

5.0 ALTERNATIVES

This chapter sets forth potential alternatives to the proposed project and provides a qualitative analysis of each alternative and a comparison of each alternative to the *Mobility Plan 2035* (MP 2035 or proposed project). Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in California Environmental Quality Act [CEQA] Guidelines Section 15126.6[f][1]) are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to the alternative site. Alternatives may be eliminated from detailed consideration in the Environmental Impact Report (EIR) if they fail to meet project objectives, are infeasible, or do not avoid any significant environmental effects.¹

5.1 PROJECT-LEVEL IMPACTS

As addressed in this Recirculated Draft EIR, the proposed project would create significant and unavoidable impacts associated with:

- **Transportation and Traffic (Intersections).** Implementation of Mitigation Measures **T1** through **T4** would potentially reduce congestion on impacted intersections; however, the degree to which signal optimization and transportation demand management would mitigate intersection congestion is uncertain at this time. Therefore, the proposed project's impacts to traffic circulation would remain potentially significant and unavoidable.
- **Noise and Vibration (Operational Noise).** The proposed project would result in a significant impact from the increased bus frequency on the Transit Enhanced Network (TEN). The increased frequency would increase noise levels greater than 3 dBA and there is no identified feasible mitigation, which would reduce the impact to less than significant.
- **Biological Resources (Sensitive Species, Habitats, Wetlands).** The proposed project would result in a significant impact from the potential to disrupt sensitive species, habitats, or wetlands during any proposed widening that would occur outside the existing street right-of-way. Implementation of Mitigation Measures **BR1** through **BR3** would potentially reduce effects from widening; however, the locations and extent of the widening is uncertain at this time and the effects of proposed mitigation cannot be reasonably foreseen. Therefore, the proposed project's impacts to biological resources would remain potentially significant and unavoidable.

As called for by the CEQA Guidelines, the achievement of project objectives must be balanced by the ability of an alternative to reduce the significant impacts of the project. The proposed project's objectives include:

PROPOSED PROJECTS' OBJECTIVES

The MP 2035 addresses all modes of circulation on the City's street network, guiding mobility policies, programs, and projects in the City of Los Angeles through 2035. The five goals and corresponding policy topics of MP 2035 are as follows:

- **Safety First** – focuses on topics related to crashes, speed, protection, security, safety, education, and enforcement.
- **World Class Infrastructure** – focuses on topics related to the Complete Streets Network (walking, bicycling, transit, vehicles, green streets, and goods movement), Great Streets, Bridges, Street Design Manual, and demand management.

¹CEQA Guidelines, California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15126.6(c), 2005.

- **Access for all Angelenos** – focuses on topics related to affordability, least cost transportation, land use, operations, reliability, demand management, and community connections.
- **Collaboration, Communication and Informed Choices** – focuses on topics related to real-time information, open source data, transparency, monitoring, reporting, emergency response, departmental and agency cooperation and data base management.
- **Clean Environments** – focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.

Any evaluated alternative should meet as many project objectives as possible. In addition, while not specifically required under CEQA, other parameters may be used to further establish criteria for selecting alternatives such as adjustments to project phasing, conformance to all existing zoning requirements, and other “fine-tuning” that could shape feasible alternatives in a manner that may result in reducing identified environmental impacts. In some instances, when the project results in environmental impacts that are reduced to less-than-significant with mitigation, an alternative may reduce these less-than-significant impacts even further.

5.2 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed project were identified on the basis of their ability to attain all or most of the basic objectives of the project while reducing the project’s significant environmental effects. Alternatives were identified based on 1) feasibility, 2) the potential to mitigate significant project-related impacts, and 3) reasonably informing the decision-maker regarding a range of options. Alternatives considered for the proposed project were limited (as for the project) to the envelope of the existing public right-of-ways as alternatives that extended into private property would be infeasible or require substantial displacement to provide a uniform mobility improvement, such as an additional lane of travel or wider sidewalks, that would result in significant and unavoidable impacts. Unless the City of Los Angeles opted to invoke the power of eminent domain, the acquisition of private properties for the purposes of increasing the right-of-way to the street’s standard dimension (if currently not to standard) would occur only through dedications concurrent with a development project. The proposed project does account for some widening on street locations that are not currently developed to the proposed standard street widths. However, the range of alternatives considered for the proposed project was primarily constrained to improvements located within the existing public rights-of-way.

The mobility improvements considered as part of the project alternatives were separated by mode (e.g., vehicle, pedestrian, bicycle, transit) with goals provided for each mode. These performance goals represent the most efficient measures to create complete streets that improve performance on a multi-modal scale. These improvements were focused on priority corridors that were developed with public input, and represent the greatest opportunities to improve mobility. The evolution of these improvements represents a meaningful screening of alternatives, where the improvements that satisfied modal objectives and provided the greatest increases in mobility were carried forward. An updated version of the City of Los Angeles Travel Demand Model was used to evaluate mobility improvements. The model simulates existing conditions and forecasts future year conditions for the network, with and without the effects of the project, allowing for evaluation of a range of automobile and transit performance measures.

There are no alternatives that would reduce the significant impacts associated with the proposed project and would satisfy a majority of project goals and objectives. Even without the project, significant impacts are expected in most of the issue areas because of increased development. The alternatives evaluated in this section would satisfy project goals and objectives and vary incrementally in the intensity of environmental effects. Given that the project is comprised of numerous improvements throughout the City of Los Angeles, it is not reasonable to separately evaluate alternatives to each proposed improvement or corridor. Rather the MP 2035 is evaluated as a package of improvements. During the development of the MP 2035, the package

of treatment options ranged from moderate to comprehensive enhancements were considered to reflect the policies of the MP 2035.

During the circulation of the initial Draft EIR, the project alternatives included comprehensive networks but did not conservatively analyze the planned network of bike lanes. The Recirculated Draft EIR reflects a conservative view of potential reductions in vehicular capacity from the Bicycle Lane Network. In the analysis of the proposed project, bicycle lanes on corridors that are not already designated as part of the Bicycle Enhanced Network (BEN), Neighborhood Enhanced Network (NEN), TEN or Vehicle Enhanced Network (VEN), are assumed to require the conversion of a vehicle travel lane, where in the previous Draft EIR it was assumed that bicycle lanes would not reduce vehicular roadway capacities. Assuming that all bicycle lanes will remove a lane of travel is a worst-case assumption for vehicle impacts, and it is anticipated that some bicycle lanes can be accomplished by removing only one vehicle lane from the roadway or without removing any travel lanes. However, without specific roadway designs, it is not possible to determine at the city scale where bicycle lanes can be accommodated and, therefore, in the interests of providing a conservative analysis, all bicycle lanes are assumed to require the conversion of vehicle travel lanes.

The proposed project analyzed in the Recirculated Draft EIR represents the higher end of the range of improvements (most change compared to existing) with a robust comprehensive package of enhancements that would entail the second most intervention to the roadway system.

On the lowest end of the alternative range of mobility improvements (least amount of change from existing conditions) is the No Project Alternative that represents reasonably foreseeable development if the MP 2035 was not implemented. In addition to the proposed project and No Project Alternative, there are four alternatives considered in the Recirculated Draft EIR that bracket the range of alternatives satisfying project goals. Two of these alternatives are assessed quantitatively through the transportation demand model (Alternative 2 – Fewer Comprehensive Enhancements and Alternative 3 – Project without Bike Lanes and Fewer Miles of Transit Improvements) and two are variations to provide additional information comprising the spectrum of alternatives with varying environmental conditions (Alternative 4 – Project with Priority Bike Lanes Only and Alternative 5 – Increased Comprehensive Enhancements, Transit Only Lanes). All of these alternatives are described below.

Alternative 1 - No Project Alternative. The No Project Alternative is required by Section 15126.6 (e)(2) of the CEQA Guidelines and assumes that the proposed project would not be implemented. The No Project Alternative allows decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative includes “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (CEQA Section 15126.6 [e][2]).

The City of Los Angeles’ Travel Demand Model was used to create the future baseline environment that represents the No Project Alternative.² The model has a base year of 2008, which is still reflective of existing conditions and a future year of 2035 and was designed to characterize peak period vehicle and transit flows on roadways within the study area based on comprehensive land use and socio-economic data (SED). The SED reflect the most recent Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Model data for existing and future conditions. The model future year network includes projects expected to be implemented by year 2035 from the following sources:³

- The Los Angeles County Metropolitan Transportation Authority (Metro) 2013 Call For Projects;
- The Street and Transportation Projects Oversight Committee project list; and
- The SCAG’s RTP/SCS (financially constrained) Model.

²The model utilizes the TransCAD Version 4.8 Build 500 modeling software and has been calibrated and validated for current conditions.

³Metro, Congestion Mitigation Fee program is on hold; projects from the CMP project list are currently included in the assumed future conditions as they reflect projects that have been identified through various City planning efforts.

The consolidated list of projects that have been incorporated into the Future No Project network is provided in the traffic appendix (Appendix C).

Alternative 2 – Fewer Comprehensive Enhancements. Alternative 2 includes a set of enhancements that are less comprehensive (require less intervention with the existing network, fewer multi-modal facilities) than those assumed for the proposed project alternative to offer a lower cost alternative with potentially fewer impacts due to the extent of the changes. The more moderate enhancements associated with this alternative would result in fewer lane conversions on the BEN and TEN, which could result in potentially fewer impacts to the vehicular circulation system and biological resources. **Table 5-1** compares daily vehicle miles of travel under the alternatives and the proposed project.

TABLE 5-1: VEHICLE MILES TRAVELED IN THE CITY OF LOS ANGELES					
	Existing Conditions	Proposed Project	Alternative 1 (No Project)	Alternative 2 (Fewer Comprehensive)	Alternative 3 (Project No Bike Lanes, Less TEN)
DAILY VEHICLE MILES TRAVELED					
Surface Streets	35,408,900	35,282,800	38,463,700	36,794,000	36,625,900
Freeways (Mainline)	39,857,400	45,602,200	44,164,000	44,449,200	44,329,500
Total, City of Los Angeles	75,266,300	80,885,000	82,627,700	81,243,200	80,955,400
PERCENT CHANGE VS. PROPOSED PROJECT					
Surface Streets	0.4%	-8.3%/a/	9.0%	0.5%	0.0%
Freeways (Mainline)	-12.6%	3.3%/a/	-2.5%	0.3%	0.0%
Total, City of Los Angeles	-6.9%	-2.1%/a/	2.2%	0.4%	0.0%
PERCENT CHANGE VS. EXISTING CONDITIONS					
Surface Streets	0.0%	-0.4%	8.6%	3.9%	3.4%
Freeways (Mainline)	0.0%	14.4%	10.8%	11.5%	11.2%
Total, City of Los Angeles	0.0%	7.5%	9.8%	7.9%	7.6%
<small>Note: Alternatives 4 and 5 were not analyzed quantitatively in the Travel Demand Model and are not included in this table. /a/compared to No Project</small>					
SOURCE: City of Los Angeles Travel Demand Model, 2015.					

