

- Lennox Library - 4359 Lennox Boulevard, Lennox, CA 90304
- Main Library - 101 W. Manchester Boulevard, Inglewood, CA 90301
- Crenshaw-Imperial Library - 11141 Crenshaw Boulevard., Inglewood, CA 90303
- El Segundo Public Library - 111 W. Mariposa Avenue, El Segundo, CA 90245
- Los Angeles Central Library - 630 W. Fifth Street, Los Angeles, CA 90071
- LACMTA Transportation Library - One Gateway Plaza, 15<sup>th</sup> Floor, Los Angeles, CA 90012.

An electronic copy of the Supplemental EA was posted on LACMTA's website (<http://www.metro.net/crenshaw>)

In addition to the previously conducted outreach, a public meeting will be held for this Supplemental EA on July 16, 2011 from 6:00 to 8:00 p.m. in the City of Inglewood Community Room at One Manchester Boulevard. The public meeting will be held to provide a presentation on the proposed project modifications and to receive comments on the Supplemental EA.

### Section 3 Environmental Effects

The following section of this analysis evaluates whether the proposed project modifications would have new adverse environmental effects compared with the effects evaluated in the FEIS/FEIR for the Crenshaw/LAX Transit Corridor project. This analysis will evaluate the environmental effects of the project changes within the affected environment described in the FEIS/FEIR which has not changed. For each of the following environmental topics, there is an evaluation of whether the proposed project modifications would have new adverse environmental effects for each topic. This Supplemental EA considers construction effects as a separate environmental topic which includes the same subtopics as discussed under the implementation of the proposed project. In addition, the construction of the proposed project could have an effect related to Ecosystems, Geotechnical/Subsurface/Seismic/ Hazardous Materials, Water Resources, and Energy.

As part of the environmental analysis conducted for the proposed project modifications, the following environmental topics were considered, but no potential new effects were identified. Consequently, there is no further discussion regarding these issues in this Supplemental EA.

- **Ecosystems (Vegetation and Wildlife)** – The proposed project modifications would have no new adverse effect related to ecosystems. Approximately 20 ornamental trees are located in the areas of partial acquisition. The removal or trimming of these trees would not be considered an adverse impact on sensitive biological resources. An updated search of the California Natural Diversity Database (CNDDDB) confirmed that the conclusions and findings made in 2011 are still applicable. The proposed project modifications would not occur in areas of native habitat or have an effect on sensitive species. Therefore, no additional analysis is needed and no adverse effects related to ecosystems would occur.
- **Energy** – The proposed project modifications would have no new adverse effects related to energy. Operation of the redesigned optional below-grade station at Crenshaw Boulevard/Vernon Avenue would require higher levels of energy for lighting and HVAC than the open cut station previously analyzed. However, the energy usage would be similar to below-grade stations and would not result in an inefficient use of energy. The roadway and sidewalk modifications and demolition of the BNSF railroad bridges are expected to have negligible construction period effects and no operational effects on energy consumption. Therefore, no additional analysis is needed and no adverse effects related to energy would occur.
- **Geotechnical/Subsurface/Seismic/Hazardous Materials** – The proposed project modifications would have no new adverse effects related to geology and soils. Potential hazardous materials impacts during construction are discussed under Construction Section below. Mitigation Measures GEO1 through GEO6 would still be applied to minimize effects due to soil instability or contaminated soils.

The removal of the BNSF railroad bridges would not affect geology or soil conditions and no exposure to hazardous materials would occur. The seismic hazards, ground shaking resulting from an earthquake occurring along any of several major active faults in Southern California, and subsurface gases from oil fields would not be affected by the proposed project modifications. The roadway, driveway, and sidewalk modifications would not introduce substantial excavation that would result in an effect on geology, seismic hazards, subsurface gases or soils. Therefore, no additional analysis is needed and no adverse effects related to geotechnical/subsurface/seismicity would occur.

- **Public Services** –The proposed project modifications would have no new adverse effects related to public services. Given the limited scope and scale of the proposed project modifications and the absence of public service and emergency facilities adjacent to the locations where these actions would be implemented, the proposed modifications would not interfere with the provision of emergency or other public services. The demolition of the BNSF railroad bridges would not hinder emergency vehicle response times since the bridges would be dismantled in segments rather than requiring full road closures. No facilities would be displaced by the proposed project modifications. Therefore, no additional analysis is needed and no adverse effects related to public services would occur.
- **Section 4(f)** – The proposed project modifications would have no new adverse effects related to Section 4(f). The proposed project modifications would not result in a use of Section 4(f) resources. The proposed project modifications would have no effect on parklands or recreational facilities. No wildlife or waterfowl refuges exist in the vicinity of the project alignment. A detailed discussion of effects on historical sites is included below under Historic (Section 106), Cultural, and Archaeological Resources. Therefore, no additional analysis is needed and no adverse effects related to Section 4(f) resources would occur.
- **Utilities** – No utility relocation or new effects on utility service would occur as a result of the proposed project modifications. Measures to protect utility service and provide proper notification in case of temporary disruption would still be implemented as part of the modifications. Therefore, no additional analysis is needed and no adverse effects related to utilities would occur.
- **Water Resources** – The proposed project modifications would have no new adverse effects related to municipal water supply, flooding, local surface water bodies, groundwater resources, local drainage basins, or water quality. The scope of the proposed project modifications would not modify the existing conditions, would not affect or require the relocation of storm drains and fire hydrants or include actions that would further affect water quality, water supply, or hydrology at a local or regional level. Therefore, no additional analysis is needed and no adverse effects related to water resources would occur.

The following environmental issues listed below were considered to have potential new adverse effects from implementation of the proposed project. It is noted that such mitigation measures are the same measures applied to similar impacts identified in the FEIS/FEIR but have been applied to mitigate new impacts from the proposed project modifications.

### ***Transportation***

The proposed project modifications would alter the portal location of the optional Crenshaw/Vernon Station, moving it from the Leimert Triangle previously analyzed in the FEIS/FEIR to either 4330 Crenshaw Boulevard or 4371 Crenshaw Boulevard. Both potential portal sites are located off street and the project alignment for this portion of the corridor would be underground and the alignment would be identical to the LPA analyzed in the FEIS/FEIR. No adverse traffic effects would occur to surrounding intersections. Station parking is expected to utilize the nearby LADOT metered parking lot within Leimert Park Village, located east of Crenshaw Boulevard between West 43<sup>rd</sup> Street and 43<sup>rd</sup> Place which is approximately 350 to 700 feet closer to the currently proposed portal locations than the portal location analyzed in the FEIS/FEIR. Vehicles would enter from an alley off Degnan Boulevard or one of two entrances off West 43<sup>rd</sup> Street. The location of passenger drop-off would not change and would occur along Vernon Avenue or Crenshaw Boulevard or within the LADOT parking lot.

The portal option at 4330 Crenshaw Boulevard could also add passenger pickup drop-off activity along 43<sup>rd</sup> Place (a low volume 2-lane minor collector road) between Crenshaw Boulevard and Degnan Boulevard. The revised pedestrian flow would utilize existing sidewalks along Crenshaw Boulevard and the pedestrian crossings at the signalized intersection at 43<sup>rd</sup> Place, as well as Vernon Avenue. Pedestrian circulation would be improved by the change in portal locations. The 4330 Crenshaw Boulevard portal location would substantially increase pedestrian connectivity with Leimert Park. The portal location at 4371 Crenshaw Boulevard would require pedestrian crossing of Crenshaw Boulevard to access Leimert Plaza Park and Leimert Park Village. However, all pedestrian crossings of Crenshaw Boulevard would take place at signalized intersections where there are designated cross walks. No adverse effects related to traffic and circulation would occur from the proposed project modification to the optional Crenshaw/Vernon Station.

The optional Florence/Hindry Station does not contain parking and the shift in the station 350 feet to east would remain in the same block and would not result in new vehicular circulation patterns. Consideration would be given to re-routing bus routes operating along Manchester Avenue through the station to provide transit connections. The relocation of the station would provide a more direct route to pedestrians accessing the Westchester community to the north along Hindry Avenue. No adverse effects related to traffic and circulation would occur from the proposed project modifications to the optional Florence/Hindry Station.

The shift in alignment at the BNSF railroad bridges would have no permanent operational effect on traffic. A slight beneficial effect on transportation would occur by improving the geometry of the LRT alignment at these crossings and providing a straighter track alignment path. Without demolition, the alignment would be shifted around the bridges. A discussion of effects on transportation during the construction period is included in the Construction section. No adverse effects related to traffic and circulation would occur from the proposed project modifications of the shift in alignment at the BNSF railroad bridges.

The roadway modifications would include the replacement of crossing gate equipment and medians to comply with CPUC requirements. At some locations, this may require partial property acquisitions. The replacement of crossing gate equipment would not impede or eliminate existing roadway traffic lanes. The medians at the grade crossings within the Harbor Subdivision would prevent left turns to adjacent driveways immediately north of the proposed alignment, which would result in minor inconveniences to access adjacent properties and would require minor detours for motorists seeking to access these properties.

The Mid-Block Pedestrian Crossing would be located approximately 350 feet west of Eucalyptus Avenue. The crossing would be solely dedicated to pedestrian use. The operation of the crossing would not affect the ingress and egress points of the existing church parking lots located either to the north or south of the project right-of-way. The crossing would provide a benefit as it also supplements pedestrian crossing capacity along Eucalyptus Avenue and reduce the potential concentration of pedestrians using the Eucalyptus Avenue sidewalk during well-attended church events. No adverse effects related to traffic and circulation would occur from the proposed project modifications of the mid-block pedestrian crossing.

