Mr. Kome Ajise  
Executive Director  
Southern California Association of Governments  
900 Wilshire Blvd., Ste. 1700  
Los Angeles, CA 90017

Re: Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal Plan) and Draft Program Environmental Impact Report

Dear Mr. Ajise:

Thank you for the opportunity to comment on SCAG’s Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal Plan) and the Draft Program Environmental Impact Report (PEIR). Attached are comments from the South Coast AQMD staff on the Connect SoCal Plan (Attachment 1) and the Draft PEIR for the Connect SoCal Plan (Attachment 2).

The 2023 attainment date for the 1997 federal 8-hour ozone standard represents a significant challenge to the South Coast Air Basin (Basin). This attainment challenge (including potential sanctions on highway funding) should be highlighted in the Plan as a regional priority. With goods movement accounting for a significant portion of the mobile source emissions in the Basin, there is a critical need for a new and innovative regional goods movement system that needs to be pursued and developed through a collaborative process. More detailed comments on goods movement are included in Attachment 1.

After a review of the Draft PEIR’s air quality and health risk analyses and supporting technical documents, the Draft PEIR likely under-estimated the air quality impacts of the Plan. The Draft PEIR improperly credits the Plan with emission reductions in air quality and health risks that will occur independent of the Plan due to adopted state and federal rules and regulations. Second, SCAG did not utilize South Coast AQMD’s CEQA significance threshold of for health risk impacts. More detailed comments on the Draft PEIR are included in Attachment 2.
We are fully committed to continuing to work collaboratively with SCAG and other stakeholders to achieve the vision outlined in this Plan.

Sincerely,

[Signature]

Wayne Nastri
Executive Officer

CC: Mr. Ping Chang, Southern California Association of Governments
Mr. Roland Ok, Southern California Association of Governments
Ms. Karen Calderon, Southern California Association of Governments

Attachments
Attachment 1 – Comments on Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal Plan)

Attachment 2 – Comments on Draft Program Environmental Impact Report for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy
Attainment of federal air quality standards, a regional priority - The South Coast Air Basin (Basin) is facing a daunting challenge to meet the upcoming deadlines for attaining the health-based federal ozone standards. NOx is the key pollutant causing high ozone levels in our region and must be reduced by 45% and 55% beyond all existing regulations by 2023 and 2031, respectively, to meet federal standards and achieve healthy air for the region. Because over 80% of the NOx in our region is from mobile sources, significant reductions have to come from goods movement sectors (i.e., trucks, cargo handling equipment, rail and ocean-going vessels). Aggressive regulations, advancements in technologies, innovative solutions and integrated land-use and transportation planning as well as coordinated efforts among all stakeholders, at local, state and federal levels are essential to achieve the needed reductions from goods movement activities. We strongly recommend that the challenge of attaining the federal air quality standards be presented in the Connect SoCal Plan as a regional priority calling for a regional solution.

Potential sanctions on transportation funding - On December 31, 2019, South Coast AQMD and California Air Resources Board submitted a jointly-developed Contingency Measure Plan (Plan) to the U.S. EPA to address the required NOx reductions for attaining the 1997 8-hour ozone standard in 2023. The Plan describes additional regulatory actions, programs, and incentive funding South Coast AQMD and CARB have developed to achieve additional emission reductions, and it highlights the critical need for federal regulatory actions and/or funding to address sources under federal jurisdiction (i.e., aircraft, ships, trains, out-of-state trucks), in order to achieve this standard. If U.S. EPA disapproves the Plan, a federal sanctions clock will be triggered, culminating in highway sanctions if the underlying deficiency cannot be corrected. The imposition of highway sanctions results in the loss of federal funds for transportation projects except for certain safety, transit, and air quality beneficial projects. It should be noted that the U.S. EPA does have the option, under the Clean Air Act section 110(m), to apply discretionary sanctions at any time after a disapproval is made. Given the detrimental impact of sanctions to regional transportation planning, we recommend that SCAG highlight the potential sanctions on transportation funding in the Connect SoCal Plan and provide an estimate of the potential impacts.

Need for new innovative regional freight transportation systems - Although goods movement in the SCAG region provides significant positive local, regional and even national economic benefits, it also brings major challenges, including adverse impacts on local and regional air quality, congestion, safety, and roadways. The projected growth in goods movement activity in the SCAG region will further exacerbate the existing conditions. Given the complex nature of the existing transportation networks used for moving import and export cargo, a comprehensive regional solution is needed to address these challenges while improving overall system efficiency. We believe that fundamental changes to the existing networks used for moving cargo need to be earnestly explored and considered.

To signal these needed changes, we recommend that the goods movement project list include at least a $10 billion funding allocation to identify and deploy innovative zero-emission cargo movement system(s) through a collaborative stakeholder process. The proposed project in the
Connect SoCal Plan will highlight the critical need for a new and innovative goods movement system for the region and will facilitate solicitation of federal funding. South Coast AQMD is fully committed to participate in this process and provide technical assistance.

Ports container forecast – The Ports of Los Angeles and Long Beach handled 17.5 million twenty-foot equivalent unit (TEU) containers in 2018, which represents a 49% increase since the last recession in 2009. The 2016 Mercator Report has provided different container growth forecasts under high growth, expected, and low-growth scenarios. Although the projected growth is expected to continue until at least 2040, the Ports are projected to reach capacity before then. We recommend that the Connect SoCal Plan reflect the latest container forecast as well as identify a potential range of uncertainties based on different forecast scenarios which would also affect the port truck vehicle miles traveled (VMT) and associated emissions.

