Chapter 4 ENVIRONMENTAL ANALYSIS, CONSEQUENCES, AND MITIGATION

This chapter has been updated since publication of the Draft EIS/EIR to address comments received on the Draft EIS/EIR and the Supplemental Environmental Assessment/Recirculated Sections of the Draft EIR (Supplemental EA/Recirculated Draft EIR Sections), as indicated in the Responses to Comments, Volumes F-2 through F-4, of this Final EIS/EIR, and based on refinements to the Locally Preferred Alternative (LPA). The refinements to the LPA were analyzed where potential differences in impacts compared to the unrefined LPA were identified. The environmental analysis assumes a conservative, worst-case, condition when determining potential impacts. A vertical line in the margin is used to show where revisions (excluding minor edits for consistency and correction of formatting and minor typographical errors) have occurred to this chapter since publication of the Draft EIS/EIR. No changes to the National Environmental Policy Act (NEPA) impact findings or California Environmental Quality Act (CEQA) impact determinations were identified as a result of refinements to the LPA, responses to comments, or other developments since publication of the Draft EIS/EIR. A summary of updates since publication of the Draft EIS/EIR is included at the beginning of each section.

Section 4.18, Construction Impacts, and Section 4.19, Cumulative Impacts, serve as summaries of the construction and cumulative impact discussions from Chapter 3 and the other sections of Chapter 4. Construction impacts are discussed in more detail in Appendix FF, Construction Impacts Technical Memorandum, and cumulative impacts are discussed in more detail in Appendix GG, Cumulative Impacts Technical Memorandum, of this EIS/EIR.

4.1 Land Use and Development

This section summarizes the existing land uses and developments in the project area, and the potential impacts of the proposed alternatives on these resources. The information in this section is based on the Land Use Impacts Technical Memorandum, which is incorporated into this EIS/EIR as Appendix M.

This section has been updated since publication of the Draft EIS/EIR to address comments received on the Draft EIS/EIR, Volumes F-2 and F-3, of this Final EIS/EIR, and based on refinements to the LPA. A vertical line in the margin is used to show where revisions have occurred to this section since publication of the Draft EIS/EIR, excluding minor edits for consistency and correction of formatting and minor typographical errors.

Minor modifications have been made to this section since publication of the Draft EIS/EIR, which include analysis of the LPA's consistency with the United States Environmental Protection Agency (USEPA), United States Department of Housing and Urban Development (HUD), and the United States Department of Transportation (USDOT) Partnership for Sustainable Communities livability principles. The need for fewer acquisitions of commercial properties associated with the refinements to the LPA is noted. No changes to the NEPA impact findings or CEQA impact determinations were identified as a result of refinements to the LPA, responses to comments, or other developments since publication of the Draft EIS/EIR.

The analysis of land use consequences associated with the LPA is detailed below in Section 4.1.4.5.

4.1.1 Existing Land Uses

The current land uses adjacent to the proposed project alignments are presented in detail in Appendix M, Land Use Impacts Technical Memorandum. Overall, the project area is characterized by a dense downtown urban environment.

Tall skyscrapers with offices and hotels dominate the western end of the project area, including the City National Towers, Bonaventure Hotel, CitiGroup Tower, US Bank Tower, and the Standard Hotel.

Civic institutions dominate the central portion of the project area, including City Hall, City Hall East, the California Department of Transportation District 7 Headquarters, Parker Center, and the new Los Angeles Police Department headquarters building.

Little Tokyo, which is located in the eastern portion of the project area, contains a mix of commercial, residential, civic, and light industrial mid- to low-scale development. Little Tokyo includes the Japanese Village Plaza (JVP), the Go For Broke Monument, and the Japanese American National Museum (JANM), all of which have particular significance to the City of Los Angeles.

