# Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy

## Final Environmental Impact Report

## SCH#2020120233


*prepared by*

**Santa Barbara County Association of Governments**
260 North San Antonio Road, Suite B
Santa Barbara, California 93110
Contact: Michael Becker, Director of Planning

*prepared with the assistance of*

**Rincon Consultants, Inc.**
209 East Victoria Street
Santa Barbara, California 93101


**August 2021**


RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

# Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy

## Final Environmental Impact Report

## SCH#2020120233

*prepared by*

**Santa Barbara County Association of Governments**
260 North San Antonio Road, Suite B
Santa Barbara, California 93110
Contact: Michael Becker, Director of Planning

*prepared with the assistance of*

**Rincon Consultants, Inc.**
209 East Victoria Street
Santa Barbara, California 93101

**August 2021**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

*This report prepared on 50% recycled paper with 50% post-consumer content.*

# Table of Contents



## Tables



## Figures

*This page intentionally left blank*

# 1 Introduction

## 1.1 Final EIR Contents

This Final Environmental Impact Report (Final EIR) is an informational document prepared by the Santa Barbara County Association of Governments (SBCAG) to evaluate the potential environmental impacts of the proposed Connected 2050 Regional Transportation Plan and Sustainable Communities Strategy ("proposed project" or "project").

As prescribed by the California Environmental Quality Act (CEQA) *Guidelines* Sections 15088 and 15132, the lead agency, SBCAG, is required to evaluate comments on environmental issues received from persons/agencies who have reviewed the Draft EIR and to prepare written responses to those comments. This document, together with the Draft EIR, as revised, comprise the Final EIR for this project. This Final EIR includes individual responses to each letter received during the public review period for the Draft EIR. In accordance with CEQA *Guidelines* Section 15088(c), the written responses describe the disposition of significant environmental issues raised.

The Final EIR also includes amendments to the Draft EIR consisting of changes suggested by certain comments, as well as minor clarifications, corrections, or revisions to the Draft EIR. The Final EIR includes the following contents:

- Section 1: Introduction
- Section 2: Responses to Comments on the Draft EIR, which also includes a list of all commenters and public comment letters
- Section 3: Amendments to the Draft EIR
- Section 4: Mitigation Monitoring and Reporting Program

## 1.2 Draft EIR Public Review Process

The Draft EIR was circulated for a 45-day public review period in accordance with *CEQA Guidelines* Section 15087 on May 27, 2021. The public comment period closed on July 12, 2021. The Draft EIR was made available on the SBCAG website. Additional options were made available to the public to view the Draft EIR by contacting SBCAG, in accordance with COVID-19 pandemic recommendations and requirements.

## 1.3 EIR Certification Process and Project Approval

In accordance with the requirements of CEQA (*CEQA Guidelines* Section 15090), SBCAG will consider certifying the Final EIR as having been prepared in compliance with CEQA. Following Final EIR certification, SBCAG will consider making findings of fact for each significant impact (*CEQA Guidelines* Section 15091) and approving the project or an alternative (*CEQA Guidelines* Section 15092).

# 1.4 Draft EIR Recirculation Not Required

*CEQA Guidelines* Section 15088.5 requires Draft EIR recirculation when "significant new information" is added to the EIR after public notice is given of the availability of the Draft EIR for public review but before certification. Significant new information is defined as including:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The comments, responses, and Draft EIR revisions presented in this document do not constitute such "significant new information." Instead, they clarify, amplify, or make insignificant modifications to the Draft EIR. For example, none of the comments, responses, and Draft EIR amendments disclose new or substantially more severe significant environmental effects of the project, or new feasible mitigation measures or alternatives considerably different than those analyzed in the Draft EIR that would clearly lessen the project's significant effects.

# 2 Responses to Comments on the Draft EIR

This section includes comments received during the circulation of the Draft Environmental Impact Report prepared for the Connected 2050 RTP/SCS (project).

The Draft EIR was circulated for a 45-day public review period that began on May 27, 2021 and ended on July 10, 2021. SBCAG received seven (7) comment letters on the Draft EIR. The commenters and the page number on which each commenter's letter appear are listed below.

| Letter No. | and Commenter | Date |
|---|---|---|
| 1 | Shannon Fiala, Southern California Transportation Program Manager, California Coastal Commission | 7/12/2021 |
| 2 | Desmond Ho, Air Quality Specialist, Santa Barbara County Air Pollution Control District | 7/9/2021 |
| 3 | Tom Becker | 7/11/2021 |
| 4 | Lisa Plowman, Director, County of Santa Barbara Planning and Development Department | 7/8/2021 |
| 5 | Lezlie Kimura Szeto, Manager, California Air Resources Board | 7/12/2021 |
| 6 | Ingrid Roberts, Development Review Coordinator, California Department of Transportation | 7/12/2021 |
| 7 | J.P. Rose, Senior Attorney and Tiffany Yap, Wildlife Corridor Advocate, Center for Biological Diversity | 7/12/2021 |

Written responses to each comment letter received on the Draft EIR are provided in this section. All letters received during the public review period on the Draft EIR are provided in their entirety. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.2, for example, indicates that the response is for the second issue raised in comment Letter 1).

Revisions to the Draft EIR necessary in light of the comments received and responses provided, or necessary to amplify or clarify material in the Draft EIR, are included in the responses. <u>Underlined</u> text represents language that has been added to the Draft EIR; text with ~~strikeout~~ has been deleted from the Draft EIR.

**CALIFORNIA COASTAL COMMISSION**
SOUTH CENTRAL COAST DISTRICT OFFICE
89 SOUTH CALIFORNIA STREET, SUITE 200
VENTURA, CA 93001-2801
VOICE (805) 585-1800
FAX (805) 641-1732

July 12, 2021

Santa Barbara County Association of Governments
260 North San Antonio Road, Suite B
Santa Barbara, CA 93110

**RE: Draft Environmental Impact Report for Connected 2050 – Santa Barbara County Regional Transportation and Sustainable Communities Strategy**

To Whom It May Concern:

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report (EIR) for Connected 2050, the update of Santa Barbara County Association of Governments' (SBCAG) Regional Transportation Plan (RTP) and Sustainable Communities Strategies (SCS). The project is an update of SBCAG's existing RTP/SCS which aims to improve the balance between land use and transportation systems, including identifying future land use patterns for the region and policies, programs, actions, and a plan of projects intended to meet regional transportation needs and policy goals.

Given the California Coastal Commission's mandate to protect coastal resources through planning and regulation of the use of land and water within the Coastal Zone, we request that the Final EIR analyze consistency of the RTP/SCS with relevant certified Local Coastal Programs (LCPs), sea level rise (SLR), and possible impacts to coastal resources such as public access. Commission staff would note that these comments are in line with comments provided by staff on previous NOPs and EIRs for SBCAG RTP/SCS updates.

1) **Sea Level Rise.** Section 4.8 of the DEIR regarding Greenhouse Gas Emissions and Climate Change does not adequately analyze the vulnerability of the proposed project to sea level rise. Coastal Act Section 30253 requires that new development minimize risks to life and property from hazards and to assure stability and structural integrity without the use of a shoreline protective device. Thus, ensuring that new coastal infrastructure is designed to avoid or adapt to the effects of sea level rise for the expected life of the infrastructure is a principal concern of the Coastal Commission, as described in the Commission's Sea Level Rise (SLR) policy guidance[1] as well as through recent Commission actions on key infrastructure projects throughout California. The Commission's Guidance references best available science, including SLR projection tables, from the Ocean Protection Council's SLR Guidance (2018).[2] Understanding the potential impacts of climate change and sea level rise is critically important when conducting long-range planning efforts to ensure

CC1

[1] https://www.coastal.ca.gov/climate/slrguidance.html
[2] https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf

that housing, jobs, and transportation infrastructure are not located in areas that will be at risk from coastal hazards.

Given the proximity of essential regional infrastructure to the coast of Santa Barbara County, the RTP/SCS should carefully evaluate the vulnerability of existing and proposed transportation infrastructure and housing/jobs investments to the effects of sea level rise and associated hazards. The EIR should also analyze potential climate change impacts on the investments proposed under the RTP/SCS for the expected life of those investments, which in the case of rail and highway bridges is typically considered to be 100 years. Potential impacts should include modeling of both tidal and fluvial flooding across the range of projected increases in global mean sea level (including under the medium-high and extreme risk aversion scenarios) as applied to the local area (e.g., Santa Barbara County's open coast), combined with potential impacts from storm surge, wave run-up, and coastal erosion.

If the RTP/SCS recommends infrastructure improvements that are likely to be temporarily flooded or perpetually inundated in the next 75 to 100 years, then the RTP/SCS and the EIR for the plan update should describe and analyze potential adaptation measures that would minimize adverse impacts to coastal resources and enhance public access to the coast. For example, if the proposed infrastructure investments are proposed to be protected from coastal hazards with shoreline armoring devices, such as seawalls and revetments, which adversely affect public access because they block access to the beach and result in the loss of public recreational areas, then the EIR should analyze a) alternative infrastructure projects that would minimize the need for shoreline armoring, b) alternative adaptation strategies for protecting the proposed infrastructure from coastal hazards, and/or c) include options for relocation of existing infrastructure segments away from hazardous conditions.