Goods Movement Environmental Strategy and Technology Advancement Plan – Although we fully support the proposed action plan for zero-emission (ZE) technologies, we recommend that the action plan be expanded to include near-zero (NZE) emission technologies with the acknowledgement that these technologies for medium-duty and heavy-duty trucks are currently in the commercial deployment phase, as discussed in the next section.

Near-term technologies commercially available now to be readily deployed within the next few years - Near-zero natural gas engine technologies are classified as one of the near-term truck technologies in the draft Goods Movement Technical Report (Appendix 1). However, natural gas engine models offered by Cummins Westport Inc. (CWI) are commercially available today and are certified to meet the optional low NOx standard of 0.02 g/bhp-hr. CWI offers the smaller L9N engine that is well suited for transit buses and refuse trucks as well as the larger 12L engine with up to 400 hp to support the demanding drayage duty cycles. In addition, CWI has recently received a CARB certification for their 6.7L engine to support the medium-duty vehicles segment which includes school buses, shuttles and medium-duty trucks. Additional fueling stations will be needed to support the expected increase in deployment of CNG trucks in the near term.

Battery electric trucks have also made significant progress in recent years, especially for the medium-duty vehicles sector. Captive fleets such as shuttles and delivery vans with fixed routes are a good match for this technology as their daily operations can be sufficiently supported by currently available products with 100 to 150 miles in operating range. In addition, because these vehicles are generally recharged overnight at their facilities, charging infrastructure needed to support these vehicles can be tailored based on the anticipated demand and provided in centralized locations. Based on the latest eligible vehicles list for the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP), there are several medium-duty trucks and vans that are commercially available for some applications and more products are expected to follow in the near future to support a wider range of vehicle types and vocations. As such, medium-duty battery electric trucks should be classified under the near-term technologies, bifurcating them from heavy-duty battery electric trucks which may require a longer timeline for commercialization. We recommend that these updates be reflected in the Goods Movement Technical Report.
Encouraging and incentivizing deployment of NZE and ZE technologies - In addition to incentive funding offered by the California Air Resources Board and South Coast AQMD to help offset the higher purchase price of NZE and ZE trucks, a dedicated lane for these trucks on highways and surface streets as well as at port terminals and railyards can provide an effective non-monetary incentive measure to promote and accelerate deployment of NZE and ZE technologies. We recommend that these types of incentive measures (e.g., dedicated lanes, parking spots/curb areas for deliveries) be considered and incorporated into the proposed goods movement projects, where appropriate.

Zero-Emission Infrastructure Study - We appreciate SCAG’s proposed study on charging infrastructure needed for electric trucks. This effort is timely and can work well in partnership with other efforts currently underway with the Public Utilities Commission\(^1\) (PUC) and the California Energy Commission\(^2\) (CEC). While those two efforts are focused on the needs and limitations of the electric grid, SCAG can provide a critical perspective and bring unique expertise as a regional transportation planning agency. We encourage SCAG to coordinate with PUC, CEC, and other key stakeholders including local utilities as this proposed study proceeds. We look forward to continuing to engage with SCAG on this effort.

\(^2\) CEC is conducting multiple efforts to evaluate transportation electrification needs, including through its current Integrated Energy Policy Report work, and through work to implement AB 2127.
South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for SCAG and should be incorporated into the Final PEIR.

South Coast AQMD Staff’s Summary of Project Description
The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range transportation and land use plan for six counties and 191 cities in Southern California (Proposed Project). It takes into account the changing socioeconomic, transportation, financial, technological, and environmental conditions, and serves as a blueprint to guide the region’s future transportation and land use development for more than 20 years. It includes a plan of transportation investments and strategies to enhance the performance and safety of the region’s transportation network that comprises of highways, arterials, roadways, transit systems, rail, seaports, and airports. It integrates technologies for the transportation and movement of people and goods, including zero and near-zero emissions technologies and infrastructure. The Proposed Project also includes land use strategies that are coordinated with transportation strategies to accommodate a net growth of 3.2 million people, 1.4 million households, and 1.4 million jobs between 2019 and 2045\(^1\) around job centers, transit priority areas, high quality transit areas, neighborhood mobility areas, and livable corridors. It balances transportation and land use strategies to meet the region’s needs in improving air quality and public health, reducing greenhouse gas emissions, and building a more sustainable, equitable, and economically vibrant future.

Summary of South Coast AQMD Staff’s Comments on the Air Quality and Health Risk Assessment Analyses in the Draft PEIR
Based on reviews of the Draft PEIR and supporting technical documents, South Coast AQMD staff has ten comments on the air quality and health risk analyses. A summary of these comments is provided as follows with additional details provided later in this attachment.

1. **CEQA Baseline:** SCAG quantified on-road mobile source emissions for the existing conditions without the Proposed Project (year 2019) and the future conditions with the Proposed Project (year 2045) and compared those emissions to determine the level of significance. Based on this analysis, the Proposed Project would mostly reduce emissions, except for PM2.5 and PM10 emissions in some parts of the region due to increases in vehicle miles travel (VMT) between 2019 and 2045\(^2\). This analysis approach improperly credits the Proposed Project with emission reductions in air quality and health risks that will occur independent of the Proposed Project due to adopted state and federal rules and regulations. SCAG should compare the emissions with the Proposed Project to the emissions without the Proposed Project in the same interim analysis years and use the comparison to determine the level of significance for the Proposed Project’s air quality impacts from on-road mobile sources.

