administration, the California State Department of Transportation (CalTrans) Headquarters, and a U.S. Federal District Courthouse planned for the block bounded by 2nd, Hill, and 1st Streets, and Broadway. The area includes the Civic Center Historic District centered around the City Hall building.

Most of the government facilities in this area are within a 10-minute walk of each other designated as the “10 minute diamond”. There are also several cultural, arts, and music facilities found in the Civic Center such as the Ahmanson Theater, Mark Taper Forum, and the Dorothy Chandler Pavilion (City of Los Angeles Planning Department 2003a).

4.9.5 Historic Core/Center City

The Historic Core/Center City links many of the districts and communities of central downtown. It encompasses an area from 1st to 11th Streets between Los Angeles and Hill Streets. The Historic Core approximates the area where Los Angeles originated in the early 1800s, and a variety of historic and architecturally significant buildings are found here. There are two historic districts in this area registered in the National Register of Historic Places: the Spring Street Financial District between 4th and 7th Streets, and the Broadway Theater District between 3rd and 9th Streets (City of Los Angeles Planning Department 2003a).

The major corridor in the Historic Core/Center City is Broadway, with clothes outlets, restaurants, Grand Central Market, and other shops frequented by the Hispanic population

(City of Los Angeles Planning Department 2003a). To the east, a variety of offices, hotels, shops and government buildings exist along Los Angeles, Spring, and Main Streets. Many buildings here have been renovated and converted to residential uses with ground floor retail, restaurants, and art galleries. Most of the historic financial buildings of the 1920s are found on Spring Street. Several historic theatres are located in this area; however, some are being used for retail purposes or are currently vacant.

The southern end of the Historic Core/City Center is adjacent to the Fashion District and contains historic buildings now used to manufacture clothing. The Metro Red Line travels beneath this district with a station on Hill Street between 4th and 5th Streets (City of Los Angeles Planning Department 2003a). The Skid Row community is located adjacent to the Historic Core/City Center area and contains a large homeless population and many single occupancy hotel residential properties.

4.9.6 Little Tokyo

Little Tokyo is a unique cultural community in downtown Los Angeles with the largest Japanese-American community in the continental United States (City of Los Angeles Planning Department 2003). Los Angeles' Little Tokyo is one of only three remaining Japantowns in the US (in addition to San Francisco and San Jose). Located between 1st, 3rd, San Pedro, and Alameda Streets, Little Tokyo has a range of mixed uses including retail, hotel, office, and commercial spaces.

The area also contains a substantial portion of the central downtown's residential units and has several new residential developments. The rehabilitation of existing spaces into residential uses is also occurring in Little Tokyo. Important developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo/Arts District Station on the Metro Gold Line. This development could potentially contain a high-density combination of offices and housing, utilizing its proximity to transit.

Little Tokyo contains a variety of important cultural venues and resources including the Japanese American National Museum (JANM), the Jodo Shu Betsuin Temple, the former Nishi Hongwanji Temple, and the Japanese American Cultural and Community Center. The Geffen Contemporary at the Museum of Contemporary Art (MOCA) is located behind JANM. North of The Geffen Contemporary at MOCA, at Temple and Alameda Streets, is the Go For Broke Monument, a monument dedicated to the Japanese American veterans of World War II who fought for the United States even as their families were classified as "enemy aliens" and were forced into internment camps (Experience L.A. 2009). Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to the area.

The Little Tokyo Historic District was listed on the National Register of Historic Places in 1986. The district spans the north side of 1st Street from Judge John Aiso Street to Central Avenue, and the east side of Judge John Aiso Street from 1st Street to midblock between 1st

and Temple Streets. Buildings in the Historic District include commercial buildings on the north side of 1st Street, the Union Church on San Pedro Street, and the former Nishi Hongwanji Temple at 1st and Central streets, the first Buddhist Temple built in Los Angeles.

4.9.7 Arts District

The Arts District is technically outside central downtown and considered a part of the Central City North Community Plan area; however it is discussed in this section because it is adjacent to Little Tokyo and could be affected by the project. The Arts District is generally considered to be between 1st, 6th and Alameda Streets, and the Los Angeles River. The Arts District consists mostly of old warehouses that have been converted to artists' lofts and studios (City of Los Angeles Planning Department 2003b). The largest concentration of artists is within the area between 1st, Palmetto, and Alameda Streets, and the Los Angeles River. This area is referred to as the Artist-in-Residence District (City of Los Angeles Planning Department 2003b).

5.0 IMPACTS

5.1 No Build Alternative

The No Build Alternative would not involve any new construction. This alternative would not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP). The transit network within the project area would be largely the same as it is now.

5.1.1 Community Mobility

Community mobility in the study area would be expected to worsen along with region-wide traffic congestion. Future increases in the area's population and employment would attract more people to the area each day, causing more vehicle and pedestrian traffic. This may reduce mobility in certain communities, especially during the commute hours.

Pedestrian mobility would not be expected to substantially change by 2035. As suggested in the Central City Community Plan, some improvements may occur to encourage pedestrian movement through the various communities and districts, but overall no substantial changes in pedestrian movement are expected. Transit mobility would deteriorate as the No Build Alternative would not provide enhanced access from downtown communities to other parts of the Los Angeles region or from the region to downtown communities.

5.1.2 Viability of Existing Businesses

The viability of existing businesses would be expected to remain similar to current conditions. No substantial transportation improvements are planned that would result in long-term construction that could affect the viability of businesses in the project area. Businesses would not benefit from enhanced access potentially afforded by build alternatives.

5.1.3 Emergency Services

As the population of the central downtown area grows, it is expected that emergency service providers would increase staff to meet the needs of the changing population. Access and response times could potentially be hampered by future traffic congestion.

5.1.4 Public Health and Safety and Crime

Crime may slightly increase in the central downtown area as a result of population growth, but public safety services would be expected to increase staff in response to new demands. Access and response times could potentially be hampered by future traffic congestion.

5.1.5 Community Resources and Events

Community resources and events are not expected to change in the future. Enhanced access to events from around the region, potentially provided by build alternatives, would not occur.

5.1.6 Population, Housing, and Employment

Table 5-1 shows population estimates through 2035 for the central downtown area. The population is expected to reach about 30,000 by 2035, an increase of about 20 percent over the 2005 population. Areas projected to experience the largest percent increase in population growth (over 26 percent) from 2005 to 2035 include the Financial District, the Toy District, and Little Tokyo.

Table 5-1. Central Downtown Population Projections through 2035

Census Tract	Population 2010	Population 2015	Population 2020	Population 2025	Population 2030	Population 2035
2060.30	1,059	1,081	1,105	1,128	1,150	1,171
2060.40	3,866	3,947	4,033	4,116	4,195	4,272
2062	3,835	4,009	4,174	4,330	4,476	4,611
2063	5,598	5,846	6,084	6,308	6,516	6,709
2073	4,221	4,331	4,464	4,593	4,716	4,833
2074	1,370	1,387	1,407	1,427	1,449	1,470
2075	4,484	4,596	4,728	4,855	4,977	5,094
2077.10	1,394	1,454	1,513	1,568	1,621	1,672
Total	25,827	26,651	27,508	28,325	29,100	29,832

Source: SCAG 2009.

Table 5-2 presents the household projections through 2035. The number of households in central downtown is expected to increase to 14,200 by 2035, an increase of about 4,000 households from 2005. The Historic Core/Jewelry District area is expected to experience the largest increase in households; approximately 900 households would be added to the area by 2035. The Bunker Hill area is expected to add over 800 new households by 2035. The majority of these new households are expected to be multi-family housing.

Employment is expected to rise steadily through 2035 in the central downtown area, as shown in Table 5-3. By 2035, the largest increase in employment is expected to occur in the Financial District with the addition of over 4,600 new jobs. Over 3,600 new jobs are expected in the Civic Center area.

The No Build Alternative would not be expected to substantially change existing communities and neighborhoods in the project area. Future growth projections for population, housing, and employment would remain unchanged.

Table 5-2. Households in Central Downtown through 2035

Census Tract	Households 2010	Households 2015	Households 2020	Households 2025	Households 2030	Households 2035
2060.30	282	297	313	325	337	347
2060.40	1,186	1,243	1,304	1,352	1,398	1,435
2062	1,250	1,317	1,390	1,447	1,502	1,548
2063	1,671	1,748	1,833	1,899	1,963	2,016
2073	3,275	3,441	3,622	3,763	3,900	4,012
2074	13	17	21	25	28	30
2075	3,187	3,343	3,514	3,648	3,777	3,883
2077.10	698	758	819	867	913	951
Total	11,562	12,164	12,816	13,326	13,818	14,222

Source: SCAG 2009.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative would create two new express shuttle bus lines linking 7th Street/Metro Center Station with Union Station in addition to the infrastructure improvements described for the No Build Alternative. These buses would run frequently, especially during peak hours. The buses may have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes.

Table 5-3. Central Downtown Employment through 2035

Census Tract	Employment 2010	Employment 2015	Employment 2020	Employment 2025	Employment 2030	Employment 2035
2060.30	2,480	2,508	2,527	2,548	2,570	2,592
2060.40	2,955	3,034	3,086	3,146	3,211	3,273
2062	6,730	6,809	6,861	6,921	6,985	7,047
2063	4,718	4,756	4,781	4,810	4,841	4,871
2073	36,168	36,711	37,062	37,474	37,915	38,336
2074	39,632	40,330	40,786	41,321	41,893	42,440
2075	27,935	28,427	28,745	29,119	29,519	29,901
2077.10	54,868	55,750	56,316	56,982	57,692	58,373
Total	175,846	178,325	180,164	182,321	184,626	186,833

Source: SCAG 2009.