4.1.2 Regulatory Framework

NEPA, CEQA, and the L.A. CEQA Thresholds Guide provide criteria for evaluating potential effects on land use and development. These criteria define an adverse impact as one that would:

- Conflict with regional land use policies
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect
- Conflict with the compatibility of surrounding land uses or adversely affect the development of surrounding land uses within the project area

The Regional Connector Transit Corridor project would be located entirely within the City of Los Angeles; therefore, consistency with the following plans, policies, and regulations would be needed to avoid land use impacts:

- City of Los Angeles General Plan:
  - Central City Community Plan
  - Central City North Community Plan
  - Transportation Element

- City of Los Angeles Planning and Zoning Code
- Civic Center Shared Facilities and Enhancement Plan

- Downtown Adaptive Reuse Incentive Ordinance
- Greater Downtown Housing Incentive Ordinance
- Redevelopment plans established by the Community Redevelopment Agency of the City of Los Angeles (CRA/LA):
  - Bunker Hill Urban Renewal Project
  - Central Business District Redevelopment Project
  - City Center Redevelopment Project
  - Little Tokyo Redevelopment Project

Additionally, the other impact analyses, such as the Noise and Vibration Technical Memorandum (Appendix S), were reviewed to determine whether any of the alternatives would have impacts that would diminish the quality of an adjacent land use. In general, zoning and land use policies in the project area are supportive of increased density and transit use, as well as reuse of existing buildings. More details on these regulations and plans are available in Appendix M, Land Use Impacts Technical Memorandum.

4.1.3 Affected Environment

The project area is heavily urbanized and is one of Los Angeles County's major employment centers that includes retail, entertainment, and residential districts. Income levels of residents vary greatly, and residential units range in cost from new luxury condominium developments in the western half of the project area to single-room occupancy hotels and homeless shelters in the eastern portion. Land use patterns in the project area consist mostly of commercial office buildings in the southwestern portion, public office buildings in the central and northern portions, and commercial manufacturing buildings in the southeastern portion. Pockets of residential uses, which include adaptive reuse of older non-residential buildings, are scattered throughout the project area.

Figure 4.1-1 shows the zoning designations and neighborhoods in the project area.