Twelve easement acquisitions to accommodate bus bays and reconfigurations of driveways and sidewalks are also proposed (see Appendix C for the revised list of parcel acquisitions). The slight changes in curb location stemming from these modifications would not affect the flow of traffic. Bus stops would continue in their present locations. Two new bus bays would be located where the bus routes terminate at the Slauson Avenue/Crenshaw Boulevard Station and the Crenshaw/Exposition Station. The new bus bay at the Crenshaw/Exposition Station would require the removal of four on-street parking spaces that are time-restricted during the hours of 9:00 a.m. and 4:00 p.m. No other traffic and circulation effects would occur. Therefore, no adverse effects related to traffic and circulation would occur from to the proposed project modifications of minor street reconfigurations.

***No adverse effects related to traffic and circulation would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

## ***Communities and Neighborhoods***

The modifications to the optional Crenshaw/Vernon Station would move the portal location from the Leimert Triangle to either 4330 or 4371 Crenshaw Boulevard. Both of these optional portal locations are closer to the Leimert Park Village commercial area and the existing LADOT parking lot, which would result in an increase in connectivity and accessibility to the Leimert Park community. The proposed project modifications to the optional Crenshaw/Vernon Station would benefit the community by increasing connectivity and accessibility to nearby community of Leimert Park.

The shift in location of the optional Florence/Hindry Station would locate the station closer to Hindry Avenue and associated residential uses to the north within the Westchester community. This shift in location would result in an increase in connectivity and accessibility along Hindry Avenue to the Westchester neighborhood. The proposed project modifications to the optional Crenshaw/Vernon Station would benefit the community by increasing connectivity and accessibility along Hindry Avenue to the nearby community of Westchester.

The shift in alignment at the BNSF railroad bridges and minor street reconfigurations would increase pedestrian and vehicular circulation which would help to better link surrounding communities. No significant displacement or disruption to the local community and economy would occur for these project modifications. There is no new and/or change in effect beyond what was determined in the FEIS/FEIR. The proposed project modifications to the optional Crenshaw/Vernon Station would benefit the community by increasing pedestrian and vehicular circulation, thereby improving the interconnectivity of the nearby communities.

***No adverse effects related to communities and neighborhoods would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

## ***Land Use***

Modifications to the design of the optional Crenshaw/Vernon Station would require the acquisition of one of two parcels (4371 or 4330 Crenshaw Boulevard). The currently proposed portal locations would be compatible with the surrounding commercial development. Given that the parcels adjacent to both potential portal locations are commercial, these businesses stand to benefit from additional pedestrian activity in the area. The Herb Vitamin Center, Botach Tactical and the Universal College of Beauty, California Float Café, and Wireless Hook-Up are located next to the portal location at 4330 Crenshaw Boulevard. Those businesses, as well as the other dozen stores in the Leimert Park Village area, would benefit from the additional pedestrian activity in the area. The stores next to the portal location at 4371 Crenshaw Boulevard are currently vacant, but future tenants would benefit from the increased pedestrian activity. Therefore, no adverse effects related to land use would occur from the proposed project modifications to the optional Crenshaw/Vernon Station.

The shift in location of the optional Florence/Hindry Station would occur in the same block of industrial uses north of Florence Avenue between Manchester and Hindry Avenues. This station would not result in a change in land use or incompatibility with surrounding light industrial land uses. No adverse effects related to land use would occur from the proposed project modifications to the optional Florence/Hindry Station.

The shift in alignment at the BNSF railroad bridges would not result in changes to land use, as the existing bridges would be replaced by LRT bridges. The minor street reconfigurations would result in partial acquisitions and slight changes to property access, but long-term land use and development patterns would be unaffected and the land uses of the affected parcels would not change or result in incompatibility. No adverse effects related to land use would occur from the proposed project modifications of the shift in alignment at the BNSF railroad bridges and minor street reconfigurations.

***No adverse effects related to land use would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

## ***Acquisitions and Displacements***

The changes to the proposed project include partial property acquisitions associated with minor street improvements and refinements consisting of roadway modifications to allow for the provision of bus bays and driveway and sidewalk modifications where the alignment would conflict with auto and pedestrian traffic. In addition, a full property acquisition (either 4330 or 4371 Crenshaw Boulevard) due to the change in the portal location for the optional Crenshaw/Vernon Station would be required. No property acquisition would be required to construct the mid-block pedestrian crossing.

The overall number of relocations would be less with the proposed project changes. The total amount of additional property acquisitions for the project modifications would be 2 parcels, totaling 2.11 acres and the total number of parcel acquisitions would be 32 parcels, totaling 19.47 acres. The net reduction of acquisitions for the Crenshaw/LAX Transit Project would be 21.87 acres of acquisition and avoids 33 full parcels, 3 partial parcels and 60 easement parcels (See Appendices C and D). All relocations would include relocation assistance and compensation per the Uniform Relocation Assistance and Real Property Acquisition Policies Act, pursuant to 49 CFR Part 24 and the California Relocation Act. Consequently, compliance with these regulations would result in similar effects to what was analyzed in the prior environmental analysis. No adverse effects related to displacement and relocation would occur from the proposed project modifications.

***No adverse effects related to acquisitions and displacements would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

## ***Visual Resources and Aesthetics***

The currently proposed portal locations for the optional Crenshaw/Vernon Station would occur adjacent to commercial uses within an established urban environment and would not be out of character with its surrounding uses. The optional portal location described in the FEIS/FEIR would have been located within the Leimert Triangle detached from surrounding uses. The portal location change would result in a portal that is directly within the Leimert Park Village and would provide a benefit by better integrating with existing pedestrian activity and the existing visual environment.

The shift in location of the optional Florence/Hindry Station would occur in the same block of industrial uses north of Florence Avenue between Manchester Avenue and Hindry Avenue. The design of this station would not change from what was described in the FEIS/FEIR and the refined location would not create a visually incompatible element with the surrounding industrial uses. No adverse effects related to visual and aesthetic resources would occur from the proposed project modifications to the optional Florence/Hindry Station.

Removal of the existing bridges would not result in change to the existing visual character of their location because they would be replaced by the new LRT bridges. No adverse effects related to visual and aesthetic resources would occur from the proposed project modifications of the shift in alignment at the BNSF railroad bridges.

Roadway, sidewalk, and driveway modifications would be consistent with the character of the street and are too minor in scale to substantially change the visual and aesthetic character of their locations. The partial acquisition of property on the southeast corner of the historic Macys/May Company building would occur for a sidewalk modification and removal of the wrought-iron fencing. The removal of the fencing would not alter the visual character of the resource and no additional visual features would be created by the sidewalk modification. No adverse effects related to visual and aesthetic resources would occur from the proposed project modifications of the proposed minor street reconfigurations.

The mid-block pedestrian crossing would be constructed approximately 350 feet west of Eucalyptus Avenue. A break in the project right-of-way fencing would be created to provide for gates on both sides of the right-of-way. The gates would be consistent in design and height with the right-of-way fencing and

would not exceed eight feet in height. The most visible element would be the pole mast for the audible and visual warning device. This element would be approximately 12 to 14 feet tall. When activated by the presence of an LRT train, the flashing red lights atop of the pole mast would be an additional visual element. Although the properties adjacent to the crossing are used as church facilities, they are converted industrial and commercial buildings. In this context, the new visual elements would not contrast with the existing visual character of the area. No adverse effects related to visual and aesthetic resources would occur from the proposed project modifications of the mid-block pedestrian crossing.

***No adverse effects related to visual resources and aesthetics would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Air Quality***

Operation of the optional Crenshaw/Vernon and Florence/Hindry Stations at the proposed locations would have impacts similar to those previously analyzed in the FEIS/FEIR and would not generate substantial new operational emissions. . No adverse effects related to air quality would occur from the proposed project modifications to the optional Crenshaw/Vernon and Florence/Hindry Stations.

The shift in alignment at the BNSF railroad bridges would not result in any operational emissions. For a discussion of air quality effects during construction, please see the Construction section.

Roadway and sidewalk modifications could result in changes to local traffic circulation patterns if they change the access points to properties, however, the proposed project modifications are minor in scope, and as stated in the Traffic section would not result in adverse circulation effects to a large number of properties. Similarly, no adverse effects related to air quality would occur from the proposed project modifications of minor street reconfigurations because of the minor nature of modifications and the limited number of instances where access points would be modified.

The mid-block pedestrian crossing would not affect vehicular circulation on local streets or the crossing effect circulation patterns within the church parking lots. No adverse effects related to air quality would occur from the proposed project modifications of the mid-block pedestrian crossing.

***No adverse effects related to air quality would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Noise and Vibration***

The proposed relocations of the optional Crenshaw/Vernon and Florence/Hindry Stations would not result in additional operational noise and vibration. The FTA *Transit Noise and Vibration Impact Assessment* guidance provides screening criteria for assessing transit noise. There are no screening criteria for subterranean transit activity as it is presumed that subterranean train movements would not generate audible noise at sensitive receptors. Train activity associated with the optional Crenshaw/Vernon Station would continue to be subterranean and the tunnel would prevent train noise from reaching sensitive receptors. Rail noise along this segment would continue to be inaudible at sensitive receptors. –

The FEIS/FEIR did not identify operational noise or vibration impacts at sensitive receptors located near the proposed relocation of the optional Florence/Hindry Station (e.g., Westchester Playhouse). The analysis assumed that trains would be traveling at 35 miles per hour. Train speeds would be substantially reduced from this free-flow speed as they approach and depart the station. The decrease in speed would lead to less pass-by noise and vibration. Pass-by noise and vibration would be less under this proposed project modification than presented in the FEIS/FEIR. No adverse effects related to noise would occur from the proposed project modifications to the optional Crenshaw/Vernon and Florence/Hindry Stations.

