Section 15130 of the *State CEQA Guidelines* requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (*State CEQA Guidelines* § 15355). "'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" (*State CEQA Guidelines* § 15065(a)(3)).

The purpose of a cumulative analysis is to determine if several projects when evaluated together could result in a significant "cumulative" impact that would otherwise not be considered significant when projects are evaluated one at a time. If several projects considered together have the potential to result in a significant cumulative impact (that is not already identified as a significant project impact), the question becomes whether the project being analyzed would result in a "considerable" contribution to such a significant cumulative impact. Therefore, if a project results in a significant impact by itself, then its contribution to a cumulative impact is considerable. Mitigation measures that reduce project impacts would similarly reduce a project's contribution to cumulative impacts.

Connect SoCal is a planning project that is comprised of multiple other planning projects as well as transportation and development projects. Therefore, the analysis of the Plan is cumulative in nature. At this regional-scale, cumulative projects that are considered cumulative to and similar to the proposed Plan are other regional-scale projects primarily consisting of RTPs/SCSs for adjacent jurisdictions and AQMPs.

The proposed Plan includes transportation projects throughout the SCAG region and land use development patterns to accommodate projected regional growth through 2045. The Plan also includes land use and transportation strategies that complement the projects and vice versa. As such, the impacts of Connect SoCal is cumulative on a regional scale. Therefore, the environmental analysis included in each issue area of this PEIR is, in essence, a cumulative analysis of the potential impacts of the transportation projects and growth anticipated to occur under the Plan. Furthermore, this PEIR considers other regional-scale projects that have similar regional-scale impacts that could overlap with impacts of the Plan, for identified CEQA impact areas. Such regional scale cumulative projects include RTPs and similar regional-scale plans for neighboring jurisdictions (Santa Barbara, Kern and San Diego counties) as well as Air Quality Managements Plans within the SCAG region and neighboring jurisdictions.

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CEQA allows for analysis of cumulative impacts based on a list of cumulative projects or projections of growth. This PEIR uses a combination of approaches. The analysis of cumulative impacts is qualitative and based on anticipated growth in adjacent jurisdictions assuming that each jurisdiction will adopt an RTP and AQMP as applicable and that growth will be consistent with Department of Finance (DOF) forecasts.

Cumulative impacts occur in one of two ways: 1) impacts from one project overlap with impacts from another project, so for example with respect to the Plan, traffic from within the SCAG region could overlap with traffic from an adjacent county to impact the same transportation facilities (the SCAG Regional Travel Demand Model accounts for travel from adjacent jurisdictions); 2) the other way that cumulative impacts occur is when a resource is of value to a broader community than just the immediate project vicinity, for example, impacts to a cultural or biological resource that has more than local significance, for example state or even national significance, impacts to such a resource would be cumulative with impacts to other resources of similar significance wherever they occur in the state or across the entire US.

The geographic area for evaluation of cumulative impacts is the area within which impacts of the proposed Plan could overlap with impacts of other regional-scale projects. In general, the areas that could experience overlapping impacts are on the periphery of the region where growth from the Plan and growth in accordance with other plans could occur and result in overlapping impacts.

The potential for cumulative or overlapping impacts is contemplated at four basic geographies, the SCAG region, adjacent jurisdictions, the state, and global (see **Table 3.21-1**, **Cumulative Impact Analysis Geographies**). Although there is some potential for categories to overlap, for example, recreational impacts may occur at the SCAG regional geography as well as the adjacent county and state level.

For purposes of the cumulative analysis, the qualitative discussion identifies how impacts could overlap; **Table 3.21-1** provides an approximate guide of the primary focus of the cumulative analysis and is not intended to limit the geography of a particular cumulative analysis where impacts may overlap at a number of levels.

