

Readers' Guidance:

This chapter reflects changes in impact analysis from that reported in the Draft EIR/EIS in April 2004. Please note that although this Final EIR is being issued in order to take actions under the California Environmental Quality Act, the chapter also includes discussions of impacts under the National Environmental Policy Act (NEPA). The Construction Authority has opted to retain these NEPA discussions for the readers of and commenters on the Draft environmental document. In the future, the federal lead agency, the Federal Transit Administration, may issue a Final Environmental Impact Statement (Final EIS).

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CHAPTER 4 - OTHER IMPACT CONSIDERATIONS

For the sections in this chapter that are required under both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), both NEPA and CEQA language is employed in the discussion of impacts.

In the sections in this chapter that are required only by NEPA, and not by CEQA, solely the NEPA term “adverse” (and not the CEQA term “significant”) is used to describe impacts.

In the sections in this chapter that are required only by CEQA, and not by NEPA, solely the CEQA term “significant” (and not the NEPA term “adverse”) is used to describe impacts.

4-1 INDIRECT/SECONDARY IMPACTS

This section is required by both NEPA and CEQA.

Construction and operation of the proposed project would involve both direct effects (i.e., those generated by the proposed project onto the immediate vicinity) and indirect (secondary) effects. Indirect effects may include those impacts that are induced by a proposed project, but which tend to occur at some distance from and/or time after the project (e.g., the effects of transportation development on long-term population growth). Indirect effects may also include those impacts that occur as a result of interrelationships between different resource systems in the environment (e.g., the effects of water pollution on sensitive biological resources).

The Council on Environmental Quality (CEQ) regulations governing the implementation of NEPA (40 CFR 1508.8) define indirect effects as those that are:

“...caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

Indirect effects cannot always be clearly and immediately discerned, or precisely measured under standard environmental impact assessment methodologies. Additionally, very little formal guidance on analyzing indirect effects has been developed by governmental agencies. The analysis that follows considers the potential indirect effects, if any, that would result from construction and operation of the proposed project.

4-1.1 Acquisitions and Displacements

The proposed project would not have any indirect effects related to acquisitions and displacements.

The potential effects of the proposed project related to acquisitions and displacements would be considered direct effects, since they would be limited to the immediate vicinity and time frame, and they would not affect other resource systems. These effects are described in Section 3-1.

4-1.2 Air Quality

During construction, the potential effects of the proposed project related to air quality would be considered direct effects, since they would be limited to the immediate vicinity and time frame, and they would not affect other resource systems. For the long-term, air quality impacts would also be considered direct effects, since the proposed transit improvements would change the mix of vehicles traveling in the region, with the primary effect being a shift from single-occupant vehicles (SOV) to transit. The forecasted change in vehicle miles traveled by vehicle type is included in the air quality analysis in Section 3-2.

There is a potential for indirect effects (benefits) to air quality to the extent that the project supports transit-oriented development or other land use location decisions that would result in new or increased development near stations that encourage the use of transit. To the extent that such development reduces SOV tripmaking, there would be a corresponding reduction in VMT and improvement in air quality.

4-1.3 Biological Resources

The proposed project should not have any significant/adverse indirect effects related to biological resources. The only major biological resources present are at the proposed Maintenance and Operations Facility site. The biological analysis indicated only a low potential for indirect effects to vegetation during construction, which would not be adverse under NEPA or significant under CEQA. No indirect impacts to wildlife were identified.

The potential effects of the proposed project related to biological resources would be considered direct effects, ~~if they were to occur~~, since they would be limited to the immediate vicinity and time frame, and they would not affect other resource systems. Direct impacts are described in Section 3-3 and would be limited to the loss of habitat, which would be replaced per the mitigation measure identified in that section.

4-1.4 Community Facilities and Services

The proposed project would not have any indirect effects related to community facilities and services. The forecasted ridership on the LRT system is based upon SCAG's regional population forecasts for 2025. Each city is aware of the forecast and plans its community facilities and services accordingly.

The potential effects of the proposed project related to community services and facilities would be considered direct effects, since they would be limited to the immediate vicinity and time frame, and they would not affect other resource systems. No direct impacts to community services or facilities were identified in Section 3-4.