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\(^1\)Draft PEIR. Page 2.0-14.
\(^2\)Ibid. Pages 3.3-57 to 61.
2. **Air Quality CEQA Thresholds of Significance**: SCAG quantified the Proposed Project’s on-road mobile source emissions of criteria pollutants for the region but did not compare the South Coast AQMD’s portion of the emissions to South Coast AQMD’s regional air quality CEQA significance thresholds to determine the level of significance. Evaluation of air quality impacts, unlike some other impact areas, easily lends itself to quantification. Not only does quantification make it easier for the public and decision-makers to understand the breadth and depth of the potential air quality impacts, but it also facilitates the identification of mitigation measures required to reduce any significant adverse air quality impacts. SCAG should identify the South Coast AQMD’s portion of the on-road mobile source emissions and compare those emissions to South Coast AQMD’s regional air quality CEQA significance thresholds in the Final PEIR to determine the level of significance.

3. **Interim Analysis Years**: The air quality analysis in the Draft PEIR included only two analysis years: baseline year (2019) and buildout year (2045). The overall emission rates of vehicles and trucks are generally higher in earlier years as more stringent emission standards and cleaner technologies have not been fully implemented, and fleets have not fully turned over. With only two analysis years for air quality, the Draft PEIR did not fully and adequately disclose the peak daily emissions from on-road mobile sources. SCAG should include interim analysis years for the air quality analysis, corresponding to the same interim analysis years (i.e., year 2020, year 2030, and year 2035) that were used to quantify the Proposed Project’s greenhouse gas emissions.

4. **Air Quality Impact Analysis**: The Draft PEIR discussed the existing air quality conditions based on the South Coast AQMD’s 2016 AQMP forecasts, but did not quantify emissions from implementing the Proposed Project’s transportation strategies for off-road mobile sources (e.g., locomotives, ocean-going vessels, commercial harbor craft, cargo handling equipment, farm equipment, and aircraft) or land use strategies. However, SCAG quantified GHG emissions for off-road vehicles (rail, aviation, and ocean-going vessels), building energy, and water-related energy consumptions but did not quantify emissions from criteria pollutants for these sources Therefore, the analysis approach for air quality is not consistent with the GHG emissions analysis which included both on-road and off-road mobile sources, and should be revised in the Final EIR.

5. **Air Quality Impacts from Overlapping Construction and Operational Activities**: The Draft PEIR did not analyze a scenario where construction activities overlap with operational activities. Since the Proposed Project will be implemented over a period of 20 years, an overlapping construction and operation scenario from transportation and land use projects is reasonably foreseeable and should be analyzed in the Final PEIR.

6. **Health Risk Assessment (HRA) Analysis**: SCAG did not utilize South Coast AQMD’s CEQA significance threshold of 10 in a million to determine the level of significance for the Proposed Project’s health risk impacts. Even though some of the transportation segments that were selected for the HRA analysis show cancer risk that would substantially exceed the significance threshold (e.g., 41.3 in a million), SCAG found that the Proposed Project’s

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health risk impacts would be less than significant\textsuperscript{4} because cancer risk for each transportation segment in 2045 is significantly reduced when it is compared to that in 2019. This is an improper comparison to determine the level of significance for cancer risk and should be revised in the Final EIR. (See also Comment No. 1).

7. **Project-level Air Quality Mitigation Measure:** SCAG recommended the use of Tier 4 construction equipment by projects within 500 feet of residences, hospitals, or schools. To encourage the use of Tier 4 Final construction equipment by all types of transportation and land use projects, South Coast AQMD staff recommends the use of Tier 4 Final construction equipment and more information on the implementation and monitoring of this mitigation measure be provided in the Final EIR.

8. **Additional Project-Level Air Quality Mitigation Measures for On-Road Mobile Sources:** The Draft PEIR serves as the first-tier, programmatic level analysis that can provide guidance to subsequent, project-level environmental analyses. To facilitate this, South Coast AQMD staff recommends that SCAG include additional project-level mitigation measures for on-road mobile sources in the Final EIR. SCAG should also review the Community Emission Reduction Plans that are prepared pursuant to Assembly Bill 617 to explore whether additional mitigation measures can be identified and included in the Final EIR.

9. **Additional Project-Level Air Quality Mitigation Measures for Off-Road Mobile Sources:** The Draft PEIR did not include project-level air quality mitigation measures for off-road mobile sources (e.g., aircraft and ground service equipment, cargo handling equipment, locomotives, shore power and infrastructure, and ocean-going vessels). Since the Proposed Project includes transportation strategies for rail, seaports, and airports, SCAG should develop and include project-level mitigation measures or performance standards for off-road mobile sources as part of PMM-AQ-1 in the Final EIR.

10. **Health Risk Reduction Strategies:** Although the Proposed Project would result in development of new transportation projects near existing sensitive receptors or locating new receptors near transportation projects, the Draft PEIR did not include a discussion on how to disclose health risks and reduce exposures when new sensitive land uses are sited within 500 feet of freeways or other sources of air pollution. To provide guidance for subsequent, project-level environmental analyses, South Coast AQMD staff recommends that SCAG include a discussion on the mobile source HRA analysis and health risk reduction strategies in the Final PEIR.

South Coast AQMD staff’s detailed comments on the Draft EIR’s air quality analysis and health risk assessment are provided as follows.