Alternative 3 – Project without Bike Lanes and Fewer Miles of Transit Improvements. Alternative 3 includes the same roadway and transit assumptions (intensity of infrastructure and enhancements) as for the proposed project except that it does not include the conservative analysis of the planned bicycle lanes for roadways that are not part of the BEN (i.e., analysis assumes no vehicle capacity restrictions – no reduction in vehicle travel lanes -- from bicycle lanes). Alternative 3 includes fewer miles of roadways on the TEN, which could result in potentially fewer impacts to the vehicular circulation system and biological resources. This alternative is the proposed project that was evaluated in the previously circulated Draft EIR. However, it does not contain the changes identified as part of the proposed project, including revisions to the BEN and TEN based on comments received on the Draft EIR and ongoing agency coordination. **Table 5-1** summarizes the comparison of vehicle miles traveled (VMT) between Alternative 3 and the proposed project and **Table 5-2**, at the end of this chapter, compares impacts under Alternative 3 with impacts under the proposed project and all other alternatives.

Alternative 4 – Projects with Priority Bike Lanes Only (in general those bike lanes that have been identified to be implemented in the short-term). Alternative 4 includes the same roadway enhancements as for the proposed project except that it only includes priority bike lanes on the BEN. This alternative evaluates the condition where only a portion of the Bicycle Lane Network could be implemented due to funding or other constraints and lies in the range between Alternative 3 and the proposed project, and could result in potentially fewer impacts to the vehicular circulation system and biological resources. **Table 5-2**, at the end of this chapter, compares impacts under Alternative 4 with impacts under the proposed project and all other alternatives.

Alternative 5 – Increased Comprehensive Enhancements, Transit Only Lanes. Alternative 5 includes the same roadway enhancements as for the proposed project except that it assumes that all streets on the TEN have exclusive bus lanes for the whole day. This alternative represents increased intervention on roadways as compared to the proposed project as it would require full conversion of streets on the TEN to exclusive bus only lanes, which could result in potentially fewer impacts to safety and pedestrian and bicyclists. While this would provide the most benefits for a multi-modal system, it would involve the most intervention to the roadway system. **Table 5-2**, at the end of this chapter, compares impacts under Alternative 5 with impacts under the proposed project and all other alternatives.

The following analysis compares the impacts that could occur under each alternative with impacts that could occur with the proposed project. For purposes of clarity and to facilitate comparison and avoid repetition, the impact thresholds for each of the environmental issue areas have been shortened or combined where appropriate. For a complete list of the impact thresholds, refer to the specific environmental resource sections contained in **Sections 4.1** through **4.5**.

ANALYSIS OF ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

Transportation, Parking, and Safety

Consistency with Plans. Plans related to transportation are discussed in detail in **Section 4.1 Transportation, Parking and Safety**. If the proposed project mobility improvements were not implemented, transportation network conditions would remain as they are, with minor maintenance improvements, and accessibility and congestion would worsen over time. This would result in inconsistency with transportation plans that aim to facilitate the movement of all modes of travel. Therefore, Alternative 1 would result in potentially significant impacts related to the consistency with transportation plans. The maintenance improvements that would occur would be less consistent with transportation plans when compared to the proposed project and impacts related to consistency with plans would be worse than the proposed project.

Circulation System. If the proposed project mobility improvements were not implemented, transportation network congestion would continue to occur as cumulative development increases, but not to the same extent as the proposed project. Alternative 1 would still result in potentially significant impacts related to the circulation system. Without multi-modal improvements, mode shifts to pedestrian, bicycle, and transit would not occur as rapidly, and streets would still become increasingly congested and would not have facilities that would allow for increased accessibility by bicycles, transit, and pedestrians.

Neighborhood Intrusion. Under Alternative 1, the modeling analysis accounts for potential redistribution of vehicular traffic from highly congested links to links that have more available capacity. While not every local street is included in the model, the cumulative effect of cut-through traffic is accounted for on the modeled links. Along roadways where the increased traffic congestion would occur, diversion of trips could occur onto adjacent parallel routes. It is anticipated that increased traffic could still occur on roadways through neighborhoods under Alternative 1. Therefore, Alternative 1 would result in a potentially significant impact related to neighborhood intrusion. As described in **Section 4.1 Transportation, Parking and Safety**, Alternative 1 would result in less overall congestion compared to the proposed project and would, therefore, generally result in lower cut-through traffic than the proposed project. However, the model-estimated changes in circulation system conditions for the project are conservative, vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and are not able to capture the benefits of a shift to multimodal options. While Alternative 1 could have fewer effects related to neighborhood intrusion than the proposed project, it would not capture the benefits of the project.

Congestion Management Program. Under Alternative 1, cumulative growth would result in a 9.8 percent increase in daily VMT when compared to existing conditions and a 2.2 percent increase in VMT when compared to the proposed project. Alternative 1 would result in a potentially significant impact compared to existing conditions. The methodology to assess CMP freeway facilities involves comparisons to the existing and No Project conditions. Since Alternative 1 is defined as No Project conditions and cannot be compared to itself, Alternative 1 impacts were compared to the proposed project. As shown in **Table 4.1-23 in Section 4.1 Transportation, Parking, and Safety**, the demand to capacity ratio for the No Project condition would be less than the proposed project at 50 of the 56 CMP stations (includes bidirectional and AM and PM peak hour measurements). As discussed with Neighborhood Intrusion, without the demand model capturing the benefits of the proposed project, impacts related to the CMP would be less than the proposed project.

Emergency Access. Cumulative growth would increase congestion, which could impede emergency access. Similar to the proposed project, Alternative 1 would result in potentially significant impacts to emergency access. The change in congestion is not anticipated to be substantial enough to cause a difference in emergency access, especially given that there is not a direct relationship between predicted travel delay and response times as California State law does require drivers to yield the right-of-way to emergency vehicles and even permits emergency vehicles to use opposing lane of travel. In some instances, emergency access under Alternative 1 would be more affected than the proposed project in areas where no center turn lanes are implemented that would be otherwise implemented as part of the proposed project. Therefore, the significant impacts related to emergency access would be similar or worse than the proposed project.

Public Transit, Bicycle, or Pedestrian Facilities. Under Alternative 1, planned transit, bicycle and pedestrian improvements would occur which would incrementally increase the multi-modal mobility in the study area. Therefore, no impact would occur related to the pedestrian, bicycle, and transit system. The mobility enhancements that would occur would be less intensive when compared to the proposed project and impacts related to public transit, bicycle, or pedestrian facilities would be worse than the proposed project.

Parking. No significant changes to lane configurations which could require the removal of parking would occur under the No Project Alternative. Therefore, no significant impacts would occur related to parking. Lane configurations resulting in some removal of parking could occur under the proposed project; however, the travel demand model does not fully capture the migration to other modes of travel (bicycle, pedestrian, transit) that could potentially reduce demand for parking. Without this capture of reduced parking demand, impacts related to parking would be less than the proposed project.

Safety. Safety conditions under Alternative 1 would be similar to Existing conditions, unless changes are proposed as part of separate individual projects. Alternative 1 may not provide the same level of protection for bicyclists and pedestrians as compared to the proposed project. Nonetheless, no significant impacts would occur related to safety. Mobility improvements affecting bicyclists, pedestrians, and transit patrons under Alternative 1 would be less than the proposed project. Alternative 1 would result in fewer improvements to safety than the proposed project.

Construction. If the proposed project mobility improvements were not implemented, no substantial transportation infrastructure related construction activity would occur. Alternative 1 would result in minimal impacts related to construction of transportation infrastructure. With the absence of mobility enhancements, construction effects would be less than the proposed project. Even with the proposed project construction effects would be less than significant, and impacts would be less under Alternative 1.

Land Use and Planning

Division of a Community. Under Alternative 1, existing conditions would not substantially change. Specifically, minimal changes would occur to the existing transportation infrastructure that could be incompatible or create a barrier that could divide a community. Therefore, as with the proposed project, Alternative 1 would result in less-than-significant impacts related to the division of a community. Under Alternative 1, there would be no implementation of a more multimodal network or mobility enhancements

that could strengthen connections to neighborhoods and project benefits to neighborhoods from increased accessibility via bicycle lanes and pedestrian amenities would not occur.

Land Use Consistency. Transportation improvements under Alternative 1 would still address vehicular circulation, and bicycle improvements. However, the planned improvements would be incremental and would not be consistent with the most recent State, regional and local policies related to complete streets and increased multi-modal mobility. Overall, the No Project Alternative would be inconsistent with the most recent applicable plans and policies related to mobility. Therefore, a significant impact could occur related to consistency with applicable plans and policies.

Air Quality

Conflict with Air Quality Plan. The 2012 Air Quality Management Plan (AQMP) was prepared to accommodate growth, to reduce the high levels of pollutants, to return clean air to the region, and to minimize the impact on the economy. Consistency with the AQMP can be assessed by determining if a project accommodates increases in population or employment and has measures to reduce VMT. The lack of adequate transportation infrastructure or measures to reduce VMT that would occur under Alternative 1 could conflict with the AQMD goals of accommodating growth and reducing VMT. Therefore, Alternative 1 could result in potentially significant impacts related to a conflict with the 2012 AQMP.

Violate Air Quality Standards. Alternative 1 would increase VMT compared to existing conditions. Although traffic volumes would be higher, pollutant emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 1 Emissions would be less than Existing emissions (echoing reductions in VMT), and would not exceed the SCAQMD significance thresholds. With the conservative vehicle-centric model projections, in comparison to the proposed project, Alternative 1 would result in less surface street VMT but higher freeway VMT, which results in a decrease in Carbon Monoxide (CO), particulate matter 2.5 microns or smaller in size (PM_{2.5}), and particulate matter 10 microns or smaller in size (PM₁₀) emissions but an increase for Volatile Organic Compounds (VOC) (1.6 percent) and Nitrogen Oxides (NO_x) (2.6 percent) emissions. The increase is due to the traffic distribution between surface streets and freeways. Under the proposed project, freeway VMT increases by 3.3 percent and surface street VMT decreases by 8.3. The VMT-weighted average speed for surface streets and freeways are calculated as 21.57 and 25.88 for Future No Project and as 20.69 and 25.89 miles per hour for Future with Project, respectively. The small increase in freeway-weighted average speed implies that the freeway emissions (not emissions rates) are mainly a function of VMT and not emissions factor of pollutants, since the emission factors only change with change in speeds. Since the freeway VMT increases and speeds hardly change, the freeway-related NO_x and VOC increase.