4-1.5 Cultural Resources

The proposed project would have beneficial indirect effects related to cultural resources since the project has provided an impetus for reuse of historic rail depots in Monrovia and Azusa ~~and San Dimas~~. Future patrons would also enjoy increased opportunities to visit and/or utilize historic resources in the cities along the proposed alignment.

The potential effects of the proposed project related to cultural resources would be considered direct effects, since they would be limited to the immediate vicinity and time frame, and they would not affect other resource systems. No adverse indirect effects to cultural resources are expected as a result of the proposed project. Other, related projects are being undertaken by the individual cities, which do affect cultural resources. These are described in Section 3-5.

4-1.6 Energy

The proposed project could have indirect effects related to energy to the extent that the project fosters new or higher intensity development near stations. Incremental development that might otherwise not occur would in turn require energy for construction and long-term operation.

4-1.7 Geology/Seismic Hazards

The proposed project would not have any indirect effects related to geology and seismic hazards. The potential effects of the proposed project related to geology and seismic hazards would be considered direct effects. The analysis in Section 3-8 revealed there were no potential impacts that would not be resolved through the design process.

4-1.8 Hazardous Materials

The proposed project would not have any indirect effects related to hazardous materials since it is assumed that all operations would be in conformity with federal and state regulations that are specifically formulated to avoid hazards from the transportation, handling, use and disposal of materials during operation of the LRT system.

The potential effects of the proposed project related to hazardous materials would be considered direct effects. These effects could occur during the construction phase at sites (identified in Section 3-9 as containing hazardous materials) that are acquired for the proposed project, or that are affected by the construction process. These direct impacts would not be considered to be adverse under NEPA or significant under CEQA since the project would have to be implemented in accordance with measures required under regulatory permits. These effects are described in Section 3-9.

4-1.9 Land Use and Planning

The proposed project could have indirect effects related to land use and planning to the extent that the project influences transit-oriented development or other land-use location decisions. The draft regional land use and population forecasts through 2025 include the proposed LRT service. Each city is aware of the forecast. Many of the cities' general and specific plans also reflect the proposed LRT service.

The site-specific potential effects of the proposed project related to land use and planning, such as the station and parking areas, would be considered direct effects, and are described in Section 3-10. Proposed LRT system elements are consistent with the cities' planning and zoning.

4-1.10 Noise and Vibration

The proposed project would not have any indirect effects related to noise and vibration. Direct impacts could occur where proposed LRT service would occur in conjunction with existing noise and vibration

from freight and commuter rail operations on portions of the proposed alignment. The noise and vibration analysis considered these potential direct effects, and is reported in Section 3-11.

4-1.11 Railroad Operations

The proposed project would not have any direct or indirect effects related to railroad operations. The City of Monrovia is undertaking the relocation of a granary in that city that is now served by freight rail. This service was discussed in the Draft EIS/EIR and operational scenarios were developed in recognition of this freight customer. The City of Monrovia's action removed this relocation from being part of the proposed project. Subsequent to the Draft EIS/EIR, two railroad grade separations were added to the proposed project that will allow freight operations between Montclair and Irwindale to function independently of the LRT Service. See Section 3-12.

4-1.12 Safety and Security

The proposed project would not have any indirect effects related to safety and security. The incremental increase and on-going demand for safety and security services associated with operations of the transit system would be considered direct effects. These effects are described in Section 3-13.

4-1.13 Population, Housing, and Employment

The proposed project could have direct and indirect effects related to the location of population, housing, and employment to the extent that the project influences transit-oriented development, land use location decisions, or where people choose to live. The regional forecasts through 2025 include the proposed LRT service, and incorporate that service in the population, housing, and employment matrix. The cities' general and specific plans, which recognize population, housing, and employment, also reflect the proposed LRT service.

The potential effects of the proposed project related to population, housing, and employment are described in Section 3-14.