1. **CEQA Baseline**
   Under CEQA, baseline conditions exist at the time of the environmental review is initiated or as they exist at the time the Notice of Preparation (NOP) is published, if there is a published NOP. Notwithstanding this general rule, the use of future baseline is proper in some cases, when supported by substantial evidence in the record. Consideration of future conditions in

\textsuperscript{4} Ibid. Page 77.
determining whether a project’s impacts may be significant is consistent with CEQA’s rules regarding baseline, especially when the project has a long-term implementation schedule such as the Proposed Project. “[N]othing in CEQA law precludes an agency … from considering both types of baseline—existing and future conditions—in its primary analysis of the project's significant adverse effects.” (Neighbors for Smart Rail v. Exposition Metro Line Construction Authority (2013) 57 Cal.4th 439, 454.). “Even when a project is intended and expected to improve conditions in the long term—20 or 30 years after an EIR is prepared—decision makers and members of the public are entitled under CEQA to know the short- and medium-term environmental costs of achieving that desirable improvement. … The public and decision makers are entitled to the most accurate information on project impacts practically possible, and the choice of a baseline must reflect that goal.” (See also Communities for a Better Environment v. South Coast Air Quality Management Dist. (2010) 48 Cal.4th 310).

SCAG quantified the Proposed Project’s on-road mobile source emissions for the 2019 baseline year and the 2045 future year. The 2019 existing conditions were held constant (i.e. using emission rates from year 2019) and compared to the 2045 future year (i.e. using emission rates from the future year). SCAG found that ROG and NOx emissions with the Proposed Project in 2045 would be lower than the existing conditions in 2019, but PM2.5 and PM10 emissions would increase due to VMT increases across the region. This approach using a comparison between the Proposed Project’s impacts in the future year (using emission rates from year 2045) and the 2019 baseline (using emission rates from year 2019) improperly credits the Proposed Project with emission reductions that will occur independent of the Proposed Project due to adopted federal and state rules and regulations, and clean vehicle and fuel technologies, since these rules, regulations, and technologies are expected to improve air quality over time, even in the absence of the Proposed Project, which SCAG has acknowledged in the Draft PEIR. For example, the California Air Resources Board’s (CARB) current regulation for trucks and buses will provide significant near-term and long-term reductions in NOx emissions from trucks and buses, at 98 tons per day for 2023. Since the Proposed Project anticipates that VMT will increase between 2019 and 2045 in all counties, NOx emission reductions in year 2045 are likely due to implementation of CARB’s regulation and other efforts at promoting zero and near-zero emissions vehicles and cleaner fuel standards. Therefore, the baseline used to analyze the Proposed Project’s long-term air quality impacts from on-road mobile sources in the Draft PEIR likely led to an under-estimation of actual emission increases, and is misleading and uninformative.

The purpose of CEQA is to disclose environmental impacts from the Proposed Project to the public and decision makers to provide the public and decision makers with the actual changes to the environment from the activities involved in the Proposed Project. By taking credit for future emission reductions from existing air quality rules, regulations, and technologies that are not contributed by the Proposed Project, the Proposed Project’s air quality impacts are

5 Ibid. Pages 3.3-57 to 61.
6 Ibid.
8 Draft PEIR. Pages 3.3-57 to 61.
likely underestimated. Therefore, South Coast AQMD staff recommends that SCAG revise the air quality analysis to calculate emissions in year 2019, year 2020, year 2030, year 2035, and year 2045 with the Proposed Project and emissions in those same years without the Proposed Project. These interim analysis years correspond to the same interim analysis years that SCAG used to quantify the Proposed Project’s greenhouse gas (GHG) emissions9. (See also Comment No. 3). SCAG should compare the emissions with the Proposed Project to the emissions without the Proposed Project in the same interim analysis years and use the comparison to determine the level of significance for the Proposed Project’s air quality impacts from on-road mobile sources.

2. Air Quality CEQA Thresholds of Significance
While CEQA allows that a Lead Agency may select a threshold to determine the level of significance, SCAG may not apply a threshold of significance in a manner that precludes consideration of substantial evidence demonstrating that there may be a significant effect on the environment. Evaluation of air quality impacts, unlike some other impact areas, easily lends itself to quantification. Not only does quantification make it easier for the public and decision-makers to understand the breadth and depth of the potential air quality impacts, but it also facilitates the identification of mitigation measures required to reduce any significant adverse air quality impacts. South Coast AQMD’s CEQA thresholds of significance for air quality provide a clear quantitative benchmark to determine the level of significance for a project’s air quality impacts. Therefore, for most projects within the South Coast AQMD’s jurisdiction, South Coast AQMD’s air quality CEQA significance thresholds for construction and operation10 are used to determine the level of significance of a project’s air quality impacts.

SCAG quantified the Proposed Project’s on-road mobile source emissions of criteria pollutants for the region but did not compare the South Coast AQMD’s portion of the emissions to South Coast AQMD’s regional air quality CEQA significance thresholds to determine the level of significance. Since the South Coast AQMD relies on SCAG’s air quality analysis for on-road mobile sources, South Coast AQMD staff recommends that SCAG identify the South Coast AQMD’s portion of the on-road mobile source emissions and compare those emissions to South Coast AQMD’s regional air quality CEQA significance thresholds in the Final PEIR to determine the level of significance. Using South Coast AQMD’s CEQA significance thresholds would clearly disclose the magnitude of air quality impacts from on-road mobile sources, facilitate the identification of feasible mitigation measures, strengthen the evaluation of the level of impacts before and after mitigation measures, and contribute to the selection of a range of reasonable alternatives to the Proposed Project based on the air quality impacts.

