

4.1 Introduction

Sections 15126 and 15130 of the State CEQA Guidelines provide that EIRs consider the significant environmental effects of a proposed project, as well as cumulative impacts. “Cumulative impacts” are two or more individual effects that, when considered together, are considerable or compound and increase other environmental impacts (CEQA Guidelines Section 15355). Cumulative impacts may be analyzed by considering a list of past, present, and possible future projects producing related or cumulative impacts (CEQA Guidelines Section 15130[b][1][A]) or through a summary of projections adopted in a local, regional, or statewide plan (CEQA Guidelines Section 15130[B]).

An EIR is to focus the discussion on the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable (CEQA Guidelines Section 15130). “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (CEQA Guidelines Section 15065[a][3]).

As set forth in the CEQA Guidelines (Section 15130[b]), the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. The analysis should be guided by the standards of practicality and reasonableness, and it should focus on the cumulative impacts to which the other identified projects contribute to the cumulative impact. “The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.”

Based on the foregoing direction, the analysis in this DEIR chapter provides:

- Long-range demographic forecasts based on adopted regional plans.
- A determination of whether the long-term impacts of all related past, present, and future plans and projects would cause a cumulatively significant impact.
- A determination as to whether implementation of the proposed project would have a “cumulatively considerable” contribution to any significant cumulative impact. (See CEQA Guidelines Sections 15130[a] and 15130[b], 15355[b], 15064[h], and 15065[c].)

The cumulative impacts analysis considers the long-term effects of a proposed project (i.e., over the 30-year implementation period of the Sidewalk Repair Program, in accordance with the City’s obligations under the *Willits* settlement). These impacts may not be apparent in the near term but may evolve into beneficial or adverse impacts in the long term. The discussion of cumulative impacts is guided by standards of practicality and reasonableness. Beneficial impacts are also considered in this analysis of cumulative impacts. In the case of the proposed Project, beneficial impacts include those associated with improved sidewalks, access, and mobility or improvements to the environment.

4.2 Summary of Projections

There are two ways to address the question of which related actions should be considered in the context of past, present, and reasonably foreseeable actions when considered with the proposed Project. As stated above, State CEQA Guidelines Section 15130(b) allows the discussion to proceed along the lines of either a “list of past, present, and probable future projects producing related or cumulative impacts” or a “summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative impact. Such plans may include a general plan, a regional transportation plan, or plans for the reduction of greenhouse gas (GHG) emissions. A summary of projections may also be contained in an adopted or certified environmental document for such a plan.”

For purposes of this EIR, the geographic boundary considered in the environmental analysis varies depending on the type of resource considered. For instance, impacts related to air quality would be regional because the emissions from construction and operation of the Project would not be restricted to the City. Consequently, the cumulative impact analysis considers environmental impacts within the air basin. GHG emissions, similarly, are cumulative and global in nature. Generally, however, the cumulative impacts analysis considers the geographic scope to include the City, and reflects consideration of whether the Project will cause a new significant cumulative impact or result in a cumulatively considerable contribution to a previously identified significant cumulative impact included in an adopted local, regional, or statewide plan. Therefore, the EIR uses the “summary of projections” methodology.

The cumulative impacts analysis for each resource area also considers impacts related to the general growth projected for the area as well as the policies and programs that are in place to protect, conserve, and improve environmental resources. The regional plans and programs for land use and mobility were consulted for planned future conditions. General plans prepared by the City and County, as well as the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP), provide information on trends as well as forecasts relevant to the cumulative impacts analysis for specific disciplines.

The discussion below describes the plans, programs, and projections as well as the context in which the proposed Project may contribute to potential cumulative impacts.

4.2.1 City of Los Angeles General Plan

As discussed in Chapter 3.9, Land Use, the City of Los Angeles General Plan is a comprehensive long-range declaration of purposes, policies, and programs for development of the City. The General Plan includes a Framework Element as well as several other elements that help to guide land use and planning decisions in the City. For purposes of the cumulative impacts analysis for the Project, the Framework Element and Mobility Plan 2035 are addressed herein.

4.2.1.1 Framework Element

The General Plan Framework Element (City of Los Angeles 2001) is a strategy for long-term growth that sets a citywide context for guiding updates to the community plan and citywide elements. The Framework Element does not mandate or encourage growth. Because population forecasts are estimates about the future and not an exact science, it is possible that population growth, as estimated, may not occur. It may be less, or it may be more. The City could be at the beginning of a

long decline in population or a sharp increase. Should the City continue to grow, the Framework Element will provide a means for accommodating new population and employment growth in a manner that enhances rather than degrades the environment. The Framework Element is based on a planning horizon for population and employment growth, with approximately 820,000 new residents and approximately 390,000 new jobs.

4.2.1.2 Mobility Plan 2035

Mobility Plan 2035, an element of the City of Los Angeles General Plan (City of Los Angeles 2016), provides the policy foundation for achieving a transportation system that balances the needs of all road users. The purpose of the plan is to guide future development of a citywide transportation system that provides for the efficient movement of people and goods. In 2008, the California State Legislature adopted Assembly Bill 1358, The Complete Streets Act, which requires local jurisdictions to “plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban or urban context.” Mobility Plan 2035 incorporates “complete streets” principles and lays the policy foundation for how future generations of Angelenos interact with their streets.

Mobility Plan 2035 includes goals that define the City’s high-level mobility priorities. Each of the goals contains objectives (i.e., targets to help measure the progress of the plan) and policies (broad strategies that guide the City’s achievement of the plan’s five goals).

The following objectives and policies are applicable to the Sidewalk Repair Program:

- **Safety First Objective:** Increase pedestrian safety in the design and implementation of “complete streets” projects in the top 25% of Senate Bill 565 disadvantaged communities in the City or as subsequently identified through tools used by the City.
- **World Class Infrastructure Objective:** Bring all sidewalks to good condition by 2035. Bring all City-owned streets, tunnels, and bridges to good condition by 2035.
- **Access for All Angelenos Objective:** Install pedestrian access curb ramps at 100% of intersections by 2035.
- **Policy 1.1 Roadway User Vulnerability:** Design, plan, and operate streets to prioritize the safety of the most vulnerable roadway user.
- **Policy 1.2 Complete Streets:** Implement a balanced transportation system on all streets, tunnels, and bridges, using “complete streets” principles to ensure the safety and mobility of all users.
- **Policy 1.6 Multimodal Detour Facilities:** Design detour facilities to provide safe passage for all modes of travel during times of construction.
- **Policy 2.3 Pedestrian Infrastructure:** Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.
- **Policy 3.2 People with Disabilities:** Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.

4.2.2 Los Angeles County General Plan

The Los Angeles County General Plan (County of Los Angeles 2015a) provides a policy framework and establishes a long-range vision for how and where the unincorporated areas will grow. It establishes goals, policies, and programs to foster healthy, livable, and sustainable communities. The County General Plan uses a regional strategy to guide growth in a way that plans for more efficient and sustainable land use patterns and address climate change, mobility, and community development. The General Plan plans for total growth by encouraging development in areas with infrastructure and access to transit and discouraging growth in undeveloped areas and environmentally sensitive and hazardous areas. The General Plan's growth forecast is from the SCAG 2012 RTP, which accounts for 11.35 million people in the county (1.39 million in unincorporated areas) and 3.85 million households in the county (405,500 in unincorporated areas) by 2035.

4.2.2.1 Mobility Element

The Mobility Element of the County General Plan (County of Los Angeles 2015a) provides an overview of transportation infrastructure and strategies for developing an efficient and multimodal transportation network. The Mobility Element addresses the requirements of the California Complete Streets Act of 2008, which requires the County General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, users of public transit, motorists, children, seniors, and those in the disability community. The element assesses the challenges and constraints of the Los Angeles County transportation system and offers policy guidance to reach the County's long-term mobility goals. The County General Plan also establishes a program to prepare community pedestrian plans, with guidelines and standards to promote walkability and connectivity throughout the unincorporated areas. The County participates in establishing policies, promoting specific projects, and funding the strategies in the SCAG RTP and the Los Angeles County Metropolitan Transportation Authority (Metro) Long-Range Transportation Plan.

The Mobility Element includes policies and programs that consider all modes of travel, with the goal of making streets safer, accessible, and more convenient for people walking, bicycling, or taking transit. The following goals and policies are applicable to the Sidewalk Repair Program:

- **Goal M 1:** Street designs that incorporate the needs of all users.
 - **Policy M 1.1:** Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.
- **Goal M 2:** Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths, and trails that promote active transportation and transit use.
 - **Policy M 2.1:** Provide transportation corridors/networks that accommodate pedestrians, equestrians, and bicyclists and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.
 - **Policy M 2.4:** Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:
 - Designs for curb ramps that are pedestrian friendly and compliant with the Americans with Disabilities Act.

- Perpendicular curb ramps at locations where it is feasible.

Chapter 16 of the County General Plan (General Plan Implementation Programs) contains implementation measures for various programs that are presented in the County General Plan. Of most relevance to the Sidewalk Repair Program is M-2, Community Pedestrian Plans, which includes preparation of community pedestrian plans that consider the following:

- The adequacy of pedestrian routes, accommodations, and the need for improvements or additional infrastructure, given the current or future context of particular neighborhoods.
- Design guidelines for streets and walking paths in public and private developments.
- Connectivity of pedestrian paths to and from schools, public transportation, major employment centers, shopping centers, and government buildings in order to eliminate gaps in the transportation system.
- Special-needs populations, including seniors and people with disabilities.
- A framework for the development and implementation of community pedestrian plans in the unincorporated areas that considers safety, design, connectivity, and the needs of all users.
- Coordination with development of the Planning Areas Framework Program and the Transit-Oriented Development Program to ensure planning consistency and promote intermodal transportation connectivity and community livability.
- The identification of unincorporated communities with a substantial absence of, and need for, sidewalks.
- Construction of pedestrian improvements through the annual road construction program.
- The securing of grant program funding to construct pedestrian plan improvements.

4.2.3 SCAG Regional Comprehensive Plan

SCAG is the federally designated metropolitan planning organization for the six-county Southern California region (i.e., Los Angeles, Orange, Riverside, San Bernardino, Ventura, Imperial). SCAG develops regional growth management plans, with the goal of providing for the efficient movement of people, goods, and information; enhancing economic growth and international trade; and improving the quality of life for the Southern California region. The SCAG region is expected to add 7 million residents between 2008 and 2035.