4-1.14 Traffic and Transportation

The proposed project could have indirect effects related to traffic and transportation to the extent that future growth is further influenced by transit. The forecasted increase in traffic that would occur as a result of the regional growth forecast through 2030 (i.e., background, non-project-generated) has been included in the traffic analysis. There is a potential for indirect effects (benefits) to regional traffic to the extent that the project supports transit-oriented development or other land use location decisions that would result in new or increased development near stations that encourage the use of transit. To the extent that such development reduces single-occupant vehicle (SOV) tripmaking, there would be a corresponding reduction in vehicle miles traveled (VMT).

The potential effects of the proposed project related to traffic and transportation that would be considered direct effects would arise from changes in local traffic bound to and from LRT stations and changes in traffic using freeways and arterials to move through the study corridor. These effects are described in Section 3-15.

4-1.15 Utilities

The proposed project could have indirect effects related to utilities to the extent that the project influences transit-oriented development, land use location decisions, or where people choose to live. Overall, the future demand for utilities is driven by the regional growth forecast. The cities' general and specific plans that address utility needs reflect the regional forecast and proposed LRT service.

The potential effects of the proposed project related to utilities that would be considered direct effects would occur during the construction phase. The needs for and effects of utility relocations are described in Section 3-16.

4-1.16 Visual Quality/Aesthetics

The proposed project could have indirect effects related to visual quality/aesthetics to the extent that LRT stations may influence how individual cities choose to control visual imagery within their boundaries.

The potential effects of the proposed project related to visual quality/aesthetics that could be considered direct effects, in comparison to existing conditions, are described in Section 3-17.

4-1.17 Water Quality and Hydrology

The proposed project could have indirect effects related to water quality/hydrology to the extent that the project influences transit-oriented development, land use location decisions, or where people choose to live. The potential effects of the proposed project related to water quality/hydrology that would be considered direct effects are associated with either the construction process or operation of the system. Direct impacts would be governed by, reduced to, and maintained at levels that are less than adverse under NEPA and less than significant levels under CEQA, by compliance with federal and state permits during construction and operation. These issues are described in Section 3-18.

4-2 CUMULATIVE IMPACTS SUMMARY

This section is required by both NEPA and CEQA.

Construction and operation of the proposed project would involve the direct and indirect effects of the proposed project as well as the cumulative effects of the proposed project combined with other related past, present, and reasonably foreseeable future actions.

For purposes of analyzing the potential cumulative effects of the proposed project, the definitions of "cumulative impact" under both NEPA and CEQA have been followed. The CEQ regulations governing the implementation of NEPA (40 CFR 1508.7) define a cumulative impact as:

"the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The State CEQA Guidelines (14 Cal. Code of Regs. sec. 15355) define cumulative impacts as:

“ . . . two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

The analysis of the cumulative effects of the proposed project also incorporates the suggestions in the CEQ’s handbook entitled “Considering Cumulative Effects Under the National Environmental Policy Act” (January 1997), which is intended as an informational document rather than formal agency guidance.

Based on the CEQ and State CEQA Guidelines discussion of cumulative effects, the following principles can be applied to the assessment of cumulative effects of the proposed project:

- Cumulative effects typically are caused by the aggregate effects of past, present, and reasonably foreseeable actions. These are 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 other related actions that affect the same resource.
- When other related actions are likely to affect a resource that is also affected by the proposed action, it does not matter who (public or private entity) has taken the related action(s).
- The scope of cumulative effects analyses can usually be limited to reasonable geographic boundaries and time periods. These boundaries should extend only so far as the point at which a resource is no longer substantially affected or where the effects are so speculative as to no longer be truly meaningful.
- Cumulative effects can include the effects (past, present, and future) on a given resource caused by similar types of actions (e.g., air emissions from several individual highway projects) and/or the effects (past, present, and future) on a given resource caused by different types of actions (e.g., air emissions from a highway project, a solid waste incinerator, and a mining facility).