3. Air Quality Interim Analysis Years
The air quality analysis in the Draft PEIR included only two analysis years: baseline year (2019) and buildout year (2045). (See also Comment No.1). Although the Proposed Project may not be at the peak development capacity in earlier years, it is possible that due to higher

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9 Draft PEIR. Section 3.8, Table 3.8-8, Page 3.8-64.
emission rates of vehicles and trucks in earlier years, peak daily emissions from on-road mobile sources may occur early and gradually decrease over time. The overall emission rates of vehicles and trucks are generally higher in earlier years as more stringent emission standards and cleaner technologies have not been fully implemented, and fleets have not fully turned over. Air quality is improving over time with substantial emission reductions occurring in later years. Therefore, South Coast AQMD staff recommends that SCAG include interim analysis years for the air quality analysis, corresponding to the same interim analysis years (i.e., year 2020, year 2030, and year 2035) that SCAG used to quantify the Proposed Project’s GHG emissions\(^\text{11}\), to ensure the peak daily emissions are identified and adequately disclosed in the Final PEIR. The interim analysis years will also demonstrate progress in emission reductions over time from implementing the Proposed Project’s strategies and the air quality mitigation measures included in the PEIR.

4. **Air Quality Impact Analysis Based on the South Coast AQMD’s 2016 AQMP Forecasts**

As stated above, the Proposed Project includes transportation strategies and investments for the region’s transportation network of roads, highway, arterials, transit, rail, seaports, and airports. It also includes land use strategies to promote a more compact form of development. To analyze the air quality impacts, SCAG used the South Coast AQMD’s 2016 AQMP forecasts of annual average off-road mobile emissions and stationary source emissions for years 2019, 2022, 2023, 2025, and 2031 in the Basin as a proxy for these emissions throughout the SCAG region\(^\text{12}\).

This analysis approach is not appropriate for three reasons. First, the 2016 AQMP forecasts are emission inventories and projections, using 2012 as the base year and air quality measures implemented since adopting the 2012 AQMP\(^\text{13}\). They provide the historic (since 2012) and existing air quality conditions in 2019 at the time the Draft PEIR was prepared. Therefore, SCAG discussed the existing air quality conditions, but did not properly assess the incremental air quality impacts of direct emissions from implementing the Proposed Project’s transportation strategies for off-road mobile sources (e.g., locomotives, ocean-going vessels, commercial harbor craft, cargo handling equipment, farm equipment, and aircraft\(^\text{14}\)) or land use strategies. Second, the 2016 AQMP forecasts include emission projections until year 2031. Since the Proposed Project has a planning horizon until year 2045, it is not appropriate to use the 2016 AQMP forecasts, which are baseline conditions, to analyze the air quality impacts from the Proposed Project, which will be implemented beyond year 2031. Third, the Proposed Project covers a six-county region and includes five air quality and air pollution control districts, including the South Coast AQMD. In the Draft PEIR, SCAG used the 2016 AQMP forecasts for the South Coast AQMD as a proxy for emissions throughout the entire region but did not provide emissions from other air districts or explain why it was appropriate to use the South Coast AQMD’s forecasts as a proxy for the SCAG region. Even if using the 2016 AQMP forecasts is found to be an adequate analysis methodology, SCAG only analyzed a portion of the region within the South Coast AQMD. Therefore, South Coast

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\(^{11}\) Draft PEIR. Section 3.8. Table 3.8-8. Page 3.8-64.

\(^{12}\) Ibid. Page 3.3-55.


\(^{14}\) Ibid. Page 3.2-6.
AQMD staff recommends that SCAG revise the air quality analysis in the Final PEIR based on the following recommendations.

Air Quality Analysis for Construction and Operational Air Quality Impacts

When specific development is reasonably foreseeable as a result of the goals, policies, and strategies in the Proposed Project, SCAG should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the PEIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Preparing the CEQA analysis “necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can” (CEQA Guideline Section 15144).

When the precise construction and operational scenarios are unknown, SCAG should use its best efforts to identify and quantify a worst-case construction and operational air quality impact scenario that is reasonably foreseeable at the time the Draft PEIR is prepared. While this comment may not change SCAG’s findings that the Proposed Project’s construction and operational air quality impacts would be significant and unavoidable\(^\text{15}\), a quantitative analysis will facilitate the goal and purpose of CEQA on public disclosure with useful information on the magnitude of air quality impacts that could occur from implementing the Proposed Project and foster meaningful public participation and informed decision making.

Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). As discussed in Section 2.0, Project Description, in the Draft PEIR, the Proposed Project anticipates an annual growth rate of 0.6 percent, resulting in a net growth of 3.2 million people, 1.4 million households, and 1.4 million jobs between 2019 and 2045\(^\text{16}\). To accommodate growth, SCAG has identified development potential around the region’s job centers, transit priority areas, high quality transit areas, neighborhood mobility areas, and livable corridors. Therefore, SCAG can and should use this information to develop a construction scenario for land use development. One way to calculate the Proposed Project’s construction emissions would be based on an estimated average annual level of development. SCAG should use the most current version of California Emission Estimator Model (CalEEMod)\(^\text{17}\) to quantify construction emissions and compare the emissions to air districts’ regional air quality CEQA significance thresholds to determine the level of significance.

Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular

\(^{15}\) Ibid. Pages 3.3-60 and 61.

\(^{16}\) Draft PEIR. Page 2.0-14.

trips (e.g., on- and off-road tailpipe emissions and entrained dust). In Section 3.8, *Greenhouse Gases*, in the Draft PEIR, in addition to quantifying GHG emissions for on-road mobile sources, SCAG quantified GHG emissions for off-road vehicles (rail, aviation, and ocean-going vessels), building energy, and water-related energy consumptions in year 2019 (baseline year), year 2020 (with and without the Proposed Project), year 2030 (with the Proposed Project), year 2035 (with the Proposed Project), and year 2045 (with and without the Proposed Project)\(^ {18}\). To be consistent with the GHG emissions analysis which included both on-road and off-road vehicles, and to provide a better and more complete understanding of the Proposed Project’s operational air quality impacts, South Coast AQMD staff recommends that SCAG quantify the Proposed Project’s operational emissions for off-road vehicles and add those emissions to on-road mobile source emissions to determine the level of significance in the Final PEIR. (See also Comment Nos 1 and 3). If emissions from off-road vehicles are not included in the Final PEIR, SCAG should provide reasons for not including them supported by substantial evidence in the record.

5. **Air Quality Analysis – Overlapping Construction and Operational Activities**
   Based on a review of the air quality analysis, South Coast AQMD staff found that SCAG did not analyze a scenario where construction activities overlap with operational activities. Since implementation of the Proposed Project is expected to occur over a period of 20 years, an overlapping construction and operation scenario from transportation and land use projects is reasonably foreseeable. Therefore, South Coast AQMD staff recommends that SCAG discuss an air quality impact scenario where construction and operational activities overlap and make a significance determination in the Final PEIR; otherwise, SCAG has not discussed the Proposed Project’s air quality impacts from overlapping construction and operational activities that will likely take place during the implementation of the Proposed Project in the PEIR.

6. **Health Risk Assessment (HRA) Analysis**
   Implementation of the Proposed Project would result in development of new transportation projects near existing sensitive receptors or locating new receptors near transportation projects\(^ {19}\). SCAG conducted a mobile source HRA analysis to evaluate the cancer risk for residents from exposures to DPM emissions from 16 transportation segments throughout the SCAG region. As shown in Table 3.3-16 in the Draft PEIR, the highest cancer risk would be 41.3 in a million along Interstate 15 in the Victorville area in San Bernardino County (Segment 13: SB I-15 VIC), followed by 30.9 in a million along Interstate 710 in the Compton area in Los Angeles County (Segment 4: LA I-710)\(^ {20}\). Because cancer risk for each of transportation segment in 2045 is significantly reduced when it is compared to that in 2019, SCAG determined that the Proposed Project’s health risk impacts would be less than significant.

South Coast AQMD staff does not agree with SCAG’s significance determination. It is not appropriate to determine the level of significance for cancer risk based on a comparison between the existing condition (year 2019) and the future condition (year 2045). (See also

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\(^ {18}\) Draft PEIR. Pages 3.8-62 to 66.
\(^ {19}\) Ibid. Page 3.3-76.
\(^ {20}\) Ibid. Table 3.3-16.
Comment No. 1 on CEQA Baseline). To determine the level of significance for cancer risk, South Coast AQMD staff recommends that SCAG compare the maximum exposed individual residential cancer risk for each of the transportation segments in 2045 to South Coast AQMD’s CEQA significance threshold of 10 in a million for cancer risk in the Final PEIR. As shown in Table 3.3-16, 12 of 16 transportation segments would exceed the CEQA significance threshold of 10 in a million for cancer risk.

7. Recommended Revisions Existing Project-Level Mitigation Measure (PMM-AQ-1 q))

SCAG included a project-level air quality mitigation measure (PMM-AQ-1 a) through q) for consideration by lead agencies that implement individual transportation and land use projects. South Coast AQMD staff recommends that SCAG incorporate the following revisions to PMM-AQ-1 q) in the Final PEIR. The recommended revisions will provide more details on the requirement for Tier 4 construction equipment, provide guidance on project-level implementation and monitoring, and facilitate CEQA streamlining and tiering as an option from the PEIR by subsequent, project-level environmental analyses, where appropriate.

a) PMM-AQ-1 q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 Final equipment or better for all engines above 50 horsepower (hp). Include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit’s certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. Require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance. In the event that construction equipment cannot meet the Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by SCAG before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or reduction in the number and/or horsepower rating of construction equipment and/or limiting the number of construction equipment operating at the same time. All equipment must be tuned and maintained in compliance with the manufacturer’s recommended maintenance schedule and specifications. All maintenance records for each equipment and their contractor(s) should be made available for inspection and remain on-site for a period of at least two years from completion of construction, unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.

8. Additional Recommended Project-Level Mitigation Measures

CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse impacts. The Proposed Project is a blueprint for the region’s future development. The Draft PEIR for the Proposed Project serves as the first-tier, programmatic level analysis that can provide guidance to subsequent, project-level environmental analyses. Therefore, it
is the intent of SCAG that lead agencies for individual transportation and land use projects that may be eligible for CEQA streamlining incorporate project-level mitigation measures as feasible and appropriate to tier from the PEIR\(^{21}\).