The 2008 SCAG Regional Comprehensive Plan (RCP) (SCAG 2008) is an action plan for implementing short-term-strategies and long-term initiatives, along with guiding principles for a sustainable and livable region. Sustainably planning for land use and housing in Southern California maximizes the efficiency of existing and planned transportation networks, provides the necessary amount and mix of housing for the growing population, enables a diverse and growing economy, and protects important natural resources. The RCP focuses on specific planning and resource management areas, including land use and housing, open space and habitat, water, energy, air quality, solid waste, transportation, security and emergency preparedness, and the economy. The RCP's Growth Management chapter addresses issues related to growth and land use and enumerates guiding principles for development that supports the overall RCP goals.

4.2.4 SCAG Regional Transportation Plan and Sustainable Communities Strategy

The SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the most current long-range visioning plan, balances future mobility and housing needs with economic, environmental, and public health goals. The plan provides forecasts through 2040. Per the 2012–2016 RTP/SCS, Los Angeles County is expected to grow through 2040. Table 4.5-1 provides growth forecasts for population and employment. The 2016 RTP/SCS does not provide a growth forecast for households within the county.

Table 4.5-1. Growth Forecast for the County of Los Angeles

County Name	2015 Population	2040 Population	2015 Employment	2040 Employment
Los Angeles County	10,159,000	11,514,000	4,463,000	5,226,000

Source: SCAG, 2016, *Regional Transportation Plan/Sustainable Communities Strategy*.

The 2016 RTP/SCS includes an Active Transportation Plan that dedicates resources to maintain and repair thousands of miles of dilapidated sidewalks, includes sidewalk quality as one of its short-term strategies, and calls for approximately 10,500 miles of new and improved sidewalks through development projects or larger road construction and maintenance projects.

The RTP’s Non-Motorized Transportation Report is a technical policy document that guides, supports, and encourages the development of county and city bicycle and pedestrian networks as well as non-motorized programs for the SCAG region. Particular emphasis is placed on bicycling and walking as commute options and improving safety for all forms of non-motorized transportation (City of Los Angeles 2016).

4.2.5 Metro Long-Range Transportation Plan (2009)

Metro’s 2009 Long-Range Transportation Plan provides a 30-year vision for Los Angeles County’s transportation system to 2040. The plan identifies public transportation and highway projects, funding forecasts over a 30-year timeframe, multimodal funding availability, sub-regional needs, and performance measures (City of Los Angeles 2016).

The 2009 Long-Range Transportation Plan promotes development of bicycle facilities as well as pedestrian improvements throughout Los Angeles County. Bicycle and pedestrian programs are critical components of a successful transit system because transit riders should be able to access buses and trains without having to drive a vehicle to and from transit stations. According to SCAG’s 2000 Post-Census Travel Survey, nearly 12% of all trips in the SCAG region are bicycling and walking trips. According to the 2001 National Household Travel Survey, many trips in metropolitan areas are 3 miles or shorter. These trips are targets for bicycling and walking, if facilities are available and safe (Metro 2009).

Metro’s Pedestrian Priority Improvement Program is designed to achieve a qualitative improvement in the pedestrian environment in Los Angeles County. The Pedestrian Priority Improvement Program acknowledges that non-motorized transport modes should connect to an efficient,

aesthetically pleasing, and safe pedestrian system that enables a person to successfully complete a trip. Physically attractive features and amenities facilitate the flow of pedestrian movement and encourage people to walk. The primary challenge to improving the quality of the pedestrian environment is retrofitting the existing built form to make walking a more viable option for more people, more often. The approach focuses on development of public policy and adoption of appropriate regulatory standards, with targeted funding to develop safer, more connected and walkable pedestrian environments that promote non-motorized transport as a viable alternative to increase the share of trips made by residents of and visitors to Los Angeles County (Metro 2009).

4.2.6 2016 Air Quality Management Plan

The 2016 Air Quality Management Plan (AQMP) (South Coast Air Quality Management District [SCAQMD] 2017) is a regional blueprint for achieving federal air quality standards and healthful air. The SCAQMD is responsible for clean air in the South Coast Air Basin (SCAB or Basin), an area that includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Although air quality has improved dramatically over the years, the Basin still exceeds federal public health standards for both ozone and particulate matter and experiences some of the worst air pollution in the nation. The 2016 AQMP represents a thorough analysis of existing and potential regulatory control options; includes available, proven, and cost-effective strategies; and seeks to achieve multiple goals in partnership with other entities that promote reductions in GHGs and toxic risk. It also seeks efficiencies in energy use, transportation, and goods movement. The plan recognizes the critical importance of working with other agencies to develop funding and incentives that encourage an accelerated transition to cleaner vehicles and the modernization of buildings and industrial facilities with cleaner technologies in a manner that benefits not only air quality but also local businesses and the regional economy. The 2016 AQMP also includes transportation control measures developed by SCAG in the 2016 RTP/SCS. The 2016 AQMP includes the integrated strategies and measures needed to meet National Ambient Air Quality Standards (NAAQS) and demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual standards regarding fine particulate matter 2.5 microns or less in diameter (PM_{2.5}).

4.3 Cumulative Impacts Analysis

The following impacts analysis considers whether the proposed Project would result in a new significant cumulative impact or make a considerable contribution to an already significant cumulative impact.

4.3.1 Aesthetics

The proposed Project would have the potential to result in a cumulatively considerable impact on aesthetics if, in combination with cumulative plans and programs within the greater Los Angeles region, it would result in substantial damage or degradation of a designated scenic vista or state scenic highway; substantial damage or degradation of recognized or valued views—including natural views of topography, mountains, oceans, or man-made visual features—in City-adopted land use plans; substantial damage or degradation of existing features or elements that contribute to the existing visual character or image of a neighborhood, community, or localized area through removal, alteration, or demolition of street trees; substantial damage to visual landscape, including but not limited to street trees, utility poles, or historic structures within public right-of-way; or a substantial

loss of shading as a result of street tree retention, removal or replacement throughout the project buildout.

During the 30-year period of the proposed Project, cities and unincorporated areas in Los Angeles County are anticipated to grow, adding approximately 300,000 new housing units and 1 million new residents (County of Los Angeles 2014), and the SCAG region is expected to add another seven million residents between 2008 and 2035 (SCAG 2008). This would also result in commercial and industrial growth, leading to outward expansion of development as well as the densification of development in existing areas. This growth could adversely affect scenic vistas and specific scenic resources, alter visual character and quality in some neighborhoods and communities, and change the overall landscape of the cities and communities. Regional transportation projects that require the conversion of open space to development—when taken into consideration with the other infrastructure and development projects in the SCAG region and surrounding areas—would constitute a significant cumulative impact (SCAG 2015).

Past and present development in the City and the region have resulted in localized obstruction of scenic vistas and focal views, degradation of visual quality as open space has been converted to urban uses, the removal of street trees, and reductions in the citywide tree canopy throughout the region. However, visual improvements have also occurred, such as more infill on underutilized or vacant sites within the urban fabric; new, attractive development that replaces degraded buildings; and roadway and transit improvements that enhance the streetscapes in communities. In addition, implementation of regional transportation projects and infrastructure improvements have the potential to degrade the visual character or quality of the site and its surroundings where such improvements pass through areas where open space is the existing condition, which, when considered in combination with other infrastructure and development with the SCAG region and nearby areas, constitutes a significant cumulative impact on the visual character of the region. The combination of urban transportation facilities infrastructure and anticipated new growth and development would change the character of the region over time, thereby contributing to a cumulatively considerable change in the visual character or quality of the SCAG region (SCAG 2015).

The proposed Project would not affect scenic highways, or contribute to a cumulative loss of scenic vistas or focal views. Temporary construction impacts from sidewalk repairs could affect the character of the local neighborhoods where the repairs would occur. However, these effects would be short term (generally less than 30 days) and would improve visual conditions over the long term by replacing aging and damaged sidewalks with newer ones.

In areas where street tree removal would be necessary, the effects on the character and quality of the neighborhood would be more perceptible and prominent. Additionally, the proposed Project would result in the temporary loss of shading from the street tree removals. However, in most cases, implementation of a street tree replacement policy would offset any long-term aesthetic impact, with removed street trees replaced at a 2:1 ratio for the first 10 years, a 3:1 ratio for years 11 through 21, and a 2:1 ratio for the remaining 9 years of the Project. The proposed Project would result in a net neutral street tree canopy as the replacement street trees reach maturity at Year 30 of the Project. This means that at the end of the Project the City will have a greater ratio of street trees to urban canopy than it did before the Project started. Over the life of the Project, or the next 30 years, the City would have an increased number of street trees and would have a larger urban canopy size than at the start of the Project. The urban forest would be enhanced by removing potentially diseased, dead, or damaged street trees. This citywide benefit would not damage or degrade recognized or valued views in adopted City land use plans; rather, the biodiversity of the

urban forest would be considered and maintained by ensuring species of street trees are diverse and compatible with the streetscape and community.

However, as discussed in Chapter 3.1, Aesthetics, a limited number of street trees have been designated Los Angeles Historic-Cultural Monuments (HCMs) by the City Council. Such trees contribute to the overall cultural history and uniqueness of the visual character of a neighborhood and the City.

In instances where the integrity of the cultural resource, like an HCM, cannot be maintained, there may be a potentially significant impact in the aesthetics or in the visual character due to the Project. Such unusual circumstances and environments include maintaining the aesthetic integrity of a known cultural resource that is a contributing factor in a Historical Preservation Overlay Zone, or within a High Sensitive Cultural Resources area, as defined in the Conservation Element of the Los Angeles General Plan, or a known archeological, paleontological, and tribal artifact or designation or an HCM Street Tree. All local, state, and federal standards would be complied with, where applicable; nonetheless, there still may be Project sites over the next 30 years where maintaining the look and details of a cultural resource may not be possible due to accessibility requirements or because following SOI Standards is infeasible. Moreover, like with HCMs, any construction activities that would significantly affect identified cultural resources are not included in the ministerial process proposed by the Project. Although few individual projects under Scenario 3 would result in a significant impact, the Project would nevertheless result in a cumulatively considerable contribution to a cumulatively significant aesthetic impact.