5.2.1 Construction

There would be no significant impact on communities and neighborhoods from construction of this alternative. The only construction that would occur would be for the enhanced bus stops located every about two blocks along the shuttle routes. Construction of such bus stops would require a minimal amount of construction equipment. This would not be expected to reduce mobility or affect emergency services, viability of existing businesses, public health and safety and crime, population, housing, or employment. There would be no significant impact from construction of the TSM alternative.

5.2.2 Operation

Operation of the TSM Alternative would have a minimal impact on existing communities and neighborhoods. This alternative would introduce two new shuttle bus routes that would run every five minutes during commute hours. This would increase bus traffic through the following districts/communities:

- Upper Grand Route Shuttle Bus: Little Tokyo, Civic Center, Bunker Hill, Financial District.

- Lower Grand Route Shuttle Bus: Little Tokyo, Historic Core, Bunker Hill, Financial District.

5.2.2.1 Community Mobility

Since the shuttle buses would use existing streets, they would not be expected to impair pedestrian mobility between neighborhoods. New infrastructure would not have the potential to physically divide existing communities.

The shuttle buses under the TSM Alternative would help to link the Metro Gold Line to the Metro Blue Line and would provide additional public transportation within the central downtown area. However, the requirement to transfer from a train to a bus operating in street traffic would limit the potential of this alternative. Transfers increase overall trip times and make the transit system less attractive to prospective riders.

New bus stops along the shuttle bus lines would increase transit mobility within the central downtown area. However, the shuttle buses would be subject to deteriorating traffic conditions as traffic congestion worsens in the future. Thus, the mobility benefits may not be permanent. The buses themselves may also add to traffic congestion, which would decrease mobility in the area, particularly during peak hours.

The overall impact of adding new transit service would be beneficial. Still, any benefits would be contingent on the ability of buses operating in street traffic to attract patrons. Noise and air quality impacts of buses proposed under the TSM Alternative are detailed in the Noise and Vibration Technical Memorandum and the Air Quality Technical Memorandum. Additional details about the potential congestion effects of adding new shuttle bus service to the project area, including level of service (LOS) data, are provided in the Transportation Technical Memorandum.

All shuttle buses and bus stops would be designed to comply with existing disability laws and would be wheel-chair and stroller accessible. There would be no adverse impacts to senior citizens or disabled persons.

5.2.2.2 Viability of Existing Businesses

Operation of the shuttle buses may slightly improve business viability in and around the new bus stops because it could increase the number of visitors to the area. This would be a beneficial impact. Bus stops could also be slightly detrimental to businesses if they impede visibility or access to the business.

5.2.2.3 Emergency Services

The shuttle buses under this alternative would use existing roads, and the addition of frequent new bus service could potentially add to traffic congestion and lengthen emergency vehicle response times.

5.2.2.4 Public Health and Safety and Crime

It is unlikely that there will be any impacts to public health and safety, as the shuttle buses would use existing roads, although emergency vehicle response times could lengthen.

The creation of new bus stops may slightly increase the potential for crimes such as vandalism, depending on the structures placed at each new bus stop. There would not likely be any increase in any other types of crimes. While there is a perception that transit stops may increase crime levels in general, mitigation measures, such as additional security services, would help prevent an increase in crime. Overall, impacts related to crime are expected to be less than significant.

5.2.2.5 Community Resources and Events

No community resources or events would be adversely affected by operation of this alternative. This alternative may be beneficial for some community events and resources because it would provide a new public transit method from the central downtown area to the Metro Gold and Blue Lines. However, because the shuttle buses would run on public streets, the beneficial impact of the buses might be reduced if service needs to be rerouted or suspended during street closures for major events. Rerouting of buses would not affect the community events.

5.2.2.6 Population, Housing, and Employment

While this alternative would provide two new bus routes and several new bus stops, it is not expected to attract a large number of new residents to the area because it would not substantially reduce commute times. The shuttle buses would provide a link between the Metro Gold and Blue Lines that would help people commuting to and from the area. However, the connection would still require commuters to make a bus transfer between the rail lines, reducing travel time savings. Since the two new bus routes would not substantially reduce commute times, they would not be expected to attract many new commuters. There would be no impact to population, housing, or employment.

5.2.3 Cumulative Impacts

This section presents the cumulative effects of the TSM Alternative.

5.2.3.1 Community Mobility

The TSM Alternative would potentially increase mobility because it would provide two new shuttle routes. Other future planned transportation projects would also contribute to beneficial impacts associated with community mobility because they would create more linkages and additional transportation routes. Overall, cumulative effects on community mobility could be beneficial. The benefit is contingent upon whether shuttle buses operating in mixed traffic would attract commuters who would otherwise drive.

However, benefits to mobility under this alternative may not be permanent if developments already planned for the downtown area (listed in the Cumulative Impacts Methodology Memorandum) increase local traffic congestion to the point where the speed of the shuttle buses is reduced. Any reduction in congestion created by the new shuttle bus service could be offset, at least partially, by the addition of these frequent buses to existing streets. There is no way to be certain if the benefits of the TSM Alternative will be permanent until the outcomes of other planned projects are known.

5.2.3.2 Viability of Existing Businesses

The TSM Alternative would result in beneficial impacts to the viability of existing businesses by providing new bus stops in central downtown. No other transportation projects are expected along the proposed shuttle routes, and there would be no cumulative impacts associated with the viability of existing businesses. A future increase in traffic and congestion may lessen the benefits to downtown businesses under the TSM Alternative. Additional buses running on downtown streets may also increase congestion to the point where it lengthens travel times under this proposal, offsetting some of the potential benefits.

5.2.3.3 Emergency Services

There would be no cumulative impacts on emergency services.

5.2.3.4 Public Health and Safety and Crime

Future population growth has the potential to increase crime. The TSM Alternative would have very little impact associated with crime but may increase the potential for vandalism by adding new facilities that are susceptible to graffiti. Overall, the TSM Alternative's contribution to cumulative crime impacts would be less than significant.

5.2.3.5 Community Resources and Events

The TSM Alternative, in tandem with future transportation projects outside the central downtown area, could result in beneficial impacts because all projects would create new linkages and provide more options for commuters in the region. This would be a beneficial cumulative impact.

5.2.3.6 Population, Housing, and Employment

There would be no cumulative impact to population, housing or employment.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would extend from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing

2nd Street tunnel. The new underground portions of the alignment would be constructed using the cut and cover method that is described in detail in the Description of Construction.

After entering the 2nd Street tunnel, the alignment continues along 2nd Street and splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). It then heads east on Temple Street, realigns into a dual track configuration just east of Los Angeles Street, and connects to the Metro Gold Line in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street.

An automobile underpass and a potential pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets because of the high volume of auto and truck traffic on Alameda Street. These grade separations would reduce potential pedestrian-train and automobile-train conflicts.

The communities directly affected by construction and operation of the At-Grade Emphasis LRT Alternative would include:

- Civic Center
- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

Other surrounding communities and neighborhoods may be indirectly affected by this alternative. Potential direct and indirect effects are described in more detail in the following sections.

5.3.1 Construction

Construction of the At-Grade Emphasis LRT Alternative would have the potential to temporarily affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in this analysis.

Additional information about the construction staging areas is provided in the Description of Construction. Most impacts would be temporary and intermittent and would be reduced or eliminated after construction is complete (four to five years).

5.3.1.1 Community Mobility

This At-Grade Emphasis LRT Alternative would require the construction of three new stations; one in the Civic Center area composed of two one-way stations located on adjacent streets, one at Bunker Hill, and one in the Financial District along Flower Street. Construction of these stations would require temporary sidewalk and street closures. Street closure locations have not yet been defined and some may last only overnight or for a few days. Mobility would be temporarily reduced in these areas during construction.

Installation of the at-grade tracks and other necessary light rail infrastructure would occur on Temple, Main, Los Angeles, and 2nd Streets in the Civic Center and Historic Core areas and would require street closures during construction. This would temporarily reduce pedestrian and vehicle mobility between the Civic Center, the Historic Core, and Little Tokyo for the duration of construction.

Under this alternative, the alignment would run underground from Flower Street and the Financial District through the Bunker Hill area onto 2nd Street. Cut and cover excavation activities for the underground portion of the alignment would result in road closures in these areas and would likely shift traffic to the surrounding streets. This could temporarily add congestion and reduce mobility to surrounding communities.

The addition of an automobile underpass at the intersection of Temple and Alameda Streets would facilitate movement of traffic on Alameda Street by allowing it to travel below the intersection without stopping. Frontage roads would allow some turning movements between Alameda and Temple Streets to be maintained, though some turns would no longer be permitted. The underpass would enhance community mobility by removing most of the automobile traffic from the intersection of Temple and Alameda Streets, thus improving traffic flow along a major regional arterial. Additional details regarding congestion improvements are provided in the Transportation Technical Memorandum.

Overall, pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area would be reduced during construction because of road and sidewalk closures and traffic detours. However, these impacts would only last for the duration of construction. This impact could be potentially significant but would be reduced to a less than significant level with mitigation measure 1 in Section 6.0. Ultimately, after construction, mobility would be improved (see Section 5.3.2).

5.3.1.2 Viability of Existing Businesses

No businesses would be directly affected by construction of this alternative because no properties on which businesses are located would need to be acquired. Still, indirect effects to businesses may occur. Businesses around each of the new stations, and along the proposed alignment, could be affected by construction activities, construction-related traffic,

and road and sidewalk closures. Construction activities would likely result in a decrease in accessibility to many businesses and could reduce on-street and off-street parking.