On February 19, 2019, South Coast AQMD staff provided comments on the Notice of Preparation (NOP) for the Proposed Project, available at: [http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/february/ALL190123-01.pdf](http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/february/ALL190123-01.pdf), and recommended specific air quality mitigation measures for SCAG to include in the Draft PEIR. South Coast AQMD staff incorporates by reference those recommended mitigation measures and requests that SCAG include them in the Final PEIR. Specifically, SCAG should include the following mitigation measures to reduce and accelerate the reduction of on-road mobile source emissions. The recommended mitigation measures are consistent with the Proposed Project’s goal of improving air quality and public health (Goal No. 5)\(^{22}\), provide guidance on the feasibility of mitigation measures with specific performance standards, and support the Draft PEIR’s intended use as the first-tier, programmatic environmental analysis to facilitate CEQA streamlining and tiering by subsequent, project-level environmental analyses.

- **Require zero-emissions (ZE) or near-zero emissions (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet CARB’s adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible.** At a minimum, require that vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export) that meet CARB’s 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks\(^{23}\). When requiring ZE or NZE on-road haul trucks, SCAG should include analyses to evaluate and identify sufficient power and supportive infrastructure available for ZE/NZE trucks in the Energy and Utilities and Service Systems Sections of the Final PEIR, where appropriate. To monitor and ensure ZE, NZE, or 2010 model year or newer trucks are used, require that operators maintain records of all trucks associated with the operation, and make these records available to SCAG upon request. The records will serve as evidence to prove that each truck called met the minimum 2010 model year engine emission standards. Alternatively, require periodic reporting and provision of written records by operators, and conduct regular inspections of the records to the maximum extent feasible and practicable.

- **Encourage construction contractors to apply for South Coast AQMD “SOON” funds.** The “SOON” program provides funds to applicable fleets for the purchase of commercially-available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. More information on this program can be found at South Coast AQMD’s website: [http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines](http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines).

\(^{21}\) *Ibid.* Page 2.0-40


\(^{23}\) Based on a review of the California Air Resources Board’s diesel truck regulations, 2010 model year diesel haul trucks should have already been available and can be obtained in a successful manner for the project construction California Air Resources Board. March 2016. Available at: [http://www.truckload.org/tca/files/ccLibraryFiles/Filename/000000003422/California-Clean-Truck-and-Trailer-Update.pdf](http://www.truckload.org/tca/files/ccLibraryFiles/Filename/000000003422/California-Clean-Truck-and-Trailer-Update.pdf) (See slide #23).
• Enter into applicable bid documents, purchase orders, and contracts to notify all construction vendors, contractors, and/or haul truck operators that vehicle and construction equipment idling time will be limited to no longer than five minutes, consistent with the CARB’s policy24. For any idling that is expected to take longer than five minutes, the engine should be shut off. Notify construction vendors, contractors, and/or haul truck operators of these idling requirements at the time that the purchase order is issued and again when vehicles enter the site. To further ensure that drivers understand the vehicle idling requirement, post signs at the site, where appropriate, stating that idling longer than five minutes is not permitted.

• Require at least five percent of all vehicle parking spaces include electric vehicle (EV) charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in. Electrical hookups should be provided at the onsite vehicle stop for to plug in any onboard auxiliary equipment. Electrical panels should be appropriately sized to allow for future expanded use. Include analyses to evaluate and identify sufficient power available for zero emissions trucks and supportive infrastructures (e.g., EV charging stations) in the Energy and Utilities and Service Systems Sections of the Final PEIR, where appropriate.

• The Proposed Project includes areas that are heavily impacted by air pollution. Assembly Bill (AB) 617, which was signed into law in 2017, requires South Coast AQMD to work with community and other stakeholders to identify and address community concerns in disadvantaged communities suffering from disproportionate air pollution impacts generated from sources, such as marine ports, warehouses, railyard facilities, heavy-duty diesel trucks, and oil drilling and production facilities. Through the AB 617 program, each of the designated AB 617 communities and South Coast AQMD staff develop a Community Emissions Reduction Plan (CERP) that identifies air quality priorities and actions to reduce air pollution in the community. In September 2019, the South Coast AQMD’s Governing Board approved three CERPs for the AB 617 communities of Wilmington, Carson, and West Long Beach; East Los Angeles, Boyle Heights, and West Commerce; and San Bernardino and Muscog that were designated in 201825. In December 2019, two new AB 617 communities in the Southeast Los Angeles and the Eastern Coachella Valley were designated for inclusion in South Coast AQMD’s AB 617 Program26. South Coast AQMD staff recommends that SCAG review the CERPs27 to explore whether additional mitigation measures can and should be included as part of PMM-AQ-1 in the Final PEIR for transportation and land use projects that may use the PEIR for CEQA streaming and tiering.

26Ibid.
27Ibid.
9. Since the Proposed Project includes transportation strategies for rail, seaports, and airports, SCAG should develop and include project-level mitigation measures for off-road mobile sources as part of PMM-AQ-1 in the Final EIR. If the specific details are impractical or infeasible to include, SCAG should develop and include performance standards that the off-road mobile source mitigation measures will achieve (CEQA Guidelines Section 15126.4(a)). Including the mitigation measures and performance standards for off-road mobile sources fulfills SCAG’s legal obligation as SCAG for the Proposed Project to comply with CEQA’s requirements for mitigation measures, serves as a guidance on the feasibility of mitigation measures that can and should be implemented by transportation and land use projects at the region’s seaports and airports, and supports tiering by subsequent, project-level environmental analyses. Specifically, South Coast AQMD staff recommends that the Final PEIR includes the following project-level mitigation measures or other comparable mitigation measures for aircrafts, ground service equipment, cargo handling equipment, locomotives, and ocean-going vessels in PMM-AQ-1.