Please note that the comments provided herein are preliminary in nature and Coastal Commission staff may have additional comments as the project develops. Coastal Commission staff requests notification of any future activity associated with this project or related projects. Additionally, the comments contained herein are those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. Thank you for the opportunity to comment on the DEIR.

Sincerely,

Shannon Fiala
Southern California Transportation Program Manager

Cc:
Steve Hudson, South Central Coast District Director, CCC
Tami Grove, Statewide Development and Transportation Program Manager, CCC
Barbara Carey, South Central Coast District Manager, CCC
Jacqueline Phelps, South Central Coast District Supervisor, CCC

# Letter 1

**COMMENTER:** Shannon Fiala, Southern California Transportation Program Manager, California Coastal Commission

**DATE:** 7/12/2021

## Response CC1

The SBCAG RTP/SCS PEIR is a programmatic document that assesses potential impacts from the proposed transportation improvement projects and land use scenario in Connected 2050. The PEIR acknowledges sea level rise is a potential effect of climate change in section 4.8.1 *Greenhouse Gas Emissions and Climate Change* c. *Potential Effects of Climate Change.* Connected 2050 Policy 4.1 Safe Roads and Highways addresses sea level rise as follows:

> *The planning, construction, and operation of transportation facilities and of the system as a whole shall:*
>
> - *Address the resiliency of new projects to possible future impacts resulting from climate change (e.g., sea level rise and inundation of low-lying areas).*

The RTP/SCS PEIR identifies mitigation measures to reduce impacts from the project to ensure consistency with state GHG reduction plans (SB 32, THE 2017 SCOPING PLAN, AND EOS S-3-05 AND B-55-18). As described in Mitigation measure *GHG-3 Transportation-Related GHG Reduction Measures*, none of the listed measures include the development of sea walls or other structures that would reduce coastal access. The strategies include constructing additional sidewalks, pedestrian and bicycle facilities which could improve coastal access.

Impact HYD-4 acknowledges the potential impacts of sea level rise flooding on local infrastructure. Because future projects will be required to adhere to existing regulations regarding flooding impacts, no mitigation has been included that could affect coastal access. As described in the PEIR, the California Coastal Commission's Sea Level Rise Policy Guidance (2015) is required to be considered when developing infrastructure within the coastal zone. This policy states that "Potential flooding due to sea level rise for projects at or near the coast or within the coastal zone is required to be considered when designing such projects."

Project sponsors of individual projects will be required to address potential impacts from sea level rise for the life expectancy of the project and take into consideration the Coastal Commission's Sea Level Rise Policy Guidance (2015) and other recent actions and references that could include modeling tidal and fluvial flooding.

apcd air pollution control district
SANTA BARBARA COUNTY

July 9, 2021

Jared Carvalho
Santa Barbara County Association of Governments
Regional Transportation Planning Agency
260 North San Antonio Road, Suite B
Santa Barbara, CA 93110

**Re: Santa Barbara County Air Pollution Control District Comments on the Draft Programmatic Environmental Impact Report for the Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy, SCH #2020120233**

Dear Mr. Carvalho:

The Santa Barbara County Air Pollution Control District (District) has reviewed the Draft Programmatic Environmental Impact Report (PEIR) for the Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS).

The RTP/SCS plans how the Santa Barbara County Region will meet its transportation needs for the 30-year period from 2021 to 2050, considering existing and projected future land use patterns as well as forecast population and job growth. The plan covers projects involving all transportation modes including highways, streets and roads, rail, bicycle and pedestrian, and transportation demand management measures. Connected 2050 will comply with regulatory requirements and changes that have occurred since the current 2040 RTP/SCS was adopted in August, 2013. None of the modified or new projects in Connected 2050 would be substantially different in terms of location, size, and type of project to those in the 2040 RTP/SCS. The RTP/SCS is based on a preferred land use and transportation scenario which lays out a pattern of future growth and transportation system investment for the region emphasizing a transit-oriented development and an urban infill approach to land use and housing, located near existing high quality transportation corridors. Accordingly, population and employment growth are allocated principally within existing urban areas near public transit.

Air Pollution Control District staff offers the following specific comments on the Revised Draft EIR:

APCD1

1. **4.2 Air Quality, Setting, Current Air Quality, Figure 4.2-2, page 4.2-4** We recommend including the 2019 and 2020 exceedance data. See www.ourair.org/days-exceeding-ozone-and-particulate-standards-2020 for data and Attachment A to this letter for a current exceedance chart.

APCD2

2. **4.2 Air Quality, Impact Analysis, Long-Term Emissions Methodology, page 4.2-11** This page states that "*With respect to long-term impacts, because Connected 2050 itself does not directly generate the emissions, County thresholds associated with "new" or Indirect Source Review do not apply to Connected 2050 as a program… Therefore, the project's long-term impacts to air quality will be considered significant if Connected 2050 could result in mobile source emissions that significantly exceed existing levels."* Since the County thresholds do not apply, please

provide an explanation of what would constitute a significant impact with respect to mobile source emissions, as compared to existing levels.

APCD3

3. **4.2 Air Quality, Table 4.2-3 Regional Air Pollutants, page 4.2-16:** The VMT levels in this table do not align with the VMT levels provided in Section 4.8 *Greenhouse Gases and Climate Change* and Section 4.12 *Transportation and Circulation* (see Table 4.8-2 on page 4.8-12, Table 4.12-2 on page 4.12-3, and Table 4.12-9 on page 4.12-28). The Air Quality section shows a decrease in VMT, as compared to 2020 baseline levels, with the implementation of the RTP-SCS; whereas, Sections 4.8 and 4.12 discuss that VMT will increase, as compared to 2020 baseline levels, with the implementation of the RTP-SCS. The discussion of Air Quality impacts AQ-1 and AQ-3 reference an overall reduction in VMT as support for the impact determinations. Please ensure internal consistency with regards to VMT estimates and conclusions throughout the PEIR.

4. **4.2 Air Quality, Impact AQ-4, Mitigation Measure AQ-4, page 4.2-20-21**: The District has the following comments on this section:

APCD4

a. The District is not familiar with the EPA document cited in the first bullet of this measure. Upon brief review, it appears this document addresses the analysis of ambient air quality impacts, including whether a project would cause or contribute to a violation of a national ambient air quality standard (NAAQS), worsen an existing violation, or delay timely attainment of a NAAQS. This document does not appear to provide guidance for estimating toxic air contaminant emissions or concentrations or conducting a health risk assessment to determine whether a project's associated TAC emissions cause a significant health risk in terms of cancer, acute and chronic non-cancer health impacts. Therefore, we suggest removing the reference to cancer risk from this bullet item and updating the language to reflect the intent of the guidance document more accurately.

APCD5

b. The first bullet item refers to a "*2015 Office of Environmental Health Hazard Assessment (OEHHA) threshold of 10 in one million*" for cancer risk. We are not aware of a statewide threshold adopted by OEHHA; please provide a reference for this threshold or remove this language.

APCD6

c. The second bullet item includes a recommendation to conduct a project-specific health risk assessment. In order to quantify potential health risks to sensitive receptors, we recommend following District's *Modeling Guidelines for Health Risk Assessments: Form-15i*, available at www.ourair.org/air-toxics-for-business.

APCD7

d. Please clarify if the measures listed on page 4.2-21 are required measures for Impact AQ-4 regardless of the results of the health risk assessment (HRA), or if these measures are optional. Regardless of the results of an HRA, if a new development project with sensitive receptors such as residents is proposed within the CARB-recommended 500-foot buffer of a freeway or high traffic volume roadway, the District recommends that the project be designed to minimize exposure to roadway-related pollutants and that these impacts be mitigated to the maximum extent feasible with such measures as air filtration and physical barriers.

In addition, District staff suggests adopting the following measures to minimize air quality impacts and ensure compliance with state and local air quality regulations:

APCD8 1. **Contaminated Soils:** If contaminated soils are found at the project site, the District must be contacted to determine if Authority to Construct and/or Permit to Operate permits will be required. District permits are required for all soil vapor extraction activities. District permits are also required for the excavation ("dig-and-haul") of more than 1,000 cubic yards of contaminated soil. A written exemption from permit is required for the excavation of less than 1,000 cubic yards. See www.ourair.org/csc-projects for more information.

APCD9 2. **Diesel Engines:** All portable diesel-fired construction engines rated at 50 brake horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or District permits. Construction engines with PERP certificates are exempt from the District permit, provided they will be on-site for less than 12 months.