Surface street emissions, unlike freeway emissions, are a function of both VMT and speed. City VMT weighted average speeds decrease from 21.57 to 20.69 miles per hour, equivalent to approximately 4 percent project-wide speed change. According to EMFAC, a decrease in the speed of traffic by only 5 miles per hour from 25 to 20 miles per hour increases the average fleet PM_{2.5} and PM₁₀ emissions by approximately 2.4 and one percent, while increases the NO_x and VOC emission rates by approximately 40 and 26 percent, respectively. Therefore, compared to PM₁₀ and PM_{2.5} increase in VOC and NO_x emissions at these low speeds is significant. While the Future With Project surface street VMT decreases compared to the Future No Project VMT, the decrease in emissions would not be able to compensate for the huge increase in emissions due to decrease in speeds. Therefore, the overall effect is increase in NO_x and CO emissions and decrease in PM_{2.5} and PM₁₀ emissions.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 1 would increase VMT compared to existing conditions. Although traffic volumes would be higher, pollutant emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Similar to the proposed project, Alternative 1 would result in less emissions when compared to existing conditions. From a cumulative perspective, Alternative 1 would

continue the status quo and would not contribute directly towards the regional goal of reducing the Basin's cumulative impact for Ozone (O₃), PM_{2.5}, PM₁₀, or lead (Pb). Therefore, Alternative 1 would result in a cumulatively considerable impact.

Objectionable Odors Affecting a Substantial Number of People. As with the proposed project, Alternative 1 would not involve the release of substantial objectionable odors. As with the proposed project, Alternative 1 would result in less-than-significant impacts related to odors.

Greenhouse Gas Emissions

Generation of Significant Greenhouse Gas Emissions. While Alternative 1 would increase the VMT compared to existing conditions, the total greenhouse gas (GHG) emissions from mobile sources would be reduced from existing conditions due to changes in fuel requirements and emission factors. Alternative 1 would result in a less-than-significant impact related to GHG emissions. Alternative 1 would result in more GHG emissions compared to the proposed project.

Conflict with GHG Reduction Policies. The primary regional plan designed to reduce GHG emission is the 2012-2035 RTP/SCS. Applicable goals of the 2012-2035 RTP/SCS include encouraging non-motorized transportation and land use and growth patterns that facilitate transit and non-motorized transportation. Community plans within the City of Los Angeles include several objectives related to GHG reduction policies including, increasing capacity on existing transportation systems through minor physical improvements, promoting pedestrian and bicycle use/reduction of dependence on automobiles, maintaining a safe and efficient street network, and promoting the use of transit. Alternative 1 would not include the implementation of multimodal mobility enhancements and, therefore, would not be consistent with these GHG reduction policies. Therefore, unlike the proposed project, Alternative 1 could result in a significant impact related to consistency with GHG reduction policies.

Noise and Vibration

Expose Persons or Generate Excessive Noise or Vibration Levels Above Standards. Under Alternative 1, planned improvements would still generate additional noise and vibration levels when compared to existing conditions. Noise and vibration levels would still increase during roadway maintenance activities and other street improvements, as with the proposed project, these activities would be temporary in duration and would not be significant. An incremental increase in operational noise or vibration levels would occur from the approximately nine percent increase in VMT compared to existing conditions. However, these vehicle miles would be dispersed over a large area and would not be concentrated enough to produce traffic volumes that would result in a perceptible increase in noise and vibration levels. In addition, Alternative 1 would not include bus lanes and would not move existing bus activity closer to sensitive receptors. Alternative 1 would not directly increase bus noise. Therefore, Alternative 1 would result in less-than-significant impacts related to noise and vibration levels.

Substantial Permanent Increase in Ambient Noise Levels. The incremental increase in operational noise levels that would occur from the increase in VMT compared to existing conditions would be dispersed over a large area and would not be concentrated enough to produce noise levels that would exceed ambient noise levels by more than 3 dBA at sensitive land uses. Therefore, Alternative 1 would result in less-than-significant impacts related to changes in a permanent increase in noise levels. In comparison to the proposed project, Alternative 1 would result in more VMT and higher overall mobile source noise levels. However, as discussed above, Alternative 1 would not include bus lanes and would not move existing bus activity closer to sensitive receptors. Alternative 1 would not directly increase bus noise and would not result in the same significant and unavoidable impact on the TEN as the proposed project

Substantial Temporary Increase in Ambient Noise Levels. Under Alternative 1, no significant construction activities would occur related to mobility improvements. Therefore, Alternative 1 would result in less-than-significant impacts related to temporary increases in ambient noise levels. The absence of construction activity would result in fewer temporary noise level increases compared to the proposed project; this impact

would be less than significant for the proposed project and would remain so under No Project (Alternative 1) Conditions.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the proposed project, under Alternative 1, no mobility improvements would be implemented that could expose people within proximity to airports to excessive noise levels. Therefore, no impact would occur. This impact would be the same as the proposed project.

Biological Resources

Adverse Effect on Sensitive Species, Sensitive Habitat, or Wetlands. Under Alternative 1, no mobility improvements would be implemented that would have the potential to effect sensitive species, sensitive habitats, or wetlands. Therefore, no impact would occur. This impact would be less than the proposed project.

Adverse Effect on Migratory Species or Wildlife Corridor. Under Alternative 1, no mobility improvements would be implemented that could adversely affect migratory species or create barriers to movement along wildlife corridors. Therefore, no impact would occur. This impact would be less than the proposed project.

Conflict with Tree Preservation Ordinances, Habitat or Natural Community Conservation Plans. Under Alternative 1, no mobility improvements would be implemented that could conflict with tree preservation ordinances, habitat or natural community conservation plans. Therefore, no impact would occur. This impact would be less than the proposed project.

ANALYSIS OF ALTERNATIVE 2 – FEWER COMPREHENSIVE ENHANCEMENTS

Alternative 2 reflects an alternative with overall more moderate mobility improvements as compared to the proposed project that would, in turn, result in generally fewer environmental impacts. The proposed project would result in increased benefits compared to existing conditions, related to multi-modal mobility and consistency with adopted plans and policies; but fewer benefits as compared to the proposed project. Alternative 2 would result in similar congestion as compared to the proposed project. Alternative 2 would result in less intervention and similar congestion but would have fewer multi-modal benefits.

In the long run, it is anticipated that a more robust multi-modal network as would occur under the proposed project, could be more beneficial to the City as mode shift choices continue to evolve, i.e. as more people choose alternative modes to vehicles, greater choice would be provided by the proposed project (as compared to Alternative 2) because alternative modes (e.g., transit, bicycles and pedestrian) would have more interconnected networks potentially accelerating mode shifts to modes other than vehicles. Alternative 2 would not provide the same potential for change as the proposed project.

Transportation, Parking, and Safety

Consistency with Plans. Implementation of Alternative 2 would result in less comprehensive improvements to the transportation network as compared to the proposed project. However, in general these improvements would still be consistent with transportation plans that aim to facilitate the movement of all modes of travel. Therefore, Alternative 2 would result in less-than-significant impacts related to the consistency with transportation plans. The mobility enhancements that would occur under Alternative 2 would be less consistent with transportation plans when compared to the proposed project.

Circulation System. Daily VMT under Alternative 2 would be 7.9 percent greater than existing conditions and 0.4 percent greater than the proposed project. The increase in VMT would result in potentially significant impacts related to the circulation system. However, fewer vehicle lanes would be converted under the BEN and TEN for Alternative 2 than the proposed project, which would provide additional capacity for vehicle travel compared to the proposed project. Therefore, the amount of congestion would be similar to the proposed project and Alternative 2 would result in a significant impact related to congestion and the vehicular transportation network.

Neighborhood Intrusion. Along roadways where Alternative 2 would cause increases in traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that increased traffic could occur on roadways through neighborhoods. Therefore, Alternative 2 would result in a potentially significant impact related to neighborhood intrusion. However, the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative. They are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and are not able to capture the benefits of a shift to multimodal options. As with the project, the greater projected VMT, along with the additional bicycle lane capacity, would result in similar congestion as the proposed project. This would result in a greater likelihood for cut-through traffic. Therefore, Alternative 2 would have similar effects related to neighborhood intrusion when compared to the proposed project.

Congestion Management Program. As described above, daily VMT under Alternative 2 would be approximately 0.4 percent greater than the VMT for the proposed project. However, fewer vehicle lanes would be converted under the BEN and TEN for Alternative 2 than the proposed project, which would provide additional capacity for vehicle travel compared to the proposed project. Therefore, the amount of congestion would be similar to the proposed project and Alternative 2 would have similar effects related to the CMP compared to the proposed project.

Emergency Access. Alternative 2 would result in similar congestion as the proposed project, which could impede emergency access. Similar to the proposed project, Alternative 2 would result in potentially significant impacts to emergency access. Moderate enhancements are less likely to provide additional room for emergency vehicles than compared to comprehensive enhancements. Therefore, the significant impacts related to emergency access for Alternative 2 could be similar or worse than the proposed project.

Public Transit, Bicycle, or Pedestrian Facilities. Under Alternative 2, the planned transit, bicycle and pedestrian improvements would increase the multi-modal mobility in the study area compared to Existing conditions but would be less than under the proposed project. A less-than-significant impact would occur related to the pedestrian, bicycle, and transit system. The mobility enhancements that would occur would be less intensive for Alternative 2 when compared to the proposed project and anticipated benefits from the proposed project would not occur to the same extent.

Parking. Under Alternative 2, changes to lane configurations would not require the removal of a substantial number of parking spaces. Therefore, no significant impacts would occur related to parking. The moderate mobility enhancements that would occur would be less intensive for Alternative 2 when compared to the proposed project and impacts related to parking would be less than the proposed project.

Safety. Safety conditions under Alternative 2 would be improved compared to Existing conditions, but not as much as under the proposed project with moderate mobility enhancements that would benefit bicyclists, pedestrians, and transit users. As with the proposed project, Alternative 2 would result in no significant impacts related to safety. Mobility improvements affecting bicyclists, pedestrians, and transit patrons under Alternative 2 would be less intensive than the proposed project. Therefore, Alternative 2 would result in fewer improvements to safety compared to the proposed project.

Construction. Implementation of on-street improvements related to the enhanced networks under Alternative 2 would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration lasting up to a few weeks. Therefore, temporary and short-term effects related to construction would occur; however, these impacts would be less than significant. Mobility improvements affecting bicyclists, pedestrians, vehicles and transit patrons under Alternative 2 would be less intensive than the proposed project. Therefore, Alternative 2 would result in fewer impacts related to construction than the proposed project.

Land Use

Division of a Community. Alternative 2 would be primarily limited to the existing public right-of-way, would continue to be transportation related, would not alter the existing land use compatibility and would not create a barrier which could divide a community. As with the proposed project, potential parking loss or limitation could occur which could indirectly affect businesses. However, the change in parking availability at this scale would not be sufficient to result in significant displacement that would cause long-term vacancies and eventual blight and mitigation is provided to provide relief to affected businesses. Therefore, as with the proposed project, Alternative 2 would result in less-than-significant impacts related to the division of a community. Mobility improvements affecting bicyclists, pedestrians, and transit patrons under Alternative 2 would be less intensive than the proposed project. Therefore, Alternative 2 would result in fewer benefits to accessibility and connecting communities as compared to the proposed project.