Table 3.21-1 Cumulative Impact Analysis Geographies

Adjacent Jurisdictions			
SCAG Region	(San Diego, Santa	State of California	Global
	Barbara, Kern)		
Air Quality Localized Impacts	Air Quality – Regional Impacts	Agriculture and Forestry Resources	Greenhouse Gases
Biological Resources	Biological Resources	Public Services – Park and Recreation (Regional Facilities)	Paleontological
Cultural Resources	Cultural Resources	Solid Waste	
		Wastewater	
	Transportation and Traffic	Water Supply	
Noise	Public Services – Fire, Police, Schools, Libraries, Parks and Recreation (Local Facilities)	Energy	
	Aesthetics	Mineral Resources	
	Noise	Tribal Cultural Resources	
	Hazards and Hazardous Materials	Biological Resources	
	Hydrology and water quality	Paleontological	
	Population and Housing	Transportation	
	Land Use and Planning		
	Mineral Resources		
	Wildfire		

Source, Impact Sciences, 2019

3.21.1 AESTHETICS

Connect SoCal includes transportation projects and land use strategies that would shape the region over the next 25 years. As discussed in Section 3.1, Aesthetics, these changes include the extension of transportation and related infrastructure and expansion of urbanized areas that would impact scenic resources. Transportation projects could facilitate access not only within SCAG boundaries but also to areas outside the region. In addition, Plan projects would connect with projects outside the region facilitating and potentially inducing construction of transportation infrastructure and development outside the region. Some of these changes would be expected on the fringe of the region (e.g. projects along the border of Los Angeles and Kern Counties). Urbanization or loss of these visual resources could also affect areas outside the region as many of these scenic areas extend beyond SCAG borders. As a result, the Plan could indirectly cause changes to the visual character or to scenic areas outside the region. Therefore, the Plan would contribute to cumulative impacts to scenic resources and visual character. Implementation of Mitigation Measures SMM AES-1 and PMM AES-1 through PMM AES-2 would

reduce potential impacts to aesthetic resources. However, even with the implementation of mitigation measures, impacts are considered significant and could add to such impacts from cumulative projects (for example other RTPs for surrounding jurisdictions) outside the region.

3.21.2 AGRICULTURE AND FORESTRY

Under the Connect SoCal Plan, consumption of farmland is anticipated. These impacts would be the direct result of either implementation of transportation projects or development anticipated to occur due to projected growth under the Plan. As discussed in Section 3.2, Agriculture and Forestry Resources, impacts to agricultural and forestry resources from the Plan are considered significant and unavoidable. Loss of farmland would worsen the conversion of agricultural lands due to urbanization throughout the state. The 2015 California Farmland Conversion Report ranks the Southern California region at the top in net acres converted to urban land, with Riverside County ranked second at the county level. The Southern California and San Joaquin Valley regions accounted for the largest urban growth in terms of acreage. Implementation of Mitigation Measures SMM AG-1, through SMM AG-4 and PMM AG-1 would reduce impacts, but as other California regions continue to urbanize, agricultural land in the state may continue to be lost due to land use conversion, contributing to cumulative statewide significant impacts.

The Plan has the potential to conflict with Williamson Act lands or existing zoning for agricultural use. Mitigation Measures SMM AG-1 through SMM AG-2 and PMM AG-1 through PMM AG-2 would reduce impacts, but they are still considered significant. As noted above, through the increasing urbanization, other regions adjacent to SCAG boundaries may also convert agricultural lands to urban uses and conflict with existing zoning.

The Plan would have a significant impact regarding forest lands. Transportation projects included in the Plan that would result impact to forest lands include highway expansion, highway widening projects, and potential connectors. Projects in adjacent regions could convert forestry resources and forest lands due to development, resulting in cumulative impacts.

The Plan would involve other changes in the environment which, due to their location or nature, could convert Farmland to non-agricultural use or conversion of forest land to non-forest use. Implementation of Mitigation Measures SMM AG-1 through SMM AG-2 as well as SMM GHG-1 through SMM GHG-

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California Department of Conservation. 2015. *California Farmland Conversion Report* 2015. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/2010-2012/FCR/FCR%202015 complete.pdf, accessed November 5, 2019.

² Ibid.

5 and PMM AG-2 as well as PMM GHG-2 would reduce impacts, but they are still considered significant. As development pressure from conversion of Farmland to urban uses increases, lands adjacent to SCAG boundaries may feel the same indirect pressure to develop and convert lands. Therefore, there would be a significant cumulative impact.

3.21.3 AIR QUALITY

Connect SoCal is a regional plan that integrates transportation investments with land use strategies for the SCAG region. As such, the analysis of air quality impacts presented is inherently cumulative. As discussed in **Section 3.3**, **Air Quality**, the Plan would result in significant impacts as a result of short-term emissions of criteria pollutants and as a result of sensitive receptors being in proximity to sources of TACs (**Impact AQ-4**). However, the Plan could also contribute to air quality impacts outside the SCAG region itself. The cumulative analysis impact area for air quality consists of air basins that extend beyond the SCAG boundaries, such as the Mojave Desert Air Basin that extends into Kern County. Implementation of the Connect SoCal Plan combined with cumulative development outside of the SCAG region would add to the significant air quality impacts of the Plan.