APCD10 3. **Asbestos:** The applicant is required to complete and submit an *Asbestos Demolition/Renovation Notification* or an *EXEMPTION from Notification for Renovation and Demolition* (District Form ENF-28 or District Form ENF-28e), which can be downloaded at www.ourair.org/compliance-forms for each regulated structure to be demolished or renovated. Demolition notifications are required regardless of whether asbestos is present or not. The completed exemption or notification should be presented, mailed, or emailed to the District with a minimum of 10 working days advance notice prior to disturbing asbestos in a renovation or starting work on a demolition. The applicant should visit www.ourair.org/asbestos to determine whether the project triggers asbestos notification requirements or whether the project qualifies for an exemption.

APCD11 4. **Naturally Occurring Asbestos**: If the project area to be disturbed: a) is located in a geographic ultramafic rock unit; b) has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the owner/operator; or c) is discovered by the owner/operator, a registered geologist, or the Air Pollution Control Officer to have naturally-occurring asbestos, serpentine, or ultramafic rock after the start of any construction or grading; then appropriate abatement measures must be undertaken pursuant to the requirements of the Air Resources Board Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations (see www.arb.ca.gov/toxics/asbestos/asbestos.htm).

APCD12 5. **Architectural Coatings**: The application of architectural coatings, such as paints, primers, and sealers that are applied to buildings or stationary structures, shall comply with District Rule 323.1, *Architectural Coatings* that places limits on the VOC-content of coating products.

APCD13 6. **Asphalt Paving**: Asphalt paving activities shall comply with District Rule 329, *Cutback and Emulsified Asphalt Paving Materials*.

APCD14 7. **Fugitive Dust:** Construction/demolition activities are subject to District Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities*. This rule establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites, includes measures for minimizing fugitive dust from on-site activities, and from trucks moving on- and off-site. Please see www.ourair.org/wp-content/uploads/rule345.pdf. Activities subject to Rule 345 are also subject to Rule 302 (*Visible Emissions*) and Rule 303 (*Nuisance*).

APCD15 8. **Fugitive Dust:** To reduce the potential for violations of District Rule 345 *(Control of Fugitive Dust from Construction and Demolition Activities)*, Rule 302 *(Visible Emissions)*, and Rule 303

*(Nuisance)*, standard dust mitigations (**Attachment B**) are recommended for all construction and/or grading activities. The name and telephone number of an on-site contact person must be provided to the District prior to start of construction.

APCD16 9. **Equipment Exhaust:** The State of California considers particulate matter emitted by diesel engines carcinogenic. Therefore, during project grading, construction, and hauling, construction contracts must specify that contractors shall adhere to the requirements listed in **Attachment C** to reduce emissions of particulate matter (as well as of ozone precursors) from diesel equipment. Recommended measures should be implemented to the maximum extent feasible.

APCD17 10. **Idling:** At all times, idling of heavy-duty diesel trucks should be minimized; auxiliary power units should be used whenever possible. State law requires that:

- Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
- Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
- See www.arb.ca.gov/noidle for more information.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8873 or via email at HoD@sbcapcd.org.

Sincerely,

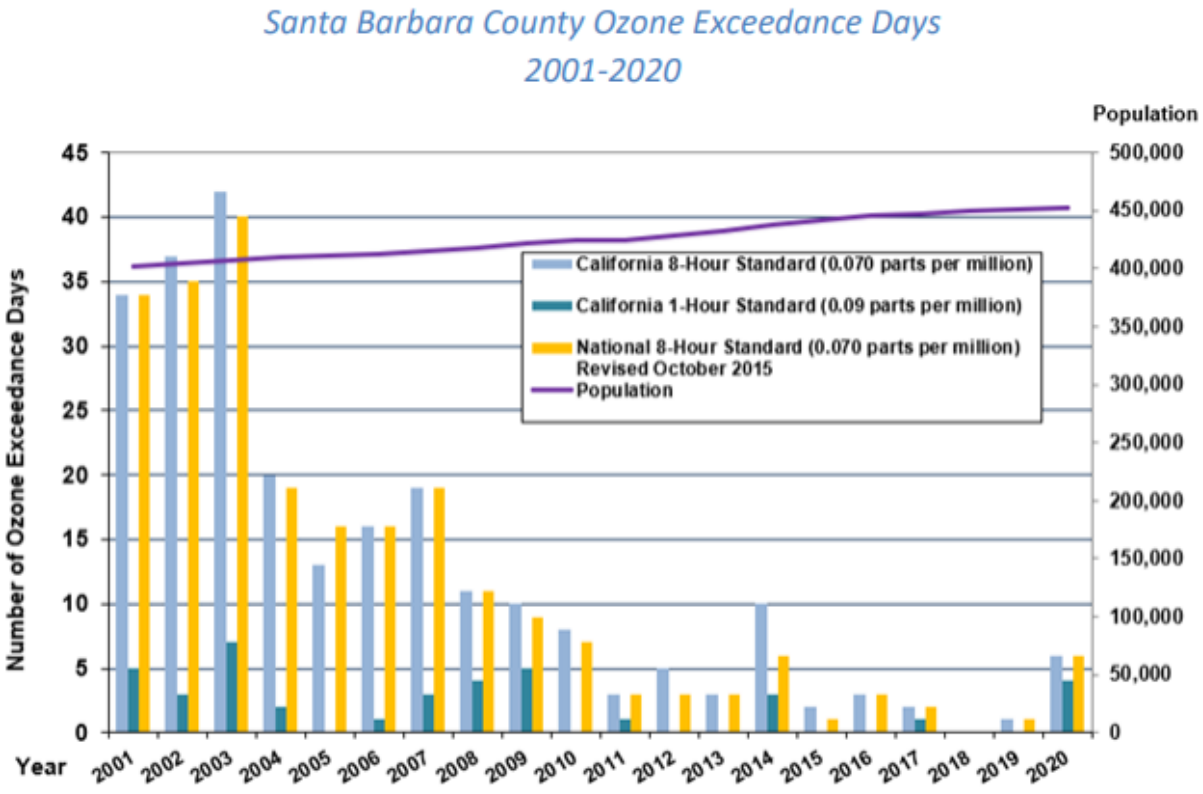
p.p. Carly Barham

Desmond Ho
Air Quality Specialist
Planning Division

Attachments: Santa Barbara County Ozone Exceedance Days 2001-2020
Fugitive Dust Control Measures
Diesel Particulate and $NO_x$ Emission Measures

cc: Planning Chron File

**Attahcment A**



air pollution control district
SANTA BARBARA COUNTY

**ATTACHMENT B**
**FUGITIVE DUST CONTROL MEASURES**

These measures are required for all projects involving earthmoving activities regardless of the project size or duration. Projects are expected to manage fugitive dust emissions such that emissions do not exceed APCD's visible emissions limit (APCD Rule 302), create a public nuisance (APCD Rule 303), and are in compliance with the APCD's requirements and standards for visible dust (APCD Rule 345).

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60 minute period. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required when sustained wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Onsite vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than one day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, OR using roll-compaction, OR revegetating, OR by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved should be completed as soon as possible.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by onsite operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to grading/building permit issuance and/or map clearance.

**PLAN REQUIREMENTS:** All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. **Timing**: Requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods.

**MONITORING:** The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

air pollution control district
SANTA BARBARA COUNTY

**ATTACHMENT C**
**DIESEL PARTICULATE AND $NO_x$ EMISSION REDUCTION MEASURES**

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible.

The following measures are required by state law:

- All portable diesel-powered construction equipment greater than 50 brake horsepower (bhp) shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- Fleet owners of diesel-powered mobile construction equipment greater than 25 hp are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation (Title 13, California Code of Regulations (CCR), §2449), the purpose of which is to reduce oxides of nitrogen (NOx), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
- Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (Title 13, CCR, §2025), the purpose of which is to reduce DPM, NOx and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.
- All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than five minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes, unless the truck engine meets the optional low-NOx idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.

The following measures are recommended:

- Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines should be used to the maximum extent feasible.
- On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible. Electric auxiliary power units should be used to the maximum extent feasible.
- Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, should be used on-site where feasible.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.
- Construction truck trips should be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- Proposed truck routes should minimize to the extent feasible impacts to residential communities and sensitive receptors.
- Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.

**PLAN REQUIREMENTS AND TIMING:** Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans, and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles onsite and have it available for inspection.