4.3.2 Air Quality

The proposed Project would have the potential to result in a cumulatively considerable impact on air quality if, in combination with cumulative plans and programs within the greater Los Angeles region, it would conflict with or obstruct implementation of the SCAQMD AQMP; generate air pollutant emissions during construction or operational activities of sufficient quantity to exceed the Air Quality Significance Thresholds established by the SCAQMD; or expose sensitive receptors to substantial toxic air contaminants (TAC) concentrations.

The cumulative plans and programs within the greater Los Angeles region would result in the production of significant regional or localized emissions. The regional growth that would occur over the 30-year Project implementation period would increase both mobile and stationary emission sources and contribute to an adverse cumulative air quality impact. The City acknowledges that implementation of the General Plan Framework would contribute to adverse cumulative impacts on air quality (City of Los Angeles 1995). According to the County of Los Angeles General Plan (County of Los Angeles 2014), the SCAB is designated nonattainment for O₃, PM₁₀, PM_{2.5}, and lead (Los Angeles County only) under the California and national AAQS, and nonattainment for NO₂ under the California AAQS. Construction of cumulative projects will further degrade the regional air quality. Furthermore, the implementation of the transportation projects included in the 2016 RTP/SCS, when taken into consideration with other development and infrastructure projects within the SCAG region and surrounding areas, would have the potential to result in a significant cumulative impact related to violating an air quality standard or contributing substantially to an existing or projected air quality violation in the short-term from construction emissions (SCAG 2015). Similarly, while the 2016 RTP/SCS includes transportation projects and strategies to improve public health, it would result in a significant cumulative impact by exposing sensitive receptors to substantial pollutant

concentrations that would harm public health outcomes due to placing sensitive receptors within 500 feet of freeways and high volume roadways.

Already-imposed mitigation measures from certified EIRs prepared for cumulative projects, as well as existing regulatory programs and plan policies and strategies, will assist in mitigating these cumulative impacts. However, even with implementation of mitigation measures and existing regulatory programs, construction and operational emissions from major development projects would still exceed SCAQMD significance thresholds (County of Los Angeles 2014). Therefore, emissions associated with projected growth and development would be considered a significant cumulative impact on air quality.

As stated in Chapter 3.2, Air Quality, the City is in nonattainment for both the 1-hour and 8-hour state standards for ozone, and it is in nonattainment (extreme) for the 1-hour national standard and pending nonattainment status for the 8-hour national standard for ozone. Additionally, the City is in nonattainment for both the 24-hour and annual mean state standards for PM₁₀, and the annual mean state standard and the 24-hour and annual mean federal standards for PM_{2.5}. The City is in attainment for all other criteria pollutants. The 2016 AQMP acknowledges that the most significant air quality challenge in the Basin is the reduction of NO_x emissions sufficient to meet the upcoming ozone standard deadlines.

The SCAQMD has developed strategies to reduce criteria pollutant emissions, as outlined in the AQMP, pursuant to federal Clean Air Act mandates. The proposed Project would comply with all regulatory requirements, discussed in Chapter 3.2, Air Quality, and would be required by law to comply with any relevant control measures adopted by the SCAQMD as part of the AQMP. The City recognizes the importance of reducing emissions and improving air quality and would adhere to these goals and objectives.

Construction activities would generate air pollutant emissions from sources such as off-road equipment exhaust, on-road vehicle trips to and from the project site, and off-gassing of VOC during crosswalk repaving. In addition to construction activities at repair sites, the continuation of operational activities under the Project would involve maintenance such as watering of newly planted street trees. As described in Chapter 3.2, regional emissions and localized concentrations of VOC, NO₂ as NO_x, CO, SO_x, PM₁₀, and PM_{2.5} were demonstrated to fall far below the SCAQMD-recommended localized thresholds. For instance, Table 4.5-2 represents the combined worst-case estimated daily emissions relative to the regional significance thresholds. Similarly, Table 4.5-3 represents the estimated daily emissions relative to the localized significance thresholds.

Table 4.5-2. Combined Worst-Case Estimated Daily Emissions Relative to the Regional Significance Thresholds

Regional Analysis	Maximum Emissions (Pounds Per Day)					
	VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}
Maximum Daily Regional Emissions	36.6	225.5	46.2	0.3	3.7	2.8
Regional Significance Threshold	75	550	100	150	150	55
Exceed Regional Threshold?	No	No	No	No	No	No

Table 4.5-3. Estimated Daily Emissions Relative to the Localized Significance Threshold

Localized Analysis	Maximum Emissions (pounds per day)			
	CO	NO_x	PM₁₀	PM_{2.5}
Maximum Daily Localized Emissions	36.7	9.0	0.7	0.7
Localized Significance Threshold	231	46	4	3
Exceed Localized Threshold?	No	No	No	No

The thresholds above are set by SCAQMD to account for an individual project’s contribution to other projects and activities occurring throughout the SCAB region. Therefore, the analysis accounts for whether a project would result in a contribution to the cumulative impact within the context of the Basin-wide impacts.

The proposed Project would not contribute to cumulative TACs or expose sensitive receptors to TACs. Each individual construction repair site would only be active for a brief period of time (generally less than 30 days). Given the brief duration of activities at each individual construction repair site and the limited intensity of construction equipment use due to site constraints, the Project’s contribution to carcinogenic risks to nearby sensitive receptors is miniscule.

For the reasons stated above, the proposed Project would not conflict with or obstruct implementation of the SCAQMD AQMP, generate air pollutant emissions during construction or operational activities of sufficient quantity to exceed the Air Quality Significance Thresholds established by the SCAQMD, or expose sensitive receptors to substantial TAC concentrations. Therefore, construction of the proposed Project would not result in a cumulatively considerable contribution to a cumulatively significant air quality impact.

4.3.3 Biological Resources

The proposed Project would have the potential to result in a cumulatively considerable impact on biological resources if, in combination with cumulative plans and programs within the greater Los Angeles region, it would result in the loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat; result in the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community; result in interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species; have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means; interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; conflict with the provisions of an adopted local street tree preservation policy or ordinance; or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Present and future regional growth involving the construction of transportation infrastructure occurring over the 30-year Project implementation period would have the potential to result in a loss of species and/or habitats and natural communities. While the City of Los Angeles Framework Plan (City of Los Angeles 2001) attempts to reduce biological effects through its policies regarding the use of open space and targeting growth within developed areas, the potential growth that may be pushed out to other areas could result in the loss of habitat for plants and animals (including some sensitive species). In this context, the Framework Plan is considered to generate significant cumulative impacts on biological resources. The cumulative effect of numerous small projects in natural open space will have a significant impact as the remaining habitat for plants and animals is fragmented and lost to piecemeal evaluation of potential project effects (City of Los Angeles 1995).

The County acknowledges that although any direct impacts on special-status species and the loss of sensitive habitats would be mitigated, due to the loss of common habitats and diminished resource availability, impacts on special-status species remain significant at the General Plan level, and cumulative impacts on special-status species would be cumulatively significant. Similarly, the County finds that avoidance or minimization of impacts on wildlife movement corridors and linkages may not always be feasible; therefore, the impediment of wildlife movement would be significant at the General Plan level and cumulatively significant (County of Los Angeles 2014).

Activities conducted under transportation projects included in the 2016 RTP/SCS (SCAG 2015) would include the conversion of natural landscapes containing sensitive biological resources into paved roads. This would result in increased access to other undeveloped areas from the extension of transportation infrastructure through rural areas. This increased access could indirectly increase manufacturing and institutional development as a result of increased transportation access within the area, resulting in further habitat fragmentation. The incremental impacts of all of the transportation projects and land use strategies included in the 2016 RTP/SCS on biological resources would be expected to result in a significant cumulative impact with regard to biological resources because these projects would contribute to an increase in habitat fragmentation and development upon native habitats. These impacts are considered to contribute to significant cumulative impacts related to state-sensitive plant communities, migratory corridors, nursery sites, and local policies and ordinances as a result of an incremental net loss of habitat and protected trees and vegetation (SCAG 2015).

Any future related development within the City would be subject to all required laws, permits, ordinances, and plans to reduce impacts on biological resources. Reasonably foreseeable future programs and projects would be required to implement biological avoidance and minimization measures when obtaining relevant permits, including implementation of best management practices (BMPs) during construction. Future development would most likely include site-specific mitigation and be expected to comply with all applicable regulations, such as the Migratory Bird Treaty Act (MBTA). Development projects causing impacts on wetlands and riparian habitats would be subject to mitigation and the permit requirements of the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and Regional Water Quality Control Board (RWQCB). In addition, the policies and implementation measures within the respective cumulative plans, which aim for sustainable development, would help to preserve, replace, restore, or compensate for the loss of biological resources. Although direct impacts on special-status species and the loss of sensitive habitats would generally be mitigated on a case-by-case basis, impacts on biological resources would nonetheless be considered cumulatively significant.

As explained in Chapter 3.3, Biological Resources, the proposed Project would be in a primarily urban landscape where there is little to no suitable habitat for any wildlife species, besides the canopy associated with street trees. No construction would occur in Section 404 regulated water bodies. Upon completion of construction activities associated with the proposed Project, minor maintenance activities, such as street tree watering, would occur. Although sensitive wildlife species would be affected through the removal of street trees and foraging habitat, such species are adapted to living in a heavily developed and disturbed urban setting. Construction noise is common throughout the Project area and unlikely to harm or harass such species.

Construction impacts such as increased noise may have a significant impact on sensitive and resident wildlife species that occur within the Project area; however, implementation of identified project design features (PDFs) (PDF-BIO-1 through PDF-BIO-6) would ensure that any impact associated with habitat interference would remain less than significant by providing detailed guidance on how to comply with the MBTA, replacing removed street trees promptly, avoiding any destruction of active nests, and complying with the California Fish and Game Code and other applicable requirements. Compliance with and implementation of the PDFs would ensure that the species' normal behavior and chances for long-term survival would not be adversely affected by construction activities.