Construction could negatively affect business activity levels because the number of customers may temporarily decline. The decline in customers could have a potentially significant impact to businesses. Even with implementation of mitigation measures in Section 6.0, this impact may remain significant. While all attempts would be made to provide adequate detours and minimize road closures, some indirect effects to businesses would still likely occur because consumers might avoid the area altogether.

Thus, the potential impact to businesses could be significant during the construction phase but would be reduced by mitigation measures. Short term adverse construction impacts would be offset by long term benefits of new transit access to businesses and the enhancement of downtown as a business destination.

5.3.1.3 Emergency Services

Construction of the At-Grade Emphasis LRT Alternative would likely require road closures, and this could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services would be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

No increases in staff would be required for emergency service providers because construction security would be the responsibility of the construction contractor.

5.3.1.4 Public Health and Safety and Crime

Construction of the At-Grade Emphasis LRT Alternative is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately fenced to prevent entry. Signs would be posted to alert the public to any areas where large construction vehicles or equipment are operating or where roads or sidewalks have been closed. The construction contractor would be responsible for providing security for the construction site throughout the duration of construction. The potential impact to crime and public health and safety would be less than significant, and mitigation measures are identified in Section 6.0.

5.3.1.5 Community Resources and Events

Construction of the At-Grade Emphasis LRT Alternative may require road and sidewalk closures and would add construction vehicles and equipment to central downtown streets. Construction of this alternative has the potential to adversely (if periodically) affect annual festivals and events in the downtown area. Construction could also disrupt traffic patterns and make public access to certain community resources (such as the MOCA Geffen

Contemporary building and the Go For Broke Monument) more difficult. This potential impact could be significant. Mitigation measures described in Section 6.0 would reduce this potential impact to a less than significant level.

5.3.1.6 Population, Housing, and Employment

Construction of the At-Grade Emphasis LRT Alternative would affect properties along the alignment and in areas around the proposed new stations Metro would have to acquire parts of three properties just north of Little Tokyo on Temple Street between Main Street and Central Avenue for the track alignments. Two of the properties are currently government buildings and one is a parking lot.

In the Bunker Hill area, easements for construction and staging would need to be obtained for two properties that contain multi-family housing, a pool, and tennis courts. A partial take would be required for construction and staging along 3rd Street on property that currently contains the Central Plant. Only one property would need to be acquired in its entirety: a vacant lot between Hope Street and Flower Street. Easements would be required for construction and staging on five additional properties along Flower Street in the Financial District area.

In the Historic Core area, residents of the Higgins Building are concerned about construction and operation noise near their building under this alternative. These concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. Since the building is located across the street from the proposed underpass site, there would be additional noise and construction detours around the building. These concerns, along with mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

All properties requiring full or partial takes would be compensated according to the requirements of the Uniform Relocation Act. Easements and properties acquired under this alternative would not result in the displacement of houses or businesses; therefore, no changes to population, housing, or employment would occur during construction of the At-Grade Emphasis LRT Alternative.

This alternative would provide new construction jobs during the four to five years of construction. Creation of these new jobs in central downtown would be beneficial but temporary because the jobs would no longer be needed after construction is complete. Most construction workers would be expected to commute from surrounding areas and not permanently relocate to the work site. Thus, the workers would not substantially change the population in central downtown. Impacts on housing would be less than significant.

5.3.2 Operation

Operation of the At-Grade Emphasis LRT Alternative could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.3.2.1 Community Mobility

The At-Grade Emphasis LRT Alternative would create a new LRT alignment through central downtown that would provide a new connection between the Civic Center, Historic Core, Bunker Hill, and Financial District. This new connection would also provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both within downtown communities and to the central downtown from outside communities, would be a beneficial impact.

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot wide surface right-of-way bordered by mountable curbs. This width would increase to approximately 39 feet at station locations. Similar to current conditions, pedestrian crossings would be limited to traffic signal-controlled intersections, though signal phasing may be modified to provide adequate green time for the LRT vehicles to safely cross.

The At-Grade Emphasis LRT Alternative would have the potential to reduce pedestrian mobility between the Civic Center, Little Tokyo, and the Historic Core because at-grade trains would be running frequently along 2nd, Main, and Los Angeles Streets. Since adequate pedestrian street crossings would be provided at all traffic signal-controlled intersections, pedestrians would still be able to cross the streets. This potential impact would be less than significant.

Vehicular crossings would also be limited to traffic signal-controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. No uncontrolled mid-block vehicular crossing of the tracks would be permitted. Access to existing parking structures, parking lots, loading docks and commercial frontage would be affected by some at-grade LRT facilities.

Impacts could be offset by providing alternate street access. Access and egress to parking lots, by making a left turn from the street, presently exists at many locations downtown. However, at-grade LRT facilities would eliminate uncontrolled mid-block left turns, modifying existing approach and departure traffic patterns around parking sites. The Transportation Technical Memorandum contains additional details regarding modification of automobile access to lots adjacent to the proposed alignment.

These potential changes in traffic flow could decrease mobility between communities and neighborhoods and could affect access to local businesses in the area. This potential reduction in vehicle mobility on existing streets is unavoidable. This potential adverse impact to adjacent properties from decreased vehicular mobility could be partially offset by increases in access via the new trains that would be available to businesses and their patrons.

The at-grade alignment along Temple Street in the Civic Center area, just north of Little Tokyo, could result in increased conflicting traffic movements. This area would have a high volume of trains using the Regional Connector corridor and a large volume of traffic using Alameda Street and pedestrians crossing Alameda Street to access the existing Little Tokyo/Arts District Station. In order to improve operation of the Temple and Alameda Streets intersection, a vehicle underpass and a potential pedestrian overpass would be constructed. With the construction of the proposed underpass/overpass, the potential for increased conflicting traffic movements would be a less than significant impact.

The new LRT stations and trains would comply with the Americans with Disabilities Act and would be designed to ensure accessibility to all persons. The stations would be wheelchair and stroller accessible with ramps and/or elevators. The LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each of the trains would be designated for persons with disabilities and senior citizens. There would be no adverse impacts on disabled persons or senior citizens.

5.3.2.2 Viability of Existing Businesses

Most businesses in the central downtown area along the proposed alignment would likely benefit from the At-Grade Emphasis LRT Alternative. This alternative would provide a new means of public transportation through the Civic Center, Historic Core, Bunker Hill, and Financial District and would likely increase the number of pedestrians around each of the new stations. This new access could potentially increase customers for local businesses. This would be a beneficial effect.

Some adverse indirect effects may occur to existing businesses along the at-grade portions of the alignment through the Civic Center and Historic Core. As noted in the mobility section, at-grade LRT facilities would eliminate uncontrolled mid-block left turns, modifying existing approach and departure traffic patterns. Some businesses may be adversely affected since access may become more difficult. This could reduce customers to and decrease the viability of some existing businesses.

On 2nd Street, the at-grade LRT tracks would run along the southern side of the street, so impacts would likely be greater for businesses on the south side of the street than those on the north side. These impacts could potentially be significant. The elimination of mid-block left turns cannot be avoided or reduced. The significance of the resulting impact could be

partially offset by increases in access via the new trains that would be available to businesses and their patrons.

5.3.2.3 Emergency Services

Operation of the At-Grade Emphasis LRT Alternative would not be expected to increase emergency response times. Emergency services would be notified of any changes to existing roads needed for the operation of Regional Connector trains.

In fact, the proposed vehicular underpass at Temple and Alameda Streets may improve emergency response times by increasing roadway capacity. Still, some rerouting of emergency vehicles may be needed due to new restrictions on turning movements. No new emergency services staff would be required. The potential impact to emergency services would be less than significant.

5.3.2.4 Public Health and Safety and Crime

Operation of the At-Grade Emphasis LRT Alternative is not expected to substantially increase crime in the central downtown area. Mitigation measures, such as adding security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime.

Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic that are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity. Metro would continue to contract with the Sheriff's Department to provide specialized security at all rail stations.

Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the facilities are not expected to substantially change crime levels in the central downtown area. The potential impact to crime would be less than significant, and potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the project build alternatives.

Operation of the LRT in Bunker Hill and the Financial District would not be expected to cause any public health and safety issues since trains would be travelling underground. Operation of the trains through the Civic Center and Historic Core would be at-grade and introduces an opportunity for collisions between trains and pedestrians. Thus, like other Metro trains currently in use, the new trains would be equipped with auditory signals that would alert pedestrians when trains are approaching.

As required by law, all track crossings at intersections would have appropriate signal lights, auditory signals, and traffic barriers. Speed limits would be established for areas with heavy pedestrian use. Overall, the potential impact to public safety would be less than significant.

5.3.2.5 Community Resources and Events

Operation of the At-Grade Emphasis LRT Alternative could benefit community resources and events because it would provide an efficient public transportation method for people travelling to the area. This effect would be beneficial. The only permanent impacts to communities would be easements, and partial and full takes of properties necessary for the track alignment.

Major events, particularly in the City Hall area, would require coordination between Metro and city law enforcement officials. Since the At-Grade Emphasis LRT Alternative would run at grade in the Civic Center area, temporary service interruptions may be necessary to accommodate crowds and ensure safety. These interruptions would not impact events but could cause light rail system delays throughout the County.

5.3.2.6 Population, Housing, and Employment

Over the long-term, the presence of the Regional Connector may attract new residents to the central downtown area because it would provide three new stations that would link to the regional LRT system. As the City of Los Angeles continues to encourage public transportation and transit-oriented growth, new developments, including additional housing units, may occur around transit stations. This would be consistent with the Central City Community Plan and would be a beneficial impact.