An adequate discussion of cumulative impacts requires analyzing either (A) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency,” or (B) “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing the cumulative impact.” [CEQA Guidelines Section 15130(b)(1)]

This cumulative impact analysis relies on method “B” described above. The analysis is based on a summary of projections contained in an adopted regional planning document, the Southern California Association of Governments’ (SCAG) 2004 Regional Transportation Plan (RTP). SCAG encourages lead agencies to use the region-wide analysis contained in the RTP Final Program EIR as the basis for cumulative analyses. The 2004 RTP Final Program EIR (SCH No. 2003061075) is therefore incorporated by reference into this Final EIS/EIR per Section 15150 of the CEQA Guidelines and used as the basis for cumulative analyses. The 2004 RTP Final Program EIR may be viewed on SCAG’s website (http://www.scag.ca.gov/committees/pdf/eec/dec03/draft_rtppeir04.pdf), or by contacting the agency directly.

The 2004 RTP is a regional planning document that establishes goals, objectives, policies, and implementation priorities for the region's transportation infrastructure through the year 2030. The 2004 RTP may be thought of as a blueprint for comprehensive transportation planning that focuses on linkages between employment and housing centers and favors land use patterns that emphasize density and reuse of land. One specific component of the RTP is the "Public Transportation System" element which seeks to "ensure mobility for people without access to automobiles and to provide attractive alternatives for drive-alone motorists or discretionary riders." In order achieve this goal, the RTP calls for an expanded system of integrated bus service and rail transit, where existing and proposed rail stations serve as hubs for bus travel to surrounding areas.

The 2004 RTP Final Program EIR analyzes potential environmental impacts from implementation of transportation projects throughout a six-county region encompassing approximately 38,000 square miles through the year 2030. Because the Gold Line Foothill Extension is contemplated within the RTP EIR analysis and both the RTP EIR and this Final EIS/EIR share a common horizon date of analysis, the RTP EIR and its adopted findings are the most appropriate source for identifying cumulative impacts related to the Gold Line Foothill Extension.

The impact discussions below consider the cumulative effects of implementation of the proposed project within the framework of the cumulative regional transportation analysis contained in SCAG's 2004 RTP Final Program EIR.

4-2.1 Impacts

4-2.1.1 Acquisitions and Displacements

The proposed project does not require the acquisition or displacement of residential properties. The maximum number of businesses to be acquired over the 24-mile length of the proposed project would be as follows:

In Arcadia, depending on the station option chosen, up to two full-parcel acquisitions (along with up to 10 business relocations) would occur. One partial acquisition would be needed for a traction power substation. In Monrovia, one full-parcel acquisition would be needed for the station, and acquisition of a portion of two parcels would be needed for traction power substations. No relocations would occur in Monrovia. In Duarte, acquisition of portions of two parcels (none requiring relocation) would be needed for parking and station access. One parcel would need to be acquired for a traction power substation. No relocations would occur in Duarte. In Irwindale, 1 full-parcel acquisition, along with acquisition of parts of three other parcels would be needed for the Maintenance and Operations Facility. One parcel would be needed for parking. No relocations would occur in Irwindale. In Azusa, five acquisitions (and five business relocations) would occur for the Alameda station and parking. One acquisition, with no displacement, would occur for the Citrus station and parking. No partial acquisitions are needed for either station. In Glendora, no acquisitions would occur. In San Dimas, five full-parcel acquisitions (along with one business relocation) would occur. No acquisitions would be needed in La Verne. In Pomona, one full-parcel acquisition would occur. One partial acquisition would be needed. No relocations would occur in Pomona. In Claremont, up to seven full-parcel acquisitions (with up to nine business relocations) would occur. No acquisitions would be needed in Montclair or Upland.

Implementation of SCAG's RTP, as detailed in the RTP Final Program EIR, would necessitate displacement of substantial numbers of homes and businesses. The Foothill Extension would contribute incrementally to these cumulative business acquisition impacts, but not to residential acquisition impacts since there are no residential acquisitions.

4-2.1.2 Air Quality

The proposed LRT system would contribute to an increase in transit ridership and corresponding decrease in vehicle miles traveled (VMT) and reduction in vehicle pollutant emissions. Projected future emission rates from the California Air Resources Board (CARB) and future traffic levels based on the SCAG travel demand forecasting model were used in the air quality analysis for the proposed project. Consistent with the findings of SCAG's RTP EIR air quality analysis, net cumulative beneficial effects to regional air quality are expected as a result of the proposed project. The proposed project, along with other transportation improvements contemplated in the RTP, would cumulatively contribute towards implementation of the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan and overall reductions in criteria pollutant emissions—a beneficial cumulative effect.