The proposed Project would not reduce but rather increase habitat. With implementation of 2:1 and 3:1 street tree ratios, nesting habitat would increase and removed street trees would be replaced within 1 year. The replacement ratios would result in a net gain in the total number of street trees and a net neutral street tree canopy by Year 30 of the Project, which would provide nesting habitat for species protected under the MBTA. Therefore, impacts on biological resources would not result in cumulatively considerable contributions to cumulatively significant biological impacts.

4.3.4 Cultural Resources

The proposed Project would have the potential to result in a cumulatively considerable impact on cultural resources, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would result in: demolition or relocation of a significant historical resource such that its integrity and significance cannot be maintained; conversion, rehabilitation, or alteration of a significant historical resource that does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; disturbance, damage, or degradation of an archaeological resource, or its setting, that is found to be important (see Section 3.4.3.3 for details on importance of setting); permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance; or disturbance of human remains, including remains interred outside of formal cemeteries.

Historic, archaeological, and paleontological resources are important parts of the City's identity. These resources are nonrenewable and irreplaceable. Cumulative land use and transportation projects located in the Southern California region—including programs and policies implemented under the Los Angeles County General Plan Mobility Element that address streets and sidewalks, and sidewalk improvements under the 2016 RTP/SCS Active Transportation Plan—would have the potential to result in a cumulative impact associated with the loss of cultural resources. Due to the regional scale of the cumulative plans and programs in the Los Angeles region and the potentially large number of cultural resources that could be disturbed as a result of their implementation, a significant cumulative impact would result through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (County of Los Angeles 2014, SCAG 2015). These projects are

regulated by federal, state, and local regulations, including Public Resources Code Section 5097, the Mills Act, State Health and Safety Code 18950–18962, and the SOI’s Standards for Rehabilitation and Standards for the Treatment of Historic Properties, and they are required to comply with the regulations. City, County, and regional goals and policies also aim to preserve and protect significant cultural resources to the extent practicable. Even with regulations in place, individual historical resources could still be affected or degraded (e.g., from demolition, destruction, alteration, structural relocation) as a result of new private or public development or redevelopment and implementation of transportation projects and land use strategies under cumulative plans and projects (County of Los Angeles 2014, SCAG 2015). Therefore, cumulative destruction of significant historical resources from construction and development planned within the region would be considered a cumulatively significant impact.

Notification and inventory of archeological and paleontological resources, implementation of an unanticipated discovery plan, and compliance with Public Resources Code and the California Health and Safety Code mandatory processes that are required to be followed in the event of a discovery of any human remains would help mitigate potentially significant impacts, but they are expected to remain significant when considered cumulatively due to the large number of paleontological and archaeological resources within the greater Los Angeles region and the likelihood of yielding undiscovered human remains. Therefore, impacts on paleontological and archaeological resources and disturbance of human remains would be cumulatively significant from cumulative plans and projects (SCAG 2015).

As discussed in Chapter 3.4, the proposed Project could result in the demolition of sidewalks, ramps, curbs, traffic signs, gutters, or other similar sidewalk-related features that are of historical significance. Similarly, construction could result in impacts on archeological resources (e.g., uncover buried artifacts or features). Such resources include, but are not limited to, prehistoric stone tools, hearths, and midden soils; historic-period refuse deposits, privies, building foundations, basements, and structural materials; and historic-period infrastructure, such as water and electrical conveyance systems and utility vaults. Although most sidewalk replacements would be limited to the top 8 to 12 inches of soil, further excavation, between 36 and 76 inches, may be required for utility relocations and trenching; catch basin and storm drain construction may require depths of 4 to 15 feet.

In most cases, a project that follows the SOI’s Standards for an affected historical resource would result in a less-than-significant impact on that historical resource, pursuant to CEQA Guidelines Section 15064.5. However, although uncommon, there are cases when the SOI’s Standards cannot be followed or a substantial material change in the significance of a historical or archaeological resource occurs even after following SOI’s standards. The proposed Project could result in the demolition of a character-defining feature associated with a historical sidewalk, including a ramp, curb, gutter, street sign, area of pavement, or utility pole. In addition, some sidewalk improvements could occur in or near undiscovered fossil resources (e.g., within Quaternary alluvium deposits, at depths of up to 3 feet; younger alluvium, at depths greater than 5 feet; and areas of older alluvium or paleontologically sensitive surface bedrock). Therefore, while the large majority of sidewalk repair sites would result in less-than-significant impacts on cultural resources owing to the shallow excavation depths and successful compliance with the SOI’s standards for an affected historical resource, there would be the uncommon sidewalk repair sites implemented under the proposed Project that would result in significant impacts on cultural resources over the 30-year implementation period. Considering the existing significant cumulative impacts for cultural resources in the greater Los Angeles region, it would be reasonable to infer that however rare the Project would result in significant impacts on cultural resources, its contribution to the existing

significant cumulative cultural resource impacts would be cumulatively considerable. Although few individual projects under Scenario 3 would result in a significant impact, the Project would nevertheless result in a cumulatively considerable contribution to a cumulatively significant impact.

Implementation of PDFs (PDF-CUL-1 through PDF-CUL-4) would require an assessment of historical significance, implementation of repairs and replacements in accordance with the SOI's Standards, preparation of an Archaeological Treatment Plan, and/or preparation of a Paleontological Management Treatment Plan, as necessary. Although these PDFs would reduce and minimize the cumulative contribution and few individual projects under Scenario 3 would result in a significant impact, the Project would nevertheless result in a cumulatively considerable contribution to a cumulatively significant impact.

4.3.5 Geology and Soils

The proposed Project would have the potential to result in a cumulatively considerable impact on geology and soils, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would: cause or accelerate geologic hazards, which would result in substantial damage to structures or infrastructure, or directly/indirectly cause substantial risk of injury resulting from rupture of a known earthquake fault, landslides, and seismic ground shaking or seismic-related ground failure, including liquefaction; destroy, permanently cover, or materially and adversely modify one or more distinct and prominent geologic or topographic features; constitute a geologic hazard to other properties by causing or accelerating instability from erosion; accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition that would not be contained or controlled on site; be located on unstable soil; or result in an on-site or off-site landslide, collapse, or lateral spreading.

As discussed in the LA County General Plan Draft EIR, most of Southern California, including the cumulative programs and projects in the greater Los Angeles region, is in an area of relatively high seismic activity, and buildout and development of the cumulative programs and projects in the County would expose of additional people and new infrastructure to the effects of earthquakes, seismically related ground failure, liquefaction, and seismically induced landslides. As the region grows, plan-and site-specific studies will be necessary to identify potential hazards and stipulate mitigation to reduce the impacts. Adequate studies, designs, and construction measures can be taken to reduce the potential impacts (County of Los Angeles 2014). Because of the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc.), geological and soil impacts are typically assessed on a project-by-project basis rather than a cumulative basis. Future cumulative development in the surrounding area, in addition to the proposed Project, would be subject to local, state, and federal regulations pertaining to geology and soils, including California Building Code and Los Angeles County Building Code requirements (or City requirements, as appropriate). These regulations contain requirements for development in areas that are subject to Seismic Design Categories E and F. In addition, cumulative projects would be subject to the Alquist-Priolo Earthquake Fault Zone Act, which restricts development on active fault traces. Adherence to these regulations and standard engineering conditions would help reduce cumulative impacts related to geology and soils (County of Los Angeles 2014). Implementation of transportation projects and land use strategies included in the 2016 RTP/SCS within the SCAG region would contribute to cumulative significant impacts with regard to the potential to expose additional people and infrastructure to the effects of earthquakes, seismic related ground-failure, liquefaction, and seismically induced landslides due to: thousands of acres of land subject to severe peak ground

acceleration, potential liquefaction, and potential earthquake-induced landslides within 500 feet of major SCAG projects; tens of thousands of acres subject to moderate or high soil erosion within 500 feet of major SCAG projects; and several miles being within the Alquist-Priolo Earthquake zone (SCAG 2015). In addition, expansive soils are present throughout the SCAG region, and larger transportation projects and regional land use strategies in particular may result in significant cumulative impacts where projects are located within areas of expansive soils. Even with the implementation of mitigation measures, these cumulative impacts would remain significant (SCAG 2015).

The proposed sidewalk improvements could be affected by strong seismic ground shaking or unstable soil conditions. The proposed Project would typically require relatively shallow excavation (e.g., between 8 and 12 inches). The installation of root barriers (if implemented) during street tree replacement activities could require an additional 18 inches. Sign relocation usually requires excavation of up to approximately 36 inches. The relocation of utilities could result in excavation and trenching to depths between 36 and 76 inches. Deeper excavation, to 30 feet, may be required where catch basins and storm drain reconstruction are necessary. Construction activities would be too shallow to cause significant geologic events (e.g., fault rupture, landslides, seismic ground shaking, liquefaction) or exacerbate geologic conditions. Geologic conditions in the area would remain unchanged as a result of the Project. However, landslide- and liquefaction-prone areas as well as areas with collapsible soils could expose workers to geologic hazards. Implementation of PDF-GEO-1 (shoring plan) would minimize this impact in areas where excavation would be greater than 5 feet deep, as required per the Los Angeles Bureau of Engineering Standard Specifications for Public Works Construction, or “Greenbook.”

Construction activities could exacerbate erosion conditions by exposing soil or adding water to the soil, either from irrigation or runoff from new impervious surfaces. BMPs, such as silt fences, straw wattles, sediment traps, gravel sandbag barriers, or other effective BMPs, would be implemented to control runoff and erosion during construction activities. Implementation of erosion and sediment control BMPs would prevent substantial soil erosion and sedimentation. Also, construction activities would occur only in areas where sidewalks currently exist, not in areas where erosion could destabilize nearby structures. Construction activities associated with the Project would not create a geologic hazard by causing or accelerating instability related to erosion. Therefore, for the reasons above, impacts related to geology and soils would not be cumulatively considerable.

4.3.6 Greenhouse Gases

The proposed Project would have the potential to result in a cumulatively considerable impact on GHG emissions, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing emissions of GHGs.