**MONITORING:** The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

# Letter 2

**COMMENTER:** Desmond Ho, Air Quality Specialist, Santa Barbara County Air Pollution Control District

**DATE:** 7/9/2021

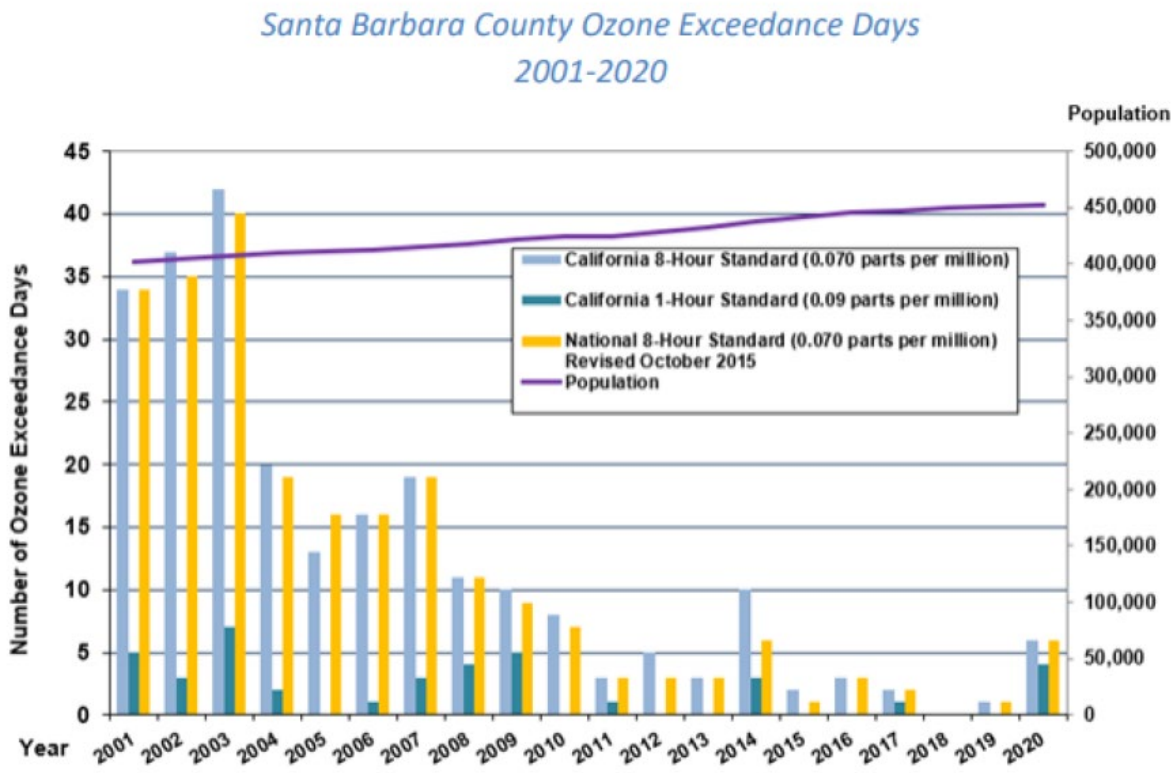
## Response APCD1

The commenter requests inclusion of ambient air quality data for 2019 and 2020 in Figure 4.2-2 in Section 4.2, *Air Quality*, of the Draft PEIR.

The ozone exceedance chart provided in Attachment A of the commenter's letter has been incorporated into Figure 4.2-2 and the associated text in Section 4.2(b), *Current Air Quality*, in Section 4.2, *Air Quality*, of the Final PEIR, as shown below.

> Santa Barbara County's air quality improved dramatically over the years as evidenced by the declining number of state 1-hour and 8-hour ozone exceedances. An exceedance is a measured concentration at a monitoring station that surpasses the standard. As displayed in Figure 4.2-2, 1-hour ozone exceedances have decreased from a high of 37 days in 1990 to zero days in six out of the last nine years. The number of 8-hour ozone exceedance days range from a high of 101 days in 1991 to zero days in 2018 with one exceedance in 2019 and six exceedances in 2020. This represents a significant milestone as 2018 is the first year in which the County did not exceed the 8-hour ozone standard. These improvements in air quality have occurred despite a 20 percent increase in countywide population since 1990.
>
> In summary, the County is currently classified as in attainment for State 8-hour ozone standard, but still in a non-attainment area for the State $PM_{10}$ standard (SBCAPCD 2019).

**Figure 4.2-1 Historical Santa Barbara County Ozone Exceedances ~~(2019)~~ (2020)**




Source: ~~SBCAPCD 2019 Ozone Plan (December 2019)~~ SBCAPCD 2021

## Response APCD2

The commenter requests clarification of the thresholds used to evaluate the project's long-term air quality impacts in Section 4.2, *Air Quality*, of the Draft PEIR as they relate to mobile source emissions.

Section 4.2.3(a), *Methodology and Significance Thresholds*, in Section 4.2, *Air Quality*, of the Final PEIR has been revised as follows to clarify the significance threshold used to evaluate the long-term operational impacts of Connected 2050 on air quality:

> The methodology for determining the significance of air quality impacts compares baseline conditions in 2020 to the future 2050 conditions, as required in CEQA Section 15126.2(a). The analysis of air quality also includes a comparison between the expected future conditions Connected 2050 and the expected future conditions if no Connected 2050 project were adopted ("No Project" scenario). With respect to long-term impacts, because Connected 2050 itself does not directly generate the emissions, County thresholds associated with "new" or Indirect Source Review do not apply to Connected 2050 as a program. However, State and federal clean air laws require that emissions of pollutants for which national or State ambient air quality standards are violated be reduced from current levels. Therefore, the project's long-term impacts to air quality will be considered significant if Connected 2050 could result in mobile source emissions that ~~significantly~~ exceed existing levels, resulting in a long-term net increase in air pollutant emissions. In this case, the pollutants of concern are ozone precursors ($NO_x$ and ROC) and fine particulate matter, as these are the primary pollutants associated with vehicle transportation.

## Response APCD3

The commenter notes that the VMT in Table 4.2-3 in Section 4.2, Air Quality, of the Draft PEIR does not match the VMT provided in Section 4.8, *Greenhouse Gases and Climate Change*, and Section 4.12, *Transportation and Circulation*, of the Draft PEIR. The commenter requests resolution of this internal inconsistency of VMT estimates.

Table 4.2-3 and the associated air pollutant emissions modeling of the Final PEIR have been revised as follows to reflect the correct VMT numbers as provided in Section 4.8, *Greenhouse Gases and Climate Change*, and Section 4.12, *Transportation and Circulation*, of the Draft PEIR:

**Table 4.2-3 Regional Air Pollutant Emissions**

| Scenario | VMT | ROC (tons/day) | $NO_X$ (tons/day) | $PM_{2.5}$ (tons/day)* | $PM_{10}$ (tons/day)* |
|---|---|---|---|---|---|
| 2020 Baseline | ~~11,066,811~~ 10,958,000 | ~~1.09~~ 2.92 | ~~5.13~~ 5.43 | ~~0.31~~ 0.32 | ~~0.69~~ 0.71 |
| 2050 No Project | ~~13,124,116~~ 13,676,600 | ~~0.33~~ 1.20 | ~~1.67~~ 2.40 | ~~0.30~~ 0.32 | ~~0.74~~ 0.78 |
| 2050 with RTP-SCS | ~~10,987,202~~ 11,539,600 | ~~0.28~~ 1.01 | ~~1.43~~ 2.02 | ~~0.25~~ 0.27 | ~~0.63~~ 0.66 |

* PM2.5 and PM10 includes tire wear and brake wear emissions

Notes: The on-road mobile source criteria pollutant emissions estimates for Connected 2050 were calculated using CARB's EMFAC2017 emission inventory model. VMT data were extracted from Fehr and Peers who utilized the SBCAG's Traffic Demand Model (as further described in Section 4.12, *Transportation and Circulation*) and include pass-through trips from vehicles travelling through the County that do not have an origin or destination within the county. $PM_{10}$ and NOx emissions are presented above using winter values and ROC emissions are presented above using winter values to provide a conservative estimate based on the seasons in which individual criteria pollutant emissions are highest.

Source: See Appendix B for EMFAC2017 modeling results

The modeling revisions do not alter the impact conclusions of the Draft PEIR.

## Response APCD4

The commenter questions the relevance of the United States Environmental Protection Agency (U.S. EPA) document referenced in the first bullet of Mitigation Measure AQ-4 in Section 4.2, *Air Quality*, of the Draft PEIR to health risk evaluation and requests revision of the first bullet to more accurately reflect the contents of the referenced U.S. EPA document.

The U.S. EPA 2015's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and $PM_{10}$ Nonattainment and Maintenance Areas* provides guidance on how to estimate future localized pollutant concentrations of particulate matter measuring 10 microns or less in diameter ($PM_{10}$) and 2.5 microns or less in diameter ($PM_{2.5}$) resulting from transportation projects. This guidance is referenced in Mitigation Measure AQ-4 as the appropriate guidance for estimating localized pollutant concentrations of particulate matter that can then be used to estimate the resultant health risk. To clarify the relevance of the U.S. EPA 2015 guidance document, Mitigation Measure AQ-4 has been revised as follows:

*AQ-4 Health Risk Reduction Measures*

Transportation implementing agencies shall implement the following measures:

- During project-specific design and CEQA review, the potential localized particulate ($PM_{10}$ and $PM_{2.5}$) impacts and their health risks shall be evaluated for the project. Localized particulate matter concentrations shall be estimated using procedures and guidelines consistent with U.S. EPA 2015's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and $PM_{10}$ Nonattainment and Maintenance Areas*. If required based on the project-level hotspot analysis, project-specific mitigation shall be added to the project design concept or scope to ensure that local particulate ($PM_{10}$ and $PM_{2.5}$) emissions would not reach a concentration at any location that would cause estimated cancer risk to exceed the ~~2015 Office of Environmental Health Hazard Assessment (OEHHA) threshold~~ SBCAPCD health risk notification level of 10 in one million. Per the U.S. EPA guidance (2015), potential mitigation measures to be considered may include but shall not be limited to: providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones and replacing older buses with cleaner buses. These measures can and should be implemented to reduce localized particulate impacts as needed.
- Retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of nearby residents to TAC concentrations. The HRA shall be conducted in accordance with the latest iteration of the SBCAPCD Modeling Guidelines for Health Risk Assessments: Form-15i.
- If impacts result in increased risks to sensitive receptors above significance thresholds, Plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source. This measure would trap TACs emitted from pollution sources such as highways, reducing the amount of TACs to which residents and other sensitive populations would be exposed.