4-2.1.3 Biological Resources

The majority of the project occurs in already developed urban areas. The habitat that would be lost in the City of Irwindale is marginal and would be replaced per the mitigation measure identified in the Final EIS/EIR. Additionally, the San Gabriel River wildlife movement corridor would not be adversely affected by the proposed project. SCAG's RTP analysis indicates that cumulative impacts to biological resources could result due to construction in undeveloped areas and population growth and development on existing natural lands. As discussed, the proposed project would not contribute significantly to these types of impacts.

4-2.1.4 Community Facilities and Services

The Los Angeles County Sheriff's Department (LASD) would patrol Gold Line Facilities. The respective cities' police departments would provide additional services when needed and requested by LASD. Because LACMTA maintains its own security personnel and programs, the proposed project is not expected to contribute to cumulative impacts to police services or cumulative increases in demand for police services.

The proposed project would not increase demand for fire protection services because such demand is primarily attributable to increased commercial and residential development rather than transit projects. Therefore, the proposed project would not contribute to adverse cumulative impacts.

Because the proposed project is a transit project that would not increase the amount of residential units in the region, it would not increase school enrollment and therefore would not contribute to adverse cumulative impacts to schools. Likewise, the project would not increase cumulative demand for parks, hospitals, libraries, and other government facilities, and thus would not contribute to cumulative impacts on such facilities.

4-2.1.5 Cultural Resources

SCAG's analysis of the 2004 RTP concludes that a significant cumulative impact to cultural resources would occur due to a substantial increase in urbanization in the SCAG region by 2025. Impacts to cultural resources resulting from the proposed project, although mitigated to less-than-significant/adverse levels, would contribute to the adverse cumulative impacts detailed in the 2004 RTP EIR.

4-2.1.6 Energy

The proposed project's resulting incremental increase in energy consumption, while less than significant and not adverse, would contribute to a significant cumulative increase in regional energy demand.

SCAG's analysis of the RTP, of which the proposed project is one component, concludes that development and operation of the regional transportation system by 2025 would result in substantial increases in the consumption of electricity, natural gas, gasoline, diesel, and other non-renewable energy types. The proposed project would thus contribute to this cumulative impact.

4-2.1.7 Geology/Seismic Hazards

The 2004 RTP analysis concludes that significant cumulative impacts could occur due to hazardous geologic conditions in certain locations where transportation projects are planned. However, the proposed project is not expected to result in any significant/adverse geologic or seismic hazards and thus would not contribute to this significant/adverse cumulative impact identified by SCAG.

4-2.1.8 Hazardous Materials

As detailed in Section 3-9, several potentially hazardous materials were identified within the project area, primarily within the existing railroad right-of-way. Potential impacts associated with disturbance of hazardous materials during construction of the proposed project would be eliminated or reduced to less-than-significant/adverse levels by complying with the federal and state regulatory requirements and/or permits. Because of the localized nature of polluted soil and other potentially hazardous materials, the presence and potential disturbance of such materials would not contribute to a significant/adverse cumulative impact.

SCAG's 2004 RTP EIR analysis concludes that the regional transportation system in 2030 would pose potential for hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during transportation. Implementation of the proposed project would contribute to this adverse cumulative impact.

4-2.1.9 Land Use and Planning

The proposed project, along with other transportation improvements contemplated within the framework of SCAG's 2004 RTP EIR, would contribute to the overall intensity of development within the SCAG region. The RTP contains growth management goals to attain mobility and to develop urban forms that enhance quality of life, accommodate a diversity of lifestyles, preserve open space and natural resources, are aesthetically pleasing and preserve the character of communities, and enhance the regional strategic goal of maintaining the regional quality of life. Given that the proposed project would help achieve SCAG's long-term growth management, land use, and mobility goals, it would contribute to a beneficial cumulative impact.