Climate change is a global phenomenon that is cumulative by nature because it is the result of combined worldwide contributions of GHGs to the atmosphere over many years (County of Los Angeles 2014). Past, present, and future development, including buildout of the cumulative land use and transportation plans, would generate GHGs in significant quantities. The Climate Action Plans of state, regional, and city governments would help minimize GHGs. In addition, implementation of the 2016 RTP/SCS would reduce GHG emissions from transportation and stationary sources compared with existing conditions. The 2016 RTP/SCS meets and exceeds SB 375 targets for reducing GHG

emissions, which demonstrates that the Plan is able to do more than its share to reduce GHG emissions for light and medium duty vehicles and heavy trucks, resulting in a less-than-significant cumulative impact with respect to the SB 375 targets (SCAG 2015). However, additional measures would be necessary to reduce GHG emissions to levels that would meet the long-term GHG reduction goal under Executive Order S-03-05 (i.e., reduce GHG emissions to 80% of 1990 levels by 2050). Based on SCAQMD's 2020 efficiency target, this would equate to 1.3 metric tons of carbon dioxide equivalent per service population (MTCO_{2e}/SP) by 2050. (County of Los Angeles 2014.)

Although it is possible that individual projects may mitigate their respective GHG emissions, not all projects will be able to achieve adequate reductions. Furthermore, the cumulative effect of various projects and overall growth in the region, according to applicable plans, will result in exceedances of long-term goals. The California Air Resources Board is currently updating the scoping plan to identify additional measures for achieving long-term GHG reduction targets. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under Executive Order S-03-05. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology. Because no additional statewide measures are currently available, cumulative GHG emissions impacts remain significant (County of Los Angeles 2014). Additionally, while the 2016 RTP/SCS acknowledges all the responsible sectors are not in conflict with AB 32 and Executive Orders, in the event of a worst case scenario, such as if other responsible agency implementation activities do not achieve their respective GHG emission reduction goals to the appropriate level, the environmental analysis would result in a determination that there would be a potential for a significant cumulative impact (SCAG 2015).

Direct impacts associated with the proposed Project are measured exclusively as cumulative impacts; therefore, the analysis in Chapter 3.6, Greenhouse Gas Emissions, also serves as the analysis of the proposed Project's contribution to cumulative impacts. As discussed in Chapter 3.6, Greenhouse Gas Emissions, the construction emissions analyzed are considered part of total GHG emissions for the Project lifecycle, including GHG emissions during operational maintenance activities and changes in carbon sequestration throughout the 30-year repair program. Construction activities would result in GHG emissions from fuel combustion associated with heavy-duty construction equipment, construction workers' vehicle trips, material deliveries, and trips by haul, water, and concrete trucks.

These ongoing construction activities, operational maintenance activities, and changes in carbon sequestration would result in a maximum annual net cumulative increase in GHG emissions of 1,408.6 MTCO_{2e} throughout the Project's lifetime. In the 2017 Climate Change Scoping Plan, CARB acknowledges that a project can generate GHG emissions above net zero without being considered cumulatively considerable (CARB 2017). The maximum annual increase in GHG emissions resulting from implementation of the Project represents less than half of the interim SCAQMD screening threshold that was determined to capture 90 percent of projects within the agency's jurisdiction. Although the City has not established a numeric threshold of its own as a lead agency, the Project's conformance with regional and local GHG emission reduction initiatives demonstrates that the Project would be consistent with applicable plans and policies adopted to meet the statewide reduction targets. The CEQA Guidelines advise that, "[p]ursuant to Sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances" (Governor's Office of Planning and Research 2017). The Project's conformance with local plans and policies has been sufficiently

demonstrated above; therefore, the project's impact on GHG emissions would be less than cumulatively considerable.

4.3.7 Hazards and Hazardous Materials

The proposed Project would have the potential to result in a cumulatively considerable impact related to hazards and hazardous materials, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions through the routine transport, use, or disposal of hazardous materials or handling in such a way as to involve the release of hazardous materials into the environment; emit/handle/involve hazardous materials and/or waste within one-quarter mile of an existing or proposed school; be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or hinder or impair an adopted emergency response or evacuation plan or route.

In general, cumulative impacts related to hazards and hazardous materials are most often affiliated with commercial or industrial land uses, compared with residential uses. Implementation of projects and plans that do not substantially increase the potential for industrial activity within the City are not considered to generate cumulatively significant impacts within Los Angeles County (City of Los Angeles 1995). Hazardous material use or hazardous emissions are cumulatively significant when the combined activities of individual industrial or commercial businesses that use, transport, or dispose of hazardous materials result in hazardous conditions. Cumulative impacts may also occur when multiple development projects disrupt existing hazardous materials sites in adjacent areas. In addition, the transport of hazardous materials may increase as a direct result of increased hazardous materials usage within the Project area (County of Los Angeles 2014). Continued growth and development in the greater Los Angeles region, including the implementation of transportation improvements, and the anticipated increased mobility from implementation of the 2016 RTP/SCS may result in greater exposure of local populations to various hazards and may create a significant hazard to the public or the environment as a result of increased hazardous materials transport. While mitigation measures would help reduce impacts to the maximum extent practicable, cumulative impacts related to routine transport, use, or disposal of hazardous materials, upset or accident conditions involving the release of hazardous, and hazardous materials emissions in the vicinity of a school would remain significant (SCAG 2015).

The potential of exposure to hazards is equally high in urban and rural areas where former land uses may have contaminated soil or groundwater, which could be disturbed from the construction of new land uses and infrastructure. However, where such incidences occur, the need for remediation is limited to the horizontal and vertical extent of contamination. Such incidences would not necessarily be affected by other sites in surrounding areas. Any future development would be required to comply with applicable federal, state, and local regulations related to hazardous materials. Required compliance with these regulations would minimize contribution of cumulative impacts related to the hazardous materials sites, and impacts would not be cumulatively significant (SCAG 2015).

The construction activities associated with the proposed Project would involve the routine transport, use, and disposal of hazardous materials, such as solvents, paints, oils, and grease—materials that are typically used in construction projects. Such transport, use, and disposal would be in compliance with applicable regulations (e.g., the Resource Conservation and Recovery Act,

Occupational Safety and Health Administration regulations, Department of Transportation regulations, the California Labor Code, and the California Code of Regulations). Moreover, the hazardous materials are generally used in small amounts. Any spills that may occur would be contained and cleaned up according to the Materials Safety Data Sheet/Globally Harmonized System in the appropriate manner. Such releases would be localized and would not result in additive effects from combined construction sites.

During Project excavation, contaminated groundwater and/or contaminated soil may occasionally be encountered, which could release hazardous materials into the environment. In most cases, excavation would be between 8 and 12 inches deep. Construction would be on existing sidewalks and curbs, which are not contaminated or would be remediated prior to initial construction. Although rare, in some cases, excavation could expose workers and nearby receptors to hazardous emissions. In even fewer cases, deeper excavations could expose contaminated groundwater. Implementation of PDF-HAZ-2 through PDF-HAZ 4 would minimize exposure to hazardous materials and require proper handling and oversight. Because of the low potential for impacts, adherence to existing state and local regulations, and implementation of contingency mitigation measures, the Project's contribution to hazardous materials cumulative impacts would be less than cumulatively considerable.

4.3.8 Hydrology and Water Quality

The proposed Project would have the potential to result in a cumulatively considerable impact on hydrology and water quality, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would: cause flooding during the projected 50-year developed storm event, which would have the potential to harm people or damage property or sensitive biological resources; substantially reduce or increase the amount of surface water in a water body; result in a permanent adverse change to the movement of surface water, enough to produce a substantial change in the current or direction of the water flow; create pollution, contamination, or a nuisance, as defined in Section 13050 of the California Water Code or cause regulatory standards to be violated; result in the alteration of a stream or river so that a change in the existing drainage pattern would occur and result in erosion or siltation on site or off site; result in structures being placed within a 100-year flood hazard area; or cause runoff that would exceed the stormwater drainage capacity or degrade water quality.

Further urbanization in the greater Los Angeles region and implementation of transportation improvements and land use strategies would result in a continuing increase in stormwater runoff, water quality degradation, and the exposure of persons and property to floodplain hazards. Cumulative growth and development would generate additional pollutants from residential, commercial, industrial, and transportation facilities. The increase in impervious surface areas such as new sidewalks, would increase urban runoff, resulting in the transport of greater quantities of contaminants to receiving waters that may currently be impaired (SCAG 2015). Paved surfaces and drainage conduits can accelerate the velocity of runoff, concentrating peak flows in downstream areas faster than under natural conditions. In addition, the increase in impervious areas could decrease groundwater recharge, increase runoff rates and/or volumes, place structures within flood zones, and expose additional people and property to risks associated with dam inundation, seiche, tsunami, and/or mudflow. Population growth could contribute incrementally to depleted groundwater supplies due to substantial additional demands for potable water such that there would be a net deficit in aquifer volume or a lowering of local groundwater level (SCAG 2015). It is not anticipated that cumulative projects in Los Angeles

County would contribute incrementally by placing housing within a 100-year flood hazard area due to compliance with flood safety requirements and flood management plans (County of Los Angeles 2014, SCAG 2015); however, the placement of regional projects within a 100-year flood hazards area would impede or redirect flows when considered cumulatively (SCAG 2015).

The Los Angeles County General Plan Update EIR (County of Los Angeles 2014) notes that buildout in the county would involve soil disturbance, construction, and operation of developed land uses that could each generate pollutants affecting stormwater. Although specific impacts may not rise to significant runoff or pollutant levels, the cumulative effect would be significant. However, various regulatory requirements are in place to minimize these effects, including the Clean Water Act, compliance with which is administered by the Los Angeles RWQCB. Other requirements involve preparing and implementing stormwater pollution prevention plans pursuant to the Statewide General Construction Permit, complying with the Municipal Separate Storm Sewer Systems (MS4) Permit, improving flood control facilities and design requirements to raise structures above flood zones, and complying with recommendations in geotechnical reports to minimize mud flows (SCAG 2015).

Even with compliance with the above-listed water quality, drainage, and flood safety regulations and policies, impacts on hydrology and water quality would be cumulatively significant.

The proposed Project would not affect the City's ability to implement or enforce its goals or policies or otherwise be inconsistent with regulatory requirements related to the minimization of water quality impacts. The proposed sidewalk repairs would involve primarily improving existing impervious surfaces and would not introduce new impervious surfaces. Construction activities associated with the proposed Project would not result in a permanent adverse change in the movement of surface water because the amount of impervious surfaces is not anticipated to change compared with existing conditions and overall drainage patterns would be maintained. Although minor changes in surface flows may occur during construction when storm drain protection is installed, these changes are expected to affect stormwater flows into the storm drain system only temporarily and would not result in a permanent adverse change to the current or direction of flows. No direct groundwater withdrawal would occur, and the Project would not obstruct potential groundwater recharge.