## Response APCD5

The commenter requests a reference for the "2015 Office of Environmental Health Hazard Assessment (OEHHA) threshold of 10 in one million" for cancer risk referenced in the first bullet of Mitigation Measure AQ-4 in Section 4.2, *Air Quality*, of the Draft PEIR or removal of this language.

Mitigation Measure AQ-4 in Section 4.2, Air Quality, of the Final PEIR has been revised to remove the incorrect reference to the 2015 OEHHA guidance and instead reference the Santa Barbara County Air Pollution Control District (SBCAPCD) health risk notification level. Revisions to Mitigation Measure AQ-4 are shown under Response APCD4.

## Response APCD6

The commenter recommends that the second bullet of Mitigation Measure AQ-4 in Section 4.2, *Air Quality*, of the Draft PEIR refer to the SBCAPCD Modeling Guidelines for Health Risk Assessments: Form-15i.

Mitigation Measure AQ-4 in Section 4.2, Air Quality, of the Final PEIR has been revised to reference SBCAPCD guidelines for conducting health risk assessments. Revisions to Mitigation Measure AQ-4 are shown under Response APCD4.

## Response APCD7

The commenter requests clarification of whether the measures listed on page 4.2-21 in Section 4.2, *Air Quality*, of the Draft PEIR are required for all projects regardless of the results of the health risk assessment or if they are optional. The commenter also recommends mitigation of exposure to roadway-related pollutants if a new development project with sensitive receptors is sited within 500 feet of a freeway or high traffic volume roadway.

The list of measures on page 4.2-21 of the Draft PEIR is part of Mitigation Measure AQ-4. As stated therein, these measures shall be incorporated, when appropriate and feasible, "into project building design for residential, school and other sensitive uses located within 500 feet, or other distance as determined by the lead agency, of freeways, heavily travelled arterials, railways and other sources of diesel particulate matter, including roadways experiencing significant vehicle delays. The appropriate measures shall include one or more of the following methods, as determined by a qualified professional, as applicable. The implementing agency shall incorporate health risk reduction measures based on analysis of individual sites and project circumstances." These measures are to be implemented when appropriate and feasible based on analysis of individual sites and project circumstances. Therefore, there may be situations in which implementation of one or more of the listed measures may not be necessary based on the results of a health risk assessment or other factors. Furthermore, the commenter's suggestion to mitigate exposure to roadway-related pollutants for new development projects with sensitive receptors sited within 500 feet of a freeway or high traffic volume roadway is already incorporated into Mitigation Measure AQ-4. No revisions to the Draft PEIR are necessary in response to this comment.

## Response APCD8

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to contact SBCAPCD if contaminated soils are found at project sites to determine the appropriate permitting pathway.

Project sponsors would be required to comply with applicable SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD9

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to ensure construction equipment has statewide Portable Equipment Registration Program (PERP) certificates or SBCAPCD permits.

Project sponsors would be required to comply with applicable State and SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD10

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to comply with SBCAPCD notification requirements for the demolition and renovation of buildings with asbestos containing materials.

Project sponsors would be required to comply with applicable SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD11

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to implement appropriate abatement measures for naturally occurring asbestos, serpentine, or ultramafic rock when present, pursuant to the requirements of the Air Resources Board Air Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations.

Project sponsors would be required to comply with applicable State rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD12

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to use architectural coatings that comply with SBCAPCD Rule 323.1.

Project sponsors would be required to comply with applicable SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD13

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to comply with SBCAPCD Rule 329 when undertaking asphalt paving activities.

Project sponsors would be required to comply with applicable SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD14

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to comply with SBCAPCD Rules 302, 303, and 345 during construction and demolition activities.

Project sponsors would be required to comply with applicable SBCAPCD rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

## Response APCD15

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to implement standard dust mitigations for all construction and/or grading activities, including the provision of an on-site contact person to the SBCAPCD prior to the start of construction.

All but one of the commenter's recommended standard dust mitigations (or their equivalents) in Attachment B of the commenter's letter, including the provision of an on-site contact person to the SBCAPCD prior to the start of construction, were included in Mitigation Measure AQ-2(a) in Section 4.2, *Air Quality*, of the Draft PEIR. However, Mitigation Measure AQ-2(a) in Section 4.2, *Air Quality*,

of the Final PEIR was revised as follows to incorporate the one additional fugitive dust control measure suggested by the commenter that was not originally included:

*AQ-2(a) Application of SBCAPCD Feasible Mitigation Measures*

For all projects, the implementing agency shall incorporate the most recent SBCAPCD feasible mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Current SBCAPCD feasible mitigation measures include the following. Additional and/or modified measures may be adopted by SBCAPCD prior to implementation of individual projects under Connected 2050. The most current list of feasible mitigation measures at the time of project implementation shall be used.

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible, especially during times of severe or extreme drought. However, reclaimed water should not be used in or around crops for human consumption.
- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or applying dust palliatives, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. During times of severe or extreme drought, the use of soil binders and/or dust palliatives should be prioritized over watering.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (greater than 25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.
- Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans.

## Response APCD16

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to implement additional actions to reduce emissions of particulate matter from diesel-fueled equipment.

The first set of particulate matter emission reduction measures recommended by the commenter in Attachment C of the letter are required by State law. Project sponsors would be required to comply with applicable State rules and regulations. Therefore, it is not necessary to include these measures as mitigation in the PEIR. In addition, two of the second set of recommended particulate matter emission reduction measures were already included in the Draft PEIR as Mitigation Measures AQ-2(b) and AQ-2(c). The remaining measures have been incorporated into Section 4.2, *Air Quality*, of the Final PEIR as Mitigation Measure AQ-2(d) as follows:

> *AQ-2(d) Diesel Particulate Emission Reduction Measures*
>
> For all projects, the implementing agency shall incorporate the following diesel particulate emission reduction measures when feasible based on analysis of individual sites and project circumstances:
>
> - On-road heavy-duty equipment with model year 2010 engines or newer shall be used to the maximum extent feasible.
> - Equipment/vehicles using alternative fuels, such as compressed natural gas, liquefied natural gas, propane or biodiesel, shall be used on-site where feasible.
> - Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
> - All construction equipment shall be maintained in tune per the manufacturer's specifications.
> - The engine size of construction equipment shall be the minimum practical size.
> - The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
> - Construction worker trips shall be minimized by requiring carpooling and by providing for lunch on-site.
> - Construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
> - Proposed truck routes shall minimize to the extent feasible impacts to residential communities and sensitive receptors.
> - Construction staging areas shall be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.

## Response APCD17

The commenter recommends the adoption of an additional measure to minimize air quality impacts and ensure compliance with State and local air quality regulations by requiring project applicants to limit vehicle idling in accordance with State law.

Project sponsors would be required to comply with applicable State rules and regulations. Therefore, it is not necessary to include this measure as mitigation in the PEIR.

Date: July 11. 2021

To: SBCAG

From: Tom Becker

Subject: Public comment for Connected 2050 RTP/SCS Draft PEIR.

This is a public comment letter for the Connected 2050 RTP/SCS Draft PEIR.

Connected 2050 is the update for the county's RTP/SCS document. Both the STP and SCS are plans required by the State of California. The RTP/SCS are reviewed by the California Air Resources Board (CARB) for consistency with applicable regulations and statutes promulgated for the implementation of Environmental Justice (EJ), reduction of Greenhouse Gas (GHG) emissions and reduction of Vehicle Miles Traveled (VMT).

Any STP/SCS approved by SBCAG, or any other MPO, is subject to review and approval by CARB, including the full CARB Board if requested. The entirety of any RTP/SCS approved by CARB becomes the official, approved position of the State of California.

The following itemized comments were prepared with the intent that they be individually responded to in the final Connected 2050 RTP/SCS PEIR.