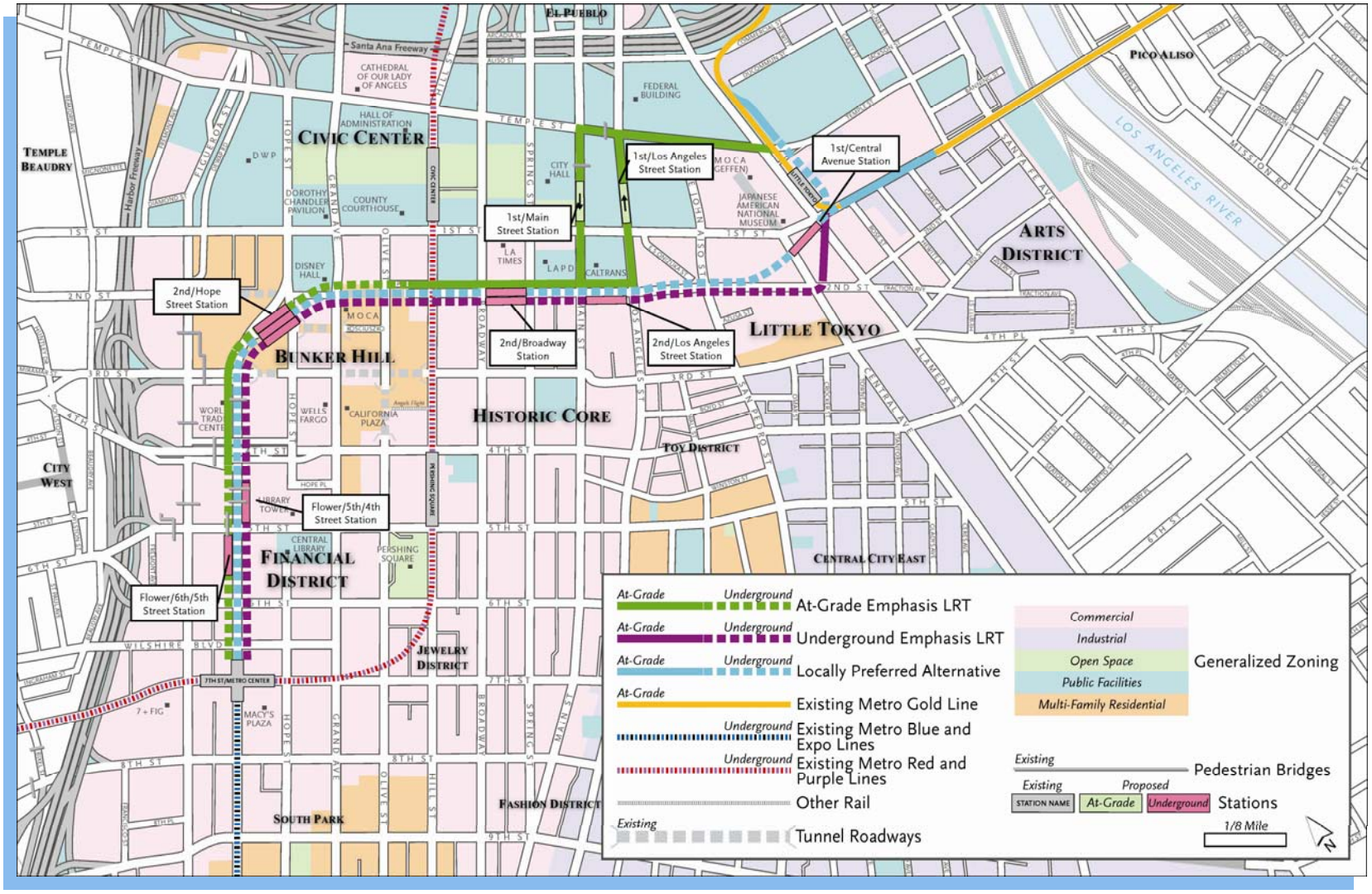

Figure 4.1-1. Neighborhoods and Zoning

The proposed build alternatives would introduce new light rail service into the following neighborhoods:

- Financial District: Existing land uses include office towers, public open space, hotels, and other commercial and retail establishments. The area is densely developed; many of the buildings in the area have 12 or more stories.
- Bunker Hill: Existing land uses include office towers, large auditoriums, residential developments, education buildings, and parking lots. The area contains the tallest buildings in the city. Most of the parcels currently used as parking lots are part of the proposed Grand Avenue redevelopment project.
- Historic Core: Existing land uses include public buildings, offices, retail establishments, and parking lots. This highly urbanized area contains many buildings from the 1920s and earlier (most with ground floor retail). Most originated as office buildings, though some have been converted to manufacturing space or residential units.
- Civic Center: Existing land uses include public offices and services, and public open space. Hotels, restaurants, and other commercial uses are also present. Many of the businesses in the area directly serve public agency needs. Most of the public buildings are large and occupy entire blocks.
- Little Tokyo: Existing land uses include office buildings, restaurants, hotels, cultural institutions, parking lots, and retail establishments. The neighborhood is a center for Japanese-American culture. In general, building heights are lower in Little Tokyo than in the rest of the project area. Also, many of the parking lots are planned for redevelopment.
- Arts District: Existing land uses include warehouse retail, public offices and maintenance facilities, new residential buildings, artist lofts, and pockets of restaurant and retail establishments. Like Little Tokyo, building heights are typically lower in this neighborhood than in the rest of the project area.

4.1.4 Environmental Impacts/Environmental Consequences

The following sections summarize the evaluation of potential land use and development impacts for each alternative. Impact conclusions for all of the alternatives are based on the thresholds identified above in Section 4.1.2. Table 4.1-1 summarizes the results of the analysis.

4.1.4.1 No Build Alternative

The No Build Alternative does not include any new transportation infrastructure beyond what is identified in the 2009 Metro *Long Range Transportation Plan* (LRTP). The No Build Alternative would not provide the land use benefits typical of high-capacity transit projects, which the *City of Los Angeles General Plan* and the CRA/LA redevelopment plans seek to achieve (e.g., encouragement of livable spaces, sustainable travel patterns, and job growth).