The repair of existing sidewalks, removal and replacement of street trees, utility work, and sidewalk replacement work could lead to ground disturbance and polluted runoff. Soil disturbances from construction could allow silt to wash into storm drains and receiving waters, thereby making them turbid, which could further affect natural aquatic organisms. Construction would comply with the minimum construction site BMP requirements for erosion, sediment, non-stormwater management, and waste management. The BMPs would be implemented during construction activities to reduce the potential for chemical contaminants to affect water quality.

The temporary reduction in citywide street tree canopy from the replacement of mature street trees with younger and smaller street trees could alter street tree rainfall interception, which may temporarily increase surface runoff. However, over the 30-year Project horizon, there would be a net neutral citywide street tree canopy. The planted areas would be adequately watered during the establishment period, without erosion that would be detrimental to plantings. No increase in surface runoff volume was observed under the different street tree replacement scenarios that were modeled for water quality and hydrology.

Although some sidewalk repairs could be within 100- and 500-year floodplains, which are potentially subject to flooding during storm events, flooding conditions would not be expected to change

compared with existing conditions. Construction activities would not affect the overall flood zone or result in additional flooding because no new structures would be added to existing sidewalks that could redirect or exacerbate existing floodflows. The overall drainage pattern would remain unchanged compared with existing conditions. In addition, the City would comply with the minimum construction BMPs for construction sites under 1 acre and implement construction BMPs to manage stormwater runoff and runoff from individual construction sites.

In conclusion, the proposed Project would not result in a cumulatively considerable contribution to significant cumulative impacts on hydrology and water quality because it would not introduce new impervious surfaces or pollutants, increase flooding hazards, or affect groundwater supplies; the Project would be consistent with related plans and programs. Existing regulations would minimize water quality impacts, including the Clean Water Act, NPDES regulations regarding nonpoint-source pollution, BMPs to reduce discharges of pollutants, and the RWQCB's L.A. Basin Plan to protect beneficial uses and achieve water quality objectives. Therefore, impacts on hydrology and water quality from the proposed Project would be less than cumulatively considerable.

4.3.9 Land Use and Planning

The proposed Project would have the potential to result in a cumulatively considerable impact on land use and planning, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would be consistent with adopted land use goals, objectives, or policies of applicable lands use plans or create incompatible land uses with the immediate surrounding land uses. The cumulative growth and development in the greater Los Angeles region is expected to be largely consistent with the plans that have been established to guide and regulate growth patterns and infrastructure improvements. Regional planning documents, such as SCAG's RCP and RTP/SCS, are often used during planning within the greater Los Angeles area. However, some strategies may not be consistent with the general plans of city and county areas when it comes to land use patterns and densities. Projects such as sidewalk improvements and construction of new sidewalks proposed under the 2016 Active Transportation Plan, encourage active transportation, improve connections to transit, and contribute to roadway improvements (SCAG 2015).

Implementation of the Project would generally be within the public right-of-way and would not change or affect the existing land use, including in adjacent and surrounding areas; it involved streamlined approval of repairs of existing sidewalks throughout the City. The Project would include the Revised Street Tree Retention, Removal and Replacement Policy, which would improve the urban street tree canopy and enhance and improve sidewalks, providing better accessibility of all pedestrians. Consistent with the applicable objectives and policies of the General Plan and Framework Element, street tree activities would help accommodate the needs of people with disabilities as well as the need for high-quality, safe pedestrian access on all sidewalks by ensuring that sidewalks would be in compliance with applicable accessibility requirements. Street tree activities would also be consistent with sustainability goals, objectives, and policies because biodiversity of the urban forest would be enhanced, and the maintenance of street trees would be improved.

The Project would also be consistent with the sustainability policies of the General Plan because stormwater BMPs (e.g., green infrastructures such as bioswales and permeable pavement), green infrastructure, and/or low-impact development BMPs would be implemented where possible. Implementation of the proposed Project would not conflict with existing land use plans, policies, or regulations of agencies with jurisdiction over the Project area. Therefore, the proposed Project

would not result in a considerable contribution to a significant cumulative impact related to land use.

4.3.10 Noise

The proposed Project would have the potential to result in a cumulatively considerable impact on noise, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would exceed an interior noise level of 85 dBA Leq (8-hr) and result in an exterior noise level increase of 10 dBA above the loudest ambient sound level (hourly A-weighted Leq) during construction hours as measured or predicted at the closest occupied space façade of the closest sensitive use; result in ground-borne vibration caused by construction exceeding a velocity of 0.3 ips PPV at the building foundations of the nearest structure causing building damage; result in ground-borne vibration caused by construction exceeding 0.1 ips PPV at the nearest occupied space of a sensitive use causing human annoyance; or expose people residing or working in the project area to excessive noise levels from private airstrips or public airports.

Development of new residential, commercial, or industrial structures could increase both stationary and mobile sources of noise from heating, ventilation, and air-conditioning and other equipment as well as vehicles. The extension of new roadways and transit corridors could also expose sensitive receptors to new sources of elevated noise that are adjacent to these areas. Construction activities could also generate significant cumulative noise and vibration effects if in proximity to one another or in combination with operational or vehicular noise. Cumulative projects would be required to comply with the applicable land use compatibility classifications and noise ordinances. However, there may be situations where noise and vibration levels from individual and cumulative projects exceed applicable standards, thereby resulting in cumulatively significant noise impacts.

Construction of individual developments associated with the buildout of the County of Los Angeles General Plan would temporarily increase the ambient noise environment and would have the potential to affect noise sensitive land uses in the vicinity of an individual project. Similarly, significant noise impacts may occur from operation of heavy earthmoving equipment and truck haul that would occur with construction of individual development projects. Because construction activities associated with any individual development may occur near noise-sensitive receptors and, depending on the project type noise, disturbances may occur for prolonged periods of time, construction noise impacts associated with implementation of the proposed Project are considered significant. Additionally, vibration generated by construction equipment has the potential to be substantial, and exceed the FTA Criteria for human annoyance and structural damage, which would be significant. (County of Los Angeles 2014.)

Buildout of the County of Los Angeles General Plan would also result in substantial noise level increases on roadways throughout the County. Nearby noise-sensitive receptors would experience a substantial increase in noise over existing conditions and significance criteria. Implementation of Proposed General Plan Update policies would reduce impacts to the extent feasible. However, impacts related to noise land use compatibility are considered significant. (County of Los Angeles 2014.)

Implementation of the 2016 RTP/SCS (SCAG 2015) would result in significant cumulative impacts from the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Grading and construction activities would generate temporary increases in noise levels, and operational

activities resulted from implementation of transportation projects and anticipated land use development would generate permanent increases in noise levels in excess of standards established in the local general plan or noise ordinance, constituting a significant impact. Implementation of the 2016 RTP/SCS, when taken into consideration with all other infrastructure and development project that may occur in the region between 2016 and 2040, would result in significant cumulative impacts from the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Both construction and operation activities would expose people to excessive groundborne vibration or groundborne noise levels, constituting a significant impact. (SCAG 2015.)

Operational activities associated with the implementation of the 2016 RTP/SCS would result in significant cumulative impacts from the generation of substantial temporary or periodic increases, as well as permanent increases in ambient noise levels, when taken into consideration with all other transportation infrastructure and development projects that may occur in the region between 2016 and 2040, in the vicinity above existing levels due to the presence of noise-sensitive land uses located near these projects, constituting a significant impact. (SCAG 2015.)

As discussed in Chapter 3.10, the noise impact from construction activities would be significant if a 10-foot distance for commercial sensitive uses or a 20-foot distance for residential sensitive uses cannot be maintained from the construction noise source. In most cases, the calculated interior sound level would not exceed the Project-specific interior threshold of 85 A-weighted decibels, equivalent noise level (8 hours), through the various phases of construction activities. In addition, construction would be short term in duration, and no hearing damage would occur. However, some individual sidewalk projects may not be able to maintain a 10-foot distance for commercial sensitive uses or a 20-foot distance for residential sensitive uses from the construction noise source, which would result in significant impacts. Construction noise BMPs would be implemented, per PDF-NOI-2, to minimize noise impacts from construction activities.

Similarly, some construction activities could result in substantial vibration impacts. The impact would be less than significant for the vast majority of construction sites. However, the impact would be significant where the distance from the construction vibration source to the building foundation of the nearest structure is less than 8 feet or where the distance to the nearest occupied space of a sensitive use is less than 23 feet. Exceedances of the applicable construction noise thresholds would still occur even after imposition of the construction vibration BMPs in PDF-NOI-3.

While the project-specific impacts may be significant in certain situations, the noise and vibration impacts would be extremely localized to the small area where construction activities take place. Noise effects diminish substantially as distance between the source and receptors widens. Noise generated by a stationary noise source, or “point source,” decreases by approximately 6 dBA over hard surfaces (e.g., reflective surfaces, such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces, such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level is 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on. None of the sidewalk repair projects would occur simultaneously within the same area that would cumulatively affect the same receptors. Therefore, when combined with noise from other cumulative projects, impacts would be less than cumulatively considerable.

4.3.11 Public Services

The proposed Project would have the potential to result in a cumulatively considerable impact on public services, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would: result in the demand for police services at the time of the proposed Project build-out compared to the expected level of service available; result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities; or require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Cumulative growth within the greater Los Angeles region would result in increased demand and a need for fire and police services to serve new development and populations (City of Los Angeles 1995, County of Los Angeles 2014). Many areas within the region already have inadequate public services for the existing populations and commercial businesses. Further growth, including implementation of the 2016 RTP/SCS, would exacerbate existing needs as well as the expanded needs of cumulative programs and plans (SCAG 2015). In order to maintain adequate service capacity, the construction or expansion of public service facilities would be required, which would have the potential to result in an adverse impact on the environment (County of Los Angeles 2014, SCAG 2015). Although the majority of cumulative projects would involve discretionary actions and therefore would be required to demonstrate compliance with CEQA prior to approval, they would incrementally increase the need for public services. These impacts would be largely mitigated through local municipal and school district developer fees to fund the development of new or expansion of existing public service facilities. (County of Los Angeles 2014). However, the incremental increases would have the potential to result in significant cumulative impacts.