4-2.1.10 Noise and Vibration

SCAG's RTP analysis indicates that significant/adverse cumulative ambient noise increases could occur. Noise level increases resulting from the proposed project, while mitigated, would fall within the context of the cumulative noise increase indicated in the RTP EIR. While the proposed project could result in remainder vibration impacts, such impacts would be highly localized and would neither contribute to a cumulative effect nor be compounded by vibration from other regional transportation projects within the RTP framework.

4-2.1.11 Railroad Operations

Double tracking for Metrolink service in the eastern part of the corridor has been completed. Operation of the proposed LRT and Metrolink services are not in competition, since they serve different markets. Since the proposed project would operate independent of freight rail operations, no direct or cumulative impacts would occur. Grade-separation projects contemplated within the framework of SCAG's 2004 RTP would further benefit heavy rail operations and reduce vehicle delays and air pollution at railroad crossings.

4-2.1.12 Safety and Security

As stated in 4-2.1.9 above, the proposed project, along with other transportation improvements contemplated within the framework of SCAG's 2004 RTP, would contribute to the overall intensity of development within the SCAG region. While crime could reasonably be expected to increase at current ratios of crimes to total population, safety and security measures and peace officer to population ratios could likewise reasonably be expected to keep pace. Additionally, there is nothing inherent to the regional transportation plan or any of its specific projects, modes, or routes that would reasonably be expected to contribute to significant cumulative impacts.

4-2.1.13 Socioeconomics

Cumulative impacts would be mostly likely to arise from the combination of additional transit ridership and redevelopment around stations, which could include changes in land use. In general, land use changes in station areas associated with LRT service have already been accounted for by individual cities' planning efforts. This planning typically calls for increased residential densities or commercial activity within walking distances of stations. These increases in density or activity would be consistent with the overall socioeconomic profile of the individual cities; no substantive changes would occur as the result of LRT service. The City of Upland has the greatest amount of forecasted change in its socioeconomic profile, arising from planned development to the north and east of the proposed Montclair and Upland LRT stations. These changes arise from current planning and approval activities that recognize, but are not dependent on, proposed LRT service.

4-2.1.14 Traffic and Transportation

SCAG's analysis of the 2004 RTP concludes that cumulative traffic and transportation impacts will be significant due to the regional increase in vehicle miles traveled (VMT). Methodology for the traffic analysis of the proposed project included using the SCAG travel demand forecasting model and, as demonstrated in chapter 3-15 of this Final EIS/EIR, the proposed project would result in a decrease in VMT when compared to the No-Build Alternative in the year 2030. Thus, the proposed project would not contribute to the significant cumulative impact identified by SCAG in the RTP EIR.

4-2.1.15 Utilities

Cumulative impacts to utilities could arise from the ongoing growth of the region, as characterized in SCAG's 2004 RTP EIR. The proposed project is accounted for in SCAG's forecasts of regional growth. Future transportation projects may influence the location of development or redevelopment, but they are not likely to induce additional, unaccounted-for utility demands. Temporary, short-term service disruptions could occur during construction, but would not be considered significant with respect to regional cumulative impacts.

4-2.1.16 Visual Quality/Aesthetics

The 2004 RTP EIR concludes that implementation of the RTP could result in obstructed views of scenic resources, which would constitute a significant cumulative impact. New design elements associated with the proposed project, such as safety fencing, catenaries, traction power substations, and passenger platforms, will be constructed at one time taking into account the local design setting, as well as municipal design standards. The project's impacts to visual resources result almost entirely from the removal of screening landscaping. The project's visual changes to the environment would be mitigated and would not fall outside the scope of the regional cumulative impact identified by SCAG in the 2004 RTP EIR.

4-2.1.17 Water Quality and Hydrology

SCAG's analysis of the 2004 RTP concludes that significant cumulative impacts to water quality would result due to potential for increased vehicle pollutants to migrate to surface and groundwater supplies. The Foothill Extension project would contribute incrementally to this cumulative impact, in proportion to its VMT.

4-3 UNAVOIDABLE ADVERSE IMPACTS AFTER MITIGATION

This section is required by both NEPA and CEQA.