TB1 **1- It is required in the PEIR that all estimates of future GHG reductions from strategies, projects and programs found in the RTP/SCS have the quantity of GHG reduction calculated based on observed data from existing, implemented strategies, programs and projects. It is not allowed to calculate future GHG reduction based solely on modeling data. The amount of observed GHG reduction from existing, implemented strategies, programs and projects should be calculated from the inception of the strategy, program or project through the end of 2019.**

TB2 **2- It is required in the PEIR that all strategies, programs and projects contained in the RTP/SCS that are intended to reduce VMT should contain an estimate of the quantity of future GHG reduction to be achieved from the program or project. The estimate of future GHG reduction should be based on observed data of GHG reduction achieved by implementing similar GHG reducing strategies, programs and projects found in previous RTP/SCS updates.**

TB3 **3- It is required in the PEIR that all bicycle strategies, programs and projects contained in the RTP/SCS should include estimates of the quantity of future GHG reductions to be achieved from the projects or programs. Those estimated GHG reductions must be based on observed data of GHG reductions achieved from existing, implemented bicycle strategies, programs and projects found in previous RTP/SCS.**

TB4 **4- It is required in the PEIR that all mass transit strategies, programs and projects contained in the RTP/SCS should include estimates of the quantity of future GHG reductions to be achieved from the projects and programs. Those estimated future GHG reductions must be based on observed data of GHG reductions achieved from existing, implemented mass transit strategies, programs and projects found in previous RTP/SCS.**

TB5 **5- It is required in the PEIR that the program contained in the RTP/SCS that is intended to reduce VMT by encouraging workers in "housing rich" areas to relocate to "jobs rich" areas must include estimates of the quantity of GHG reductions to be achieved from program. Those estimated GHG reductions must be based on observed data of GHG reductions achieved from existing and implemented housing strategies, projects and programs found in previous RTP/SCS.**

TB6 **6- It is required in the PEIR that all estimates of future GHG reductions from all GHG reducing strategies, programs or projects found in the RTP/SCS to be calculated based on observed performance data from existing, already implemented GHG reduction strategies, programs and projects approved in past RTP/SCS plans.**

TB7 **7- It is required in the PEIR that all models used to calculate future GHG quantity reductions from all GHG reducing strategies, programs and projects found in the RTP/SCS must be programmed to calculate future performance based on observed performance of existing GHG reducing strategies, projects and programs. For instance, if observed data from existing bicycle strategies, programs and projects show no measurable reduction in GHG countywide from those strategies, programs or projects over the last 10 years, Then the models used to calculate future GHG reductions must calculate future performance of GHG reductions using existing, observed performance, which shows no measurable reduction in GHG emissions.**

TB8 **8- It is required in the PEIR that the correct application of the Scientific Method be observed, which mandates changes to a model and/or data fed into the model if the model makes faulty projections. For instance, if models used in past RTP/SCS EIR's and documents incorrectly projected GHG reductions from RTP/SCS strategies, programs and projects, the models and /or the data must be changed, so when data is put into the model, the model produces the correct projection that shows the actual, observed result. Those corrections must then be left in the model when calculating future projections.**

TB9 **9- Referring to #8, the PEIR requires SBCAG to change models and/or data when models make incorrect projections. SBCAG is not allowed use faulty or manipulated models or data to support the implementation of a strategy, project or program found in the RTP/SCS. SBCAG must use models and data that are proven to make correct projections, based on the model's and data's success at making projections that match observed data.**

TB10 **10- In the RTP document, SBCAG acknowledges the program to construct housing in South County to relocate workers into "jobs rich" South County will result in significant increased congestion in South County.**

TB11 **11- SBCAG is required to perform a complete environmental analysis in the PEIR of the impacts to South County communities from the increase in congestion, impacts from construction and other environmental impacts associated with the program to build housing in South County to relocate workers into "jobs rich" South County.**

TB12 **12- As part of the complete environmental analysis, SBCAG must identify mitigations and alternatives to the South County housing/worker relocation program.**

TB13 **13- Even though the PEIR is programmatic and consists of individual programs whose implementing projects are controlled by various government entities, CEQA requires the South County housing/worker relocating program to have a separate environmental review because the program is identified as a distinct program, which in the aggregate of all projects proposed to implement the program, creates significant environmental impacts, as admitted by SBCAG.**

TB14 **14- The STP/SCS is controlled by requirements and guidelines developed by CARB. The RTP/ SCS is also subject to approval by CARB. As such, the RTP/SCS is subject to California Code of Regulations, Title 17, s 60004, which also requires a full and complete environmental analysis of the South County housing worker relocation program for the same reasons stated above.**

TB15 **15- I am submitting a proposed alternative to the South County housing/worker relocation program: SBCAG should prepare an evaluation of shifting jobs out of South County to areas that have plentiful and lower cost housing. This plan would eliminate the environmental impacts to South County, including the coastal zone area, that SBCAG admits will occur. And as mentioned previously, SBCAG should also evaluate the success of existing and implemented housing strategies/plans/programs in reducing GHG emissions by relocating workers to South County.**

TB16

As part of this comment letter, I am resubmitting all comments I submitted during the scoping process. All scoping comments are itemized. I request that all itemized comments submitted during the scoping process, and resubmitted as part of this comment letter, be responded to individually as part of the draft PEIR public comment period. The resubmitted comments are found in the EPA letter referenced below.

I have also attached a comment letter I submitted to U.S EPA. That comment letter contains my comments submitted during the PEIR scoping process, and resubmitted as part of this comment letter. Outside the resubmitted scoping comments, the rest of the EPA comment is for information only and does not require a response from SBCAG.

It is my belief that the VMT reduction strategies adopted by the State of California are failures, and the state should develop strategies that reduce VMT in the state by 25% from a 2014 baseline by 2035. SBCAG is not constrained by any state requirement if SBCAG wishes to reduce VMT by amounts that exceed state requirements.

Finally, it is the ultimate responsibility of the government of the State of California to reduce GHG emissions to the greatest possible extent using feasible VMT reducing strategies.

Thank you,

Tom Becker

Buellton, CA

tsbecker069@gmail.com

1/13/21

To: SBCAG

From: Tom Becker

Subject: Connected 2050 RTP EIR scoping comments, due by 1/15/21

TB16 1- The EIR should study how high density housing developments spread the Covid-19 virus, and should include a comparative analysis between low density housing and high density housing virus infection rates and rate of virus spread.

TB 17 2- The EIR should include a comparative analysis of Covid-19 infection rates between Hispanic populations living in high density housing and Hispanic populations living in low density housing.

TB18 3- The EIR should include a comparative analysis of Covid-19 death rates for Hispanic populations living in high density housing and Hispanic populations living in low density housing.

TB19 4- The EIR should include a comparative analysis in Hispanic home ownership rates between populations living in high density housing and populations living in low density housing.

TB20 5- The EIR should include a comparative analysis of the poverty rate in the Hispanic populations living in high density housing and Hispanic populations living in low density housing.

TB21 6- The EIR should include an analysis of how the addition of HOV lanes on Highway 101 between Carpinteria and Santa Barbara will induce Vehicle Miles Traveled (VMT) on the highway and surrounding streets and intersections.

TB22 7- The EIR should determine if the addition of HOV lanes on Highway 101 conforms with Coastal Act section 30253(4) and county CLUP section 3.11.1, which both state that new developments in the coastal zone shall minimize energy consumption and VMT.

TB23 8- The EIR should include SBCAG's definition of the word "minimize", as applied to Coastal Act section 30253(4) and county CLUP section 3.11.1, and should include SBCAG's source for their definition.

TB24 9- The EIR should include a determination if the increase in VMT associated with the addition of HOV lanes on Highway 101 conforms with the VMT reduction goals of Connected 2050 RTP.

TB25 10- The EIR should determine if the approval of Coastal Development Permits (CDP) for segments 4D and 4E of the HOV project conforms with the VMT reduction goals of Connected 2050 RTP.

TB26 11- The EIR should include a determination if the approval of CDP's for HOV segments 4D and 4E conform with the VMT minimization requirements of Coastal Act section 30253(4) and county CLUP section 3.11.1.

TB27 12- The EIR should include an analysis of possible VMT reductions on Highway 101 between Carprinteria and Santa Barbara if the proposed HOV lanes were converted to exclusive transit bus lanes.

TB28 13- The EIR should include a study of the reductions in VMT on Highway 101 between Carpinteria and Santa Barbara that are possible by implementing the VMT reduction policies and strategies found in the following documents, and other similar documents prepared to implement SB 743;

D1- Technical Advisory on Evaluating Transportation Impacts in CEQA (Governor's Office of Planning and Research, April, 2018.) D2- Transportation Under CEQA, First Edition (CalTrans, September, 2020). D3- Transportation Analysis Updates in Santa Barbara County (County of Santa Barbara, Planning and Development, July, 2020).

TB29 14- The EIR should analyze the reduction of induced VMT into the intersections of San Ysidro Lane/ Jameson Lane and Coast Village Road/ Olive Mill Road if the proposed Highway 101 HOV lanes are converted into exclusive transit bus lanes.

TB30 15- The EIR should determine which configuration of lanes on Highway 101 will achieve the greatest reduction of VMT- HOV lanes or exclusive transit bus lanes.