The proposed project modifications would not shift the alignment along Crenshaw Boulevard from that identified in the FEIS/FEIR. Because the alignment would not shift, vibration levels would not be different than indicated in the FEIS/FEIR. However, the relocated optional Crenshaw/Vernon Station portal would

potentially increase noise levels at adjacent sensitive receptors, including Leimert Plaza Park. The relocated Florence/Hindry Station would also potentially increase noise levels at the Westchester Playhouse on residences on West 82<sup>nd</sup> Street. Noise changes at both optional station locations would be mostly affected by new concentrations of pedestrians accessing the stations. Pedestrian noise is not unusual and is expected in urban settings. As a result no discernible adverse effects related to noise and vibration would occur from the proposed project modifications to the relocations of the optional stations. Operational elements of the light rail system, such as ventilation shafts, warning signals, park and ride lots, would not be affected by the station location modifications.

The shift in alignment at Aviation/Century Boulevards would result in the track moving 57 feet to the east. As a result, the track would be located closer to the Travelodge hotel and residences located on the eastside of Aviation Boulevard. The FEIS/FEIR identified the project-related day-night noise level at these receptors as 60 decibels, which did not result in an adverse impact. A revised analysis indicated that the new alignment location would result in a project-related day-night noise level of 62 decibels. Noise levels would be less than the FTA impact criteria of 66 decibels at this receptor. No adverse effects related to noise would occur from the proposed project modifications of the shift in alignment at Aviation/Century Boulevards.

The FEIS/FEIR identified the project-related vibration level at these receptors as 63 VdB, which did not result in an adverse impact. A revised analysis indicated that the new alignment location would change the vibration level to 66 VdB. Vibration levels would continue to be less than the FTA impact criteria of 72 VdB. No adverse effects related to vibration would occur from the proposed project modifications of the shift in alignment at Aviation/Century Boulevards.

The shift in alignment of the Florence Avenue/I-405 BNSF railroad bridge would result in the track moving 54 feet to the south. The closest sensitive receptor to this portion of the track was identified as Stilleto Entertainment in the FEIS/FEIR. Noise and vibration impacts were not identified at this sensitive receptor. The project modification would shift pass-by noise further from Stilleto Entertainment than identified in the FEIS/FEIR, resulting in less noise and vibration. No adverse effects related to noise and vibration would occur from the proposed project modifications of the shift in alignment at Florence Avenue/I-405.

Sidewalk and roadway modifications are required to ensure ADA compliance and accommodate safety equipment. Sidewalk modifications would not introduce a new source of noise or shift a source of noise closer to sensitive receptors. The FEIS/FEIR identified and assessed noise levels associated with safety equipment. However, the specific impacts due to driveway reconfigurations and tie-ins for roadway modifications where they join the existing grade were not able to be determined until further analysis was completed during preliminary engineering. Roadway modifications at Slauson Avenue and Crenshaw Boulevard would include 2.5 feet of new roadway. Under existing conditions, the closest sensitive receptor to the roadway is G Life Records located approximately 170 feet to the west. Project modifications would result in this receptor being approximately 167.5 feet from the roadway. A screening analysis was completed to assess how this shift would change ambient noise levels. The analysis indicated that ambient noise levels would increase by less than 0.5 decibels. Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 decibels. As a result, roadway modifications at Slauson Avenue and Crenshaw Boulevard would not generate audible changes to the existing ambient noise environment. No adverse effects related to noise would occur from the proposed project modifications of minor street reconfigurations.

Modifications at Exposition and Crenshaw Boulevards would include 8.5 feet of new roadway to allow for the provision of bus bays. The closest sensitive receptor to the bus bays would be at approximately 340 feet to the west and would potentially have an unobstructed line-of-sight to the bus bays. The FTA *Transit Noise and Vibration Impact Assessment* guidance includes screening criteria for bus facilities. Analysis is required when sensitive receptors are located within 225 feet of facilities like bus bays. The closest sensitive receptor would be outside this distance and no analysis is required. No adverse effects related to noise and vibration would occur from the proposed project modifications of minor street reconfigurations.

To satisfy CPUC requirements, the mid-block pedestrian crossing between Eucalyptus and Inglewood Avenues will entail the installation of an audible warning device (bells). The sound level of this device is specified by the CPUC at 75 decibels. The audible warning device would be located within approximately 95 feet of the Faithful Central Bible Church sanctuary building (Tabernacle) north of the right-of-way and with 60 feet of the church office building located south of the right-of-way. The audible warning will be activated each time an LRT train approaches regardless of whether the pedestrian crossing gate is locked or unlocked. The warning device will be aimed and shielded to maximize the sound effect on the pedestrian queuing area directly on either side of the right-of-way. This directional aiming would reduce noise effects on adjacent church buildings. No adverse effects related to noise would occur for the mid-block pedestrian crossing.

For a discussion of noise and vibration effects during construction, please see the Construction section.

***No adverse effects related to noise and vibration would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Cultural, Archaeological, and Paleontological Resources***

The proposed relocations of the optional Crenshaw/Vernon and Florence/Hindry Stations are not anticipated to result in adverse effects with respect to cultural, archaeological, or paleontological resources. The May 2011 Cultural Resources Report prepared for the Crenshaw/LAX Transit Project included the project modifications affecting all 32 of the parcels listed in Appendix C of this Supplemental Environmental Assessment, as well as the shift in alignment near the two BNSF railroad bridges, were located within the Area of Potential Effects (APE). The State Historic Preservation Officer (SHPO) concurred with the definition of the APE in May 2011 and the proposed changes to the project will occur within the 2011 APE.

On April 11, 2012, qualified architectural historians/historians conducted a field survey to verify the location and condition of the 32 properties and two BNSF railroad bridges that are part of the proposed project modifications, and to evaluate them for eligibility for the National Register of Historic Places (NHRP). Of the 32 parcels and two BNSF railroad bridges that are included in this analysis, one, the former May Company Building at 4001 Crenshaw Boulevard, is considered to be a historic property for the purposes of Section 106. On May 23, 2011, SHPO concurred with FTA's determination for each of the 32 properties and parcels.

The former May Company Building at 4001 Crenshaw Boulevard, now Macy's, was determined eligible for listing in the National Register under Criteria A and C. The May 2011 Cultural Resources Technical Report identifies this as a "2S2," which refers to the assigned California Historical Resource Status Code. The status codes reflect specific definitions of historic properties, as established by the Office of Historic Preservation (OHP) to simplify the identification, evaluation and understanding of the state's historical resources.

The former May Company Building was designed by noted Los Angeles architect Albert C. Martin in the Streamline Moderne style and the building retains its integrity. It was constructed as an anchor property for the Crenshaw Shopping Plaza, one of the first large suburban shopping malls in Los Angeles. In 2004, the building was determined to be significant for its association with Martin and his architectural firm, for its architectural integrity, and as a focal point in the Crenshaw Shopping Center.

The proposed improvement at 4001 Crenshaw Boulevard would use approximately 165 square feet of the property on the southeastern corner of the Macy's/May Company Building. The proposed temporary modification is located approximately 30 feet from the Crenshaw Boulevard/King Boulevard entrance to the building. The sidewalk modification would require the removal of the wrought-iron fencing and may temporarily disturb landscaping (the bushes adjacent to the wrought-iron fence). Once construction has been completed, the sidewalk would be rebuilt, and safety lighting would be installed. The rebuilt sidewalk would be similar in dimensions and materials to the existing sidewalk.

The primary entrance, as designed, is from the parking lot on the west/northwest side of the building. The historic property would not be demolished, relocated, or altered in a manner inconsistent with the Secretary of the Interior's Standards. The proposed improvement would be focused on permanent modifications to the sidewalk, including removal of non-original metal fencing, and temporary modifications to the sidewalk that would not change the character of the property's use. The wrought-iron fence and landscaping are not noted for being character-defining features of the property. The primary architectural feature at this location is the rounded corner of the building. Neither the structure nor the parking lot would be affected by the sidewalk modification. The temporary or permanent sidewalk modifications would not introduce new visual, atmospheric or audible elements that would diminish the integrity of the significant historic features. The other properties affected by the currently proposed action previously received SHPO's concurrence to FTA's determination of ineligibility on May 23, 2011. No adverse effects would occur related to historic and architectural resources from the proposed project modifications.

On June 13, 2012, FTA re-initiated Section 106 consultation with SHPO requesting concurrence with the following determinations:

- Proposed project changes occur entirely within the existing APE.
- Thirty -one properties previously identified as Not Eligible for the National Register of Historic Places remain as not eligible due to no significant changes to or information on the properties that would warrant re-consideration.
- No Adverse Effect to the Macy's/May Building.

Consultation with SHPO is ongoing. Correspondence with the SHPO is included in Appendix E.

SHPO issued a letter in response to the proposed project's modifications (see Appendix E). They upheld their original findings and noted that neither of the two railroad bridges (Florence Avenue/I-405 BNSF Railroad Bridge and Aviation/Century Boulevards BNSF Railroad Bridge) nor any of the 32 parcels that are proposed to be acquired are eligible for inclusion in the National Register of Historic Place. In addition, SHPO determined that the proposed project would not result in an adverse affect to the May Company Building at 4001 Crenshaw Boulevard.

No archeological resources were identified within the APE, however, archeological resources were identified in the project vicinity. The proposed project modifications would not change or result in new effects to archaeological or paleontological resources. No adverse effects related to archaeological and paleontological resources would occur from the proposed project modifications.

In the unlikely discovery of an unknown archaeological resource, Mitigation Measures **CR1** and **CR2**, identified below, will ensure that no adverse effects would occur.

**CR1 Treatment of Undiscovered Archaeological Resources**

Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the Crenshaw/Martin Luther King Jr. Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a 0.5 miles of the Crenshaw/Martin Luther King Jr. Station. If human remains are encountered during construction, all work shall cease in the area of potential effect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary.