Land Use Consistency. The mobility improvements under Alternative 2 would be consistent with regional and local adopted plans and policies. Therefore, as with the proposed project, Alternative 2 would result in a less-than-significant impact related to consistency with applicable plans and policies. The mobility improvements under Alternative 2 would not be as comprehensive as the proposed project and would not achieve the same level of project objectives and multi-modal mobility improvements as the proposed project.

Air Quality

Conflict with Air Quality Plan. Alternative 2 would result in increased options for mobility; more walkable communities; and fewer travel barriers for active transportation and those who cannot drive such as children or people with disabilities. As with the proposed project, Alternative 2 would encourage an increase in non-driving modes of travel while maintaining certain routes for vehicles and goods movement. One of the goals of the AQMP is to reduce mobile source regional emissions, which can be demonstrated by a reduction in per capita VMT and associated emissions. Alternative 2 would reduce VMT within the City by 1,384,500 miles as compared to 1,742,200 mile for the proposed project. There would be an associated reduction in per capita VMT. These per capita VMT reductions demonstrate consistency with the AQMP goals. Therefore, as with the proposed project, Alternative 2 would result in less-than significant impacts related to a conflict with an air quality plan. Compared to the proposed project, Alternative 2 would result in a higher per capita VMT and would be less consistent with the AQMP.

Violate Air Quality Standards. Alternative 2 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 2 emissions would be less than Existing emissions, and would not exceed the SCAQMD significance thresholds. Regarding construction emissions, it is anticipated that the daily construction intensity and associated daily emissions would be similar as presented for the proposed project, which resulted in a less-than-significant impact. Therefore, as with the proposed project, Alternative 2 would result in less-than significant impacts related to air quality standards. Compared to the proposed project, Alternative 2 would generate more emissions due to higher VMT.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 2 would increase VMT compared to existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. There is no potential for the project-related emissions to contribute to the Basin's cumulative impact for O₃, PM_{2.5}, PM₁₀, or Pb. To the contrary, it is anticipated that Alternative 2 would reduce VMT and associates mobile source emissions, thereby contributing towards the regional goal of eliminating the cumulative impact. Therefore, Alternative 2 would result in a less-than-significant impact related to a cumulatively considerable operational impact. Compared to the proposed project, Alternative 2 would generate more emissions and contribute less towards eliminating the region's cumulative impact.

Objectionable Odors Affecting a Substantial Number of People. As with the proposed project, Alternative 2 would not involve the release of objectionable odors. Alternative 2 would result in no impacts related to odors. Alternative 2 would result in the same effect to odors as the proposed project.

Greenhouse Gas Emissions

Generation of Significant GHG Emissions. Alternative 2 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 2 emissions would be less than Existing emissions. Therefore, as with the proposed project, Alternative 2 would result in less-than significant impacts related to GHG emissions. Compared to the proposed project, Alternative 2 would generate more emissions due to higher VMT.

Conflict with GHG Reduction Policies. The primary regional plan designed to reduce GHG emission is the RTP/SCS. Applicable goals of the RTP/SCS include encouraging non-motorized transportation and land use and growth patterns that facilitate transit and non-motorized transportation. Community plans within the City of Los Angeles include several objectives related to GHG reduction policies including, increasing capacity on existing transportation systems through minor physical improvements, promoting pedestrian and bicycle use/reduction of dependence on automobiles, maintaining a safe and efficient street network, and promoting the use of transit. Alternative 2 would be consistent with community plan goals and objectives related to the promotion of pedestrian, transit and bicycle use, although to a lesser extent as compared to the proposed project. The development of a Citywide Enhanced Complete Street System (although less extensive than the proposed project) would include modal enhancements for particular major streets in mode-specific enhanced networks that together create a system of complete streets that would improve the overall multimodal transportation system. Alternative 2 would be consistent with policies and goals related to increasing capacity on existing transportation systems and with maintaining a safe and efficient street network (although to a lesser extent as compared to the proposed project). Therefore, Alternative 2 would result in less-than-significant impacts related to a conflict with GHG reduction policies. Compared to the proposed project, Alternative 2 would generate more emissions due to higher VMT and would be less consistent with GHG reduction policies.

Noise and Vibration

Expose Persons or Generate Excessive Noise or Vibration Levels Above Standards. As with the proposed project, construction activity associated with the enhanced networks under Alternative 2 would mainly include reconfiguration of roadway striping and would not include excavation or construction. Limited heavy-duty equipment is anticipated to construct the proposed enhancements (e.g., small loaders for sidewalk widening or asphalt paving equipment). It is possible that construction activities lasting more than one day would exceed existing ambient noise levels by 10 dBA or more at any one noise sensitive use as construction proceeds along a transportation corridor; it is not anticipated that construction activities lasting more than ten days in a three-month period would exceed existing ambient noise levels by 5 dBA or more at any one noise sensitive use, and/or it is not anticipated that construction activities would exceed the ambient noise level by 5 dBA at any one noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or anytime on Sunday. With implementation of mitigation, Alternative 2 would result in less-than-significant impacts related to the generation of excessive noise levels during construction. The mobility enhancements under Alternative 2 would result in similar noise effects during construction as compared to the proposed project.

Potential increases in operational noise would be limited to proposed mobility improvements on the PEDs, VEN, TEN, and BEN. Improvements in the PEDs would not increase vehicles speeds and associated noise levels. The improvements could reduce vehicle speeds and potentially increase congestion. Reduced vehicle speeds and increased traffic congestion result in decreased noise levels. Therefore, similar to the proposed project, Alternative 2 would result in a less-than-significant impact related to the PEDs. The mobility

enhancements under Alternative 2 would result in similar less-than-significant impacts on the PEDs related to increases in ambient noise levels as the proposed project.

Increasing vehicle speeds or converting lanes on the VEN would increase noise levels by one to two dBA, which would be less than the 3-dBA significance threshold. It is not anticipated that VEN improvements would increase noise levels by more than 3 dBA CNEL. Therefore, Alternative 2 would result in a less-than-significant impact related to the generation of excessive noise levels on the VEN. The lower intensity VEN enhancements under Alternative 2 would result in fewer effects related to substantial increases in ambient noise levels than the proposed project.

Similar to the proposed project, treatments associated with the TEN include doubling the frequency of bus service and converting vehicle travel lanes to bus only lanes, which could increase vehicle congestion in adjacent lanes. Depending on specific roadway cross sections, a bus only lane could increase noise levels by more than 3 dBA adjacent to some sensitive land uses. Therefore, as with the proposed project, Alternative 2 could result in a significant impact related to bus lanes. The lower intensity TEN enhancements under Alternative 2 would result in fewer effects related to increases in ambient noise levels compared to the proposed project.

As with the proposed project, treatments associated with the BEN include removing vehicle lanes for buffered bicycle lanes or cycle tracks which could increase vehicle delay. Traffic delay could lead to lower vehicle speeds and would not result in a distinguishable increase in ambient noise levels. Therefore, as with the proposed project, Alternative 2 would result in a less-than-significant impact related to changes in mobile noise associated with BEN improvements. The lower intensity BEN enhancements under Alternative 2 would result in fewer effects related to increases in ambient noise levels compared to the proposed project.

The removal of one or more vehicular travel lanes has the potential to change the existing noise environment by shifting the location of traffic on the roadway to adjacent parallel routes. The extent to which trips would divert to specific adjacent local roadways is not reasonably foreseeable given the broad framework of the enhanced networks, and therefore, impacts cannot be precisely determined. However, it is anticipated that increased traffic could occur on these roadways. A doubling of traffic volumes is not anticipated along the majority of roadways. However, some residential roadways have very low traffic volumes. Although mobile noise levels may increase along some neighborhood streets, it is anticipated that these low-volume segments have existing noise levels within the compatibility criteria and increases in noise levels would still result in the noise levels being within the acceptable range for compatibility with residential use. Therefore, as with the proposed project, Alternative 2 would result in a less-than-significant impact related to mobile noise due to traffic diversion. The lower intensity mobility enhancements under Alternative 2 would result in fewer effects related to substantial increases in ambient noise levels than the proposed project.

Bicycle riders would be exposed to mobile source noise. Bicycle activity occurs throughout the City, including adjacent to high volume roadways such as freeways. Bicycle rider exposure to this noise is not considered significant under existing conditions as the exposure does not reach deafening or dangerous levels and is a short-term exposure. Similarly, bicycle rider exposure to changed noise levels as a result of Alternative 2 is also not considered significant. Similar to the proposed project, the mobility enhancements under Alternative 2 would result in less-than-significant noise impacts to bicycle riders.

The NEN provides a network of slow, locally serving streets that connect communities to schools, retail, parks and open space, health care and employment opportunities. It is anticipated that the NEN would decrease mobile source noise. Similar to the proposed project, Alternative 2 would result in less-than-significant or even beneficial impacts related to changes in mobile noise associated with NEN improvements. Mobility enhancements under Alternative 2 would result in similar effects related to ambient noise levels as the proposed project.

Specific designs for roadway changes are not known at this time. It is possible that larger pieces of construction equipment (e.g., large bulldozers) could be used during construction activity. Large bulldozers would generate a vibration level of approximately 0.3 inches per second at 11 feet. It is not anticipated that construction equipment would be within 11 feet of buildings although it cannot be dismissed without detailed construction plans. At 11 feet or less, vibration levels could exceed the FTA criteria of 0.3 inches per second. Therefore, as with the proposed project, Alternative 2 could result in a significant impact related to the generation of excessive vibration levels, however, as with the proposed project, it is anticipated that mitigation would be imposed to reduce this impact to less than significant. The lower intensity of construction under Alternative 2 would result in fewer effects related to the generation of vibration levels than the proposed project.

Substantial Permanent Increase in Ambient Noise Levels. As with the proposed project, Alternative 2 would result in significant impacts related to permanent increases in bus noise. The lower intensity mobility enhancements under Alternative 2 would result in fewer effects related to substantial increases in ambient noise levels as compared to the proposed project.

Substantial Temporary Increase in Ambient Noise Levels. As with the proposed project, under Alternative 2, it is anticipated that construction noise would increase ambient noise levels by more than 10 dBA for activities lasting more than one day, and by more than 5 dBA for construction activities lasting more than ten days in a three-month period. This would result in a substantial temporary or periodic increase in ambient noise levels in the proposed project vicinity above ambient noise levels. Therefore, Alternative 2 would result in a potentially significant impact. Under Alternative 2, the mobility improvements would be less comprehensive than the proposed project and would result in a lower intensity of construction activity. As with the proposed project, it is anticipated that mitigation would be imposed to reduce this impact to less than significant. The lower intensity of construction under Alternative 2 would result in fewer effects related to temporary increases in ambient noise levels than the proposed project.