Demand for additional public services is usually created when there is a net increase in population in an area as a result of a project. The proposed Project would not result in an increase in population because the construction crews employed to repair and maintain the sidewalks or remove and replace the street trees would not require relocated housing during construction. The sidewalks being repaired are existing sidewalks that are already serving the existing population, and there is no evidence that ensuring the accessibility of the sidewalks would lead to increased population growth. No other element of the continuing construction activities of the proposed Project has the potential to increase the population, nor would it require the expansion of existing or construction of new fire, police, school, library, or park facilities. Impacts on public services would be less than cumulatively considerable.

4.3.12 Transportation/Traffic

The proposed Project would have the potential to result in a cumulatively considerable impact on transportation/traffic, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would result in temporary traffic constraints due to construction; result in the temporary loss of access due to construction; result in the temporary loss of bus stops or the rerouting of bus lines due to construction; conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)(2) by substantially inducing additional automobile travel due to operations; or negatively affect residential streets due to operations.

Past projects in Los Angeles County (cities and unincorporated areas) have converted undeveloped and agricultural land to urban uses resulting in residential and employment population increases and associated demand for expansions of roadway systems. The cumulative traffic impact of the Los

Angeles County General Plan buildout will be largely mitigated through a combination of regional programs that are the responsibility of other agencies such as cities and Caltrans. However, if these programs are not implemented by the agencies with the responsibility to do so, the cumulative transportation and traffic impacts would remain cumulatively significant. (County of Los Angeles 2014.)

The 2016 RTP/SCS, in addition to other projects from other regional plans (e.g., RTPs of adjacent jurisdictions), could result in additional impacts inside and outside the SCAG region. Therefore, when considered with other projects outside the region, the Plan would have the potential to conflict with established performance of the circulation system by increasing overall VMT, constituting a significant cumulative impact. Forecasted urban development and growth that would be accommodated by the transportation investments in the Plan and increased mobility provided by the Plan would contribute to the significant impacts. Therefore, when considered with other additional projects outside the region, the Plan would have the potential to conflict with established performance of the circulation system by increasing overall delays and congestion, constituting a significant cumulative impact. (SCAG 2015).

The transportation and land use strategies considered in the 2016 RTP/SCS and other RTPs in surrounding areas have the potential to conflict with emergency access, constituting a significant impact. While there are provisions in many other RTPs outside the SCAG region to offer connectivity in terms of goods and services so residents can enjoy a high quality of life complemented by easily accessible transportation options, the timing, location, and duration of construction activities from transportation projects—including grade crossings, arterials, interchanges, and auxiliary lanes outside the region—could result in delayed emergency vehicle response times or otherwise disrupt delivery of emergency response services. For example, closing off one or more lanes of a roadway would result in impaired emergency routes. The closure of these lanes could potentially cause traffic delays and ultimately prevent access to calls for service. Construction and operation of the transportation projects, and related development projects outside the SCAG region, would have the potential to conflict with emergency access plans, constituting a significant cumulative impact. (SCAG 2015.)

Construction activities associated with the proposed Project could involve temporary parking restrictions, lane closures, access restrictions, disruptions to traffic signals, temporary closures or relocations of bus stops, and disruptions to the flow of vehicles, pedestrians, or bicyclists. Full street closures may be required on small residential streets, but these are expected to be infrequent and would not exceed a few hours at a time. Areas of substantial traffic congestion would be anticipated to experience the effects of increased traffic from daily construction trips to a greater degree than areas with relatively low levels of congestion, such as residential streets. Construction trip generation is expected to be widely distributed across the city, and the effects would be localized.

Local access would be maintained, and traffic controllers would implement best practices from the WATCH manual, per PDF-TR-1, which serves as an industry standard for construction-related traffic control, both within the work site and on the nearby local street network. Local vehicular, bicycle, and pedestrian access would be maintained throughout construction, per PDF-TR-3 through PDF-TR-5. The construction activity would be spread across the entire city; multiple projects are not anticipated to occur within proximity of one another, thereby making effects additive.

Under most circumstances (Scenario 1), the highest level of daily construction trip generation is estimated to be 62 one-way trips at each site. The daily maximum could be up to 76 one-way trips under Scenario 2, which is expected to require only one crew per day. Citywide construction-related daily trip generation, with one crew at a Scenario 2 site, would total 758 trips. Trip generation would be geographically dispersed throughout the city; effects would not be concentrated in one area at a time. Construction workers' commute trips to and from the construction yard would occur during off-peak hours to the extent feasible. Truck trips would comply with this policy, including coordination in order to arrive and depart at off-peak commute times to the extent feasible, per PDF-TR-8.

During post-construction operations, trip generation would result from trucks used for watering street trees and inspection activities, which would occur 33 times per year for 3 years. The Project sites would be spread out across the entire city; as a result, the trip generation associated with operations at any single location would not be additive.

Because of the nominal number of daily trips, and the short-term nature of the construction at each site, impacts on transportation are not expected to result in a considerable contribution to significant cumulative impacts related to traffic constraints, loss of access, loss of bus stops, loss of access, or substantially inducing additional automobile travel, or negatively affect residential streets due to operation.

4.3.13 Tribal Cultural Resources

The proposed Project would have the potential to result in a cumulatively considerable impact on tribal cultural resources, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would cause a substantial adverse change in the significance of a tribal cultural resource. Tribal cultural resources (TCRs) in the region are protected by state and regional laws. Cumulative growth and development within the region, as well as implementation of the 2016 RTP/SCS strategies, have the potential to result in the loss or disturbance of historical and archaeological resources, including TCRs (County of Los Angeles 2014, SCAG 2015). Although these potential impacts are normally addressed on a project-specific basis through the formal consultation process, some projects are unable to fully avoid or fully mitigate potential impacts. Impacts related to the loss and/or disturbance of known or unknown archaeological sites (including TCRs) within the greater Los Angeles area, such that the significance of such resources would be materially impaired, are considered to be cumulatively significant (City of Los Angeles 1995, County of Los Angeles 2014, SCAG 2015).

TCRs may be found throughout the city of Los Angeles; it is difficult to document TCRs with precise locations. Construction activities associated with trenching and deeper excavations, as opposed to more surficial disturbances, have the potential to uncover or disturb TCRs. Even with the incorporation of PDF-CUL-1 through PDF-CUL-3 and PDF-CUL-5 to manage unforeseen circumstances, such as the unexpected discovery of TCRs, impacts could nonetheless still occur. Through the consultation process with area tribes, mutual agreement could not be reached as to whether a significant effect exists and/or any measures to mitigate or avoid a significant effect on TCRs. Therefore, the proposed Project would result in a cumulatively considerable contribution to a significant cumulative impact on TCRs.

4.3.14 Utilities and Service Systems

The proposed Project would have the potential to result in a cumulatively considerable impact on utilities and service systems, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would exceed the existing and planned water supply; be adequately served by the existing and planned water infrastructure; constrain or exceed the future planned drainage capacity as defined in the City of Los Angeles General Plan; exceed the existing sewer capacity; conflict with solid waste policies and objectives in the City of Los Angeles Solid Waste Management Policy Plan, Framework Element or the Source Reduction and Recycling Element; or result in a need for an additional solid waste collection route, or recycling or disposal facility to adequately handle Project-generated waste.

Cumulative growth and development, as well as implementation of transportation infrastructure improvements, would result in additional demands on utilities and services, such as water supplies, wastewater treatment, and solid waste disposal. As the County and City of Los Angeles continue to grow, there will be a continued need for increased landfill capacities. A potential for cumulative impacts to solid waste management exists on a countywide level. Similarly, the Framework Plan EIR concluded that cumulative impacts would occur to the Joint Water Pollution Control Plant for wastewater flows. Significant cumulative impacts were not anticipated to water supplies from buildout of the General Plan. (City of Los Angeles 1995.)

Cumulative forecast water demands and wastewater treatment capacity within Los Angeles County are expected to be accommodated by existing available supplies and treatment capacities, and cumulative water demands for Los Angeles County are forecast to decline between 2013 and 2035. In addition, cumulative estimated solid waste generation to 2035 conditions and at post-2035 buildout are well within the residual capacity of landfills serving Los Angeles County. Therefore, impacts on utilities and services would be less than cumulatively significant (County of Los Angeles 2014).

The 2016 RTP/SCS would be expected to contribute to less-than-significant cumulative impacts incrementally with related projects in the SCAG region to contributing to exceeding wastewater treatment requirements. Wastewater treatment facilities throughout the SCAG region can accommodate 3,018.17 million gallons per day (MGD). The remaining wastewater treatment capacity in the SCAG region is estimated at 54 percent remaining.

The 2016 RTP/SCS would be expected to contribute incrementally with related projects in the SCAG region to significant cumulative impacts on contributing to new stormwater drainage systems. Significant increases to runoff and peak flow can overwhelm drainage systems and alter flood elevations in downstream locations. Increased runoff velocity can promote scouring of existing drainage facilities, reducing system reliability and safety. (SCAG 2015.)

The 2016 RTP/SCS would be expected to contribute incrementally with related projects in the SCAG region to significant cumulative impacts on having sufficient water supplies available to serve the project. The volume of water and water delivery infrastructure currently available within the SCAG region would not be sufficient to meet the future multiple dry year or average year water demand in 2040. As population increases and disperses throughout the SCAG region, the demand for municipal water would increase. Development attributed to land use strategies would also increase water demand. The 2016 RTP/SCS would contribute to cumulative significant impacts in the region in consideration of related projects in regard to water supply. Due to the

uncertainties associated with water supply and management, this impact is considered cumulatively considerable. (SCAG 2015.)

The 2016 RTP/SCS would be expected to contribute incrementally with related projects in the SCAG region to significant cumulative impacts on having sufficient landfill capacity. Existing landfills are currently operating at 80 percent capacity across the SCAG region. Per capita generation of solid waste is decreasing across the SCAG region due to increased recycling and compliance with the requirements of AB 939 and other sustainable conservation measures. Additionally, transportation projects and development encouraged by land use strategies would be required to comply with AB 341, in which 75 percent of the waste stream be recycled by the year 2020. However, the potential to exceed capacity over the planning horizon remains significant. (SCAG 2015.)