The At-Grade Emphasis LRT Alternative may indirectly increase employment. Operation of the Regional Connector would decrease commute times and would result in three new transit stations in the central downtown area. A more efficient public transportation option could encourage people in the surrounding communities to seek employment downtown. This potential impact would be beneficial.

5.3.3 Cumulative Impacts

This section describes cumulative effects of the At-Grade Emphasis LRT Alternative.

5.3.3.1 Community Mobility

The At-Grade Emphasis LRT Alternative, when considered cumulatively with other future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. Taken cumulatively, the projects would result in a beneficial impact.

5.3.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the At-Grade Emphasis LRT Alternative. However, many new construction and renovation projects are planned in the area. If these construction projects also affect accessibility to local businesses, then there may be a cumulative impact during construction of the Regional Connector.

However, these impacts are all expected to be temporary and would be eliminated after construction is complete. No future projects are expected to alter existing streets or on-street parking in the construction area. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant. Viability of existing businesses would improve after the At-Grade Emphasis LRT Alternative is completed because it would bring more potential customers to the area.

5.3.3.3 Emergency Services

Many new construction and renovation projects are planned in central downtown for the same time as construction of the At-Grade Emphasis LRT Alternative. If these projects require road closures or detours in the same time frame as the construction of this alternative, a cumulative effect could result in increased response times for emergency services. However, each construction project, including the At-Grade Emphasis LRT Alternative, would be responsible for alerting emergency services to any road closures or detours to help avoid increased response times. The potential cumulative impact would be less than significant.

5.3.3.4 Public Health and Safety and Crime

The At-Grade Emphasis LRT Alternative, and other projects planned for the central downtown area, would potentially result in safety risks or increased crime during both construction and operation. However, each project would be responsible for reducing or avoiding potential adverse impacts. The At-Grade Emphasis LRT Alternative includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of the mitigation measures in Section 6.0, the At-Grade Emphasis LRT Alternative would not contribute adversely to cumulative public health and safety or crime impacts.

5.3.3.5 Community Resources and Events

Many new construction and renovation projects are planned in and around the central downtown area during construction of the At-Grade Emphasis LRT Alternative. If these projects require road closures or detours in the same timeframe as this alternative, cumulative effects to community resources or events may occur through traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each project, including the At-Grade Emphasis LRT Alternative, would be responsible for coordinating with local

community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, the potential cumulative impact would be less than significant.

5.3.3.6 Population, Housing, and Employment

The At-Grade Emphasis LRT Alternative has the potential to indirectly increase population, housing, and employment over the long-term because it would better link the project area to the LRT system. This could encourage more people to live and work in central downtown. Future development in the project area would also increase population, housing, and employment.

The cumulative population, housing, and employment growth under this alternative and other planned future projects would be expected to be consistent with the Central City Community Plan objectives and would result in a beneficial cumulative impact. Los Angeles' transit-oriented growth policies could encourage new, dense, development around the proposed stations under this alternative. This development would add to the housing supply and create new jobs in the downtown area, which is a beneficial impact.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would connect directly to the Metro Blue/Expo Line tracks at 7th Street/Metro Center Station, continue north underneath Flower Street to 3rd Street, then travel further northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north into a new portal on the private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The tracks would then enter the intersection of 1st and Alameda Streets in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative. The option exists under this alternative for a potential pedestrian overpass and vehicular underpass for through traffic on Alameda Street.

The communities potentially directly affected by construction and operation of the Underground Emphasis LRT Alternative would include:

- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

5.4.1 Construction

Construction impacts from the Underground Emphasis LRT Alternative would have the potential to affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about the construction staging areas is provided in the Description of Construction.

Most impacts would be temporary and intermittent, and they would be reduced or eliminated after construction is complete in four to five years. Cut and cover tunnel construction would be required on Flower Street and all of the station sites, except possibly at the 2nd/Hope Street station, which may be constructed using the sequential excavation method. The remainder of the alignment on 2nd Street would be constructed using a tunnel boring machine. Further information about these construction methods is available in the Description of Construction.

5.4.1.1 Community Mobility

This alternative would require the construction of three new underground stations: one near the Financial District, one at Bunker Hill, and one in the Historic Core/Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction. Installation of underground tracks would require tunneling along 2nd and Flower Streets. The segment on Flower Street would require temporary cut and cover excavations and concrete decking along the entire length of the roadway from 7th Street/Metro Center Station to the new portal just south of 3rd Street. Along 2nd Street, a tunnel boring machine (TBM) would be used for the majority of the alignment. As such, construction impacts to surface traffic and mobility would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

However, most of the construction would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of the temporary excavations would be greater on Flower Street than on 2nd Street. Streets and sidewalks in the vicinity of the temporary excavation areas would likely be closed periodically during construction.

Temporary street closures and construction activities, similar to cut and cover construction, would be needed in the vicinity of the proposed underpass at 1st and Alameda Streets. This could result in temporary mobility impacts during construction. Further information about construction activities and mobility impacts is available in the Description of Construction and the Transportation Technical Memorandum.

In summation, road and sidewalk closures and traffic detours could reduce mobility for pedestrian and vehicle traffic in the central downtown area. This potential impact could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to a less than significant level.

5.4.1.2 Viability of Existing Businesses

Businesses around each of the new stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would likely result in a temporary decrease in accessibility to many businesses and could reduce on-street and off-street parking. Construction operations could negatively affect business activity levels as the number of customers may temporarily decline. This potential impact could be significant.

While Metro would provide adequate detours and minimize road closures, some indirect effects to businesses may occur as people may avoid the project area altogether. This potential impact could be significant and unavoidable during the construction phase. Mitigation measures could help reduce the significance of these impacts. The Underground Emphasis LRT Alternative could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could also create local construction-related and other permanent jobs.

Some existing commercial properties would need to be acquired under this alternative in Little Tokyo and the Historic Core. Properties would be acquired according to the Uniform Relocation Act, and owners would be compensated. However, loss of these businesses could indirectly affect the viability of surrounding businesses because less people could be drawn to the general area. This potential impact could be significant and unavoidable if not necessarily permanent. Mitigation measures would help reduce the significance of these impacts.

After construction, access to local businesses would be enhanced by the improved transit service provided by the Underground Emphasis LRT Alternative. Viability of businesses along the alignment would be increased by added pedestrian activity (more potential customers) on streets near the alignment, especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the

project. Measures to ensure these concerns are addressed will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Underground Emphasis LRT Alternative would require acquisition of a portion of the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new portal, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses could include Office Depot, Señor Fish, and Starbucks Coffee. All other businesses on Central Avenue would remain. Additionally, some off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Any further displacement of businesses could cause additional temporary job losses. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.4.1.3 Emergency Services

The Underground Emphasis LRT Alternative would likely require temporary road closures during construction. This could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.4.1.4 Public Health and Safety and Crime

Construction of the Underground Emphasis LRT Alternative is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately fenced or blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. The potential impact from this alternative on crime and public health and safety would be less than significant, and potential mitigation measures are identified in Section 6.0.

5.4.1.5 Community Resources and Events

Construction of the Underground Emphasis LRT Alternative would require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. Construction under this alternative has the potential to create temporary adverse affects on festivals and events in the downtown area. It could also disrupt traffic patterns and make it more difficult for the public to access certain community resources like the Japanese American National Museum and the MOCA Geffen Building. The potential resulting impact could be significant; however, mitigation measures described in Section 6.0 would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.4.1.6 Population, Housing, and Employment

Construction of the Underground Emphasis LRT Alternative would affect properties along the alignment, near proposed underground stations, and where the alignment connects to the Metro Gold Line.

In order to construct a portal and launch site for the TBM, some properties on the block bounded by 1st, Alameda, and 2nd Streets, and Central Avenue in Little Tokyo would be acquired. These properties include commercial buildings and parking lots. Acquisition of properties housing businesses could temporarily reduce employment in the Little Tokyo area. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This direct decrease in employment at this location in Little Tokyo would be unavoidable. However, construction activities would introduce new employees into the area on a regular basis, which could offset the decrease in economic activity. After the project is complete, the added mobility and access it would provide to the area would likely increase business viability and overall employment. In addition, new employment at new businesses developed in the station vicinities would likely occur.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential tunnel boring machine launch area) and adjacent to the proposed underpass site. There would be noise and construction detours around the building under this project alternative. These concerns, along with potential mitigation

measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to 19 easements, six partial takes, and four full takes could be required, depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. However, not all proposed station entrances would be built, so the actual number of easements needed would likely be smaller. The four properties that would be acquired in full include three parking lots and commercial buildings. A direct decrease in employment at this location in the Historic Core and would be an unavoidable. After the project is complete, the added mobility and access it would provide to the area would likely increase business viability and overall employment. In addition, new employment at new businesses developed in the station vicinities would likely occur.

Residents of the Higgins Building are concerned about construction noise that would result from implementation of the Underground Emphasis LRT Alternative. The building is located less than one block from the proposed 2nd Street station (under either the Broadway option or the Los Angeles Street option). These concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. The Central Plant property would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, so there would be no impact to population, housing, or employment.

The Underground Emphasis LRT Alternative would provide a number of new construction jobs in the four to five years construction would last. Creation of new employment in central downtown would be beneficial but temporary since the jobs would end with completion of the project.