Based on the levels of information available when the ~~DEIS/DEIR~~ Final EIS/EIR was prepared, construction of the proposed project should result in no unavoidable adverse effects under NEPA, when the effects of regulatory compliance, best management practices and proposed mitigation measures are factored. Impacts, regulatory compliance, best management practices, and mitigation measures are described in the respective sections of Chapter 3. Construction would result in one unavoidable significant impact under CEQA, an exceedance of NO_x and PM₁₀ impact thresholds established by the South Coast Air Quality Management District.

Based on the levels of information available when the ~~DEIS/DEIR~~ Final EIS/EIR was prepared, operation of the proposed project would result in one unavoidable adverse effect under NEPA (unavoidable significant impacts under CEQA). Specifically, limited vibration effects would remain after implementation of mitigation measures, application of regulatory compliance, facility operating permits, and best management practices.

For CEQA, to the extent that the residual construction phase air quality impacts and residual operational phase vibration impacts may occur, notice is provided that a Statement of Overriding Considerations may be necessary in order to comply with the requirements of the California Environmental Quality Act.

4-4 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE OF LONG-TERM PRODUCTIVITY

This section is required by NEPA only.

Construction and operation of the proposed project would maintain and enhance the productivity and general quality of life in Southern California through attainment of the following objectives identified in the project's Purpose and Need Statement:

- Provide a high-capacity improvement that responds to problems associated with the corridor's only freeway.
- Provide transportation improvements that respond to transit issues identified in the corridor.
- Provide transportation improvements that respond to problems associated with the corridor's arterial network.
- Provide transportation improvements that respond to issues associated with population and employment conditions and forecasts.
- Provide transportation improvements that respond to environmental goals for the region and corridor.

The benefits of improving the reliability and efficiency of the local and regional transportation system would be realized in the near term and would likely increase over the long term as the need for transportation infrastructure increases.

In addition to the near- and long-term productivity benefits and improved quality of life derived from the proposed project, certain short-term uses of the environment would occur during construction of the proposed project. These short-term uses of the environment would include temporary, localized traffic obstructions, air emissions, noise, vibration, and light and glare that typically occur in the vicinity of construction activities. Beneficial short-term effects of the proposed project would be related to new construction employment and purchases of construction materials, supplies and services.

Only one long-term adverse environmental effect has been identified and that is vibration effects in very localized areas. It is possible that many, if not all, of these remainder vibration effects will be reduced to acceptable levels with continued study, monitoring, and testing of mitigation techniques once the project is operable. However, since the effectiveness of mitigation cannot be absolutely assured at this point, the effects are deemed adverse, significant, and unavoidable. In any respect, these very localized effects would have a negligible effect on the long-term viability and productivity of the natural environment.

4-5 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section is required by both NEPA and CEQA.

Construction and operation of the proposed project would involve certain commitments of resources. In some instances, the resource committed would be recovered after a short period of time. Often, however,

resources would be irreversibly or irretrievably committed to the proposed project because they would be permanently consumed or they would be dedicated to a particular use for an essentially limitless period of time.

The proposed project would involve the commitment of a range of natural, physical, human, and fiscal resources. For example, the land used for the project would continue the existing commitment of land in the area for transportation purposes. To the extent that this commitment would be for long-range use, it would be an irretrievable commitment. In the event, however, that a greater need would arise for the land in the future, or that the corridor were no longer needed, the land could conceivably be converted to some other use. Currently, there is no reason to expect that such a need for conversion would ever be necessary or desirable.

The proposed project would also require that various other resources be irreversibly or irretrievably committed. Non-renewable fossil fuel resources would be necessary to power construction equipment, electrical devices, vehicles, and buses. Considerable amounts of other types of resources would also be expended, including iron, steel, wood, sand, stone, aggregate, and cement construction materials. Additionally, large amounts of labor and natural resources would have to be committed to the fabrication and preparation of these construction materials. This commitment of resources would be considered irreversible, except for the possible recycling of raw materials in the unlikely event that the corridor were ever dismantled. These resources are generally not in short supply and their use would not have an adverse effect on their continued availability. Given the commitment of these resources well into the foreseeable future, however, their use should be considered irreversible and irretrievable.