Table 4.1-1. Summary of Potential Impacts to Land Use and Development

Alternative	Regional Land Use and Development (CEQA/NEPA)	Conflict with Applicable Land Use Plans (CEQA/NEPA)	Incompatibility with Surrounding or Adjacent Land Uses (CEQA/NEPA)	Adverse NEPA Effects After Mitigation	Significant CEQA Impacts After Mitigation
No Build	None	Potential significant impact/ adverse effect	None	No mitigation available; Adverse effect	No mitigation available; Significant unavoidable impact
TSM	None	Potential significant impact/ adverse effect	None	No mitigation available; Adverse effect	No mitigation available; Significant unavoidable impact
At-Grade Emphasis LRT	None	None	None	None	None
Underground Emphasis LRT	None	None	None	None	None
LPA	None	None	None	None	None

Since the LRTP predicts that traffic will worsen in the absence of additional transportation capacity, the No Build Alternative would contribute to deteriorating access and mobility within the Los Angeles region by failing to increase the efficiency and carrying capacity of the transit network.

This alternative would conflict with Federal Transportation Administration (FTA) guidance supporting transit investments that encourage and support land uses that are environmentally sustainable, foster livable communities, and increase economic vitality (FTA 2010).

The No Build Alternative would also be inconsistent with the *Central City Community Plan* goal for a light rail connector between 7th Street/Metro Center Station and Union Station.

4.1.4.1.1 NEPA Finding

The No Build Alternative would conflict with the *Central City Community Plan,* part of the *City of Los Angeles General Plan* Land Use Element, and would cause an adverse, unavoidable land use effect.

4.1.4.1.2 CEQA Determination

The No Build Alternative would conflict with the *Central City Community Plan,* part of the *City of Los Angeles General Plan* Land Use Element, and would cause a significant, unavoidable land use impact.

4.1.4.2 TSM Alternative

Like the No Build Alternative, the TSM Alternative does not include any new transportation infrastructure beyond what is identified in the LRTP. However, it does include two new shuttle bus lines connecting 7th Street/Metro Center Station and Union Station, but the quality of this service would be contingent on traffic congestion, which is anticipated to worsen in the coming years in the absence of additional capacity.

As such, the TSM Alternative would not provide the lasting benefits typical of high-capacity transit projects, which the *City of Los Angeles General Plan* and the CRA/LA redevelopment plans seek to achieve (e.g., encouragement of livable spaces, sustainable travel patterns, and job growth).

Since the LRTP states that traffic will worsen without additional transportation capacity, the TSM Alternative would contribute to deteriorating access and mobility within the Los Angeles region by failing to increase the efficiency and carrying capacity of the transit network.

This alternative would conflict with FTA guidance supporting transit investments that encourage and support land uses that are environmentally sustainable, foster livable communities, and increase economic vitality (FTA 2010). The TSM Alternative would also be inconsistent with the *Central City Community Plan* goal for a light rail connector between 7th Street/Metro Center Station and Union Station.

4.1.4.2.1 NEPA Finding

The TSM Alternative would conflict with the *Central City Community Plan*, part of the *City of Los Angeles General Plan* Land Use Element, and would cause an adverse, unavoidable land use effect.

4.1.4.2.2 CEQA Determination

The TSM Alternative would conflict with the *Central City Community Plan*, part of the *City of Los Angeles General Plan* Land Use Element, and would cause a significant, unavoidable land use impact.

4.1.4.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative alignment is surrounded primarily by land zoned for public facilities, commercial, and multi-family residential uses.

During construction, the at-grade portions of the alignment would be constructed mostly in existing roadways, and the underground portions would be constructed using the cut and cover method. More information about these construction methods is available in the Description of Construction, Appendix K. These methods can involve temporary, intermittent street and sidewalk closures in the immediate vicinity of the alignment. This could temporarily inhibit, but not eliminate, access to the adjacent parcels. The alternative would also require permanent removal of traffic lanes on Flower, 2nd, Los Angeles, Main, and Temple Streets. Traffic flow would be affected; however, access would be retained to adjacent land uses.

The LRT facilities would encroach upon parcels in the Historic Core and Little Tokyo areas. A traction power substation would be placed in a portion of the parking lot immediately south of the

Los Angeles Times building, and the light rail tracks would encroach upon the parking lot surrounding the Go For Broke Monument in Little Tokyo.