Most construction workers are expected to come from surrounding areas and not permanently relocate around the work site. They would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.4.2 Operation

Operation of the Underground Emphasis LRT Alternative could result in direct and indirect impacts on mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.4.2.1 Community Mobility

The Underground Emphasis LRT Alternative would create a new LRT alignment through central downtown and provide a new connection between Little Tokyo, the Historic Core, Bunker Hill, and the Financial District. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both within downtown and to the central downtown from outside communities, would be a beneficial impact.

Unlike the At-Grade Emphasis LRT Alternative, operation of the Underground Emphasis LRT Alternative would run almost entirely underground. Operation would not affect existing pedestrian or vehicle traffic except around the at-grade portion of the alignment near Alameda Street. Alameda Street experiences heavy vehicle traffic and large volumes of pedestrians cross Alameda Street to get to and from the Little Tokyo/Arts District Station.

Many of the traffic movements that could conflict with LRT trains would be eliminated by construction of a new underpass that would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction. Additionally, a potential new overhead pedestrian bridge structure would allow pedestrians to safely cross the street. Potential mobility impacts from this alternative would be less than significant and smaller than those for the At-Grade Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and would be designed to ensure accessibility to all persons. The stations would be wheelchair and stroller accessible with ramps and/or elevators. The LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts on senior citizens or disabled persons.

5.4.2.2 Viability of Existing Businesses

Most businesses in the central downtown area along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through Little Tokyo, the Historic Core, Bunker Hill, and the Financial District and would likely increase the number of pedestrians around each of the new stations. An increase in pedestrian traffic would have a beneficial impact to businesses by increasing the number of potential customers.

5.4.2.3 Emergency Services

Operation of the Underground Emphasis LRT Alternative would not be expected to increase emergency response times because it would be underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response

times by increasing roadway capacity. Some alteration of emergency routes may be needed due to potential new turning restrictions. No new emergency service staff would be required as a result of operation of this alternative. There would be no adverse impact to emergency services.

5.4.2.4 Public Health and Safety and Crime

Operation of the Underground Emphasis LRT Alternative is not expected to substantially increase crime in the central downtown area. While there is a perception that transit stops increase crime levels in general, mitigation measures, such as additional security services, would help prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials that are resistant to vandalism, such as brick, concrete, steel, aluminum, and heavy plastic. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the facilities are not expected to substantially change crime levels in the central downtown area. The potential impact of this alternative related to crime would be less than significant, and potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the project build alternatives.

5.4.2.5 Community Resources and Events

Operation of the Underground Emphasis LRT Alternative would benefit community resources and events since it would provide a new transit option for travelers to the area. Since the alignment would run almost entirely underground, train service would continue uninterrupted during large events. Potential event attendees would gain new access to the area. This impact would be beneficial.

5.4.2.6 Population, Housing, and Employment

Over the long-term, the presence of the Regional Connector may attract new residents to the central downtown area since it increases access to the area. The City of Los Angeles continues to encourage public transportation and transit-oriented growth. Development, including additional housing units, may occur around proposed stations. This potential increase in population and housing would be consistent with the Central City Community Plan and would be a beneficial impact.

The Underground Emphasis LRT Alternative may indirectly increase employment. Operation of the Regional Connector would decrease commute times and increase access to and within

the central downtown area. Increased access could make employment in the central downtown area more attractive to residents of surrounding communities. This potential impact would be beneficial.

5.4.3 Cumulative Impacts

This section describes cumulative effects of the Underground Emphasis LRT Alternative.

5.4.3.1 Community Mobility

The Underground Emphasis LRT Alternative, when considered cumulatively with future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.4.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Underground Emphasis LRT Alternative. However, many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact. Still, these impacts are expected to be temporary and would be eliminated after construction is complete. The potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.4.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area for the same time as construction of the Underground Emphasis LRT Alternative. If these related projects require road closures or detours in the same timeframe as construction of the Underground Emphasis LRT Alternative, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This would lessen increased emergency response times due to construction. The potential cumulative impact to emergency services would be less than significant.

5.4.3.4 Public Health and Safety and Crime

The Underground Emphasis LRT Alternative, and the future projects planned for the central downtown area, could have the potential to increase safety risks and crime during both construction and operation. However, each project would be responsible for reducing or avoiding potential adverse impacts.

The Underground Emphasis LRT Alternative has included measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Underground Emphasis LRT Alternative would not contribute to significant cumulative public health and safety or crime impacts.

5.4.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area for the same time as the potential construction of the Underground Emphasis LRT Alternative. If these related projects require road closures or detours in the same timeframe as construction of the Underground Emphasis LRT Alternative, a cumulative effect could occur resulting in adverse impacts to community resources and events.

Potential adverse impacts could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads.

However, each specific project, including the Underground Emphasis LRT Alternative, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, this potential cumulative impact would be less than significant.

5.4.3.6 Population, Housing, and Employment

The Underground Emphasis LRT Alternative has the potential to indirectly increase population, housing, and employment in central downtown over the long-term. This alternative would better link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the city's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development projects in the project area could also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Underground Emphasis LRT Alternative, and other planned future projects, would be expected to be consistent with the Central City Community Plan objectives and would result in a beneficial cumulative impact.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would connect directly to the Metro Blue/Expo Line tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets, and Central

Avenue. Next, the tracks would enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two directions. One set of tracks bound for the City of Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for I-605 via the Eastside Extension, would proceed east from the junction and rise through a new portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line to East Los Angeles tracks.

The communities directly affected by construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would include:

- Arts District
- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

5.5.1 Construction

Construction impacts from the Fully Underground LRT Alternative - Little Tokyo Variation 1 would potentially affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, and population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about the construction staging areas is provided in the Description of Construction.

Most impacts under this alternative would be temporary and intermittent and would be reduced or eliminated after construction is completed in four to five years. Cut and cover tunnel construction would be required on Flower Street between 7th Street/Metro Center Station and 3rd Street. The potential 2nd /Hope Street station could be constructed using either the cut and cover method or the sequential excavation method. The proposed 2nd Street/Central Avenue station, the portal on the Department of Water and Power site, and tunnels beneath the Nikkei parcel would be constructed using the open cut method.

Other stations would be constructed using the cut and cover method. Cut and cover construction would also be needed for the junction beneath the intersection of 1st and

Alameda Streets and tunnel approaches to nearby portals. The remainder of the alignment on 2nd Street would be constructed using a tunnel boring machine. Further information about these construction methods is available in the Description of Construction.

5.5.1.1 Community Mobility

This alternative would require the construction of four new underground stations: one near the Financial District, one at Bunker Hill, one in the Historic Core, and one in Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction.

Installation of underground tracks would require tunneling along 2nd and Flower Streets. A segment on Flower Street would require temporary cut and cover excavations. Concrete decking would be installed along the entire length of Flower Street from 7th Street/Metro Center Station to the new portal just south of 3rd Street. Along 2nd Street, a TBM would be used for the majority of the alignment. Since the TBM operates underground, construction impacts to surface traffic and mobility would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

Tunneling activities would affect Flower Street at 7th Street, Bunker Hill, Little Tokyo, and the Arts District. Temporary excavations in these areas could periodically reduce mobility during construction. Most of the construction, however, would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of the temporary excavations would be greater on Flower Street than on 2nd Street. Construction could necessitate the periodic closing of streets and sidewalks near excavations.

Temporary street closures, and construction activities similar to cut and cover construction, would be needed in the vicinity of the two portals near the intersection of 1st and Alameda Streets. This could result in temporary mobility impacts while construction is underway. Further information about construction activities and mobility impacts are available in the Description of Construction and the Transportation Technical Memorandum.

Overall, pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area could be reduced during construction because of road and sidewalk

closures and traffic detours. This potential impact could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to mobility to a less than significant level.

5.5.1.2 Viability of Existing Businesses

Businesses around each of the new stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would result in a temporary decrease in accessibility to some businesses and could reduce on-street and off-street parking. Less accessibility could negatively affect business activity levels if the number of customers temporarily declines. This potential impact could be significant.

While Metro would provide adequate detours and minimize road closures, some indirect effects to businesses may occur if consumers avoid the project area altogether. This potential impact could be significant and would be unavoidable during the construction phase. Mitigation measures would help reduce the significance of these impacts. The Fully Underground LRT Alternative - Little Tokyo Variation 1 could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could create local construction-related and permanent jobs.

Partial takes would be needed along only the north side of 1st Street between Alameda and Garey Streets. A partial take on the north side of 1st Street would come from the proposed Nikkei parcel. Though less space would remain, the development potential of the Nikkei parcel would be enhanced by the proposed 2nd Street/Central Avenue station that would improve access to the site.

Under this alternative, some existing commercial properties would need to be acquired in Little Tokyo and the Historic Core. These properties would be acquired according to the Uniform Relocation Act and owners would be compensated. However, losing these businesses could indirectly affect the viability of other local businesses because fewer people might be drawn to the area. This impact would be unavoidable during construction and could be considered significant. Mitigation measures would help reduce the significance of these impacts.

After construction, access to the area would be enhanced by the improved transit service provided by the Fully Underground LRT Alternative – Little Tokyo Variation 1. After construction, this alternative would increase viability of area businesses by increasing pedestrian activity (adding more potential customers) on streets near the alignment and especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the

project. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 1 could require acquisition of the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new station, entrances, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses would include Office Depot, Señor Fish, Starbucks Coffee, Weiland's Brewery, and Café Cuba. All other businesses on Central Avenue would remain. Additionally, all off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.5.1.3 Emergency Services

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would require temporary road closures during construction. Road closures could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.5.1.4 Public Health and Safety and Crime

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. This potential impact would be less than significant, and mitigation measures are identified in Section 6.0.