Implementation of Mitigation Measures SMM AQ-1 through SMM AQ-3 and PMM AQ-1 through PMM AQ-3 would reduce the contribution to cumulative air quality impacts; however, the Plan's impacts would remain significant and would add to the impacts of other RTPs in surrounding jurisdictions.

3.21.4 BIOLOGICAL RESOURCES

As discussed in Section 3.4, Biological Resources, Connect SoCal would result in impacts to sensitive species as well as habitat fragmentation and loss and disturbance. Implementation of Mitigation Measures SMM BIO-1 through SMM BIO-2 and PMM BIO-1 through PMM BIO-6 would reduce impacts to biological resources but impacts would remain significant. Many of these impacts would be the direct result of either transportation improvements or development. Impacts to sensitive species, as well as loss of habitat and habitat fragmentation would contribute to similar statewide impacts. Many important habitat corridors cross the SCAG region's boundaries. As a result, the loss of an important corridor, or fragmentation of habitat could limit the movement of wildlife species resulting in additional cumulative impacts. Similarly, fragmentation could reduce the viability of a species beyond the plan area. Therefore, the significant impacts to biological resources anticipated to result from transportation and development projects occurring under the Plan would contribute to cumulative biological resources impacts outside of just the SCAG region, including effects throughout California.

3.21.5 CULTURAL RESOURCES

The Plan includes transportation projects and land use strategies that will shape the region over the next 25 years. As discussed in Section 3.5, Cultural Resources, these changes include the extension of transportation and related infrastructure that would impact cultural resources through activities such as demolition of historical resources or indirect impacts such as changing the historic context of the resource. In addition, Plan projects will connect with projects outside the region, thereby facilitating and potentially inducing construction of transportation infrastructure outside the region. This additional infrastructure could lead to additional development, both inside and outside the region. Plan impacts would add to cultural resource impacts of cumulative projects (transportation projects and development in accordance with RTP plans of adjacent jurisdictions). Implementation of Mitigation Measures SMM CULT-1 and PMM CULT-1 and PMM CULT-2, would reduce the contribution to cumulative impacts to cultural resources. However, the Plan would still result in significant impacts to historical resources as well as archaeological resources and would contribute to significant cumulative impacts. Although in general cultural and historical impacts are specific to a smaller area (region), there is the potential for the project to contribute to impacts in adjacent counties.

3.21.6 ENERGY

Impacts to energy related to implementation of the Plan are analyzed in **Section 3.6**, **Energy.** The increase in energy demand that is anticipated to occur as population increases in the SCAG region would contribute cumulatively to state increases in energy consumption. The state population is anticipated to continue to grow throughout the implementation period of the Connect SoCal Plan, reaching over 47 million by 2045.³ Inland areas within the state will grow at higher rates, as the Inland Empire, San Joaquin Valley, and the Sacramento region experience faster growth.⁴ The population growth reflects California's increasing energy demand, with the lowest 2030 estimates indicating an annual consumption demand of 326,026 GWh.⁵ Transportation energy demand will see significant changes in response to increasing vehicle electrification, higher vehicle fuel economy, and hydrogen fuel demand. Although California's population and economy are expected to grow, gasoline consumption is projected to decline by 2030.⁶ Diesel demand and demand for hydrogen fuel will continue to rise during same period.⁷ The

California Department of Finance. 2019. *Total Estimated and Projected Population for California and Counties: 1-Year Increments*. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Projections/, accessed November 6, 2019.

Public Policy Institute of California. 2016. *California's Future*. Available at: https://www.ppic.org/content/pubs/report/R 116HJ3R.pdf, accessed November 6, 2019.

California Energy Commission. 2018. *California Energy Demand 2018-2030 Revised Forecast*. Available at: https://ww2.energy.ca.gov/2017 energypolicy/documents/, accessed November 6, 2019.