A detailed CRMMP would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for LACMTA's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains, if applicable
- Reporting of monitoring and mitigation results

## **CR2 Paleontological Monitoring**

A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans.

Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.

Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and repositied in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with LACMTA and the repository. The final report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate

communications, and a copy of the project-specific paleontological monitoring and mitigation plan.

***No adverse effects related to cultural, archaeological, and paleontological resources would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Parklands and Recreational Facilities***

The proposed relocations of the optional Crenshaw/Vernon and Florence/Hindry Stations would not result in the partial or full acquisition of parklands or recreation facilities. The two proposed portal locations for the optional Crenshaw/Vernon Station would no longer require an underground easement from the City of Los Angeles for Leimert Plaza Park. The currently proposed station portals would not increase access or use of the park from what was described in the FEIS/FEIR. The FEIS/FEIR Crenshaw/Vernon Station portal location in the Leimert Triangle would have resulted in passengers traveling through or around the park to get to Leimert Park Village. The currently proposed portals would be in close proximity to the park, thereby providing a benefit by no longer requiring access through or around the park. Travel through the park would be limited to those interested in using the amenities. No parks or recreational facilities would be affected by the relocation of the optional Florence/Hindry Station, the removal of the two BNSF railroad bridges, the mid-block pedestrian crossing, or the minor street reconfigurations. No adverse effects related to parks would occur from these proposed project modifications.

***No adverse effects related to parklands and recreational facilities would occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Construction***

Proposed project modifications would potentially include use of a tunnel boring machine (TBM) along the segment from the Crenshaw/Exposition Station to the optional Crenshaw/Vernon Station. The construction process assumed in the FEIS/FEIR states that all below-grade sections would be excavated using the cut-and-cover technique. Should a TBM be implemented along the Exposition Boulevard to 48<sup>th</sup> Street segment, it is anticipated that the environmental effects would be less invasive than those associated with cut-and-cover excavation. Although the TBM method is slower than the cut-and-cover method and the construction duration would be lengthened, the total amount of soil export would be identical under both scenarios.

Project modifications would include demolition of the Aviation/Century Boulevards and Florence Avenue/I-405 BNSF railroad bridges. The Aviation/Century Boulevards BNSF railroad bridge is a through concrete girder bridge structure with center pier abutments and retained concrete approaches that contain a single freight track. The bridge is supported with two single spans and a ballasted bridge deck over Century Boulevard. The design allows the superstructure of the bridge to be removed and hauled away separately. The track will be removed before lifting the superstructure out. Removal of the bridge spans over Century Boulevard will require shutdown of the roadway for approximately one weekend and removal of the center pier will require an additional shutdown of Century Boulevard. The abutments and center pier will be demolished and broken up at the project site. If re-useable, fill material between the retaining walls will be stockpiled and re-used as engineered fill in the new bridge approaches. Following removal of the fill material, the concrete walls will be removed from the site.

The Florence Avenue/I-405 BNSF railroad bridge is a through steel girder bridge structure with abutments that are two track bays wide with a single freight track. The bridge is supported on a center pier in the median of the freeway with two single spans. The ballasted bridge deck allows the superstructure to be removed separately, hauled away, and used as salvage material. The track will be removed before lifting the superstructure out. The superstructure is anticipated to be lifted out and removed over one section of the freeway at a time. This will require a nighttime closure in each freeway direction. Removal of the

bridge spans will require approximately two weekends of work. The concrete abutments and center pier will be demolished and broken up at the project site. Removal of the center pier may require an additional nighttime closure on one side of the freeway or inside lane closures on both sides of the freeway.

The street modifications include tapering the sidewalks for at-grade crossings per California Public Utility Commission (CPUC) requirements, driveway relocation, and upgrades to existing curb ramps for City and ADA compliance. Pedestrian crossing modifications include replacement of crossing gate equipment, installation of new medians, and curb and sidewalk modifications throughout the corridor at the various station locations and at-grade crossings.

The following is expected to result from construction activities associated with the proposed project modifications:

- **Transportation:** Construction work at the proposed locations of the optional Crenshaw/Vernon and Florence/Hindry Stations would not change from what has been analyzed and documented in the DEIS/DEIR or the FEIS/FEIR. The FEIS/FEIR also indicated that the project segment between Exposition Boulevard and 48<sup>th</sup> Street would be underground with portals at Crenshaw Boulevard near Exposition Boulevard and just north of Crenshaw Boulevard and 48<sup>th</sup> Street. The FEIS/FEIR assumed that this segment would be constructed using a cut-and-cover technique with conventional construction equipment. As the design process has advanced, it has now become likely that a 4,100-foot portion of this segment (with the exception of the station boxes at Exposition Boulevard and at Martin Luther King Jr. Boulevard) could be constructed using a TBM. The TBM would proceed from north to south and material would be removed at a portal near Crenshaw and Exposition Boulevards.

Outside of the station box areas, the TBM process is less invasive than the cut-and-cover technique with reduced effects on street traffic and other proximity impacts on adjacent land uses. The TBM method would result in substantially fewer lane closures and reductions in travel lanes than with cut-and-cover method. The key difference between the two construction methods with regards to traffic is the effect on the number and location of haul trucks that remove material from the underground areas. The cut-and-cover method would require the removal of approximately 182,200 cubic yards of material. In contrast, the TBM method would require the removal of approximately 47,700 cubic yards of material over the same distance because the soil removed by boring would be just for the tunnel and not the area between the tunnel and the surface (also known as the over burden). The total number of 13-cubic-yard truck loads) necessary to remove this soil to a disposal site would be approximately 14,000 for the cut-and-cover method compared to approximately 3,700 total truck loads for the TBM method. Thus, the use of TBM would represent a substantial community benefit by reducing truck trips along Crenshaw Boulevard by 74 percent. It is also important to note that on a daily basis there would also be truck reductions owing to the difference in the excavation or advance rates of the two construction methods. The cut-and-cover method would typically remove approximately 1,100 cubic yards of material each day compared to the TBM method where tunneling would yield approximately 400 cubic yards per day. This translates into 85 truck loads per day for cut-and-cover and 31 truck loads per day for TBM. This 63 percent reduction in daily trucks would continue to represent a community benefit. On an hourly basis, the cut-and-cover method would generate approximately 21 in-and-out truck trips from the construction zone along the Exposition Boulevard to King Boulevard segment of Crenshaw Boulevard while the TBM method would yield 8 in-and-out truck trips along the same segment. The only other consideration is the difference in truck queuing areas. The cut-and-cover method would disperse a higher number of trucks along the entire length of the construction segment over approximately eight months, while the TBM would concentrate a substantially lower number of trucks at a single location over a shorter tunneling period of approximately six months. Truck haul routes (regardless of construction method) would remain unchanged from the FEIS/FEIR. Trucks would proceed northward along Crenshaw Boulevard to access the I-10 on route to regional disposal sites. The concentration of 21 daily truck trips from the

Exposition to King Boulevard segment of Crenshaw Boulevard is not expected to result in adverse traffic impacts in and near the project site.

Regardless of method, potential adverse construction transportation effects would occur from the construction of proposed project modifications without the implementation of mitigation. Overall, the TBM technique would represent a substantial reduction in truck traffic from the cut-and-cover technique.

Periodic construction-related closures of I-405 and Century Boulevard would occur during demolition of both BNSF railroad bridges. The removal of the bridges would require closure of the Century Boulevard for approximately one weekend and I-405 for approximately two weekends. Evening or weekend work is anticipated for both bridge removals.

The modifications to roadways, sidewalks, and driveways, as well as the demolition of the two bridges, would be included in the existing traffic management plan required for the Crenshaw/LAX Transit Corridor Project, so that any potential effects resulting from these actions are minimized to the extent feasible. Subject to approval by the CPUC, the mid-block pedestrian crossing would be designated as a crossing as it would allow pedestrian access between to parking lots owned by Faithful Central Bible Church. While two to four parking spaces may be temporarily placed out of service, the construction of the crossing and gates would not affect the operation of the parking lots and there would be no affect on local streets such as Eucalyptus Avenue and/or Florence Avenue.

As a result of the CPUC process medians would be installed at several at-grade crossings along the Harbor Subdivision to either manage traffic flow and/or provide locations for related crossing gate equipment. These medians would restrict turns at 11 driveways to right turn in and right turn out. No left turns would be possible. Specifically, this includes: two driveways near the Hindry Avenue crossing, one driveway adjacent to the Oak Street crossing, four driveways adjacent to the Eucalyptus Avenue crossing, and four driveways adjacent to the Brynhurst Avenue crossing. The two driveways near the Hindry Avenue crossing are located north of the project alignment (8330 and 8337 Hindry Avenue). Both driveways on either side of Hindry Avenue would be restricted to right turn in and right turn out for the affected industrial properties. This restriction would require a change in circulation to approach to the property. The driveway adjacent to the Oak Street crossing is located north of the project alignment (301 Oak Street) and would be restricted to right turn in and right turn out. This restriction would require a change in approach to this industrial property for southbound entering and existing vehicles. The four driveways adjacent to the Eucalyptus Avenue crossing are located north and south of the project alignment. All four would be restricted to right turn in and right turn out. Two of these driveways on the west side of Eucalyptus Avenue serve church parking lots (333 West Florence Avenue and 320 North Eucalyptus Avenue). This restriction would require vehicles to either change the direction of approach into the lots or access the church parking lots at other driveways along Florence Avenue or from Oak Street. Two driveways are located on the east side of Eucalyptus Avenue (235 West Florence Avenue and 321 North Eucalyptus Avenue) and serve an industrial property. Vehicles entering or existing this site southbound would be required to circulate to achieve a right turn entry or exit. The four driveways adjacent to the Brynhurst Avenue crossing are located north and south of the project alignment (6813, 6814, 6828, and 6833 Brynhurst Avenue). All four driveways would be restricted to right turn in and right turn out. This restriction would require a change in approach to the properties for northbound traffic exiting or entering sites on the west side of Brynhurst Avenue and for southbound traffic exiting or entering the sites on the east side of Brynhurst Avenue. In the case of all of the driveway turn restrictions, access is not eliminated and the grid of adjacent local streets allows for minor re-routing to allow entry or exit from the appropriate direction. No adverse effects are anticipated.