5.5.1.5 Community Resources and Events

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 may require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. This has the potential for temporary adverse affects on annual festivals and events held in the downtown area. Construction could disrupt traffic patterns and make it more difficult for the public to access community resources such as the Nishi Hongwanji Temple, the Japanese American National Museum, and the MOCA Geffen building. This potential impact could be significant; however, mitigation measures, described in Section 6.0, would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.5.1.6 Population, Housing, and Employment

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would affect properties along the alignment, near the proposed underground stations, and near the portals where the alignment would connect to the Metro Gold Line.

All of the properties on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue in Little Tokyo would be acquired under this alternative to allow for construction of a portal and launch site for the TBM. Though they would be acquired under this project alternative, the strip of businesses facing Central Avenue would remain in place, except possibly Starbucks Coffee. These properties consist of commercial buildings and parking lots. Acquisition of these properties could temporarily reduce employment in the Little Tokyo area since these properties contain existing businesses. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This alternative would result in a decrease in employment at this location in Little Tokyo and would be unavoidable. However, construction activities would introduce new people into the area on a regular basis. This influx could offset the decrease in employment and economic activity. After construction there would likely be additional new employment since the increased access to the area afforded by the project would enhance local business viability.

Should it be necessary to acquire all properties on the aforementioned block, a temporary reduction in employment would be more pronounced but would not extend to other areas of the community. New space for businesses could potentially be constructed on the same site once the Regional Connector is finished, possibly as part of a transit-oriented development that would boost business activity throughout the community.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential TBM launch area) and is adjacent to the proposed portal site. There would be additional noise and construction detours would be implemented around the building during construction. Potential noise and access effects, along with mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to eighteen easements, six partial takes, and four full takes could be required depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. Not all proposed station entrances would be built however, so the number of easements needed would likely be smaller. Three commercial properties and a parking lot would be acquired in full.

This acquisition is unavoidable and would result in a direct decrease in employment at this location. After construction this impact could be offset by new employment at new businesses developed in the vicinity of new stations. When the area becomes more accessible by rail, employment could increase since local businesses would become more viable.

Residents of the Higgins Building are concerned about construction noise that would result from the Fully Underground LRT Alternative - Little Tokyo Variation 1. The Higgins Building is located less than one block from the proposed 2nd Street/Broadway station. Construction noise concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. Property housing the Central Plant would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, and no population, housing, or employment impacts would occur.

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide a number of new construction jobs over the four to five year construction period. Creation of new employment in central downtown would be beneficial but temporary since the jobs would no longer be needed after construction is complete. Most construction workers are expected to commute from surrounding areas and are not expected to permanently relocate to the work site. Construction workers would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.5.2 Operation

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.5.2.1 Community Mobility

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would create a new LRT alignment through central downtown and provide a new connection between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both between downtown communities and to central downtown from outside communities, would be a beneficial impact. Mobility for Little Tokyo and the Arts District would be enhanced under this alternative because the proposed 2nd Street/Central Avenue station would be served by both North-South and East-West Regional Connector routes.

Unlike the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative, operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would run entirely underground and would not affect existing pedestrian or vehicle traffic. One exception exists where the alignment would surface on 1st Street. Pedestrians and vehicles would no longer be able to cross 1st Street at Hewitt Street, but they would still be able to cross at Alameda Street and Vignes Street. Alameda Street currently experiences heavy vehicle and pedestrian traffic. Additionally, large volumes of pedestrians cross Alameda Street to get to and from the existing Little Tokyo/Arts District Station.

However, by placing the 2nd Street/Central Avenue Station close to major activity centers in Little Tokyo, this alternative would eliminate the need for many pedestrians to cross Alameda Street. Operation of this alternative would not conflict with existing traffic movements, but some intersections would be modified by new turning restrictions. Potential mobility impacts from this alternative would be less than significant. Additionally, mobility impacts would be less than those of the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and be designed to ensure accessibility to all persons. Stations would be wheelchair and stroller accessible with ramps and/or elevators. LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts to senior citizens or disabled persons.

5.5.2.2 Viability of Existing Businesses

Most businesses along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. The number of pedestrians in the areas around new stations would likely increase.

An increase in pedestrians would benefit local businesses by increasing the volume of potential customers. An entrance to the 2nd Street/Central Avenue station could be incorporated into the planned Nikkei Center on the northeast corner of 1st and Alameda Streets. Such transit-oriented development could increase transit ridership and local business activity. This potential effect would be beneficial.

5.5.2.3 Emergency Services

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not be expected to increase emergency response times because it would run underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response times by increasing roadway capacity. Some alteration of emergency routes may be needed due to added turning restrictions. New emergency service staff would not be required as a result of operation of this alternative. There would be no adverse impact to emergency services.

5.5.2.4 Public Health and Safety and Crime

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not result in an increase in crime in the central downtown area. Mitigation measures, such as additional security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic which are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the operation of this alternative is not expected to change crime levels in the central downtown area. The potential impact of the project on crime would be less than significant. Mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the proposed build alternatives.

5.5.2.5 Community Resources and Events

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would benefit community resources and events because it would provide a new transit option for travelers to the area. Since the alignment would operate entirely underground, train service would continue uninterrupted during large events, facilitating access for event attendees. This increased access would be beneficial.

5.5.2.6 Population, Housing, and Employment

Over the long-term, this alternative could attract new residents to the central downtown area. This alternative would link the project area to the regional LRT system through four new stations. As Los Angeles continues to encourage public transportation and transit-oriented growth, new development, including additional housing units, could occur around new stations. This increase in population and housing would be consistent with the Central City Community Plan and the Central City North Community Plan and would be a beneficial impact.

The Fully Underground LRT Alternative - Little Tokyo Variation 1 could indirectly increase employment. This alternative creates four new stations and would decrease commute times for workers. In general, increased public transportation would make central downtown a more desirable location to work and live in, increasing jobs and population. This potential impact would be beneficial.

5.5.3 Cumulative Impacts

This section describes cumulative effects of the Fully Underground LRT Alternative - Little Tokyo Variation 1.

5.5.3.1 Community Mobility

Upon completion, the Fully Underground LRT Alternative - Little Tokyo Variation 1, when considered cumulatively with future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.5.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Fully Underground LRT Alternative - Little Tokyo Variation 1. Many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact.

However, impacts are expected to be temporary and would be eliminated after construction is complete. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.5.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area during the time the Regional Connector would be constructed. If these projects require road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 1's construction, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each specific project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This measure would help avoid increased response times due to construction. The potential cumulative impact to emergency response time would be less than significant.

5.5.3.4 Public Health and Safety and Crime

The Fully Underground LRT Alternative - Little Tokyo Variation 1, and future projects planned for the central downtown area could potentially result in safety risks or increased crime during both construction and operations. However, each project would be responsible for reducing or avoiding potential impacts.

The Fully Underground LRT Alternative - Little Tokyo Variation 1 includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not contribute to significant cumulative public health and safety or crime impacts.

5.5.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area during the time the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be constructed. If these projects require temporary road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 1's construction, cumulative effects to community resources or events may occur.

Adverse effects could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each specific project, including the Fully Underground LRT Alternative - Little Tokyo Variation 1, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, potential cumulative impacts to community resources and events would be less than significant.

5.5.3.6 Population, Housing, and Employment

Over the long-term, the Fully Underground LRT Alternative - Little Tokyo Variation 1 has the potential to indirectly increase population, housing, and employment in the downtown area. This alternative would link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the city's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development in the project area would also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Fully Underground LRT Alternative - Little Tokyo Variation 1, and other planned future projects, would be consistent with the Central City Community Plan objectives. Such growth would be a beneficial cumulative impact.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would connect directly to the Metro Blue and Expo Line tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and then northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets and Central Avenue. The tracks would then enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two sets. One set of tracks bound for the City of Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for I-605 via the Eastside Extension, would proceed east from the junction and rise through a new portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line.

Communities potentially directly affected by construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would include:

- Arts District
- Little Tokyo
- Historic Core
- Bunker Hill

- Financial District

5.6.1 Construction

Construction impacts from the Fully Underground LRT Alternative - Little Tokyo Variation 2 could affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, and population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about construction staging areas is provided in the Description of Construction.

Most potential impacts would be temporary and intermittent and would be reduced or eliminated after construction is complete in four to five years. Cut and cover tunnel construction would be required on Flower Street between 7th Street/Metro Center Station and 3rd Street. The 2nd/Hope Street station could be constructed using either the cut and cover method or the sequential excavation method. The 2nd Street/Central Avenue station would be constructed using the open cut method.

Other stations would be constructed using the cut and cover method. Cut and cover construction would be needed for the junction beneath the intersection of 1st and Alameda Streets and tunnel approaches to nearby portals. A TBM would create the remainder of the alignment on 2nd Street. Further information about construction methods is available in the Description of Construction.

5.6.1.1 Community Mobility

This alternative would construct four new underground stations: one near the Financial District, one at Bunker Hill, one in the Historic Core, and one in Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction.

Installation of underground tracks would require tunneling along 2nd and Flower Streets. Temporary cut and cover excavation would be required on a segment of Flower Street. Concrete decking would be installed along the entire length of Flower Street from 7th Street/Metro Center Station to the new portal just south of 3rd Street. A TBM would be used to build the majority of the alignment along 2nd Street. As such, construction impacts to mobility of surface traffic would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling

activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

Tunneling activities would affect Flower Street at 7th Street, Bunker Hill, Little Tokyo, and the Arts District. Temporary excavations could periodically reduce mobility in these areas during construction. However, most construction would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of temporary excavations would be greater on Flower Street than on 2nd Street. Some streets and sidewalks in the vicinity of temporary excavation areas would periodically be closed during construction.