⁶ California Energy Commission. 2017. Transportation Energy Demand Forecast, 2018-2030.

various counties and cities within the SCAG region, in accordance with state law, will require the implementation a variety of energy efficiency measures to decrease energy consumption as a means to reduce GHG emissions. The Plan aims to reduce energy consumption and GHG emissions, and would comply with the state's goals, as adjacent counties' regional plans would also comply with state goals. Energy impacts would be less than significant. Therefore, the Plan would not cumulatively contribute to wasteful, inefficient, or unnecessary consumption of energy resources.

3.21.7 GEOLOGY AND SOILS

Impacts to geology and soils related to implementation of the Plan are analyzed in **Section 3.7**, **Geology and Soils**. The SCAG region extends primarily over four California geomorphic provinces: the Mojave Desert, the Transverse Ranges, the Peninsular Ranges, and the Colorado Desert.⁸ These geomorphic provinces include several active faults, and they extend beyond SCAG's boundaries to neighboring counties. However, geologic effects occur independently of one another and are related to site-specific and project-specific characteristics and conditions. In addition, existing regulations specify mandatory actions that must occur during project development, which would adequately address the potential for effects from construction or operation of projects related to exposure to seismic hazards. Since the implementation of the Plan would not exacerbate existing geologic hazards including fault rupture, in addition to the fact that there are already numerous regulations in place to reduce such risks to any planned development or transportation project, geologic impacts would be less than significant and the Plan would not result in a considerable contribution to cumulative impacts.

The paleontology of the SCAG region is as equally diverse as the geologic diversity. The Plan's ground disturbing activities would potentially impact paleontological resources. Ground-disturbing activities such as excavation for building foundations and bridges, trenching for utility lines, tunneling, and grading, could damage or destroy sensitive paleontological resources on or near the surface or at depth. Implementation of **Mitigation Measures SMM-GEO-3** and **PMM-GEO-1** would reduce the level of impacts but would still be considered significant. Paleontological resources, and important paleontological finds may still occur. For example, in 2005 a Mammoth was discovered in the City of Moorpark. The fossils were dated as between 400,000 and 1.8 million years old Such finds, while locally important, provide important contextual information to the state's history and beyond. The loss of such resources would be cumulatively considerable.

⁷ Ibid

California Geological Survey. 2002. California Geomorphic Provinces. Available online at: https://www.conservation.ca.gov/cgs/Documents/Note-36.pdf, accessed June 12, 2019.

3.21.8 GREENHOUSE GASES

In general, GHG emissions analyses are by nature cumulative as impacts from GHG emissions are global, and there is currently no method to tie local impacts to specific sources. Emissions from any single project mix in the atmosphere and contribute to local, regional, and global impacts over long periods of time. Consequently, any project specific GHG analysis is inherently a cumulative analysis. The analysis presented in **Section 3.8**, **Greenhouse Gases**, is also a cumulative analysis in that it considers the entire SCAG region as the project site, includes all growth in residential and commercial space as well as region-wide vehicle traffic, and compares these impacts to statewide plans and regulations. In this way, it includes all projects of a similar nature and compares the total impact to regional thresholds. Adjacent jurisdictions in preparing their RTPs will similarly evaluate GHG emissions; in addition, air quality management districts will evaluate emissions associated with stationary and other non-mobile sources and local jurisdictions will more precisely quantify emissions associated with individual projects. Consequently, the analysis presented in **Section 3.8** of this PEIR is a cumulative analysis, and no separate assessment of cumulative effects is needed.

3.21.9 HAZARDS AND HAZARDOUS MATERIALS

Impacts associated with hazards and hazardous materials related to implementation of the proposed Plan are analyzed in Section 3.9, Hazards and Hazardous Materials. Hazards and hazardous materials impacts may be related to the transport, use, or disposal of hazardous materials, create a significant hazard through upset or accident conditions involving release of hazardous materials, hazardous materials within one-quarter mile of an existing or proposed school, location on a known hazardous materials site, airport-related hazards, and conflict with an emergency response plan. These effects occur independently of one another, related to site-specific and project-specific characteristics and conditions. However, the analysis in Section 3.9 concluded there would be significant and unavoidable effects regarding impacts to transport of hazardous materials, release of hazardous materials, hazardous materials within one-quarter mile of a school, location on a known hazardous materials site, and conflict with an emergency response plan. Implementation of Mitigation Measures SMM HAZ-1 through SMM HAZ-5 as well as SMM TRA-5 and PMM HAZ-1 through PMM HAZ-1 through PMM HAZ-5 as well as PMM TRA-5 would reduce the Plan's impacts, but they would remain significant. These impacts have the potential, due to transportation projects and land use strategies, to have effects beyond SCAG boundaries, particularly to adjacent jurisdictions. Therefore, implementation of the Plan would have significant cumulative impacts.