TB31 16- The EIR should study the combined effects of reducing VMT on Highway 101 from point #13 and converting HOV lanes to exclusive transit bus lanes, and determine if reducing VMT will meet or exceed the goals of traffic improvements originally sought by the construction of HOV lanes.

I will be submitting additional comments during the Connect 2050 process.

Thank you

Tom Becker

tsbecker069@gmail.com

Date: July 4, 2021

To: U.S. Environmental Protection Agency

From: The Automotive Coalition

Subject: Docket # EPA-HQ-OAR-2021- 0257

This is a public comment letter submitted for EPA Docket # EPA-HQ-OAR-2021-0257.

On April 27, 2021, the U.S EPA posted the following – Hearing: California State Motor Vehicle Pollution Control Standards: Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption.

In 2019, U.S EPA withdrew a waiver granted to the State of California in 2013 for California's Advanced Clean Car program. During the public comment period for the waiver withdrawal, several public comments were submitted by Cars Are Basic (CAB) and Tom Becker. Those comments are attached.

The purpose and reasons for the waiver withdrawal were well understood by CAB, Mr. Becker and many other persons and NGO's who submitted comments in support of the waiver withdrawal. EPA made well- reasoned and clearly articulated arguments for the waiver withdrawal. Because of the clear and rational decision to withdraw the waiver, citizens of the State of California were empowered to effectively engage with the state government to improve air quality and reduce Greenhouse Gas (GHG) emissions, using environmentally superior strategies and technologies ignored or obstructed by the state government after the waiver was granted in 2013.

In the statement EPA submitted in support of the reconsideration of the waiver withdrawal, EPA established the following positions:

- EPA will not consider any comments that discuss the original waiver approval of 2013.
- EPA will consider comments discussing changes and developments that occurred between 2013 and now that support the waiver withdrawal.
- EPA had absolute authority to withdraw the waiver if developments occurred between 2013 and 2019 that showed the waiver was unnecessary for California to meet compelling and extraordinary conditions.

- EPA had absolute authority to withdraw the waiver if California acted in an arbitrary and capricious manner between 2013 and 2019 in implementation of the standards and requirements found in the waiver.

- EPA has the absolute authority to maintain the waiver withdrawal if the withdrawal results in the state developing environmentally superior emission reduction standards and strategies compared to those found in the 2013 waiver.

After the State of California was granted the waiver in 2013, the state engaged in a well-coordinated effort to promote electric vehicle (EV) technology, while engaging in actions that damage industries and businesses that provide competitive alternatives to EV technology. The granting of the waiver in 2013 emboldened the state government to engage in destructive behavior towards companies that provide biofuel products and technologies.

The granting of the waiver in 2013 also emboldened the state to ignore efforts by citizens of the state to strengthen efforts to reduce Vehicle Miles Travelled (VMT) in the state. After 2013, the state made no meaningful effort to reduce VMT to levels that would achieve measurable and effective VMT reductions. All VMT reduction efforts by the state were token in nature, with the state creating loopholes and exemptions in regulations and guidelines that made VMT reduction unachievable. The state also engaged in blatant and intentional disregard of VMT reducing rules, regulations and policies, while approving projects that induce massive increases in VMT.

When EPA granted the State of California the waiver in 2013, it actually guaranteed an increase in GHG emissions over the next 20 years. The waiver emboldened the state to promote EV technology, which is unlikely to achieve any significant reduction in GHG emissions nationwide in the next 20 years, while at the same time emboldened the state to engage in behavior that obstructed technologies and strategies that would achieve significant reductions in GHG emissions. In particular, the state's action towards companies and businesses that manufacture biofuels and biofuel systems has all the markings of an intentional act by the state to damage or destroy the competitors of EV manufacturers and companies that manufacture systems that support EVs.

On June 20, 2019, the U.S House Committee on Energy and Commerce held a hearing titled "Driving in Reverse". The subject of the hearing was the EPA waiver withdrawal and the EPA/ NHTSA Safe Rule. One of the witnesses was California Air Resource Board (CARB) Chairwoman Mary Nichols. During her

testimony, Chair Nichols revealed that EPA Director Wheeler discussed with her the strategy of reducing GHG emissions by reducing VMT. Chair Nichols stated that reducing GHG emissions through reduction in VMT was "not terribly attractive", but acknowledged that reduction in VMT could meet the state's GHG goals absent the waiver. Chairwoman Nichols admission was conclusive evidence that the waiver was not required to meet California's compelling and extraordinary conditions. This fact supports the EPA's 2019 position that the waiver withdrawal was legally and technically correct, since one of the requirements to obtain a waiver is showing the standards contained in the waiver are required to meet compelling and extraordinary conditions, and no other alternative exists. The video of the June 20, 2019 hearing is available on the House Committee website.

For decades before the 2013 waiver approval, California citizens have attempted to convince the State of California government to reduce VMT in the state. This was done to reduce pollution and fuel consumption. In the late 1990's reduction in VMT also became a strategy to reduce GHG emissions.

The state has enacted several statutes to reduce VMT, most notably AB 32 in 2006, SB 375 in 2008 and SB 743 in 2014. Many California citizens pointed out that the aforementioned statutes would not reduce GHG emissions to a level that would result in any meaningful GHG reduction.

The state's attempts to reduce VMT have actually failed. California citizens have proposed reducing VMT by 25% from a 2014 baseline, basically reducing VMT to 1990 levels. The state's strategy is to SLOW the PROJECTED rate of growth in VMT, allowing an increase in VMT of at least 20% from the 2014 baseline by 2035. Even at that, the state has failed to meet its VMT reduction objectives.

In April of this year, the California Coastal Commission (CCC) set precedent during an appeal of a major road development project in the coastal zone of Santa Barbara County. The CCC established that VMT reducing alternatives to projects that induce or support increases in VMT, do not have to be considered, even if the alternative achieves large VMT reductions while achieving the Level of Service (LOS) goals of the proposed project. The California Transportation Commission approved funding for parts of the project, having full and complete knowledge of the VMT inducing nature of the project, and the existence of feasible VMT reducing alternatives to the project. The appeal #'s were A-4-SBC-20-0065, A-4-STB-20-0079 and A-4-STB-20-0078.

Every 5 years, California Metropolitan Planning Organizations (MPO) are required to update their Regional Transportation Plans (RTP) and Sustainable Community Strategies (SCS). The largest MPO is the Southern California Association of Governments (SCAG). In Santa Barbara County, the MPO is the Santa

Barbara County Association of Governments (SBCAG). SCAG submitted their updated RTP/ SCS to CARB in September of 2020. SBCAG is currently in the process of updating their RTP/ SCS.

After evaluating SCAG's RTP/SCS submittal, CARB accepted SCAG's GHG evaluation, even though CARB pointed out that SCAG failed to consider observed data, which SCAG is required to do. Failure to consider observed data, and rely only on modeling data, makes the GHG evaluation worthless. Evaluating observed data is the main method for determining the accuracy of the models.

SBCAG's RTP/SCS is scheduled to be completed sometime in the Summer/Fall of 2020. Currently, public comments for the RTP/SCS Draft Programmatic EIR are due by July 12. Attached to this letter are itemized comments submitted during the PEIR scoping process. Itemized comments reflecting the comments submitted during the scoping process will be submitted for the Draft PEIR.

CARB reviews all RTP/SCS plans prepared by California MPOs. CARB has the authority to approve, reject or conditionally approve RTP/SCS submittals. STP/SCS documents are heavily relied upon by MPOs when preparing their State Implementation Plans (SIP).

Since 2013, CARB has implemented regulations to reduce GHG emissions from on-road vehicles in California. Three regulations stand out:

- The Zero Emission Airport Shuttle Regulation (2019)
- The Advanced Clean Truck Regulation (2019)
- The Clean Miles Standard Regulation (2021)

Only the Clean Miles Standard Regulation pertains to light-duty vehicles. However, the other 2 regulations are important as examples of how CARB has engages in behavior that obstructs and harms companies and businesses that manufacture products that compete with the Electric Vehicle industry.

In all three regulations mentioned above, the state intentionally blocked the use of renewable biofuels as options or alternatives that could be used to meet the emission reduction goals of the regulation. Those renewable fuels include natural gas, biodiesel, ethanol and butanol. At least one lawsuit was filed as the result of the state's intentional efforts to obstruct biofuel manufacturers- California Natural Gas Vehicle Coalition v California Air Resources Board, et al, Case # 20CEC02250, California Superior Court.

Attached are a selection of comments submitted to CARB during the public comment periods for the above-mentioned regulations. All public comments submitted for the regulations, including verbal comments presented during the CARB hearing for the regulations, are available at the CARB website.