Expose People Within Proximity to Airports to Excessive Noise Levels. Alternative 2 mobility improvements would not expose people within proximity to airports to excessive noise levels. Therefore, no impact would occur. Alternative 2 would result in the same effect to airport noise exposure as the proposed project.

Biological Resources

Adverse Effect on Sensitive Species, Sensitive Habitats, or Wetlands. As with the proposed project, under Alternative 2, mobility improvements could require widening outside the right-of-way that could have to potential to affect sensitive species, sensitive habitats, or wetlands. Therefore, a potentially significant impact related to an adverse effect on sensitive species, sensitive habitats, or wetlands would occur. Alternative 2 would result in less widening than the proposed project and the potential to affect sensitive species, sensitive habitats, or wetlands would be less than the proposed project but would remain potentially significant.

Adverse Effect on Migratory Species or Wildlife Corridor. While, wildlife does sporadically find its way onto transportation infrastructure, the proposed mobility improvements would not create a condition that would increase the exposure. However, street trees within or immediately adjacent to the enhanced network right-of-ways could potentially support migratory birds. Accordingly, as with the proposed project, construction activities associated with Alternative 2 could result in conflicts with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) through the removal or destruction of an active nest or direct mortality or injury of individual birds, creating a potentially significant impact.

Conflict with Tree Preservation Ordinances, Habitat or Natural Community Conservation Plans. The removal or disturbance of any trees would be subject to the City's Tree Preservation Ordinance which requires a permit for the removal or relocation of protected trees. The Department of Urban Forestry also has a goal to resolve conflicts between street trees and infrastructure, so as to preserve the urban forest to the extent possible. Existing trees would be preserved where possible and/or relocated to the extent possible.

The proposed mobility improvements would not be located in areas with a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). Therefore, as with the proposed project, Alternative 2 would not conflict with a tree preservation ordinance, a HCP or NCCP and would not result in a significant impact.

ANALYSIS OF ALTERNATIVE 3 – PROJECT WITHOUT BIKE LANES AND FEWER MILES OF TRANSIT IMPROVEMENTS

In terms of intervention to the roadway system, Alternative 3 lies between the proposed project and Alternative 2. Alternative 3 reflects an alternative with similar comprehensive mobility improvements as the proposed project that would, in turn, result in similar environmental (traffic) impacts. The primary difference between Alternative 3 and the proposed project is that Alternative 3 does not include the analysis of the potential vehicle impacts of the Bicycle Lane Network resulting from vehicle-lane conversions to provide available roadway space for bicycle lanes. Also, Alternative 3 does not include additional miles added to the TEN after the Draft EIR was circulated. The resulting outcome of the inclusion of bike lanes into the proposed project provides a multimodal transportation network with increased connectivity, but the conservative analysis of the project bike lanes results in greater impacts compared to Alternative 3.

Transportation, Parking, and Safety

Consistency with Plans. Implementation of Alternative 3 would result in similar comprehensive improvements to the transportation network as compared to the proposed project except that bike lanes would not be included and fewer miles of TEN are included in Alternative 3. These improvements would be consistent with transportation plans which aim to facilitate the movement of all modes of travel. Therefore, Alternative 3 would result in less-than-significant impacts related to the consistency with transportation plans. The mobility enhancements that would occur under Alternative 3 would be similar in consistency with transportation plans when compared to the proposed project and impacts related to consistency with plans would be similar to the proposed project, except that bicycle lanes and added TEN miles in the proposed project would increase consistency with state, regional and local plans.

Circulation System. Daily VMT under Alternative 3 would be 7.6 percent greater than existing conditions and about the same (less than 0.1 percent greater) as the VMT for the proposed project. However, the analysis of Alternative 3 assumes that no vehicle lanes would be converted to bicycle lanes in the Bicycle Lane Network, which would provide additional capacity for vehicle travel compared to the proposed project. Nonetheless, the amount of congestion generally would be similar to the proposed project and Alternative 3 would result in a similar significant impact related to congestion and the vehicular transportation network.

Neighborhood Intrusion. Along roadways where Alternative 3 would cause increases in traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that increased traffic could occur on roadways through neighborhoods. However, the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative. They are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and are not able to capture the benefits of a shift to multimodal options. As with the project, Alternative 3 would result in a potentially significant impact related to neighborhood intrusion. As described above, the greater VMT, along with additional vehicle lane capacity would result in similar congestion as the proposed project, which would result in a similar likelihood for cut-through traffic. Therefore, Alternative 3 would have similar effects related to neighborhood intrusion as compared to the proposed project.

Congestion Management Program. Daily VMT under Alternative 3 would be approximately 0.1 percent greater than the VMT for the proposed project. However, fewer vehicle lanes were assumed to be converted to bicycle lanes under Alternative 3 than the proposed project, which would provide additional capacity for

vehicle travel compared to the proposed project. Nonetheless, overall, the amount of congestion would be similar to the proposed project and Alternative 3 would have similar effects related to the CMP compared to the proposed project.

Emergency Access. As with the proposed project, Alternative 3 would result in increased congestion compared to Existing conditions, which could impede emergency access. Similar to the proposed project, Alternative 3 would result in potentially significant impacts to emergency access. The similar mobility enhancements are likely to provide the same amount of movement for emergency vehicles compared to the proposed project. Therefore, the significant impact related to emergency access for Alternative 3 would be similar to the proposed project.

Public Transit, Bicycle, or Pedestrian Facilities. Under Alternative 3, the planned transit, bicycle and pedestrian improvements would increase the multi-modal mobility in the study area but to a lesser extent than the proposed project since bicycle lanes are not included and there would be fewer miles of transit enhancements. The mobility enhancements that would occur would have slightly less regional connectivity when compared to the proposed project and benefits to these users would be less than the proposed project.

Parking. As with the proposed project, Alternative 3 would result in a loss of parking spaces that could increase VMT if people drive farther to find parking or seek an alternate destination with more convenient parking. However, this increased VMT would typically be off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Therefore, as with the proposed project, Alternative 3 would result in less-than-significant impacts related to parking. The mobility enhancements that would occur under Alternative 3 would be of similar intensity when compared to the proposed project and impacts related to parking would be similar to the proposed project.

Safety. As with the proposed project, safety conditions under Alternative 3 would be improved compared to Existing conditions with the addition of mobility enhancements that would benefit bicyclists, pedestrians, and transit users. Therefore, no significant impacts would occur related to safety. Mobility improvements affecting bicyclists, pedestrians, and transit patrons under Alternative 3 would be similar in intensity to the proposed project with the exception of bicycle lanes and the transit improvements that have been added to the proposed project. Nonetheless, overall at a Citywide level, Alternative 3 would result in similar improvements to safety as the proposed project.

Construction. As with the proposed project, implementation of on-street improvements related to the enhanced networks under Alternative 3 would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration lasting up to a few weeks. As with the proposed project, temporary and short-term effects related to construction would occur under Alternative 3; however, these impacts would be less than significant.

Land Use

Division of a Community. As with the proposed project, Alternative 3 would occur primarily within existing public right-of-way, would continue to be transportation related, would not alter the existing land use compatibility or create a barrier which could divide a community. As with the proposed project, potential parking loss or limitation could occur which could indirectly affect businesses. However, the change in parking availability at this scale would not be sufficient to result in significant displacement that would cause long-term vacancies and eventual blight and mitigation is provided to provide relief to affected businesses. Therefore, as with the proposed project, Alternative 3 would result in less-than-significant impacts related to the division of a community.

Land Use Consistency. As with the proposed project, the mobility improvements under Alternative 3 would be consistent with regional and local adopted plans and policies. Therefore, as with the proposed project, Alternative 3 would result in a less-than-significant impact related to consistency with applicable plans and

policies. The loss of bicycle lanes under this alternative would be less responsive to policies that promote bicycle use.

Air Quality

Conflict with Air Quality Plan. Alternative 3 would result in increased options for mobility; more walkable communities; and fewer travel barriers for active transportation and those who cannot drive such as children or people with disabilities. As with the proposed project, Alternative 3 would encourage an increase in non-driving modes of travel while maintaining certain routes for vehicles and goods movement. One of the goals of the AQMP is to reduce mobile source regional emissions, which can be demonstrated by a reduction in per capita VMT and associated emissions. Alternative 3 would reduce VMT within the City by 1,672,300 miles as compared to 1,742,200 mile for the proposed project. There would be an associated reduction in per capita VMT. These per capita VMT reductions demonstrate consistency with the AQMP goals. Therefore, as with the proposed project, Alternative 3 would result in less-than significant impacts related to a conflict with an air quality plan. Compared to the proposed project, Alternative 3 would result in a higher per capita VMT.

Violate Air Quality Standards. Alternative 3 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 3 emissions would be less than Existing emissions, and would not exceed the SCAQMD significance thresholds. Regarding construction emissions, it is anticipated that the daily construction intensity and associated daily emissions would be similar as presented for the proposed project, which resulted in a less-than-significant impact. Therefore, as with the proposed project, Alternative 3 would result in less-than significant impacts related to air quality standards. Compared to the proposed project, Alternative 3 would generate more emissions due to higher VMT.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 3 would increase VMT compared to existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. There is no potential for the project-related emissions to contribute to the Basin's cumulative impact for O₃, PM_{2.5}, PM₁₀, or Pb. To the contrary, it is anticipated that Alternative 3 would reduce VMT and associates mobile source emissions, thereby contributing towards the regional goal of eliminating the cumulative impact. Therefore, Alternative 3 would result in a less-than-significant impact related to a cumulatively considerable operational impact. Compared to the proposed project, Alternative 3 would generate more emissions and contribute less towards eliminating the region's cumulative impact.

Objectionable Odors Affecting a Substantial Number of People. As with the proposed project, Alternative 3 would not involve the release of substantial objectionable odors. As with the proposed project, Alternative 3 would result in less-than-significant impacts related to odors.

Greenhouse Gas Emissions

Generation of Significant GHG Emissions. Alternative 3 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 3 emissions would be less than Existing emissions. Therefore, as with the proposed project, Alternative 3 would result in less-than significant impacts related to GHG emissions. Compared to the proposed project, Alternative 3 would generate incrementally more emissions due to higher VMT.

Conflict with GHG Reduction Policies. The primary regional plan designed to reduce GHG emission is the RTP/SCS. Applicable goals of the RTP/SCS include encouraging non-motorized transportation and land use and growth patterns that facilitate transit and non-motorized transportation. Community plans within the City of Los Angeles include several objectives related to GHG reduction policies including, increasing

capacity on existing transportation systems through minor physical improvements, promoting pedestrian and bicycle use/reduction of dependence on automobiles, maintaining a safe and efficient street network, and promoting the use of transit. Alternative 3 would be consistent with community plan goals and objectives related to the promotion of pedestrian, transit and bicycle use, although to a lesser extent as compared to the proposed project. The development of a Citywide Enhanced Complete Street System (although less extensive than the proposed project) would include modal enhancements for particular major streets in mode-specific enhanced networks that together create a system of complete streets that would improve the overall multimodal transportation system. Alternative 3 would be consistent with policies and goals related to increasing capacity on existing transportation systems and with maintaining a safe and efficient street network (although to a lesser extent as compared to the proposed project). Therefore, Alternative 3 would result in less-than-significant impacts related to a conflict with GHG reduction policies. Compared to the proposed project, Alternative 3 would generate more emissions due to higher VMT and would be less consistent with GHG reduction policies.