3.21.10 HYDROLOGY AND WATER QUALITY

As discussed in Section 3.10, Hydrology and Water Quality, the Plan would result in significant impacts related to water quality, groundwater recharge, flood hazards and water supply. The land use strategies included in the Plan would result in a more compact development pattern that would be more water efficient. The water providers within the SCAG region that serve the population would need to coordinate water supply with nearby jurisdictions. Given the unreliability of water supply in the region, the increase of approximately 3.2 million people would result in a significant impact to water supply that would add to the impacts of development in surrounding jurisdictions. The Plan could also facilitate access to other areas of the state by increasing infrastructure which could ultimately influence growth (and associated impermeable surfaces) in areas outside SCAG boundaries. Mitigation Measures SMM HYD-1 through SMM HYD-2 and PMM HYD-1 through PMM HYD-2 would reduce impacts, but they would remain significant. This could result in greater impacts to water quality and could affect water in areas outside the SCAG region. Therefore, the Plan would result in significant cumulative impacts.

3.21.11 LAND USE AND PLANNING

As discussed in Section 3.11, Land Use and Planning, implementation of the Connect SoCal Plan has the potential to physically divide an established community and to conflict with existing land use plans. The Plan would result in an increase in density and land use development. Improved accessibility from the Plan could help facilitate urbanization to areas outside the region. Furthermore, changes in land use patterns in the region (i.e. increased urbanization) could affect areas outside the region, resulting in increased urbanization in adjacent jurisdictions. Implementation of Mitigation Measures SMM LU-1 through SMM LU-4 and PMM LU-1 through PMM LU-2 would reduce impacts, but they would remain significant. Therefore, the Plan would result in significant cumulative land use impacts.

3.21.12 MINERAL RESOURCES

Impacts to mineral resources related to implementation of the Plan are analyzed in **Section 3.12**. The analysis concluded that there would be a significant and unavoidable impact regarding the loss of known mineral resources occurring from transportation projects and land use strategies in the Plan. Aggregate resources used in construction activities throughout the SCAG region would potentially be reduced due to the Plan's transportation projects and anticipated development under the Plan. The Plan could worsen depletion of aggregate supply which would impact surrounding areas and the state. **Mitigation Measures SMM MIN-1** and **PMM MIN-1** would reduce impacts, but they would remain significant. Therefore, the Plan would have significant cumulative impact on mineral resources adding to the impact from development of areas outside the SCAG region.

3.21.13 NOISE

As discussed in **Section 3.13, Noise**, the Plan would result in significant impacts related to increases in noise. Changes resulting from the Plan include the extension of transportation and related infrastructure that would result in new noise sources as well as increased noise from some existing sources. Implementation of **Mitigation Measures SMM NOISE-1** and **PMM NOISE-1** would reduce noise and vibration impacts, however they would remain significant. Many of the transportation projects could facilitate access not only within SCAG boundaries but also areas outside the region to adjacent jurisdictions. In addition, Plan projects will connect with projects outside the region, facilitating and potentially inducing construction of transportation infrastructure outside the region. Construction noise and vibration impacts are generally site specific, but to the extent that the Plan might influence growth outside the region, it could result in construction noise outside the region. As population in the region continues to increase, the Plan could also contribute to a cumulatively considerable temporary or permanent increase in noise and vibration outside the region as a result of increased travel. This activity would include railroads, as well as freeway, arterial and transit noise. As a result, there would be a significant cumulative impact.

3.21.14 POPULATION AND HOUSING

As discussed in Section 3.14, Population and Housing, implementation of the Connect SoCal Plan could facilitate an increase in population, housing, and employment (although the same increases are anticipated whether or not the Plan is adopted). It is possible that the improved accessibility gained by transportation investments and key land use strategies could result in an increase in population in areas outside the region (as people find it easier to move from outside the region to employment centers within the region). If population increases in areas outside the SCAG region were in excess of forecasts and plans, it could add to cumulative impacts in other jurisdictions. Impacts would be reduced by Mitigation Measures SMM POP-1 through SMM POP-4 and PMM POP-1 would reduce impacts, but they would remain significant. Therefore, the significant impacts of the Plan could contribute to population and displacement impacts of other Plans in neighboring jurisdictions, resulting in a significant cumulative impact.