In addition to the Mitigation Measures identified in the FEIS/FEIR, Mitigation Measures T2 and T3 listed below shall also be applied to the proposed project modifications. With implementation of mitigation, no adverse construction effects related to transportation would occur from the proposed project modifications.

**T-2** LACMTA shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and include the following measures:

- Schedule a majority of construction-related travel (i.e., deliveries, hauling, and worker trips) during the off-peak hours;
- Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas;
- Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures;
- Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures;
- Where feasible, station traffic control officers should be at major intersections during peak hours to minimize delays related to construction activities;
- Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures;
- Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs.

**T-3** LACMTA shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible.

- **Community and Neighborhood:** Neighborhoods adjacent to the proposed project modifications, particularly near the BNSF railroad bridges would be disrupted and detoured for short periods of time during construction, but access would continue to be available to neighborhoods for both residents and emergency response. The change in effect from shift in alignment at the BNSF railroad bridges would not be adverse. The other project modifications would not result in a change in effect beyond what was determined in the FEIS/FEIR. No adverse construction effects related to communities and neighborhoods would occur from the proposed project modifications. Transportation, air quality, and noise and mitigation measures identified in the FEIS/FEIR would ensure that traffic, air quality and noise construction effects to communities and neighborhoods would remain not adverse from the proposed project modifications. No new mitigation would be required. The reduction of ROW acquisitions would benefit the community by reducing disruption of the neighborhood businesses in the Leimert Triangle, providing more operational space for Wally Park commercial parking structure, and preventing the need to eliminate a sewer line on the Florence Avenue/I-405 BNSF railroad bridge.
- **Land Use and Development:** The staging of equipment, and the stockpiling or hauling of dirt and materials associated with the construction of the proposed project modifications would result in longer construction duration but would not affect the land use compatibility of the surrounding primarily industrial area. There is no new and/or change in effect beyond what was determined in the FEIS/FEIR. No adverse effects related to land use would occur from the proposed project modifications. No new mitigation would be required.
- **Displacement and Relocation of Existing Resources:** The effects of permanent partial acquisition and the full parcel acquisition for the optional Crenshaw/Vernon Station portal are discussed above in the Displacement Section. The construction of the proposed project modifications would result in 15 new temporary construction easements at two locations shown in Appendix A and listed in Appendix C. These temporary construction easements would not displace businesses and the property would be returned to the owner after completion of construction. The construction of the mid-block crossing would not entail permanent acquisitions but would require temporary construction easements for installation of the gates and to tie into small areas of the adjacent church parking lots. There would be no new and/or change in effect beyond what was determined in the FEIS/FEIR. No

adverse effects related to displacement and relocation would occur from the proposed project modifications. No new mitigation would be required.

- **Visual Quality:** Mature vegetation along the Harbor Subdivision and approximately 20 trees along the alignment would be removed for the proposed project modifications. These trees are typical street trees and do not possess visual significance. No adverse visual effect related to tree and vegetation removal would occur from the proposed project modifications.

Temporary lighting may be necessary for nighttime demolition of the BNSF railroad bridges. The temporary lighting may potentially affect sensitive receptors by exposing residents to glare from unshielded light sources or by increasing ambient nighttime light levels. Therefore, potentially adverse effects related to nighttime lighting would occur without mitigation.

Construction of the mid-block crossing would require the creation of a small staging area for equipment, and paving materials. It is anticipated that this area would be primarily located within the existing LACMTA right-of-way. No adverse effects related to visual impacts would occur.

Mitigation Measures **V1** through **V4** and **CON1** through **CON3** identified in the FEIS/FEIR would reduce the construction visual and aesthetic effects of the proposed project modifications to not adverse. No new mitigation would be required.

- V1** To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations to the extent feasible. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines.
  - V2** At locations where existing land uses or vegetation is removed and neighboring residential or sensitive uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels where practical to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated.
  - V3** Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement should occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works.
  - CON1** Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales should be removed as soon as the area is stabilized.
  - CON2** Stockpile areas should be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses.
  - CON3** During nighttime construction activities, lighting shall be aimed downward and away from residential and other sensitive uses adjacent to the alignment and stations.
- **Air Quality:** The analysis in the FEIS/FEIR included an assessment of construction emissions associated with equipment and truck exhaust along with fugitive dust. Estimated emissions were

based on broad, conservative, and reasonable assumptions that included the simultaneous operation of 20 pieces of heavy-duty equipment per day and 200 heavy-duty truck roundtrips per day. It is still anticipated that intensity of daily construction activity, including periods of bridge demolition and roadway modifications, would be consistent with assumptions used in the FEIS/FEIR. Proposed project modifications would likely increase the duration of construction activity. In addition, as assumed in the FEIS/FEIR, exposure to construction emissions would be the highest adjacent to the alignment and would decrease with distance towards the boundaries of the Study Area. Construction emissions would still be temporary, and would not result in any long-term adverse effects. Mitigation Measures **CON4** through **CON24**, incorporated here by reference, would also be applied to the activities for demolition of the bridges.

Proposed project modifications would potentially include use of a TBM along the segment from the Crenshaw/Exposition Station to the optional Crenshaw/Vernon Station. Regional emissions would be less under the TBM technique than the cut-and-cover technique assumed in the FEIS/FEIR because cut-and-cover activity requires more diesel-powered construction equipment (e.g., excavators and loaders). In addition, the cut-and-cover technique would generate approximately 14,000 total trucks as opposed 3,700 under the TBM technique. As a result, regional truck emissions would be less under the TBM technique. On a local level, truck traffic would be moved from along the cut-and-cover alignment to one tunnel export location near Exposition Boulevard. This would reduce total lane closures and reduce the number of sensitive land uses exposed to truck and equipment exhaust. Detour routes would ensure that trucks and passenger vehicles do not idle for extended periods of time thus reducing the potential for localized exceedances of the federal standards.

Construction of the mid-block crossing would not take place adjacent to a public roadway. The construction would take place primarily within the LACMTA right-of-way and in small areas of the adjacent church parking lots. No traffic disruption would occur and no adverse effects related to air quality would occur from the mid-block pedestrian crossing.

Overall, the proposed project modifications would result in similar daily regional emissions as presented in the FEIS/FEIR although the construction period would potentially be extended. Localized pollutant concentrations would be less along the portion of the cut-and-cover alignment modified to TBM but concentrations would increase near Exposition Boulevard. Implementation of Mitigation Measures **CON4** through **CON24** would ensure that fugitive dust and exhaust emissions are controlled at the source. No adverse effects related to air quality localized concentrations would result from the proposed project modifications. Construction of the mid-block crossing would not take place adjacent to a public roadway. The construction would take place primarily within the LACMTA right-of-way and in small areas of the adjacent church parking lots. No traffic disruption would occur and no adverse effects related to air quality would occur from the mid-block pedestrian crossing.

- CON4** Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.
- CON5** Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday.
- CON6** Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.
- CON7** All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114.
- CON8** All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).

- CON9 Traffic speeds on unpaved roads shall be limited to 15 mph.
  - CON10 Operations on unpaved surfaces shall be suspended when winds exceed 25 mph.
  - CON11 Heavy equipment operations shall be suspended during first and second stage smog alerts.
  - CON12 On-site stockpiles of debris or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be watered at least two times per day or covered at all times when not being used.
  - CON13 Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications.
  - CON14 Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.
  - CON15 Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site.
  - CON16 Construction parking shall be configured to minimize traffic interference.
  - CON17 Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible.
  - CON18 Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals.
  - CON19 The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible.
  - CON20 Portable generators shall be low-emitting and use ultra low sulfur diesel (<15 parts per million) or gasoline.
  - CON21 Construction equipment shall use a combination of low sulfur diesel (<15 parts per million) and exhaust emission controls.
  - CON22 The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job).
  - CON23 Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices.
  - CON24 LACMTA shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations.
- **Noise and Vibration:** The minor street modifications to roadways, sidewalks, and driveways would not have a substantially noticeable effect on noise and vibration. This work would include minor improvements and limited use, if any, of heavy-duty construction equipment. Demolition of the Aviation/Century Boulevards and Florence Avenue/I-405 BNSF railroad bridges would generate construction-related noise and vibration. The major sources of noise and vibration associated with this activity would be from equipment and truck activity. Sensitive receptors near bridge demolition activity include the Travelodge hotel, residences, and G Life Records. Construction-generated noise would exceed existing ambient noise levels by at least 5 dBA at these land uses. In addition, impact equipment (e.g., jackhammer) would potentially generate vibration levels that exceed the annoyance criteria listed in the FTA *Transit Noise and Vibration Impact Assessment* guidance document. Therefore, adverse construction effects related to noise and vibration would occur from bridge demolition activity without the implementation of mitigation.

The proposed project modifications would also relocate the optional Crenshaw/Vernon and Florence/Hindry Stations. Construction activity associated with the two potential portal locations for the optional Crenshaw/Vernon Station would likely increase noise and vibration levels at residences along the east side of Victoria Avenue. Noise and vibration levels would be less at Leimert Plaza Park than presented in the FEIS/FEIR because the distance from the construction site to the park would shift from approximately 70 feet to either 80 or 130 feet, depending on the option that is selected. Construction activity associated with the modified locations for the Florence/Hindry Station would potentially increase noise and vibration levels at the Westchester Playhouse and residences on West 82<sup>nd</sup> Street. Adverse construction effects related to noise and vibration would occur from the relocated optional stations without the implementation of mitigation.