**Aircraft and Ground Service Equipment (GSE)**
- Encourage and incentivize aircraft operators to route the cleanest aircraft engines to serve the South Coast Air Basin.
- Consider operational improvements to reduce taxi time and auxiliary power unit usage, where feasible. Additionally, consider single engine taxing, if feasible and as allowed per Federal Aviation Administration guidelines.
- Set goals to achieve a reduction in emissions from aircraft operations over the lifetime of the proposed project.
- Require the use of GSE that can operate on electric battery-power. If electric equipment cannot be obtained, require the use of alternative fuel, the cleanest gasoline equipment, or Tier 4, at a minimum.

**Cargo Handling Equipment (CHE)**
- Develop specific timelines for transitioning to zero emissions CHE. For example, South Coast AQMD staff recommends a step-down program to require any off-road equipment to be zero emissions first, followed by near-zero emissions, then Tier 4 alternative fuels, and then Tier 4 engine as a floor. The criteria for a step-down program can be based on availability of equipment at the time of purchase and cost of equipment compared to the Tier 4 floor after considering available incentive funds.
- Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress.

**Rail and Locomotives**
- Offer incentives to encourage the use of on-dock rail.
- Provide the highest incentives for electric locomotives and then locomotives that meet Tier 5 emission standards with a floor on the incentives for locomotives that meet Tier 4 emission standards.

**Shore Power and Infrastructure**
- Use shore side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives to gradually ramp up the usage of shore power.
Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized.

*Ocean-Going Vessels*
- Maximize participation in the Vessel Speed Reduction Program for all vessels transiting within 40 nautical miles of Point Fermin in the region.
- Encourage the participation in the Green Ship Incentives.

10. **Health Risk Assessment for New Sensitive Land Uses Near Freeways and Other Sources of Air Pollution and Health Risk Reduction Strategies**

Notwithstanding the court rulings, South Coast AQMD staff recognizes that the lead agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of South Coast AQMD staff’s concern about the potential public health impacts of siting sensitive populations within close proximity of freeways or other sources of air pollution, South Coast AQMD staff recommends that, prior to approving the project, lead agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

Implementation of the Proposed Project would result in development of new transportation projects near existing sensitive receptors or locating new receptors near transportation projects. To disclose the potential health risks for new sensitive land uses that will be sited within 500 feet of freeways or other sources of air pollution, South Coast AQMD staff recommends a mobile source HRA analysis be performed. Since the PEIR is intended to serve as the first-tier, programmatic analysis for projects in the region, South Coast AQMD staff recommends that SCAG include a discussion on the mobile source HRA analysis in the Final PEIR to provide guidance for subsequent, project-level environmental analyses that will tier from the PEIR. Additionally, South Coast AQMD staff recommends that SCAG include the following health risk reduction strategies in the Final PEIR as guidance for future sensitive land use projects that will be sited in close proximity to freeways or other sources of air pollution. These strategies were included in the South Coast AQMD staff’s comment letter on the NOP for the Proposed Project.

- Consider high efficiency or enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better for sensitive land use projects that are located within 500 feet of freeways and other sources of air pollution. Enhanced filtration units are capable of reducing exposures. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

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28 Draft PEIR. Page 3.3-76.
30 South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as SCAG, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.
• Enhanced filtration systems have limitations. In a study that South Coast AQMD conducted to investigate filters\textsuperscript{32}, a cost burden is expected to be within the range of $120 to $240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the residents. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the environmental analysis does not generally account for the times when the residents have their windows or doors open or are in common space areas of the project. Moreover, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail and disclosed to prospective residents prior to assuming that they will sufficiently alleviate health risk exposures to toxic air emissions.

• Because of the limitations, South Coast AQMD staff recommends additional details regarding the ongoing, regular monitoring, inspection, and maintenance of filters be provided. To facilitate a good faith effort at full disclosure and provide useful information to future sensitive receptors who will live and/or work in proximity to freeways or other sources of air pollution, the following information should be included, at a minimum, as guidance to future sensitive land use projects in the subsequent, project-level environmental analyses:

a) Disclose potential health impacts to prospective sensitive receptors from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open and/or when residents are outdoors (e.g., in the common usable open space areas);

b) Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued;

c) Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are inspected and maintained regularly;

d) Disclose the potential increase in energy costs for running the HVAC system to prospective residents;

e) Provide information to residents on where MERV filters can be purchased;

f) Provide recommended schedules (e.g., every year or every six months) for replacing the enhanced filtration units;

\textsuperscript{32}This study evaluated filters rated MERV 13 or better. Accessed at: \url{http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf}. Also see 2012 Peer Review Journal article by South Coast AQMD: \url{http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf}.
g) Identify the responsible entity such as future residents themselves, Homeowner’s Association (HOA), or property management for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if residents should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the individual project’s lead agency should include this information in the disclosure form);

h) Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units;

i) Set criteria for assessing progress in installing and replacing the enhanced filtration units; and

j) Develop a process for evaluating the effectiveness of the enhanced filtration units.

**Conclusion**
Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that SCAG provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final PEIR. Issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, when SCAG makes the finding that the recommended revisions to existing air quality mitigation measures and additional new air quality mitigation measures are not feasible, SCAG should describe the specific reasons supported by substantial evidence for rejecting them in the Final PEIR (CEQA Guidelines Section 15091).