3.21.15 PUBLIC SERVICES

Fire Protection

As discussed in **Section 3.15.1, Fire Protection**, the Plan would result in significant impacts related to the need for new facilities, the construction of which could cause physical impacts. In general impacts to fire services would be confined to the region and would result from transportation projects and anticipated

growth. It is possible that developments that occur near the region's boundary could result in the need for new or expanded fire protection facilities outside the region. This impact would be cumulatively considerable. In addition, wildfire impacts would be significant. Large fires can extend across regional boundaries requiring firefighters from adjacent regions and beyond to assist on a case-by-case basis. To the extent that the Plan would increase urban uses along the wildland interface and increase fire risk, the chance of a fire requiring multi-regional support also increases. **Mitigation Measures SMM PSF-1** through **SMM PSF-3** and **PMM PSF-1** would reduce impacts but they would remain significant. As a result, the Plan would have a significant cumulative impact.

Police Protection

As discussed in Section 3.15.2, Police Protection, the Plan would result in significant impacts related to the need for new facilities. Impacts would be reduced by Mitigation Measures SMM PSP-1 through SMM PSP-4 and PMM PSP-1 would reduce impacts but they would remain significant. In general, impacts as a result of construction of new police facilities would be confined to the immediate area of the construction of each facility. However, as with fire protection, where development and transportation projects are located on the boundary of the region, it is possible that new or expanded facilities would be necessary outside the region. If the construction of such facilities results in a significant impact, the Plan's impact would be cumulatively considerable.

Schools

As discussed in **Section 3.15.3, Schools,** the Plan would result in significant impacts related to the need for new school facilities. **Mitigation Measure SMM PSS-1** would reduce impacts, but they would remain significant. In general, impacts as a result of construction of new schools would be confined to the immediate area of each school. However, if development and transportation projects occur on the boundary of the region, it is possible that new or expanded school facilities would be necessary. If the construction of such facilities results in significant impacts, the Plan's impact would be cumulatively considerable.

Library Services

As discussed in **Section 3.15.4**, the Plan would result in significant impacts related to the need for new facilities. **Mitigation Measure PMM PSL-1** would reduce impacts, but they would remain significant. In general, impacts as a result of construction of new library facilities would be confined to the immediate area of each library. However, if development and transportation projects occur on the boundary of the region, it is possible that new or expanded library facilities would be necessary. If the construction of such facilities results in significant impacts, the Plan's impact would be cumulatively considerable.

3.21.16 PARKS AND RECREATION

To the extent that development may occur on the periphery of the SCAG region, it could increase demand for recreation facilities in surrounding jurisdictions as discussed in Section 3.16, Parks and Recreation. Similarly, development on the periphery of these other regions, such as adjacent counties, would result in demand for recreational facilities within the SCAG region. In addition, given the natural resources in the SCAG region, any development in other counties would tend to increase demand for recreation facilities with statewide appeal that are within the SCAG region. Improved transportation infrastructure would facilitate access to these recreational facilities. Impacts would be reduced by Mitigation Measures SMM REC-1 and PMM REC-1, PMM AQ-2(b), and PMM NOISE-1(b) but would remain significant. Therefore, the significant impacts of the Plan on existing facilities of statewide appeal would add to similar impacts anticipated to result from RTPs in other jurisdictions, resulting in a significant cumulative impact.

3.21.17 TRANSPORTATION, TRAFFIC, AND SAFETY

As discussed in Section 3.17, Transportation, Traffic and Safety, the Plan would result in increases in total VMT and vehicle hours of delay but reductions in per capita VMT and vehicle hours of delay. Implementation of the Connect SoCal Plan would result in an increase in density and land use development over the life of the Plan. Transportation and traffic related impacts would be reduced by Mitigation Measures SMM TRA-1 through SMM TRA-8 and PMM TRA-1 through PMM TRA-2 but they would remain significant. Implementation of the Plan, combined with growth outside the region, has the potential to conflict with congestion management programs outside SCAG boundaries. Congestion and delay from RTPs in adjacent counties would add to these significant impacts, which would result in a significant cumulative impact. Further, as discussed in Section 3.17 Transportation, the per capita VMT reductions may not be enough to meet the state goals established by CARB. This, combined with other MPO's not achieving reductions in VMT beyond those identified by CARB, would result in a cumulative statewide impact.