Construction of the mid-block crossing would not entail the use of major equipment. A gate would be installed in the right-of-way fence, foundations would be laid for crossing gate warning devices and other equipment, and the equipment would be installed. No major excavation or grading is anticipated that would be the source of vibration. Intermittent sound from pneumatic tools and worker voices would be the primary sources and would be typical to noise from similar sidewalk or street repair activities that take place along local streets. It is expected that work activity will be confined to week days and daytime hours to avoid impacts on church services. No adverse effects related to noise impacts would occur for the mid-block pedestrian crossing.

The construction process assumed in the FEIS/FEIR states that all below-grade sections would be excavated using the cut-and-cover technique. Tunnel boring was assumed for the segment between Exposition Boulevard and 48<sup>th</sup> Street but was not quantitatively evaluated. Should additional TBM be implemented, it is anticipated that the noise and vibration levels would be less invasive than those associated with cut-and-cover excavation. Cut-and-cover excavation would locate excavating equipment at the street surface, and would be a direct source of noise and vibration for adjacent land uses throughout the excavated segment. Tunneling, in contrast, would occur entirely below the street surface and would remove dirt and debris from a single portal at Exposition Boulevard where stockpiling and truck traffic would be concentrated. In addition, the cut-and-cover technique would generate approximately 85 trucks per day as opposed 31 under the TBM technique. The dirt and debris removal activity at the Crenshaw/Exposition Station would represent an increase in construction noise and vibration at this location, although there would be a decrease in construction noise and vibration along the modified cut-and-cover alignment. Regardless, the total duration of construction noise and vibration levels would increase at multiple sensitive land uses including the West Los Angeles Church of God on Crenshaw Boulevard and residences on Rodeo Road. In addition, construction haul routes would not change from those identified in the FEIS/FEIR. Adverse construction effects related to noise and vibration would occur from TBM activity without the implementation of mitigation.

Implementation of Mitigation Measures **CON25** and **CON26** from the FEIS/FEIR would reduce the effects of construction noise and vibration. No substantial adverse construction effects are anticipated from the proposed project modifications. Mitigation Measure **CON25** is consistent with the guidance in Section 12.1.3, Construction Noise Criteria, in the FTA Transit Noise and Vibration Impact Assessment that states noise criteria should be developed using local ordinances when possible. This mitigation measure acts as a performance standard tied to the requirements of the code and includes a Noise Control Plan to be completed by the construction contractor using construction details specific to the methodology employed by the construction contractor and that are not known at this time. Monitoring is also required to demonstrate compliance with contract noise and vibration limits. Mitigation Measure **CON26** lists additional best management practices that comply with the LACMTA Design Criteria to eliminate construction noise and vibration impacts at sensitive receptors. Mitigation Measures **CON25** and **CON26** would reduce the effects of this construction noise and vibration impact associated with the proposed project modifications to not adverse. No additional mitigation measures are necessary.

**CON25** The construction contractor shall develop and implement a Noise and Vibration Control Plan that demonstrates how to achieve the more restrictive LACMTA design criteria noise limits and the noise limits of the city noise control ordinance. The plan should also show how to achieve FTA vibration limits. The plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by LACMTA prior to initiating construction. Where the construction cannot be performed in accordance with the requirements of LACMTA, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with LACMTA and city noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated School and St. John the Evangelist School administrators to avoid disruptive activities during school hours.

**CON26** The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the LACMTA Design Criteria:

- The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available.
  - The contractor shall locate equipment and staging areas as far from noise-sensitive receptors as possible.
  - The contractor shall limit unnecessary idling of equipment.
  - The contractor shall install temporary noise barriers as determined by the Noise Control Plan.
  - The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality.
  - The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter.
- **Ecosystems:** The proposed project modifications may require removal or disturbance of mature trees. If construction results in removal of native tree species (as defined in the Native Tree Protection Ordinance) within the City of Los Angeles, compliance with the Native Tree Ordinance would ensure that no adverse effect would occur. The proposed project modifications would not result in a change in effect beyond what was determined in the FEIS/FEIR. No adverse construction effects related to ecosystems would occur from the proposed project modifications. Although the ordinance does not require a permit for the pruning of protected trees, if the project requires pruning of native tree species, Mitigation Measures **EB1** and **EB2** would be implemented to ensure that the pruning would not damage or adversely affect the trees. No new mitigation would be required.

**EB1** Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

**EB2** If construction of the project requires pruning of native tree species on non-LACMTA-owned land, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree

species, the affected tree species shall be relocated or replaced in consultation with appropriate jurisdiction.

- **Geotechnical/Subsurface/Seismic/Hazardous Materials:** The proposed project modifications would have the potential for encountering hazardous materials during the demolition of the BNSF railroad bridges. Potential asbestos containing materials in bridges include, but are not limited to, utility conduits, rocker pads, paint on metal, waterproofing membrane between PCC and hot mix asphalt overlay, expansion joint material, reclaimed hot mix asphalt that may have incorporated reclaimed shingles in the mix, and PCC that may contain asbestos fibers. However, a hazardous materials analysis completed for the bridges indicated that there were no elevated levels of asbestos, lead, or other hazardous materials which would require soil treatment before disposal. Thin layers of membranes with asbestos containing materials are present in limited quantities in the foundations of the two BNSF railroad bridges. During demolition of the two bridges, safe removal of the asbestos would occur in accordance with State laws. The proposed project modifications, other than the construction of the optional Crenshaw/Vernon Station, would not involve construction near faults or in unstable soils and would not require excavation which could result in the exposure to contaminated soil and/or groundwater. Construction of the optional Crenshaw/Vernon Station portal would occur in similar soil conditions as analyzed in the FEIS/FEIR and no change or no new effect would occur. No adverse construction effects related to geotechnical/subsurface/hazards/hazardous materials would occur for the proposed project modifications. No new mitigation would be required.
- **Water Resources:** No additional excavation for the proposed project modifications would occur beyond what was described in the FEIS/FEIR. The relocated portal location for the optional Crenshaw/Vernon Station would occur in a different location, but would not result in additional excavation or increase the potential to encounter groundwater. There are no new catch basins, storm drain structures, or fire hydrants that would require relocation or temporary closure. No adverse construction effects related to water resources would occur from the proposed project modifications. No new mitigation would be required.
- **Energy:** Construction-related energy consumption from the proposed project modifications, particularly the demolition of the BNSF railroad bridges, would result in additional non-recoverable energy costs compared to what was described in the FEIS/FEIR. However, the construction of the Crenshaw/LAX Transit Corridor Project would provide transit infrastructure to increase mobility and regional connectivity and would not lead to wasteful, inefficient, or unnecessary consumption of energy. No adverse construction effects related to energy would occur from the proposed project modifications. No new mitigation would be required.
- **Cultural, Archaeological, and Paleontological Resources:** No known archaeological or paleontological sites would be affected by the proposed project modifications. Construction of the proposed project modifications, other than temporary construction easement for the sidewalk modification in front of the Macys/May Company building would occur more than 30 feet from the building and would not damage or reduce access to the historic building. No adverse effects related to cultural, archaeology, and paleontological resources would occur from the proposed project modifications.

Implementation of Mitigation Measures **CR1** and **CR2** described previously would ensure that no adverse effects on archaeological and paleontological resources would occur. Implementation of Mitigation Measures **T2** and **T3** would ensure full access to historic resources during the construction period. No new mitigation would be required.

- **Parklands and Other Community Facilities:** Construction of the proposed project modifications would not result in a change in reduced access or use to parklands and recreational facilities than what was described in the FEIS/FEIR. The relocation of the portal for the optional Crenshaw/Vernon Station would no longer require underground easements under Leimert Plaza Park. No adverse effects

related to parklands and recreational facilities would occur from the proposed project modifications. No new mitigation would be required.

- **Safety & Security:** Construction of the proposed project modifications would not result in a change to safety and security than what was described in the FEIS/FEIR. Construction areas would be secured to eliminate the threat to safety and security of anyone not directly involved in construction activity. Fencing would be incorporated in the areas surrounding the shift in alignment near the BNSF railroad bridges to ensure that vehicles or pedestrians are not exposed to debris or materials. It is assumed that all additional related activity would be implemented in accordance with all Federal and State requirements and permits during the construction process. No adverse effects related to safety and security would occur from the proposed project modifications. No new mitigation would be required.

### ***Environmental Justice***

Environmental Justice Executive Order 12898 requires consideration of impacts on low income and minority populations, careful consideration of whether there are high and substantial adverse effects on these populations, whether these effects are disproportionate compared to the general population, and whether there are offsetting benefits. Low income is defined as a person whose household income (or in the case of a community or group, whose median household income) is below the U.S. Department of Health and Human Services (HHS) poverty guidelines. For purposes of the Executive Order, the Council on Environmental Quality, Executive Office of the President (CEQ) has defined minority as members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

The FEIS/FEIR established that a large portion of the population in the Crenshaw/LAX Transit Corridor Project area are minority populations. Also, the project area included a significant proportion of the population identified as low income. Based on the 2010 Census, approximately 69 percent of the Los Angeles County population is characterized as minority, while 94 percent of the Study Area population belongs to a minority group. The minority group with the largest representation in the Study Area is African-Americans (44 percent). The second largest minority group in the Study Area is Hispanics/Latinos (42 percent). The Study Area is comprised of less than 10 percent of the following races: White, American Indian or Native Alaskan, Asian, Native Hawaiian or other Pacific Islander, or other race. Approximately 17.9 percent of the Los Angeles County population is below the poverty threshold, while 23 percent of the Study Area population is below the poverty threshold.