However, this permanent conversion of land use to LRT facilities would be compatible with the other surrounding land uses. The acquisitions needed for this alternative are discussed in the Displacement and Relocation section (Section 4.2). Once the mitigation measures specified in the Noise and Vibration section (Section 4.7) have been implemented, significant incompatible noise impacts would not affect surrounding land uses.

By improving transit service to major activity centers, the At-Grade Emphasis LRT Alternative would be consistent with the stated General Plan goal of focusing growth toward existing high-density areas countywide. It would also be consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line. By adding new stations to the downtown area, the alternative would also make more parcels eligible for density and parking bonuses created by the City of Los Angeles to encourage growth in areas served by transit.

It is anticipated that the At-Grade Emphasis LRT Alternative and other transit projects currently underway or planned for the future would support increases in transit ridership, which would be a cumulatively beneficial effect. Many new commercial and residential developments are planned in the project area on sites that are currently occupied by surface parking lots, and the At-Grade Emphasis LRT Alternative would help offset the effects of these land use changes by providing a better alternative to driving.

4.1.4.3.1 NEPA Finding

The At-Grade Emphasis LRT Alternative would not have direct, indirect, or cumulative adverse effects on land use.

4.1.4.3.2 CEQA Determination

The At-Grade Emphasis LRT Alternative would not have significant direct, indirect, or cumulative impacts on land use.

4.1.4.4 Underground Emphasis LRT Alternative

During construction, the majority of the alignment and LRT facilities would be constructed using the cut and cover and Tunnel Boring Machine (TBM) methods. More information about these construction methods is available in Appendix K, Description of Construction. These methods can involve temporary, intermittent closures of streets and sidewalks in the immediate vicinity of the alignment and stations. This could temporarily inhibit, but not eliminate, access to the adjacent parcels. The alternative would also require permanent removal of a traffic lane on Flower Street. Traffic flow would be affected, but access would be retained to adjacent land uses. Overall, construction would be less noticeable in the Historic Core area than under the At-Grade Emphasis LRT Alternative, due to the use of TBMs instead of at-grade construction methods.

The LRT facilities would encroach upon parcels in the Historic Core and Little Tokyo areas. Some businesses on the commercial parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue would be removed for portal construction. Businesses on the southeast corner of 2nd and

Spring Streets would also be acquired. Business owners would be compensated and relocation assistance would be provided as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act. This conversion of land use to LRT facilities would not be incompatible with the other surrounding land uses. After construction, it would be possible for new developments to be located on some of the land used for construction staging. So land use conversions, including conversions on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue, may not all be permanent. The acquisitions needed for this alternative are described in the Displacement and Relocation section (Section 4.2). Significant noise impacts would not occur as a result of the Underground Emphasis LRT Alternative and land use incompatibility would not be expected.

By improving transit service to major activity centers, the Underground Emphasis LRT Alternative would be consistent with the stated General Plan goal of focusing growth toward existing high-density areas countywide. It would also be consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line. By adding new stations to the downtown area, the alternative would also make more parcels eligible for density and parking bonuses created by the City of Los Angeles to encourage growth in areas served by transit.

It is anticipated that the Underground Emphasis LRT Alternative and other transit projects currently underway or planned for the future would support increases in transit ridership, which would be a cumulatively beneficial effect. Many new commercial and residential developments are planned in the project area on sites that are currently occupied by surface parking lots, and the Underground Emphasis LRT Alternative would help offset the effects of these land use changes by providing a better alternative to driving.

4.1.4.4.1 NEPA Finding

The Underground Emphasis LRT Alternative would not have direct, indirect, or cumulative adverse effects on land use.

4.1.4.4.2 CEQA Determination

The Underground Emphasis LRT Alternative would not have significant direct, indirect, or cumulative impacts on land use.