Noise and Vibration

Expose Persons or Generate Excessive Noise or Vibration Levels Above Standards. Alternative 3 would have similar noise impacts as compared to the proposed project. As with the proposed project, Alternative 3 would result in a potentially significant impact related to bus noise. As with the proposed project, implementation of mitigation would reduce potential impacts on construction noise and construction vibration to less than significant.

Substantial Permanent Increase in Ambient Noise Levels. As with the proposed project, Alternative 3 would result in significant impacts related to permanent increase in bus noise. However, with fewer miles on the TEN, fewer people may be exposed to these increased noise levels.

Substantial Temporary Increase in Ambient Noise Levels. As with the proposed project, Alternative 3 would result in a potentially significant impact related to construction activity. As with the proposed project, implementation of mitigation would reduce impacts to less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. Alternative 3 mobility improvements would not expose people within proximity to airports to excessive noise levels. Therefore, no impact would occur. Alternative 3 would result in the same effect to airport noise exposure as the proposed project.

Biological Resources

Adverse Effect on Sensitive Species, Sensitive Habitats, or Wetlands. As with the proposed project, under Alternative 3, mobility improvements could require widening outside the right-of-way that could have an impact on sensitive species, sensitive habitats, and/or wetlands. Therefore, as with the proposed project, Alternative 3 would result in a significant impact to sensitive species, sensitive habitats, or wetlands.

Adverse Effect on Migratory Species or Wildlife Corridor. While, wildlife does sporadically find its way onto transportation infrastructure, as with the proposed project, the proposed mobility improvements under Alternative 3 would not create a condition that would increase exposure. Street trees within or immediately adjacent to the enhanced network right-of-ways could potentially support migratory birds. Therefore, as with the proposed project, construction activities associated with Alternative 3 could result in conflicts with the MBTA and CFGC through the removal or destruction of an active nest or direct mortality or injury of individual birds, creating a potentially significant impact. As with the proposed project, implementation of mitigation would reduce impacts to less than significant.

Conflict with Tree Preservation Ordinances, Habitat or Natural Community Conservation Plans. As with the proposed project, removal or disturbance of any trees under Alternative 3 would be subject to the City's Tree Preservation Ordinance which requires a permit for the removal or relocation of protected trees. The Department of Urban Forestry also has a goal to resolve conflicts between street trees and infrastructure, so as to preserve the urban forest to the extent possible. Existing trees would be preserved where possible

and/or relocated to the extent possible. The proposed mobility improvements would not be located in areas with a HCP or NCCP. Therefore, as with the proposed project, Alternative 3 would not conflict with a tree preservation ordinance, a HCP or NCCP and would not result in a significant impact.

ANALYSIS OF ALTERNATIVE 4 – PROJECT WITH PRIORITY BIKE LANES ONLY (in general those bike lanes that have been identified to be implemented in the short-term)

In terms of intensity, Alternative 4 lies between the proposed project and Alternative 3. Alternative 4 reflects an alternative with similar comprehensive mobility improvements as the proposed project that would, in turn, result in similar environmental impacts. The primary difference between Alternative 4 and the proposed project is that Alternative 4 includes only priority lanes (in general those bike lanes that have been identified to be implemented in the short-term) on the bicycle network. The resulting outcome of the inclusion of priority bike lanes only into Alternative 4 provides a multimodal transportation network with increased connectivity compared to Alternative 3 and less connectivity compared to the proposed project.

Transportation, Parking, and Safety

Consistency with Plans. As with the proposed project, implementation of Alternative 4 would result in comprehensive improvements to the transportation network. These improvements would be consistent with transportation plans which aim to facilitate the movement of all modes of travel. Therefore, as with the proposed project Alternative 4 would result in less-than-significant impacts related to the consistency with transportation plans.

Circulation System. Daily VMT under Alternative 4 would be greater than existing conditions and greater than the proposed project (since Alternative 4 includes fewer bicycle enhancements). However, fewer vehicle lane conversions would occur under Alternative 4, which would provide additional capacity for vehicle travel compared to the proposed project. This would result in slightly less congestion and an incremental decrease in impacts to the circulation system compared to the proposed project.

Neighborhood Intrusion. Along roadways where Alternative 4 would cause increases in traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that increased traffic could occur on roadways through neighborhoods. However, the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative. They are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and are not able to capture the benefits of a shift to multimodal options. As for the project, Alternative 4 would result in a potentially significant impact related to neighborhood intrusion. As described above, the slightly greater VMT, along with fewer vehicle lane conversions, would result in slightly less congestion than the proposed project, which would result in a slightly less likelihood for cut-through traffic. Therefore, Alternative 4 would have more incrementally fewer effects related to neighborhood intrusion than compared to the proposed project.

Congestion Management Program. VMT under Alternative 4 would be greater than Existing conditions and greater than the proposed project. The greater VMT under Alternative 4, along with fewer vehicle lane conversions would result in slightly less congestion than the proposed project and a slightly lower demand to capacity ratio than the proposed project. Therefore, Alternative 4 would have incrementally fewer effects related to CMP than compared to the proposed project.

Emergency Access. As with the proposed project, Alternative 4 would result in increased congestion, which could impede emergency access resulting in potentially significant impacts to emergency access. The similar mobility enhancements of Alternative 4, as compared to the proposed project, would provide for movement for emergency vehicles in a similar way. Therefore, the significant impacts related to emergency access for Alternative 4 would be similar to the proposed project.

Public Transit, Bicycle, or Pedestrian Facilities. As with the proposed project, under Alternative 4, the planned transit, bicycle and pedestrian improvements would increase the multi-modal mobility in the study area. The mobility enhancements that would occur would have slightly less regional connectivity for Alternative 4 when compared to the proposed project and beneficial impacts related to bicycle facilities would be less than the proposed project.

Parking. As with the proposed project, Alternative 4 would result in a loss of parking spaces that could increase VMT if people drive farther to find parking or seek an alternate destination with more convenient parking. However, as with the proposed project, this increased VMT would typically be off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Therefore, as with the proposed project, Alternative 4 would result in less-than-significant impacts related to parking. The mobility enhancements included in Alternative 4 would be of similar intensity (but with fewer bike lanes) as the proposed project and impacts related to parking would be similar to the proposed project.

Safety. As with the proposed project, safety conditions under Alternative 4 would be improved with the addition of mobility enhancements that would benefit bicyclists, pedestrians, and transit users (although with fewer bicycle lanes, fewer benefits would be available to bicyclists).

Construction. As with the proposed project, implementation of on-street improvements related to the enhanced networks under Alternative 4 would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration lasting up to a few weeks. Therefore, Alternative 4 would result in similar less-than-significant impacts related to construction as compared to the proposed project.

Land Use

Division of a Community. As with the proposed project, Alternative 4 would be primarily limited to or adjacent to the existing public right-of-way, would continue to be transportation related, would not alter the existing land use compatibility or create a barrier which could divide a community. As with the proposed project, potential parking loss or limitation could occur which could indirectly affect businesses. However, the change in parking availability at this scale would not be sufficient to result in significant displacement that would cause long-term vacancies and eventual blight and mitigation is provided to provide relief to affected businesses. Therefore, as with the proposed project, Alternative 4 would result in less-than-significant impacts related to the division of a community. Mobility improvements affecting bicyclists, pedestrians, and transit patrons under Alternative 4 would be similar to the proposed project, but with fewer benefits to bicyclists. Therefore, Alternative 3 would result in similar effects to the division of a community as the proposed project.

Land Use Consistency. As with the proposed project, the mobility improvements under Alternative 4 would be consistent with regional and local adopted plans and policies. Therefore, as with the proposed project, Alternative 4 would result in a less-than-significant impact related to consistency with applicable plans and policies. The mobility improvements under Alternative 4 would be similar in intensity as the proposed project and would achieve a similar level of project objectives and multi-modal mobility improvements as the proposed project, with slightly less bicycle connectivity.

Air Quality

Conflict with Air Quality Plan. Alternative 4 would result in increased options for mobility; more walkable communities; and fewer travel barriers for active transportation and those who cannot drive such as children

or people with disabilities. As with the proposed project, Alternative 4 would encourage an increase in non-driving modes of travel while maintaining certain routes for vehicles and goods movement. One of the goals of the AQMP is to reduce mobile source regional emissions, which can be demonstrated by a reduction in per capita VMT and associated emissions. The daily VMT related to Alternative 4 would be incrementally greater than the VMT for the proposed project, which would reduce VMT within the City by 1,742,200 miles. There would be an associated reduction in per capita VMT. The per capita VMT reduction demonstrates consistency with the AQMP goals. Therefore, as with the proposed project, Alternative 4 would result in less-than significant impacts related to a conflict with an air quality plan. Compared to the proposed project, Alternative 4 would result in an incrementally higher per capita VMT.

Violate Air Quality Standards. Alternative 4 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 4 emissions would be less than Existing emissions, and would not exceed the SCAQMD significance thresholds. Regarding construction emissions, it is anticipated that the daily construction intensity and associated daily emissions would be similar as presented for the proposed project, which resulted in a less-than-significant impact. Therefore, as with the proposed project, Alternative 4 would result in less-than significant impacts related to air quality standards. Compared to the proposed project, Alternative 4 would generate incrementally more emissions due to higher VMT.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 4 would increase incrementally VMT compared to existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. There is no potential for the project-related emissions to contribute to the Basin's cumulative impact for O₃, PM_{2.5}, PM₁₀, or Pb. To the contrary, it is anticipated that Alternative 4 would reduce VMT and associates mobile source emissions, thereby contributing towards the regional goal of eliminating the cumulative impact. Therefore, Alternative 4 would result in a less-than-significant impact related to a cumulatively considerable operational impact. Compared to the proposed project, Alternative 4 would generate incrementally more emissions and contribute less towards eliminating the region's cumulative impact.

Objectionable Odors Affecting a Substantial Number of People. As with the proposed project, Alternative 4 would not involve the substantial release of objectionable odors. As with the proposed project, Alternative 4 would result in less-than-significant impacts related to odors.

Greenhouse Gas Emissions

Generation of Significant GHG Emissions. Alternative 4 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 4 emissions would be less than Existing emissions. Therefore, as with the proposed project, Alternative 4 would result in less-than significant impacts related to GHG emissions. Compared to the proposed project, Alternative 4 would generate incrementally more emissions due to higher VMT.