During construction, water would be used primarily for pouring and mixing concrete as well as mitigating fugitive dust impacts associated with construction activities. No extension of water infrastructure would be required for any part of the Project. The total water consumption associated with construction activities over 30 years would be approximately 222 acre-feet (AF). Overall, the average water demand for construction would be 7.3 acre-feet per year (AFY). In years 26 through 30, representing the maximum water demand for construction activities, the average water demand would be 10.3 AFY, representing approximately 0.015% of the total projected 2040 water demand. This is also substantially lower than the estimated 123 AFY required for a 500-dwelling-unit that would be subject to a Water Supply Assessment. The 2015 Urban Water Management Plan (UWMP) prepared by Los Angeles Department of Water and Power projects water supplies through 2040. Although the Project would require water resources through 2051, future water demand would be considered and planned for in subsequent updates to the UWMP. Therefore, the demand for water from the Project would not result in a cumulatively considerable impact on water supplies.

Water consumption estimates for post-construction assume that each street tree planted would require 30 gallons of water for 33 weeks for the first 3 years. As a result, each street tree would require 2,970 gallons of water during the optimization period. The Project proposes to plant a total of 30,405 street trees over 30 years, which would result in approximately 90,302,850 gallons, or 277.1 AF. This corresponds to an average use of 9.2 AFY, with a maximum water use in years 16 through 20 (2034 through 2038) of 12.2 AFY. The maximum of 12.2 AF between 2034 and 2038 that would be required for replacement street tree watering would represent approximately 0.018% of the anticipated water demand for 2040. Future demand beyond 2040 would be considered and planned for in subsequent updates to the UWMP through the life of the Project. Therefore, water demand during operations would be less than cumulatively considerable.

Water used in concrete pouring would not require the use of sewer capacity; a dried mixture would be used to lay new sidewalk. In addition, construction workers would consume water and generate a nominal amount of unquantified wastewater. Because of the nominal contribution of continuing construction activities from the Project to overall citywide flows (particularly in the context of the amount of wastewater currently generated by the ongoing citywide sidewalk repairs), which would use the existing network of drainage pipes, and the unused capacity available at the City's treatment facilities, it is expected that the Project would not exceed existing sewer capacity. Similarly, construction of the Project would not exceed the wastewater treatment requirements of the Los

Angeles RWQCB. Therefore, impacts on wastewater treatment facilities would be less than cumulatively considerable.

Sidewalk repair would result in ground surface during excavation, which may create the potential for erosion to occur. Temporary BMPs—such as silt fences, straw wattles, sediment traps, gravel sandbag barriers, or other effective BMPs—would be implemented to control runoff and erosion during construction activities. Implementation of erosion and sediment control BMPs would prevent soil erosion and sedimentation from exposed soils. Furthermore, sidewalk repairs would be performed in accordance with Los Angeles County low-impact development standards. New sidewalks would closely follow existing contours and direct stormwater runoff toward existing infrastructure. Although some projects may require repairs to catch basins or replacements, no new additive storm drain infrastructure would be required. Therefore, the Project would not result in a cumulatively considerable impact on storm drainage infrastructure.

Construction activities would result in the demolition of existing sidewalk facilities, creating a need to dispose of concrete and other construction debris. The City requires construction and demolition waste processing and recycling pursuant to the Construction and Demolition Waste Recycling Ordinance (Ordinance 181,519) rather than disposal in landfills. Compliance with this ordinance, as well as solid waste policies and objectives in the City Solid Waste Management Policy Plan, Framework Element, or the Source Reduction and Recycling Element, would minimize the Project's contribution to cumulative impacts at landfills. However, the proposed Project may exceed existing capacity at City recycling facilities. The waste infrastructure that would be necessary over the life of the Project would be addressed and planned for in subsequent iterations of the relevant planning documents, such as the Solid Waste Integrated Resources Plan. As a result, impacts would be less than cumulatively considerable.

4.3.15 Energy

The proposed Project would have the potential to result in a cumulatively considerable impact related to energy, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would result in the wasteful, inefficient, or unnecessary consumption of energy.

Cumulative growth and development in the greater Los Angeles region would result in additional demand, resulting in increased consumption of electricity and natural gas. The anticipated power and natural gas demands for the buildout of the City of Los Angeles Framework Plan would be considered to be cumulatively significant in the context of future growth elsewhere in Los Angeles County (City of Los Angeles 1995). Cumulative electricity demands within Los Angeles County in 2035 would total about 15.1 billion kilowatt hours per year (15,100 gigawatt hours per year), which is within Southern California Edison's demand forecast for its service area. Cumulative natural gas demands in 2035 would total about 232 million therms per year (61.6 million cubic feet of natural gas per day), which is within the Southern California Gas Company's natural gas supply forecast. These cumulative impacts were considered to be less than significant (County of Los Angeles 2014).

Implementation of the transportation projects included in the 2016 RTP/SCS, when taken into consideration with other development and infrastructure projects within the SCAG region and surrounding areas, would have the potential to increase the consumptive use of energy by residential land uses, constituting a significant cumulative impact. The cumulative residential energy consumption between 2015 and 2040 would be 6 percent less with the Plan than with no Plan. However, there would still be 11,028 trillion British thermal unit [BTU] commitment to residential

energy consumption over the lifespan of the Plan, resulting in a significant cumulative impact. Furthermore, implementation of the transportation projects included in the 2016 RTP/SCS, when taken into consideration with other development and infrastructure projects within the SCAG region and surrounding areas, would have the potential to increase building energy consumption, constituting a significant cumulative impact. The total energy consumption between 2015 and 2040 with the proposed 2016 RTP/SCS is 19,559 trillion BTU. This is 4 percent less than the energy consumption expected in the same time frame without the Plan. However, there would still be a 19,559-trillion BTU commitment to total energy consumption over the lifespan of the Plan, resulting in a significant cumulative impact. (SCAG 2015.)

Construction activities under the Project would rely on diesel-powered generators to produce the electricity required to operate electrical equipment. Although the removal of street trees could indirectly increase electricity consumption because of the urban heat island effect, the Project would plant up to 30,405 street trees, resulting in a net neutral citywide street tree canopy beginning in year 30 of the Project and continuing beyond year 30, which would offset the temporary urban heat island effects. As described in Chapter 3.15, it is anticipated that the utilities would address demands within their respective service territories, which are under the oversight of the Public Utilities Commission. Furthermore, the Project would not have a detrimental effect on local and regional energy supplies or requirements for additional capacity. In addition, the Project would not impede a local utility's ability to meet the Project's peak- and base-period demand for electricity and other forms of energy.

During construction, transportation fuel would be required and consumed at a rate of approximately 148,705 gallons per year during peak activity, or approximately 3.3 million gallons (418,456 BTUs) over the 30-year lifetime of the Project. Vehicles used for street tree watering and inspections during post-construction operations would result in the consumption of approximately 10,623 gallons (41,280 BTUs) of transportation fuel per year, or approximately 318,690 gallons over the 30-year lifetime of the Project. The City would use a fleet of fuel-efficient vehicles for all work that would be required under the Project, which would reduce the demand for transportation fuels. Therefore, the Project would not result in a wasteful, inefficient, or unnecessary usage of energy; result in a substantial increase in energy demand that would affect local or regional energy supplies; or require additional capacity or infrastructure to meet an increased demand. Therefore, the proposed Project would not result in cumulatively considerable contributions to impacts on energy supplies.

4.3.16 Wildfire

The proposed Project would have the potential to result in a cumulatively considerable impact related to wildfire, if, in combination with cumulative plans and programs within the greater Los Angeles region, it would: substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment; or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Los Angeles County faces major wildland fire threats due to its hilly terrain, dry weather conditions, and the nature of its plant coverage. Although fires are a natural part of the wildland ecosystem, development in wildland areas increases the danger of wildfires to residents, property, and the environment. Cumulative growth and development within the Los Angeles region would increase the number of wildfire events and increase the exposure of people to risks associated with wildfires. Continued growth and development in Los Angeles County would significantly affect the Los Angeles County Fire Department operations. In an effort to reduce the threats to lives and property, the Los Angeles County Fire Department has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the Los Angeles County Fire Department and the County Department of Public Works enforce fire and building codes related to development in Very High Fire Hazard Severity Zones (VHFHSZs). The Los Angeles Fire Department has access requirements for single-family residential uses built in VHFHSZs. The County General Plan policies and conditions of approval for future development projects, in addition to compliance with applicable regulations, would minimize proposed Project impacts related to wildland fires. Any future development would be required to comply with applicable federal, state, and local regulations related to wildland fires. Required compliance with these regulations would ensure impacts related to wildland fires would be less than cumulatively considerable. (County of Los Angeles 2014.)

Implementation of the transportation projects included in the 2016 RTP/SCS—when taken into consideration with related development and infrastructure projects within the SCAG region and surrounding areas, and anticipated growth and land use development patterns—would contribute to cumulative significant impacts with regard to the potential to expose people and structures to wildland fires. The 2016 RTP/SCS includes a set of regional land use strategies that are intended to guide future land development patterns to focus new growth in transit priority areas or existing infill sites, existing suburban town centers, and walkable mixed-use communities. While the specific impact of this pattern of development relative to wildland fires is unknown, it could result in cumulative significant impacts with regard to more people being exposed to the effects of effects of wildland fires. Therefore, the Plan would result in cumulative significant impacts with regard to the potential to expose additional people and structures to the effects of wildland fires. (SCAG 2015.)

The proposed Project would result in sidewalk repairs within urban or suburban areas. However, some repairs would occur in areas that are designated as VHFHSZs. The work would be performed on concrete sidewalks, curbs, gutters, ramps, and other existing built-environment infrastructure. The materials involved are not flammable, and work would not be performed near flammable materials that would exacerbate wildfire risks. Compliance with existing laws, such as those in the Los Angeles Municipal Code, Fire Code Section 57, et seq., as mentioned in PDF-WF-1 through PDF-WF-6, for construction sites on, adjacent to, or in the immediate vicinity of a VHFHSZ would further minimize potential risks. Therefore, the proposed Project would not result in cumulatively considerable contributions to wildfire impacts.