As described in the preceding sections of this assessment, adverse effects would occur during construction in the following environmental topics: transportation, community and neighborhoods, land use and development, displacement and relocation of existing resources, visual quality, air quality, noise and vibration, ecosystems, geotechnical/subsurface/seismic/hazardous materials, water resources, energy, cultural/archeological/paleontological, parklands and other community facilities, and safety and security. None of the impacts resulting from the proposed modifications are considered adverse since steps have been taken to mitigate those effects. It should also be noted that the proposed modifications to the project design do not result in new impacts associated with the long-term operations of the project. As a result, none of the impacts (construction or operational) are considered high and substantial. In this context, with the implementation of mitigation measures, the proposed project modifications would not result in high and substantial adverse impacts to environmental justice populations. The proposed project modifications would provide offsetting benefits since the proposed modifications would reduce right-of-way and displacement impacts, compared to the project in the FEIS/FEIR. These effects are itemized and discussed below.

The shift in alignment at the Florence/I-405 BNSF railroad bridge is located in an area that separates the Inglewood community from the Westchester community. As discussed above, the removal of the bridge would be temporary, and would have no substantial adverse effects on surrounding land uses. There would be no new adverse construction effects that would not be mitigated from what was described in the

FEIS/FEIR. As a result, this shift in alignment would not adversely affect environmental justice populations or the general community as a result of the implementation of mitigation. The proposed project modifications would not result in any high and substantial, disproportionate adverse effect on environmental justice populations.

The removal of the Century/Aviation Boulevards BNSF railroad bridge is located in a minority area. All of the station areas and corridor segments have minority populations greater than the Los Angeles County average. The 2010 Census data at the Aviation/Century Station, the station nearest to the Century /Aviation Boulevards BNSF railroad bridge, indicates that 76.5 percent of the residents are minorities. Specifically, 34.8 percent of the population in the immediate vicinity of the Century Boulevard is African-American, 28.2 percent is Hispanic, and 13.5 percent is Asian/Other. The surrounding neighborhood (Manchester Square), is also considered a minority area as well as low income area since the percentage of persons below the poverty level exceeds the Los Angeles County rate of persons below the poverty level. Residences in the Manchester Square area (located east of Aviation Boulevard and north of Century Boulevard) are in isolated clusters due residential land acquisition in the area by Los Angeles World Airport for noise abatement for runway approaches. The nearest remaining residential buildings are approximately 250 to 300 feet from the bridge demolition site. The main concentration of the remaining residential buildings is approximately 400 to 600 feet east of the demolition site. The primary site affected would be a hotel east of the demolition site. The construction impacts, however, would be temporary, limited to the duration of construction (approximately 3 months), and highly localized. Potential air quality and noise impacts during construction to the hotel approximately 120 feet and residences are not considered adverse with the implementation of mitigation measures. Thus, with the implementation of mitigation measures, the Century Boulevard bridge demolition and construction would not result in a high and substantial, disproportionate adverse effect on environmental justice populations.

The optional Crenshaw/Vernon Station relocation from the Leimert Triangle to the new site with portal options on the east and west sides of Crenshaw Boulevard, north of Vernon Avenue, does not change the affected population. In all cases the population remains minority. The cut and cover excavation technique for the original station, as well as for the relocation options would remain the same, and construction-related proximity impacts would not change and would not be discernible between the original and modified locations. Also, the original location would displace businesses serving a minority community. The new Crenshaw/Vernon Station portal location options would also displace businesses serving a minority community; however, the magnitude of the displacement associated with these station portal alternatives would result in the net reduction of acquisitions and avoids 33 full parcels, 3 partial parcels and 60 easement parcels. It is important to note that the new station portal alternatives would be located north of Vernon Avenue and would be more than 150 feet closer to the Leimert Park and the Leimert Park Village commercial area and would provide increased accessibility and support to added pedestrian activity and an opportunity for economic growth for village businesses. As a result, minority and low income populations and businesses in the area are likely to be benefit from with the increase in pedestrian activity from the proposed project modification.

The proposed at-grade optional Florence/Hindry Station would be relocated to an area within the right-of-way that would better serve both the Westchester community located to the north (largely non-minority) and minority communities in Inglewood located to east and south. The relocation would benefit both non-minority and minority communities. The proposed at-grade optional Florence/Hindry Station would not result in any high and substantial, disproportionate adverse effect on environmental justice populations.

Replacement of crossing gate equipment, installation of new medians, and curb and sidewalk modifications would occur throughout the corridor at the various station locations or at at-grade crossings. While the vast majority of these changes would occur in areas that are considered minority and low income communities, the property acquisition, traffic, and circulation and proximity impacts such as air quality and noise are not considered substantial or adverse. The mid-block crossing at the

Eucalyptus Avenue crossing is intended to provide an additional pedestrian connection between the Faithful Central Bible Church Sanctuary and its parking facilities. The congregation of the church is predominantly minority. The crossing would provide a benefit for this minority institution as the crossing would improve accessibility. Similarly, the minor street reconfigurations and sidewalk and driveway modifications would not result in any high and substantial, disproportionate adverse effect on environmental justice populations.

***No adverse effects related to environmental justice would occur as a result of the proposed modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.***

### ***Secondary and Cumulative***

Secondary effects are caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable (40 CFR 1508.8). Cumulative effects are caused by the aggregate effects of past, present, and reasonably foreseeable actions. These include the effects (past, present, and future) of the proposed action on a given resource and the effects (past, present, and future), if any, caused by all related actions that affect the same resource.

The proposed action would not include any elements that would result in additional growth or new secondary development, given the limited scope, scale, and locations of the proposed project modifications. It would not increase or attract new traffic or development in the area. Any new development that occurs subsequent to the proposed action is unlikely to be related to the proposed modifications. Rather, it would be the result of ongoing infill development in the surrounding community.

As described in the preceding sections of this assessment, adverse effects would occur during construction in the following environmental topics: transportation, community and neighborhoods, land use and development, displacement and relocation of existing resources, visual quality, air quality, noise and vibration, ecosystems, geotechnical/subsurface/seismic/hazardous materials, water resources, energy, cultural/archeological/paleontological, parklands and other community facilities, and safety and security. None of the effects resulting from the proposed modifications are considered adverse after the implementation of mitigation measures. The proposed modifications would not result in cumulatively considerable effects, due to the limited scope, scale, and locations of the proposed project modifications, when compared to the proposed project elements analyzed in the regional projections from SCAG's 2008 Regional Transportation Plan (RTP), the LACMTA 2009 Long Range Transportation Plan, Measure R (a half-cent sales tax approved by the voters of Los Angeles County in November 2008).

At the time of the FEIS/FEIR, a proposed paint and body shop for the light rail system was planned to be located at the Division 22 Green Line Maintenance Facility. The proposed location has been moved to the Southwestern Yard associated with the Crenshaw/LAX Transit Corridor Project. The environmental effects of the paint and body shop would be primarily limited to volatile organic compound emissions associated with the paint. The painting would be located in an enclosed area which would control the emissions of these toxic air contaminants. The additional environmental effects of the paint and body shop would be localized within 500 feet, which would be within one of the proposed project modifications, a sidewalk modification on the northeast corner of the Aviation Boulevard and Arbor Vitae Street. The combined effect of these improvements would not have cumulative adverse effects which would result in adverse impacts to environmental resources or human health and safety.

The demolition of the BNSF railroad bridges would result in additional temporary construction effects to sensitive receptors near the alignment. For example, additional air pollutant emissions would result from the increased duration of construction activity although the daily project-related construction intensity (e.g., total equipment operations) would remain the same as assumed in the FEIS/FEIR. As assumed in the FEIS/FEIR, exposure to construction emissions would be the highest adjacent to the alignment and would decrease with distance towards the boundaries of the Study Area. With implementation of mitigation measures, no adverse effects would occur from the proposed project modifications. The temporary and localized effect of the demolition of the bridges would not result in an adverse cumulative

contribution to the Crenshaw/LAX Transit Corridor Project and other related projects. The proposed project modifications would not change secondary and cumulative impacts. Thus the proposed project modifications would not result in adverse secondary or cumulative impacts.

*No secondary or cumulative adverse effects are expected to occur as a result of the proposed project modifications to the Crenshaw/LAX Transit Corridor Project. No additional mitigation is required.*

***Summary of Effects and Mitigation Measures***

**Table 2**, below, is a summary of effects and mitigation measures and effects after mitigation for the proposed project modifications. All feasible, prudent, and reasonable actions have been taken to avoid or minimize adverse impacts. Mitigation measures as identified in the FEIS/FEIR for the Crenshaw/LAX Transit Corridor Project would still apply to the proposed project. **Table 2** includes additional mitigation measures proposed to avoid, minimize, or mitigate environmental effects of the currently proposed action.