Conflict with GHG Reduction Policies. The primary regional plan designed to reduce GHG emission is the 2012-2035 RTP/SCS. Applicable goals of the 2012-2035 RTP/SCS include encouraging non-motorized transportation and land use and growth patterns that facilitate transit and non-motorized transportation. Community plans within the City of Los Angeles include several objectives related to GHG reduction policies including, increasing capacity on existing transportation systems through minor physical improvements, promoting pedestrian and bicycle use/reduction of dependence on automobiles, maintaining a safe and efficient street network, and promoting the use of transit. Alternative 4 would be consistent with community plan goals and objectives related to the promotion of pedestrian, transit and bicycle use, although to a lesser extent as compared to the proposed project. The development of a Citywide Enhanced Complete

Street System (although less extensive than the proposed project) would include modal enhancements for particular major streets in mode-specific enhanced networks that together create a system of complete streets that would improve the overall multimodal transportation system. Alternative 4 would be consistent with policies and goals related to increasing capacity on existing transportation systems and with maintaining a safe and efficient street network (although to a lesser extent as compared to the proposed project). Therefore, Alternative 4 would result in less-than-significant impacts related to a conflict with GHG reduction policies. Compared to the proposed project, Alternative 4 would incrementally generate more emissions due to higher VMT and would be less consistent with GHG reduction policies.

Noise and Vibration

Expose Persons or Generate Excessive Noise or Vibration Levels Above Standards. As with the proposed project, Alternative 4 would result in a potentially significant impact related to construction noise and construction vibration; with implementation of mitigation, these impacts could be reduced to less than significant. As with the proposed project, noise impacts related to increased bus movements and changes to the TEN could result in significant impacts related to increased bus noise.

Substantial Permanent Increase in Ambient Noise Levels. As with the proposed project, Alternative 4 would result in significant impacts related to permanent increases in bus noise.

Substantial Temporary Increase in Ambient Noise Levels. As with the proposed project, Alternative 4 would result in a potentially significant impact as a result of construction activity. As with the proposed project, implementation of mitigation could reduce these impacts to less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. Alternative 4 mobility improvements would not expose people within proximity to airports to excessive noise levels. Therefore, no impact would occur. Alternative 4 would result in the same effect to airport noise exposure as the proposed project.

Biological Resources

Adverse Effect on Sensitive Species, Sensitive Habitats, or Wetlands. As with the proposed project, under Alternative 4, mobility improvements could require widening outside the right-of-way that would have the potential to affect sensitive species, sensitive habitats, and/or wetlands. Therefore, as with the proposed project, a potentially significant impact related to an adverse effect on sensitive species, sensitive habitats, and/or wetlands would occur.

Adverse Effect on Migratory Species or Wildlife Corridor. While wildlife does sporadically find its way to transportation infrastructure, as with the proposed project, the proposed mobility improvements under Alternative 4 would not create a condition that would increase exposure. Street trees within or immediately adjacent to the enhanced network right-of-ways potentially support migratory birds. Accordingly, as with the proposed project, construction activities associated with Alternative 4 could result in conflicts with the MBTA and CFGC through the removal or destruction of an active nest or direct mortality or injury of individual birds, creating a potentially significant impact. As with the proposed project, implementation of mitigation could reduce impacts to migratory birds to less than significant.

Conflict with Tree Preservation Ordinances, Habitat or Natural Community Conservation Plans. The removal or disturbance of any trees would be subject to the City's Tree Preservation Ordinance, which requires a permit for the removal or relocation of protected trees. The Department of Urban Forestry has a goal to resolve conflicts between street trees and infrastructure, so as to preserve the urban forest to the extent possible. Existing trees would be preserved where possible and/or relocated to the extent possible. As with the proposed project, the proposed mobility improvements would not be located in areas with a HCP or NCCP. Therefore, as with the proposed project, Alternative 4 would not conflict with a tree preservation ordinance, a HCP or NCCP and would not result in a significant impact.

ANALYSIS OF ALTERNATIVE 5 – INCREASED COMPREHENSIVE ENHANCEMENTS, TRANSIT ONLY LANES

Alternative 5 reflects an alternative with more comprehensive mobility improvements than the proposed project that would, in turn, result in more environmental impacts. The primary difference between Alternative 5 and the proposed project is that Alternative 5 includes the maximum set of enhancements to the TEN, which involves all day lane conversions to bus only lanes.

Transportation, Parking, and Safety

Consistency with Plans. Implementation of Alternative 5 would result in increased comprehensive improvements to the transportation network. These improvements would be consistent with transportation plans that aim to facilitate the movement of all modes of travel. Therefore, Alternative 5, as with the proposed project, would result in less-than-significant impacts related to the consistency with transportation plans. The mobility enhancements that would occur under Alternative 5 would enhance consistency with transportation plans related to multimodal improvements but would be less consistent with transportation plans related to the flow of vehicles. When compared to the proposed project, impacts related to consistency with plans would be similar to the proposed project.

Circulation System. Daily VMT under Alternative 5 would be less than the proposed project. Alternative 5 would result in greater vehicle lane conversions and, therefore, in more potentially significant impacts related to the circulation system as compared to the proposed project. The conversion of lanes to all day bus only lanes on the TEN would likely increase vehicle congestion compared to the proposed project. This would result in more congestion and an increase in impacts to the circulation system compared to the proposed project.

Neighborhood Intrusion. Alternative 5 would cause increases in traffic congestion along roadways compared to the proposed project; therefore, increased diversion of trips could occur onto adjacent parallel routes and through neighborhoods. However, the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative. They are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and is not able to capture the benefits of a shift to multimodal options. As with the proposed project, Alternative 5 would result in a potentially significant impact related to neighborhood intrusion (impacts would be greater than the proposed project).

Congestion Management Program. VMT under Alternative 5 would be less than the proposed project. However, the conversion of vehicle lanes to all day bus only lanes on the TEN would likely increase vehicle congestion compared to the proposed project. This would result in more congestion and an increase in impacts to the CMP compared to the proposed project.

Emergency Access. As with the proposed project, Alternative 5 would result in increased congestion, which could impede emergency access. It is likely that the all day bus only lanes would provide additional movement opportunities for emergency vehicles. Therefore, the significant impacts related to emergency access for Alternative 5 would be less than the proposed project. Nonetheless, this impact could remain significant because of the number of areas of the city without bus only lanes.

Public Transit, Bicycle, or Pedestrian Facilities. As with the project, under Alternative 5, the planned transit, bicycle and pedestrian improvements would increase the multi-modal mobility in the study area. The mobility enhancements that would occur would have more regional connectivity for Alternative 5 when compared to the proposed project because of increased transit enhancements.

Parking. As with the proposed project, Alternative 5 would result in a loss of parking spaces that could increase VMT if people drive farther to find parking or seek an alternate destination with more convenient parking. However, this increased VMT would typically be off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Therefore, as with the proposed project, Alternative 5 would result in less-than-significant impacts related to parking. The mobility enhancements for Alternative 5 would have more lane conversions, and could result in more lost parking when compared to the proposed project and impacts related to parking would be more than the proposed project but still anticipated to be less than significant.

Safety. As with the proposed project, safety conditions under Alternative 5 would be improved with the addition of mobility enhancements that would benefit bicyclists, pedestrians, and transit users. Therefore, no significant impacts would occur related to safety. Mobility improvements affecting bicyclists and pedestrians would be similar in intensity to the proposed project; transit safety improvements could be greater than the proposed project.

Construction. As with the proposed project, implementation of on-street improvements related to the enhanced networks under Alternative 5 would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration lasting up to a few weeks. Therefore, as with the proposed project, temporary and short-term effects related to construction would occur; however, as for the proposed project these impacts would be short-term and less than significant.

Land Use

Division of a Community. As with the proposed project, Alternative 5 would be within existing public right-of-way, would continue to be transportation related, would not alter the existing land use compatibility or create a barrier that could divide a community. As with the proposed project, potential parking loss or limitation could occur which could indirectly affect businesses. However, the change in parking availability at this scale would not be sufficient to result in significant displacement that would cause long-term vacancies and eventual blight and mitigation is provided to provide relief to affected businesses. Therefore, as with the proposed project, Alternative 5 would result in less-than-significant impacts related to the division of a community.

Land Use Consistency. As with the proposed project, the mobility improvements under Alternative 5 would be consistent with regional and local adopted plans and policies. Therefore, Alternative 5 would result in a less-than-significant impact related to consistency with applicable plans and policies.

Air Quality

Conflict with Air Quality Plan. Alternative 5 would result in increased options for mobility; more walkable communities; and fewer travel barriers for active transportation and those who cannot drive such as children or people with disabilities. As with the proposed project, Alternative 5 would encourage an increase in non-driving modes of travel while maintaining certain routes for vehicles and goods movement. One of the goals of the AQMP is to reduce mobile source regional emissions, which can be demonstrated by a reduction in per capita VMT and associated emissions. The daily VMT related to Alternative 5 would be incrementally less than the VMT for the proposed project, which would reduce VMT within the City by 1,742,200 miles. This is due to increased transit options. There would be an associated reduction in per capita VMT. The per capita VMT reduction demonstrates consistency with the AQMP goals. Therefore, as with the proposed project, Alternative 5 would result in less-than significant impacts related to a conflict with an air quality plan. Compared to the proposed project, Alternative 5 would result in an incrementally less per capita VMT.

Violate Air Quality Standards. Alternative 5 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 5 emissions would be less than Existing emissions, and would not exceed the SCAQMD significance thresholds. Regarding construction emissions, it is anticipated that the daily

construction intensity and associated daily emissions would be similar as presented for the proposed project, which resulted in a less-than-significant impact. Therefore, as with the proposed project, Alternative 5 would result in less-than significant impacts related to air quality standards. Compared to the proposed project, Alternative 5 would generate incrementally less emissions due to reduced VMT.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 5 would increase VMT compared to existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. There is no potential for the project-related emissions to contribute to the Basin's cumulative impact for O₃, PM_{2.5}, PM₁₀, or Pb. To the contrary, it is anticipated that Alternative 5 would reduce VMT and associates mobile source emissions, thereby contributing towards the regional goal of eliminating the cumulative impact. Therefore, Alternative 5 would result in a less-than-significant impact related to a cumulatively considerable operational impact. Compared to the proposed project, Alternative 5 would generate fewer emissions and contribute more towards eliminating the region's cumulative impact.

Objectionable Odors Affecting a Substantial Number of People. As with the proposed project, Alternative 5 would not involve the release of substantial objectionable odors. As with the proposed project Alternative 5 would result in less than significant impacts related to odors.

Greenhouse Gas Emissions

Generation of Significant GHG Emissions. Alternative 5 would increase VMT compared to Existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems combined with normal turnover in the vehicle fleet. Alternative 5 emissions would be less than Existing emissions. Therefore, as with the proposed project, Alternative 5 would result in less-than significant impacts related to GHG emissions. Compared to the proposed project, Alternative 5 would generate incrementally less emissions due to reduced VMT.