4.1.4.5 Locally Preferred Alternative

The LPA alignment is similar to the Underground Emphasis LRT Alternative–Broadway Station Option, just west of Central Avenue. However, under the LPA the Flower/5th/4th/Street station is not proposed and businesses on the southeast corner of 2nd and Spring Streets would not be acquired. Just west of Central Avenue, at 2nd Street and the pedestrian signal to the JVP, the tracks would continue underground heading northeast under the JVP and 1st and Alameda Streets. An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Two portals would be located to the north and east of the junction.

During construction, the majority of the alignment and LRT facilities would be constructed using the cut and cover and TBM methods, with some sequential excavation method (SEM). More

information about these construction methods is available in Section 4.18. These methods can involve temporary, intermittent closures of street lanes and sidewalks in the immediate vicinity of the alignment and stations. This could temporarily inhibit, but not eliminate, access to the adjacent parcels. The LPA would also require permanent removal of a traffic lane on Flower Street. Traffic flow would be affected, but access would be retained to adjacent land uses.

The LRT facilities would encroach upon parcels in the Historic Core and Little Tokyo areas. A parking lot on the south side of 2nd Street, between Broadway and Spring Street, would be used for the 2nd/Broadway station. East of Central Avenue, only businesses on the northern portion of the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue would need to be removed for station construction. The Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking would need to be acquired for construction of this station. However, the remaining businesses on that block would remain, including the Office Depot and associated parking. Business owners would be compensated and relocation assistance would be provided as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

The introduction of LRT facilities in these areas would not be incompatible with the surrounding retail and dense residential land uses. After construction, it would be possible for new developments to be located on some of the land used for construction staging. Therefore, land use conversions may not all be permanent. The acquisitions needed for this alternative are discussed in the Displacement and Relocation section (Section 4.2). With implementation of mitigation specified in Section 4.7, significant noise impacts would not occur as a result of the LPA and land use incompatibility would not be expected.

By improving transit service to major activity centers, the LPA would be consistent with the stated General Plan goal of focusing growth toward existing high-density areas countywide. The LPA would also be consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line. By adding new stations to the downtown area, the LPA would also make more parcels eligible for density and parking bonuses created by the City of Los Angeles to encourage growth in areas served by transit. For example, the LPA would also make possible an integrated transit-oriented development at the Mangrove property on the northeast corner of 1st and Alameda Streets. This type of development would be supportive of the City's land use goals of encouraging density near transit stops. Metro has no reasonably foreseeable plans for a joint use development on this site. Furthermore, it is not known at this time what a private development on this site would consist or if there would be one. Future development on the site, if any, would be subject to planning an environmental review.

The USEPA joined with HUD and the USDOT to help improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. Through a set of guiding livability principles and a partnership agreement that will guide the agencies' efforts, this partnership will coordinate federal housing, transportation, and other infrastructure investments to protect the environment, promote equitable development, and help to address the challenges of climate change.

The goals of the Regional Connector Transit Corridor project – improve travel times, reduce transfers, reduce traffic congestion, improve air quality, and develop an efficient and sustainable level of mobility within Los Angeles County to accommodate planned growth and a livable environment – would be consistent with the HUD-USDOT-USEPA Partnership for Sustainable Communities livability principles.

It is anticipated that the LPA and other transit projects currently underway or planned for the future would support increases in transit ridership, which would be a cumulatively beneficial effect. Many new commercial and residential developments are planned in the project area on sites that are currently occupied by surface parking lots, and the LPA would help offset the effects of these land use changes by providing a better alternative to driving.

4.1.4.5.1 NEPA Finding

The LPA would not have direct, indirect, or cumulative adverse effects on land use. The LPA would have a cumulatively beneficial effect on land use as it, in combination with other transit projects currently underway or planned for the future, would support increases in transit ridership.

4.1.4.5.2 CEQA Determination

The LPA would not have significant direct, indirect, or cumulative impacts on land use. The LPA would have a cumulatively beneficial impact on land use as it, in combination with other transit projects currently underway or planned for the future, would support increases in transit ridership.

4.1.5 Mitigation Measures

The No Build and TSM Alternatives would conflict with applicable land use plans and policies, but no mitigation is planned. Significant land use impacts and adverse effects would not occur as a result of any of the Regional Connector build alternatives, including the LPA. Hence mitigation measures would not be required for any alternative.