A substantial one-time expenditure of local, state, and federal financial resources would also be necessary to construct the proposed project. This expense would be offset by the direct and indirect benefits to the local and regional economy from new construction employment, purchases of construction materials and services, and long-term economic development opportunities resulting from an enhanced transportation system.

The commitment of resources to construct and operate the proposed project is based on the belief that residents, employees and visitors would benefit from the improved efficiency, accessibility, safety, and environmental quality of the transportation system in Southern California. These benefits are anticipated to substantially outweigh any irreversible or irretrievable commitments of resources.

4-6 GROWTH INDUCEMENT

This section is required by CEQA only.

As documented in the responses to the checklist below, the proposed project is not expected to cause any adverse effects with respect to growth within the vicinity of the project area or in the region.

- *Will the project attract more residential development or new population into the community or planning area?* Yes. The proposed LRT service and ridership forecasts are reflective of SCAG projections of population, households, and employment in the region through 2025. SCAG's long-term planning accounts for growth in areas served by planned transit improvements such as the proposed project. Thus, the proposed project is a vital component to accommodate the transportation needs of planned growth patterns in the region. The proposed project is not anticipated to attract more growth than what has already been envisioned in SCAG's regional planning documents.
- *Will the project encourage the development of more acreage of employment generating land uses in the area (such as commercial, industrial, or office)?* No. Overall, SCAG projections of population, households, and employment in the region through 2025 have taken into account

development of the proposed LRT service. Additionally, the corridor cities' general or specific area plans recognize and account for the proposed LRT service.

- *Will the project lead to the increase of roadway, sewer, water supply, or drainage capacity?* No. The project would involve no substantial modifications to any of the aforementioned facilities.
- *Will the project encourage the rezoning or reclassification of lands from agriculture, open space, or low density residential to a more intensive land use?* No. The corridor cities' general or specific area plans recognize and account for the proposed LRT service. Proposed station areas are located primarily in existing commercial areas in each city. The proposed Azusa Citrus station is located adjacent to Monrovia Nursery, an agricultural use. However, that property is already subject to a planned conversion to mixed use development, with the proposed stations included in the plan.
- *Is the project not in conformance with the growth-related policies, goals, or objectives of the local general plan or the area growth management plan? Or, is it in conflict with implementation measures contained in the area's growth management plan?* No. As discussed in Section 3-10, the project would be consistent with the applicable local and regional plans.
- *Will the project lead to the intensification of development densities or accelerate the schedule for development?* No. The proposed LRT has been recognized in the corridor cities' general or specific area plans for over a decade. Intensification or acceleration of development that may occur has thus been already accounted for.
- *Will the project measurably and significantly decrease home to work commuter travel times to and from the project area (i.e., more than 10 percent overall reduction or five minutes or more in commute time savings)?* Yes. However, since this change in travel time is accounted for in SCAG's regional forecasts of population and housing, there would not be a growth inducement.
- *Is the project directly related to the generation of cumulative effects?* No. The proposed LRT service and ridership forecasts are reflective of SCAG projections of population, households, and employment in the region through 2025, which also include the proposed LRT service. Thus, the project would not be expected to directly or indirectly attract more residential development or population beyond that which is already contemplated in the applicable planning forecasts.

4-7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An environmentally superior alternative needs to be identified under CEQA. Although the No-Build Alternative would involve fewer local environmental impacts, it would not provide the desired levels of mobility, accessibility, and transit reliability for the corridor communities, nor would it contribute as substantially to regional air quality conformity as the LRT Alternatives.

The Full Build (Pasadena to Montclair) Alternative is the environmentally superior alternative that addresses corridor transportation needs because it provides the greatest relief to east-west corridor traffic, enhances corridor and regional air quality, and supports the development/redevelopment of local employment and residential nodes that would further help reduce east-west and regional traffic. The alternative would serve 13 cities. The remainder adverse effects under NEPA or remainder significant impacts under CEQA (construction phase air quality and operational phase localized vibration effects) would not compromise the long-term viability and productivity of the natural environment. The Build LRT to Azusa Alternative provides many of the same benefits, but to a lesser degree because it serves only six cities.