Conflict with GHG Reduction Policies. The primary regional plan designed to reduce GHG emission is the RTP/SCS. Applicable goals of the RTP/SCS include encouraging non-motorized transportation and land use and growth patterns that facilitate transit and non-motorized transportation. Community plans within the City of Los Angeles include several objectives related to GHG reduction policies including, increasing capacity on existing transportation systems through minor physical improvements, promoting pedestrian and bicycle use/reduction of dependence on automobiles, maintaining a safe and efficient street network, and promoting the use of transit. Alternative 5 would be consistent with community plan goals and objectives related to the promotion of pedestrian, transit and bicycle use. The development of a Citywide Enhanced Complete Street System would include modal enhancements for particular major streets in mode-specific enhanced networks that together create a system of complete streets that would improve the overall multimodal transportation system. Alternative 5 would be consistent with policies and goals related to increasing capacity on existing transportation systems and with maintaining a safe and efficient street network. Therefore, Alternative 5 would result in less-than-significant impacts related to a conflict with GHG reduction policies. Compared to the proposed project, Alternative 5 would generate incrementally less emissions due to reduced VMT, and would be more consistent with GHG reduction policies.

Noise and Vibration

Expose Persons or Generate Excessive Noise or Vibration Levels Above Standards. As with the proposed project, Alternative 5 would result in a potentially significant impact related to construction noise and construction vibration; with implementation of mitigation, these impacts could be reduced to less than significant. Increased transit enhancements could result in a greater impact on bus noise as compared to the proposed project and this impact would be significant as with the proposed project.

Substantial Permanent Increase in Ambient Noise Levels. As with the proposed project, Alternative 5 would result in significant impacts related to a permanent increase in bus noise (the impact could be greater than the project because of the increased bus facilities).

Substantial Temporary Increase in Ambient Noise Levels. As with the proposed project, Alternative 5 would result in a potentially significant impact from construction noise. As with the proposed project, implementation of mitigation could reduce these impacts to less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. Alternative 5 mobility improvements would not expose people within proximity to airports to excessive noise levels. Therefore, no impact would occur. Alternative 5 would result in the same effect to airport noise exposure as the proposed project.

Biological Resources

Adverse Effect on Sensitive Species, Sensitive Habitats, or Wetlands. As with the proposed project, Alternative 5 could require widening outside the right-of-way that could have to potential to affect sensitive species, sensitive habitats, and/or wetlands. Therefore, as with the proposed project, a significant impact related to an adverse effect on sensitive species, sensitive habitats, and/or wetlands could occur.

Adverse Effect on Migratory Species or Wildlife Corridor. While, wildlife does sporadically find its way onto transportation infrastructure, as with the proposed project, the proposed mobility improvements under Alternative 5 would not create a condition that would increase the exposure. Street trees within or immediately adjacent to the enhanced network right-of-ways could potentially support migratory birds. Accordingly, as with the proposed project, construction activities associated with Alternative 5 could result in conflicts with the MBTA and CFGC through the removal or destruction of an active nest or direct mortality or injury of individual birds, creating a potentially significant impact. As with the proposed project, the implementation of mitigation would reduce this impact to less than significant.

Conflict with Tree Preservation Ordinances, Habitat or Natural Community Conservation Plans. As with the proposed project, the removal or disturbance of any trees would be subject to the City's Tree Preservation Ordinance, which requires a permit for the removal or relocation of protected trees. The Department of Urban Forestry also has a goal to resolve conflicts between street trees and infrastructure, so as to preserve the urban forest to the extent feasible. Existing trees would be preserved where possible and/or relocated to the extent possible. The proposed mobility improvements would not be located in areas with a HCP or NCCP. Therefore, as with the proposed project, Alternative 5 would not conflict with a tree preservation ordinance, a HCP or NCCP and would not result in a significant impact.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6 of the State CEQA Guidelines requires that an "environmentally superior" alternative be selected among the alternatives that are evaluated in the EIR. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives. **Table 5-2**, at the end of this chapter, provides a summary comparison of impacts for the proposed project and alternatives.

Transportation, Parking and Safety

As described in this chapter, similar to the proposed project, all alternatives would result in increased traffic (attributable to growth that is anticipated to occur with or without the project). All of the proposed alternatives and project would result in significant impacts to the vehicular transportation network. However, the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative. They are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and is not able to capture the benefits of a shift to multimodal options.

Alternatives 1, the No Project Alternative and Alternative 2 would have the least impacts to the transportation network compared to the other alternatives. Alternative 5 would result in the most impacts to the vehicular transportation network.

Alternative 1 would have potentially significant impacts related to the CMP. The proposed project and Alternatives 2, 3, 4, 5 would have less-than-significant impacts related to the CMP. All of the alternatives would result in potentially significant impacts to emergency access and less-than-significant impacts related to safety, public transit, pedestrian and bicycle facilities, construction, and parking. Alternative 5 and the proposed project would have the least significant impacts related to safety, public transit, pedestrian and bicycle facilities; however they would have the greatest effects related to construction and parking.

Land Use and Planning

Alternative 1, the No Project Alternative, would be the least consistent with recent State, regional, and local land use policy. Alternative 5 and the proposed project would be the most consistent with applicable land use policies. None of the alternatives would result in the division of a community.

Air Quality

Alternative 1 could conflict with the AQMP because it does not support policies designed to reduce VMT and emissions. The proposed project and Alternatives 2, 3, 4, 5 would have potentially significant impacts related to construction emissions. Mitigation Measures provided in **Section 4.3 Air Quality** would reduce these effects to less than significant. The proposed project and Alternative 5 would have the greatest VMT reductions which could correspond to fewer criteria pollutant emissions.

Greenhouse Gases

Alternative 1 would conflict with GHG reduction policies because it does not support policies designed to reduce VMT and emissions. The proposed project and Alternatives 2, 3, 4, 5 would have less-than-significant impacts related to GHG emissions. The proposed project and Alternative 5 would have the greatest VMT reductions which would correspond to a lower generation of GHG emissions.

Noise and Vibration

Alternative 1 would not have potentially significant impacts related to noise and vibration. The proposed project and Alternatives 2, 3, 4, 5 would have potentially significant impacts related to construction noise and vibration. Mitigation Measures provided in **Section 4.5 Noise and Vibration** would reduce these effects to less than significant. The proposed project and Alternatives 2, 3, 4, 5 would have potentially significant impacts related to bus noise on the TEN. Alternative 5 would have the most significant impacts to as a result of the transit intensive features of this alternative.

Biological Resources

The proposed project and all of the alternatives except Alternative 1 would result in potentially significant impacts to sensitive species, sensitive habitats, and wetlands.

Conclusion

As indicated above, there are no alternatives that would eliminate the significant impacts associated with the proposed project and satisfy a majority of project goals and objectives. Even the No project Alternative results in many of the same impacts as the project because of the anticipated increased development between now and 2035. The No Project Alternative may not have the noise impact associated with buses or the biological impact associated with widening of roadways, but it would have additional impacts related to inconsistency with land use and air quality plans.

The alternatives evaluated would satisfy project goals and objectives and vary incrementally in the intensity of environmental effects. The proposed project and Alternatives 2, 3, 4, and 5 would result in significant impacts to circulation, neighborhood intrusion, CMP, emergency access, bus noise, sensitive species, sensitive habitats, and wetlands. Although the impacts anticipated under Alternative 2 would be similar to Alternatives 3, 4, and 5, and the proposed project, Alternative 2 would result in an incrementally lower level of effect due to the lower intensity of physical changes to the enhanced networks (reduced intervention with existing roadways) while at the same time achieving project objectives (albeit to a lesser degree than the project). Therefore, Alternative 2 is considered to be the environmentally superior alternative due to a lower level of environmental impacts.

It should be noted however that the model-estimated changes in circulation system conditions for the project, and alternatives that include increased facilities for bicyclists, pedestrians and transit users, are conservative with respect to vehicle impacts. That is they are vehicle-centric estimates based on historical travel behavior patterns and do not account for changes in demographics, vehicle ownership patterns, energy prices, and migration to alternate modes (pedestrian, bicycle and transit) that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections and are not able to capture the benefits of a shift to multimodal options. The proposed project would achieve more multi-modal mobility improvements and, in the long run, it is anticipated that a more robust multi-modal network as would occur under the proposed project, could be more beneficial to the City as mode shift choices continue to evolve, i.e. as more people choose alternative modes to vehicles, greater choice would be provided by the proposed project (as compared to Alternative 2) because alternative modes (transit, bicycles and pedestrian) would have more interconnected networks potentially accelerating mode shifts to modes other than vehicles and thereby further reducing impacts (fewer air emissions, fewer GHG emissions) beyond those presented in this EIR.

TABLE 5-2: COMPARISON OF IMPACTS – PROPOSED PROJECT AND ALTERNATIVES						
Environmental Issue	Proposed Project	Alternative 1 (No Project)	Alternative 2 (Fewer Comprehensive Enhancements)	Alternative 3 (Project Without Bike Lanes, Fewer Miles of Transit Enhancements)	Alternative 4 (Project with - Priority Bike Lanes Only)	Alternative 5 (Increased Comprehensive Enhancements, Transit Only Lanes)
TRANSPORTATION, PARKING, & SAFETY						
Plans and Policies	Less than Significant	Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Circulation	Significant	Significant	Significant	Significant	Significant	Significant
Neighborhood Intrusion	Significant	Significant	Significant	Significant	Significant	Significant
CMP	Significant	Significant	Significant	Significant	Significant	Significant
Emergency Access	Significant	Significant	Significant	Significant	Significant	Significant
Public Transit, Bicycle, or Pedestrian Facilities	Beneficial	No Impact	Beneficial	Beneficial	Beneficial	Beneficial
Parking	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Safety	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Construction	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
LAND USE & PLANNING						
Consistency Plans, Policies	Less than Significant	Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Division of a Community	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
AIR QUALITY						
Conflict with AQ Plan	Less than Significant	Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Violate AQ Standards	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Criteria Pollutants	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Objectionable Odors	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
GREENHOUSE GASES						
GHG Emissions	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
GHG Reduction Policies	Less than Significant	Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
NOISE & VIBRATION						
Excessive Noise, Vibration	Significant	Less than Significant	Significant	Significant	Significant	Significant
Permanent Noise Increase	Significant	Less than Significant	Significant	Significant	Significant	Significant
Temporary Noise Increase	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Airports or Airstrips	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant	Less than Significant
BIOLOGICAL RESOURCES						
Sensitive Species/Habitats, Wetlands	Significant	No Impact	Significant	Significant	Significant	Significant
Migratory Species or Wildlife Corridors	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Tree Preservation Policies or HCP and NCCP	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significant
SOURCE: TAHA, 2015.						