3.21.18 TRIBAL CULTURAL RESOURCES

Plan projects will facilitate access to areas outside the region. In addition, Plan projects will connect with projects outside the region, thereby facilitating and potentially inducing construction of transportation infrastructure outside SCAG boundaries. As discussed in **Section 3.18**, implementation of the Plan would result in significant impacts to tribal cultural resources. **Mitigation Measures SMM TCR-1** and **PMM TCR-1** would reduce impacts but they would remain significant. Therefore, the impacts would contribute

to significant cumulative impacts to tribal cultural resources throughout the state as resources are impacted by new development and land is disturbed.

3.21.19 UTILITIES AND SERVICE SYSTEMS

Solid Waste

The Plan would result in significant impacts related to solid waste generation in the region, as discussed in Section 3.19.1, Solid Waste. Implementation of Mitigation Measures SMM USW-1 through SMM USW-2 and PMM USW-1 would reduce impacts but they would remain significant. As population increases across the state, it is expected that additional demands will be placed on landfills with remaining capacity both from inside the SCAG region and from nearby areas such as adjacent counties. The increased demand on landfill capacity could result in the need to truck waste long distances, including to sites outside the region which could result in localized impacts outside the region (noise, air quality, traffic). Further, landfill capacity is finite and by reducing landfill capacity outside the region, there would be less capacity available for areas outside the region. As a result, the Plan would add to impacts on available landfill capacity and result in a cumulatively considerable impact.

Wastewater

The Plan would result in a significant impact related to wastewater capacity and the need for new facilities, as discussed in Section 3.19.2, Wastewater. Impacts would be reduced by Mitigation Measures SMM HYD-1 through SMM HYD-3 and PMM UWW-1 but impacts would remain significant. Connect SoCal includes transportation projects and regional land use strategies, targeting growth in urban areas. However, due to planned transportation projects and anticipated development, there would be potential for construction of new stormwater drainage facilities or expansion of existing facilities would be needed. The need for new or expanded facilities for Plan projects in combination with other large projects outside the region, such as wastewater projects in adjacent counties or transportation projects that connect with projects to outside areas could result in significant impacts. As such the Plan would result in a cumulatively considerable impact.

Water Supply

The Plan would result in significant impacts related to water supply, as discussed in **Section 3.19.3**, **Water Supply**. Impacts would be reduced by **Mitigation Measures SMM USS-2** and **PMM USS-1** but impacts would remain significant. The water providers within the SCAG region that serve the population would need to coordinate water supply with nearby jurisdictions. Given the unreliability of water supply in the region, additional population growth would result in a significant impact to water supply that would add

to the impacts of development in surrounding jurisdictions. Water supply projects that serve the SCAG region include infrastructure that extends beyond the boundaries of the SCAG region. For example, the California Aqueduct conveys water from the Sierra Nevada Mountains and the Colorado River Aqueduct conveys water from the Colorado River to Southern California. Increases in population could require or result in the relocation or construction of new or expanded water facilities outside of the region. As such, the Plan would result in a cumulatively considerable impact.

3.21.20 WILDFIRE

The Plan would result in significant wildfire risk impacts. Impacts associated with wildfire hazards related to implementation of the Plan are analyzed in Section 3.20. Impacts would be reduced by Mitigation Measures SMM WF-1 through SMM WF-2 and PMM WF-1 but impacts would remain significant. Wildfire impacts may be related to impairing an emergency response or evacuation plan, exposing occupants to wildfire risks and pollutant concentrations from wildfire, and exposing people or structures to post-fire slope instability. Wildfires pose a significant public health risk due to their air quality impacts. Furthermore, as wildfire-prone areas tend to have fewer vehicular access points than flat, urbanized areas, these roads could face gridlock in the event of a sudden emergency evacuation. Such circumstances could expose vehicle occupants to active flames and potential death. Development of transportation or housing projects in wildfire-prone areas would cause an increase in population exposed to wildfire risk and exacerbate exposure of those populations to pollutant concentrations from wildfires, particularly populations living downwind of the fire. Plan projects, in combination with other projects outside the region, specifically, potential development projects in wildfire areas, could result in additional impacts. Therefore, the project would result in a cumulative considerable impact.

3.21.21 SOURCES

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