Temporary street closures, and construction activities similar to cut and cover construction, would be needed in the vicinity of the two portals near the intersection of 1st and Alameda Streets. This could result in temporary mobility impacts while construction is underway. Further information about construction activities and mobility impacts are available in the Description of Construction and the Transportation Technical Memorandum.

Overall, construction could lead to road and sidewalk closures and traffic detours and reduce pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area. This potential impact to mobility could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to a less than significant level.

5.6.1.2 Viability of Existing Businesses

Businesses around the proposed stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would likely result in a temporary decrease in accessibility to many businesses and could reduce on-street and off-street parking.

Construction could negatively impact business activity levels because the number of customers may temporarily decline. This potential impact could be significant. While Metro would provide adequate detours and minimize road closures, some adverse effects to businesses may occur as people may avoid the project area altogether.

This potential adverse impact would be unavoidable during construction and could be significant. Mitigation measures would help reduce the significance of these impacts. The Fully Underground LRT Alternative - Little Tokyo Variation 2 could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could also create local construction-related and permanent jobs.

Some commercial properties in Little Tokyo and the Historic core would be acquired under this alternative. These properties would be acquired according to the Uniform Relocation Act and owners would be compensated. However, loss of these businesses could adversely affect

the surrounding communities and indirectly affect the viability of other businesses because fewer people could be drawn to the area. This impact would be unavoidable and could be considered significant if not permanent. Mitigation measures would help reduce this potential impact to a less than significant level.

Under this alternative, partial property acquisitions would occur along both sides of 1st Street east of Alameda Street. Easements on the south side of the street would be located on a private parking lot and vacant space, causing little disruption to the community. The partial take on the north side of 1st Street would be from the proposed Nikkei parcel. Though less space would remain, the development potential of the Nikkei parcel would be enhanced by the proposed 2nd Street/Central Avenue station that would improve access to the site.

After construction, access to the area would be enhanced by the improved transit service provided by the Fully Underground LRT Alternative – Little Tokyo Variation 2. After construction, this alternative could increase viability of area businesses by increasing pedestrian activity (adding more potential customers) on streets near the alignment and especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the project. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 2 could require acquisitions of the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new station, entrances, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses would include Office Depot, Señor Fish, Starbucks Coffee, Weiland's Brewery, and Café Cuba. All other businesses on Central Avenue would remain. Additionally, all off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal

parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.6.1.3 Emergency Services

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would require temporary road closures during the construction period; this could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.6.1.4 Public Health and Safety and Crime

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. This potential impact would be less than significant, and potential mitigation measures are identified in Section 6.0.

5.6.1.5 Community Resources and Events

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 may require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. This has the potential for temporary adverse affects on annual festivals and events held in the downtown area. Construction could disrupt traffic patterns and make it more difficult for the public to access community resources such as the Nishi Hongwanji Temple, the Japanese American National Museum, and the MOCA Geffen building. This potential impact could be significant; however, mitigation measures, described in Section 6.0, would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.6.1.6 Population, Housing, and Employment

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would affect properties along the alignment, near the proposed underground stations, and near the portals where the alignment would connect to the Metro Gold Line.

All of the properties on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue in Little Tokyo would be acquired under this alternative to allow for construction of a

portal and launch site for the TBM. Though they would be acquired under this project alternative, the strip of businesses facing Central Avenue would remain in place, except possibly Starbucks Coffee. These properties consist of commercial buildings and parking lots. Acquisition of these properties could temporarily reduce employment in the Little Tokyo area since these properties contain existing businesses. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This alternative would result in a decrease in employment at this location in Little Tokyo and would be unavoidable. However, construction activities would introduce new people into the area on a regular basis. This influx could offset the decrease in employment and economic activity. After construction there would likely be additional new employment since the increased access to the area afforded by the project would enhance local business viability.

Should it be necessary to acquire all properties on the aforementioned block, a temporary reduction in employment would be more pronounced but would not extend to other areas of the community. New space for businesses could be constructed on the same site once the Regional Connector is finished, possibly as part of a transit-oriented development that would boost business activity throughout the community.

Residents of the Savoy condominium development have expressed concerns over potential construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential TBM launch area) and adjacent to the proposed portal site. Potential noise impacts and construction detours could occur around the building. Noise and traffic concerns, along with potential mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to eighteen easements, six partial takes, and four full takes could be required depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. Not all potential station entrances would be built however, so the number of easements needed would likely be smaller. Three commercial properties and a parking lot would be acquired in full.

This acquisition would be unavoidable and could result in a direct decrease in employment at this location. After construction this impact could be offset by new employment at new businesses developed in the vicinity of the proposed stations. When the area becomes more accessible by rail, employment could increase since local businesses would become more viable.

Residents of the Higgins Building are concerned about potential construction noise that would result from Fully Underground LRT Alternative - Little Tokyo Variation 2. The Higgins

Building is located less than one block from the proposed 2nd Street/Broadway station. Construction noise concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. Property housing the Central Plant would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, and no population, housing, or employment impacts would occur.

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide a number of new construction jobs over the four to five year construction period. Creation of new employment in central downtown would be beneficial but temporary since the jobs would no longer be needed after construction is complete. Most construction workers are expected to commute from surrounding areas and are not expected to permanently relocate to the work site. Construction workers would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.6.2 Operation

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.6.2.1 Community Mobility

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would create a new LRT alignment through central downtown and provide a new connection between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both between downtown communities and to central downtown from outside communities, would be a beneficial impact. Mobility for Little Tokyo and the Arts District is particularly enhanced under this alternative because the proposed 2nd Street/Central Avenue station would be served by both North-South and East-West Regional Connector routes.

Unlike the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative, operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would run entirely underground and would not affect existing pedestrian or vehicle traffic. One exception exists where the alignment would surface on 1st Street. Pedestrians and vehicles would no longer be able to cross 1st Street at Hewitt Street, but they would still be able to cross at Alameda Street and Vignes Street. Alameda Street currently experiences

heavy vehicle traffic. Additionally, large volumes of pedestrians cross Alameda Street to get to and from the existing Little Tokyo/Arts District Station.

However, by placing the 2nd Street/Central Avenue Station close to major activity centers in Little Tokyo, this alternative could eliminate the need for many pedestrians to cross Alameda Street. Operation of this alternative would not conflict with existing traffic movements, but some intersections would be modified by new turning restrictions. Potential mobility impacts from this alternative would not be significant. Additionally, mobility impacts would be less than those of the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and be designed to ensure accessibility to all persons. Stations would be wheelchair and stroller accessible with ramps and/or elevators. LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts to senior citizens or disabled persons.

5.6.2.2 Viability of Existing Businesses

Most businesses along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. The number of pedestrians in the areas around proposed new stations would likely increase.

An increase in pedestrians would benefit local businesses by increasing the volume of potential customers. An entrance to the 2nd Street/Central Avenue station could be incorporated into the planned Nikkei Center on the northeast corner of 1st and Alameda Streets. Such transit-oriented development could increase transit ridership and local business activity. This potential effect would be beneficial.

5.6.2.3 Emergency Services

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not be expected to increase emergency response times because it would run underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response times by increasing roadway capacity. Some alteration of emergency routes may be needed due to added turning restrictions. New emergency service staff would not be required as a result of operation of this alternative. There would be no adverse impact to emergency services

5.6.2.4 Public Health and Safety and Crime

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 is not expected to increase crime in the central downtown area. Mitigation measures, such as additional security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic which are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the operation of this alternative is not expected to substantially change crime levels in the central downtown area. The potential effects related to crime would be less than significant. Potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the build alternatives.

5.6.2.5 Community Resources and Events

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would benefit community resources and events because it would provide a new transit option for travelers to the area. Since the alignment would operate entirely underground, train service would continue uninterrupted during large events, facilitating access for event attendees. This increased access would be beneficial.

5.6.2.6 Population, Housing, and Employment

Over the long-term, this project alternative could attract new residents to the central downtown area. This alternative would link the project area to the regional LRT system through four new stations. As Los Angeles continues to encourage public transportation and transit-oriented growth, new development, including additional housing units, could occur around new stations. This increase in population and housing would be consistent with the Central City Community Plan and the Central City North Community Plan and would be a beneficial impact.

The Fully Underground LRT Alternative - Little Tokyo Variation 2 could indirectly increase employment. This alternative creates four new stations and would decrease commute times for workers. In general, increased public transportation would make central downtown a more desirable location to work and live in, potentially increasing jobs and population. This potential impact would be beneficial.

5.6.3 Cumulative Impacts

This section describes cumulative effects of the Fully Underground LRT Alternative - Little Tokyo Variation 2.

5.6.3.1 Community Mobility

Upon completion, the Fully Underground LRT Alternative - Little Tokyo Variation 2, when considered cumulatively with other future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.6.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Fully Underground LRT Alternative - Little Tokyo Variation 2. Many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact.

However, impacts are expected to be temporary and would be eliminated after construction is complete. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.6.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area during the time the Regional Connector would be constructed. If these projects require road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 2's construction, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each specific project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This measure would help avoid increased response times due to construction. The potential cumulative impact to emergency response time would be less than significant.

5.6.3.4 Public Health and Safety and Crime

The Fully Underground LRT Alternative - Little Tokyo Variation 2, and future projects planned for the central downtown area, could potentially result in safety risks or increased crime during both construction and operations. However, each project would be responsible for reducing or avoiding potential impacts.