**Table 2: Summary of Effects, Mitigation Measures, and Effects After Mitigation for the Proposed Project Modifications**

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<b>Ecosystems/Biological Resources</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Geotechnical/Subsurface/Seismic/Hazardous Materials</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Public Services</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Section 4(f) Resources</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Utilities</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Water Resources</b> No new/change in effect	Not Adverse	None Required	Not Adverse
<b>Transportation</b> Pedestrian circulation would be improved by the change in portal locations. The medians at the grade crossings would require minor detours for vehicles.	Not Adverse	None Required	Not Adverse
<b>Communities and Neighborhoods</b> The proposed minor street reconfigurations and shift in alignment at the BNSF railroad bridges would increase pedestrian and vehicular circulation which would help to unite surrounding communities.	Not Adverse	None Required	Not Adverse
<b>Land Use</b> The businesses in the Leimert Park Village area would benefit from the additional pedestrian activity in the area. The minor street reconfigurations would result in partial acquisitions and slight changes to property access.	Not Adverse	None Required	Not Adverse

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Acquisitions and Displacements</b> The proposed project modifications and reduction of property acquisition from BNSF abandonment would result in a net reduction of acquisition of 19.76 acres for the Crenshaw/LAX Transit Project.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Visual and Aesthetics</b> The portal location change would result in a portal that is adjacent to commercial uses offering more opportunity to become integrated with the Leimert Park setting.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Air Quality</b> Roadway and sidewalk modifications would not result in changes to local traffic circulation patterns. Operation of the relocated optional Crenshaw/Vernon and Florence/Hindry Stations would not generate substantial new operational emissions</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Noise and Vibration</b> Roadway modifications would not generate audible changes to the existing ambient noise environment. The project modifications from the bridge removal would shift passby noise further to sensitive receptors near the Florence Avenue and I-405 and closer to a sensitive receptor (Travel Lodge) near the Aviation/Century Boulevards intersection.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Cultural, Archaeological, and Paleontological Resources</b> One parcel, the former May Company Building, is affected by the project modifications would not affect the use of the building.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Parklands and Recreational Facilities</b> Although the currently proposed portals would be in close proximity to the park, they would no longer require access through or around the park and travel through the park would be limited to those interested in using the facilities.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Transportation):</b> Removal of the bridge spans will require approximately one to two weekends of work. Construction work with a TBM would result in fewer lane closures and reductions than with cut-and-cover construction.</p>	<p>Adverse</p>	<p>The modifications to roadways, sidewalks, and driveways, as well as the demolition of the two BNSF railroad bridges, would be included in the existing traffic management plan for construction at these locations, so that any potential effects resulting from these actions are minimized to the extent feasible. Mitigation Measures T2 and T3 listed below shall be applied to the proposed project modifications.</p> <p><b>T-2</b> LACMTA shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and include the following measures:</p> <ul style="list-style-type: none"> <li>o Schedule a majority of construction-related travel (i.e. deliveries, hauling, and worker trips) during the off-peak hours;</li> <li>o Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas;</li> <li>o Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures;</li> <li>o Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures;</li> <li>o Where feasible, station traffic control officers should be at major intersections during peak hours to minimize delays related to construction activities;</li> <li>o Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures;</li> <li>o Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs.</li> </ul> <p><b>T-3</b> LACMTA shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible.</p>	<p>Not Adverse</p>
<p><b>Construction (Land Use)</b> The staging of equipment, and the stockpiling or hauling of dirt and materials associated with the construction of the proposed project modifications would result in longer construction duration.</p> <p><b>Construction (Displacement and Relocation)</b> The construction of the proposed project modifications would result in 15 new temporary construction easements at two locations (depicted in Appendix A).</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Community and Neighborhoods)</b>                      Neighborhoods adjacent to the proposed project modifications, particularly near the BNSF railroad bridges would be disrupted and detoured for short periods of time during construction.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Construction (Visual and Aesthetics)</b>                      Mature vegetation and approximately 20 trees along the alignment would be removed for the proposed project modifications. The temporary lighting may potentially affect sensitive receptors by exposing residents to glare from unshielded light sources or by increasing ambient nighttime light levels.</p>	<p>Adverse</p>	<p><b>V1</b> To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations to the extent feasible. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines.</p> <p><b>V2</b> At locations where existing land uses or vegetation is removed and neighboring residential or sensitive uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels where practical to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated.</p> <p><b>V3</b> Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement should occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works.</p> <p><b>CON1</b> Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales should be removed as soon as the area is stabilized.</p> <p><b>CON2</b> Stockpile areas should be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses.</p>	<p>Not Adverse</p>

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Air Quality)</b>                      Tunnel boring would relocate truck traffic and would reduce total lane closures and reduce the number of sensitive land uses exposed to truck and equipment exhaust. Exhaust and fugitive dust emissions would increase near Exposition Boulevard.</p>	<p>Not Adverse</p>	<p><b>CON3</b> During nighttime construction activities, lighting shall be aimed downward and away from residential and other sensitive uses adjacent to the alignment and stations.</p> <p><b>CON4</b> Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.</p> <p><b>CON5</b> Track-out shall not extend 25 feet or more from an active operation and trackout shall be removed at the conclusion of each workday.</p> <p><b>CON6</b> Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d) (5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.</p> <p><b>CON7</b> All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114.</p> <p><b>CON8</b> All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).</p> <p><b>CON9</b> Traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p><b>CON10</b> Operations on unpaved surfaces shall be suspended when winds exceed 25 mph.</p> <p><b>CON11</b> Heavy equipment operations shall be suspended during first and second stage smog alerts.</p> <p><b>CON12</b> On-site stockpiles of debris or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be watered at least two times per day or covered at all times when not being used.</p> <p><b>CON13</b> Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications.</p> <p><b>CON14</b> Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.</p> <p><b>CON15</b> Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site.</p> <p><b>CON16</b> Construction parking shall be configured to minimize traffic interference.</p> <p><b>CON17</b> Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible.</p>	<p>Not Adverse</p>

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Noise and Vibration)</b> Construction activity associated with the project modifications would increase noise and vibration levels at multiple sensitive land uses.</p>	<p>Adverse</p>	<p><b>CON18</b> Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals.</p> <p><b>CON19</b> The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible.</p> <p><b>CON20</b> Portable generators shall be low-emitting and use ultra low sulfur diesel (&lt;15 parts per million) or gasoline.</p> <p><b>CON21</b> Construction equipment shall use a combination of low sulfur diesel (&lt;15 parts per million) and exhaust emission controls.</p> <p><b>CON22</b> The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job).</p> <p><b>CON23</b> Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices.</p> <p><b>CON24</b> LACMTA shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations.</p>	<p>Not Adverse</p>
		<p>Demolition of the bridge at Century Boulevard and Aviation Boulevard shall be included in the Noise and Vibration Control Plan described in Mitigation Measure <b>CON25</b> to minimize any potential noise and vibration effects on the hotel property during demolition. Mitigation Measure <b>CON25</b>, included in Section 4.15.2.8 of the 2011 FEIS/FEIR on page 4-292, is listed below.</p> <p><b>CON25</b> The construction contractor shall develop and implement a Noise and Vibration Control Plan that demonstrates how to achieve the more restrictive LACMTA design criteria noise limits and the noise limits of the city noise control ordinance. The plan should also show how to achieve FTA vibration limits. The plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by LACMTA prior to initiating construction. Where the construction cannot be performed in accordance with the requirements of LACMTA, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with LACMTA and city noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated School and St. John the Evangelist School administrators to avoid disruptive activities during school hours.</p>	

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
		<p><b>CON26</b> The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the LACMTA Design Criteria: The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available.</p> <ul style="list-style-type: none"> <li>o The contractor shall locate equipment and staging areas as far from noise sensitive receptors as possible.</li> <li>o The contractor shall limit unnecessary idling of equipment.</li> <li>o The contractor shall install temporary noise barriers as determined by the Noise Control Plan.</li> <li>o The contractor shall limit unnecessary idling of equipment.</li> <li>o The contractor shall install temporary noise barriers as determined by the Noise Control Plan.</li> <li>o The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality.</li> <li>o The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities) where possible. Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter.</li> </ul>	
<p><b>Construction (Ecosystems)</b> The proposed project modifications may require removal or disturbance of mature trees.</p>	Not Adverse	<p><b>EB1</b> Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.</p> <p><b>EB2</b> If construction of the project requires pruning of native tree species on non-LACMTA-owned land, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree species, the affected tree species shall be relocated or replaced in consultation with appropriate jurisdiction.</p>	Not Adverse

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Geotechnical/Subsurface/ Seismic/ Hazardous Materials)</b>                      The proposed project modifications would not involve construction near faults or in unstable soils and would not require excavation which could result in the exposure to contaminated soil.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Construction (Water Resources)</b>                      The relocated portal location for the optional Crenshaw/Vernon Station would not result in additional excavation or increase the potential to encounter groundwater. There are no new catch basins, storm drain structures, or fire hydrants that would require relocation or temporary closure.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Construction (Energy)</b>                      Construction-related energy consumption from the proposed project modifications, particularly the demolition of the BNSF railroad bridges, would result in additional non-recoverable energy costs compared to what was described in the FEIS/FEIR.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Construction (Cultural, Archaeological, and Paleontological Resources)</b>                      Construction of the proposed project modifications for the sidewalk modification in front of the Macys/May Company building would occur more than 30 feet from the building and would not damage or reduce access to the historic building.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Construction (Parklands and Recreational Facilities)</b>                      The relocation of the portal for the optional Crenshaw/Vernon Station would no longer require underground easements under Leimert Plaza Park. Thus the construction of the proposed project modifications would not result in a change in reduced access or use to parklands and recreational facilities.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>

Environmental Resource/Effect	Effect before Mitigation	Mitigation Measures	Effect after Mitigation
<p><b>Construction (Safety and Security)</b> Construction areas would be secured to eliminate the threat to safety and security of anyone not directly involved in construction activity. Fencing would be incorporated in the areas surrounding the shift in alignment near the BNSF railroad bridges to ensure that vehicles or pedestrians are not exposed to debris or materials.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Environmental Justice</b> All of the full acquisitions would occur in an area with EJ populations. The full acquisition of three full parcels, 12 partial parcels, 8 partial and 29 underground easements would result in an improved effect to displacement. The proposed project modifications are anticipated to provide beneficial direct impacts for minority and low income communities who are typically transit dependent and would provide increased mobility and regional connectivity throughout the region.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>
<p><b>Secondary and Cumulative</b> The project modifications would result in additional temporary construction effects to sensitive receptors. The effects would not be adverse after mitigation and would not be cumulatively considerable when combined with the effects of related projects.</p>	<p>Not Adverse</p>	<p>None Required</p>	<p>Not Adverse</p>