The Fully Underground LRT Alternative - Little Tokyo Variation 2 includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not contribute to significant cumulative public health and safety or crime impacts.

5.6.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area during the time the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be constructed. If these projects require temporary road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 2's construction, cumulative effects to community resources or events may occur.

Adverse effects could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each specific project, including the Fully Underground LRT Alternative - Little Tokyo Variation 2, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the potential mitigation measures listed in Section 6.0, potential cumulative impacts to community resources and events would be less than significant.

5.6.3.6 Population, Housing, and Employment

Over the long-term, the Fully Underground LRT Alternative - Little Tokyo Variation 2 has the potential to increase population, housing, and employment in the downtown area. This alternative would link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the City's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development in the project area would also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Fully Underground LRT Alternative - Little Tokyo Variation 2, and other planned future projects, would be consistent with the Central City Community Plan objectives. Such growth would be a beneficial cumulative impact.

6.0 POTENTIAL MITIGATION MEASURES

Mitigation measures could be implemented to avoid, minimize, or mitigate potentially significant impacts identified in Section 5.0. Additional measures may be considered once the ongoing coordination process with the communities in the project area is completed. The following is a list of potential mitigation measures:

- Whenever possible, develop detours for any road or sidewalks to be closed during construction. Post signs (in appropriate languages) alerting pedestrians and vehicles of road and sidewalk closures and detours. Ensure pedestrian detours are accessible to seniors and disabled persons. Develop Worksite Traffic Control Plans in conjunction with the City of Los Angeles Department of Transportation (LADOT) to accommodate automobile and pedestrian traffic.
- Maintain access to community facilities affected by construction activities.
- Provide early notification to emergency service providers of any road closures or detours.
- Develop a community outreach plan to notify local communities of construction schedules, road and sidewalk closures, and detours. Coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events. Consider limiting construction activities during special events.
- Develop a construction mitigation plan with community input to address construction impacts unique to the Little Tokyo community. Determine truck hauling routes and schedules that would minimize impacts on sensitive uses in all parts of the project area.
- During construction, provide temporary replacement parking to offset the loss of parking due to acquisitions on the block bounded by 1st, 2nd Street, and Alameda Streets, and Central Avenue. Temporary parking could be added by constructing surface lots on nearby vacant parcel or restriping nearby streets to allow diagonal curb parking.
- Provide crossing guards in the vicinity of construction sites, haul routes and other relevant sites as proposed in the *California DOT Traffic Manual, Chapter 10-07.3, Warrants for Adult Crossing Guards*,
- Erect barriers and provide security personnel during construction to minimize trespassing and vandalism. Barriers could be enhanced with artwork and attractive design features where possible.

- Forewarn the public of any anticipated road closures or detours due to construction activity.
- Work with businesses along the alignment to increase their visibility during construction.

7.0 CONCLUSIONS

7.1 No Build Alternative

The No Build Alternative would result in some population, housing, and employment growth. However, this alternative would not be expected to create any substantial changes in the quality of life for communities and neighborhoods in the project area. While this alternative would not have significant adverse impacts it also would not have beneficial mobility, business or community effects.

7.2 TSM Alternative

The TSM Alternative would require minimal construction and would not affect existing communities or neighborhoods. Operation of the TSM Alternative could be beneficial. This alternative could increase mobility through the central downtown area and increase viability for local businesses along new bus routes. However, adding additional buses to the street network in downtown Los Angeles could contribute to additional congestion.

Potential benefits from the TSM alternative depend upon whether it would attract current automobile commuters. The TSM Alternative would not substantially decrease commute times for commuters to central downtown. This alternative would not affect population, housing or employment growth in the central downtown area.

7.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would have potentially significant adverse impacts to community mobility, emergency service response times, and community resources and events. These impacts would be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Furthermore, this alternative could have a significant adverse impact on the viability of some local businesses. Road and sidewalk closures could decrease accessibility to businesses near the proposed alignment and staging areas. Some customers might avoid the area altogether during construction activities. This impact would be unavoidable during construction. Mitigation measures would be developed with affected parties to reduce this impact to a less than significant level. The efficacy of the measures would be evaluated after implementation.

Operation of the At-Grade Emphasis LRT Alternative would have beneficial effects on population, housing, and employment. This alternative would decrease commute times to central downtown and could encourage more people to live and work in the area. Operation of this alternative would be beneficial for community resources and events because it would provide a new public transportation option through central downtown. This alternative would

increase mobility between the Financial District, Bunker Hill, the Civic Center, and the Historic Core.

The At-Grade Emphasis LRT Alternative would, however, limit mid-block left turns through the Civic Center and Historic Core areas where the track runs along the surface. This change in traffic flow could adversely affect accessibility to existing businesses and would be unavoidable. This impact would be partially offset by increased access from the new trains that would be available to patrons of local businesses.

7.4 Underground Emphasis LRT Alternative

Construction of the Underground Emphasis LRT Alternative would have largely the same impacts as the At-Grade Emphasis LRT Alternative. Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would have potentially greater impacts on local business viability during construction. This alternative could reduce accessibility to existing businesses during construction but would also require the displacement of existing businesses in Little Tokyo and near Bunker Hill.

Property acquisition would be carried out according to the Uniform Relocation Act requirements. Still, displaced businesses would be unavoidably affected and surrounding businesses would be potentially indirectly affected by a smaller overall customer base. Mitigation measures identified in the Displacement and Relocation Technical Memorandum would reduce the impacts of these business losses below the level of significance. Additionally, new development of businesses around new stations would help offset adverse impacts to business.

Operation of the Underground Emphasis LRT Alternative would result in benefits similar to the At-Grade Emphasis LRT Alternative. The Underground Emphasis LRT Alternative would benefit population growth, housing, and employment during operation because it would decrease commute times to central downtown and would encourage more people to live and work in the area. This alternative would also be beneficial for community resources and events since it would increase mobility in and accessibility of the central downtown area.

This alternative would increase mobility between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. It would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central Avenue to a potential location for a mixed-use joint development. The main difference between this alternative and the At-Grade Emphasis LRT Alternative would be that this alternative would operate mainly below ground and not on

surface streets. Thus, this alternative would not adversely affect existing businesses through the elimination of mid-block left turns in the Civic Center and Bunker Hill areas.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Construction impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would generally mirror those from construction of the Underground Emphasis LRT Alternative. However, construction activities would extend further east along 1st Street to Garey Street. Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 could potentially have greater unavoidable impacts associated with the viability of existing businesses. Under this alternative, additional businesses might need to be acquired on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. Property acquisition would be carried out according to the Uniform Relocation Act. Still, acquisitions would unavoidably impact project area communities through direct loss of businesses and related, indirect effects on surrounding business.

Mitigation measures identified in Section 6.0 and the Displacement and Relocation Technical Memorandum would reduce the potential impacts of these business losses below the level of significance. Additionally, new development of businesses around stations would help offset adverse impacts to business viability.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in more benefits to the Little Tokyo community than the At-Grade Emphasis LRT Alternative or the Underground Emphasis LRT Alternative because it includes a new station with greater connectivity than the existing Little Tokyo/Arts District Station. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be beneficial to population, housing, and employment during operation because it would decrease commute times to central downtown and encourage more people to live and work in the area.

This alternative would also be beneficial to community resources and events since it would provide a new public transportation option through central downtown. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would increase mobility between the Financial District, Bunker Hill, the Historic Core, Little Tokyo, and the Arts District. This alternative would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central Avenue into a potential location for a mixed-use joint development. This potential new development would combine the site with the proposed 2nd Street/Central Avenue station and the proposed Nikkei Center across the street.

Unlike the At-Grade Emphasis LRT Alternative, this alternative would not operate on the surface of existing streets and would not adversely affect existing businesses by eliminating mid-block left turns in the Civic Center and Bunker Hill areas.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would generally have the same impacts as construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, construction activities would extend further east along 1st Street to Vignes Street because two single track portals would be constructed instead of one double track portal.

Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 2 could potentially have greater unavoidable impacts associated with the viability of existing businesses. Under this alternative, additional businesses might need to be acquired on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. Property acquisition would be carried out according to the Uniform Relocation Act. Still, acquisitions would unavoidably impact project area communities through direct loss of businesses and related, indirect effects on surrounding business.

Mitigation measures identified in Section 6.0 and the Displacement and Relocation Technical Memorandum would reduce the impacts of these business losses to a less than significant level. Additionally, new development of businesses around stations would help offset adverse impacts to business viability.

Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in more benefits to the Little Tokyo community than the At-Grade Emphasis LRT Alternative or the Underground Emphasis LRT Alternative because it includes a new station with greater connectivity than the existing Little Tokyo/Arts District Station. Fully Underground LRT Alternative – Little Tokyo Variation 2 would be beneficial to population, housing, and employment during operation because it would decrease commute times to central downtown and encourage more people to live and work in the area.

This alternative would also be beneficial to community resources and events since it would provide a new public transportation option through central downtown. Fully Underground LRT Alternative – Little Tokyo Variation 2 would increase mobility between the Financial District, Bunker Hill, the Historic Core, Little Tokyo, and the Arts District. This alternative would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central

Avenue into a potential location for a mixed-use joint development. This potential new development would combine the site with the proposed 2nd Street/Central Avenue station and the proposed Nikkei Center across the street.

Unlike the At-Grade Emphasis LRT Alternative, this alternative would not operate on the surface of existing streets and would not adversely affect existing businesses by eliminating mid-block left turns in the Civic Center and Bunker Hill areas.

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