The Clean Miles Standard Regulation directly pertains to California's efforts to regulate GHG emission from light duty vehicles. Several comments were submitted by businesses that manufacturer biofuels and biofuel systems. The CARB Board received clear and convincing evidence and testimony that the regulation arbitrarily, capriciously and intentionally blocks the use of biofuels as an option or alternative to achieve the GHG reduction goals of the regulation. The CARB Board voted to approve the regulation, with full and complete knowledge the regulation harms manufacturers of biofuels and biofuel systems, and the regulation continues a pattern of behavior by the CARB Board that harms the manufacturers of biofuels and biofuel systems.

Below are a list of issues U.S EPA should be compelled to respond to as part of their considerations of reversing EPA's decision to withdraw California's emission waiver. The issues are itemized.

1- EPA expressed concern that insufficient time had elapsed between the 2013 waiver approval and the waiver reconsideration. The purpose for allowing a sufficient time period between approval and reconsideration is to develop a clear understanding if the waiver was providing the emission reduction benefits promised by the waiver, was showing the waiver was required to meet compelling and extraordinary conditions and implementation of the waiver was not being done in an arbitrary and capricious manner. Between 2013 and 2019, it was clearly shown the waiver was not needed by the state to meet compelling and extraordinary conditions, the state was arbitrarily and capriciously implementing the waiver standards and the waiver failed to achieve the nationwide increase in vehicles that have zero net GHG emissions.
2- The State of California has engaged in an intentional effort to block and destroy the use of renewable biofuels as alternatives or options to meet GHG reductions goals in at least 3 on-road vehicle regulations promulgated by the California Air Resources Board. Those 3 regulations are: The Advanced Clean Truck Regulation (2019), The Zero Emission Airport Shuttle Regulation (2019) and the Clean Miles Standard Regulation (2021).
3- The Clean Miles Standard Regulation is directly connected to the state's light duty GHG emission reduction efforts associated with the 2013 waiver. The CARB Board, acting with full and complete knowledge, and in possession of clear and convincing testimony provided by biofuel and biofuel system manufacturers, arbitrarily, capriciously and intentionally blocked the use of biofuels as an alternative or option to meeting the regulation's emission reduction requirements.
4- On June 20, 2019, CARB Chairwoman Mary Nichols stated before the House Committee on Energy and Commerce that she discussed the reduction of VMT as a GHG reducing strategy with then-

4- (continued) EPA Administrator Wheeler. Chair Nichols then acknowledged that reducing VMT in the State of California has the potential of reducing GHG emissions equal in quantity to the GHG reductions achievable from the 2013 waiver standards. Chair Nichols' admission is conclusive proof that the 2013 waiver was and is not required by the state to meet compelling and extraordinary conditions.

5- CARB has a history of accepting GHG quantification documents, that are part of VMT/GHG reduction plans submitted to U.S EPA, that they knew were scientifically and technically flawed and incomplete. Refer to CARB Executive Order G-20-239.

6- The State of California must be "technology neutral" when promulgating regulations intended to meet the standards of the 2013 waiver.

7- The State of California has acted in arbitrary and capricious fashion by intentionally blocking biofuel technologies from being considered as alternatives or options in regulations that regulate GHG emissions from light duty vehicles. This includes regulations promulgated by the state that are intended to implement or supplement the 2013 waiver standards.

8- The State of California declared that the issuance of emission waivers to the state would promote the advancement of technology nationwide. The nationwide sale of light duty vehicles powered solely by electricity between 2013 and 2019 failed to achieve the sale volumes the State of California projected would happen with implementation of the 2013 waiver standards.

9- It is well within the EPA's power to require the State of California to implement the following actions or corrections before the 2013 waiver withdrawal is overturned:

A)- Require the state to allow renewable biofuels to be alternatives or options in all 2013 waiver connected regulations that seek to reduce GHG emissions from light duty vehicles.

B) Require the state amend the Clean Miles Standard regulation to allow renewable biofuels To be alternatives or options for achieving the emission standards of the regulation.

C) Require the state to demonstrate and quantify GHG emission reductions that would Be achieved in 2035 by reducing VMT by 25% from a 2014 baseline. Determine if the quantity of GHG reduction meets or exceeds the projected GHG reductions from the 2013 waiver standard.

Thank you,

Tom Becker

The Automotive Coalition

tsbecker069@gmail.com

# Attachment

To: Ms. Heidi King

Deputy Administrator

National Highway Traffic Safety Administration

To: Mr. William Wehrum

Assistant Administrator

Office of Air and Radiation

United States Environmental Protection Agency

From: Tom Becker

Subject: NHTSA/EPA revised CAFE standards, California emission waiver

Ms. King and Mr.Wehrum,

This letter concerns the proposed revision of federal motor vehicle CAFE standards and revocation of California's emission waiver.

In August, 2018, I submitted a comment letter to NHTSA/EPA regarding the CAFE revisions and the waiver revocation. That letter is attached. Over the past 10 months, the State of California has engaged in a campaign to stop both the CAFE revisions and waiver revocation.

To make this letter as brief as possible, there are people and businesses in California that support NHTSA's and EPA's efforts. In fact, there are people and organizations that have been attempting to correct California's problems for decades. Many Californians have engaged the

+ 9,8¢

state government and local governments during environmental reviews of public works projects and planning documents.

The State of California has created its own air quality problems. From bad planning of cities, overdevelopment and foolish obsessions with unworkable transportation schemes, the state government has created a huge mess. The rest of the nation should not have to kowtow to California because the state is in a situation of its own making.

The people of California have a right, through the California Environmental Quality Act (CEQA), to have a say in how environmental issues are addressed and dealt with. Those rights are routinely violated by the state.

If the State of California obeyed CEQA, and developed proper planning documents and emission control strategies, then the South Coast Air Quality Management District (SCAQMD), and the rest of California, would meet federal and state air quality standards without requiring auto manufacturers to build motor vehicles that people in other states will not want to buy. Californians won't even buy them.

California can be compared to a grossly obese kid living in Malibu that never gets up off his parent's couch, and demands all potato chips and pork rinds trucked into California be calorie-free.

I have attached a comment letter I am submitting to the California Air Resources Board. It comments on a CARB regulation that will be the subject of a CARB board meeting on 6/27. It is just a sample of the efforts many Californians make. NHTSA and EPA should hold California accountable for violating its own environmental laws, rules and regulations. No federal court should grant any credibility to California if the state sues NHTSA or EPA.

I have attempted to keep this letter brief. I am not going to submit hundreds of pages of documents. Mr. Wehrum stated before congress on 6/20 that over 600,000 comments were submitted to NHTSA and EPA. Your people are dealing with a huge volume of letters you must respond to. If EPA and/or NHTSA wish to contact me for additional information, I will be glad to provide what I have. Just be aware that there are hundreds, even thousands, of people in

California that are involved in changing the attitudes and practices of the state government on this and other issues. If NHTSA and EPA were to tap into those resources, I believe the situation will work out well for everyone and every state in the Union.

Thank you,

Tom Becker

Buellton, CA

lesdeplorable7@gmail.com

8/24/18

From: Cars Are Basic

To: US Environmental Protection Agency

Subject: EPA docket EPA-HQ-OAR-2018-0283 vehicle fuel economy standards

Cars Are Basic (CAB), a nonprofit watchdog group based in Santa Barbara County, CA, is submitting this public comment addressing the proposed change to federal vehicle fuel economy standards.

CAB has been in existence for over 20-years. During that period, we have addressed the issue of motor vehicle fuel efficiency, fuel consumption and safety on several occasions. We have submitted several documents to the federal government, the State of California government, and local governments in Santa Barbara County.

During the past 2-years, CAB has submitted comment letters during environmental reviews of several transportation projects and planning documents. In our letters, we have asked numerous questions concerning state and local transportation and housing development planning. Many of our questions specifically concern planning priorities of state and local governments to reduce Vehicle Miles Traveled (VMT). In large part, the State of California government, as well as local governments and agencies, have refused to properly answer CAB's questions.

CAB has always held the belief that the best way to reduce motor vehicle fuel consumption and reduce the number of motor vehicle collisions is to properly plan cities and highways, so people can own homes close to their jobs. We also believe that the motor vehicle marketplace should allow consumers to freely choose the type and size of vehicle they wish to drive. Currently, it is common in California for people to own a home 30-60 miles away from their place of employment. This excessive distance causes commuters to burn millions of gallons of motor vehicle fuel every day that would not be consumed if those people lived within 10-miles of their jobs. A commuter driving a 20-MPG minivan on a 20-mile round trip commute will burn less fuel than a commuter driving a 40-MPG subcompact car on a 100-mile round-trip commute. A shorter commute is also safer.

Currently, the State of California government is threatening to sue US EPA over the proposed changes in federal vehicle fuel economy standards and California's waiver. For the past 2-years, CAB has asked the state to engage with us on the issue of reducing fuel consumption and VMT in California. As pointed out above, the state government has refused to answer our questions put to them in environmental review documents. In CAB's opinion, the state has no credibility, since the state has refused to cooperate with citizens of California who are attempting to reduce VMT and fuel consumption through proper planning.

The purpose of conducting environmental reviews of public works projects and planning documents, is to ensure the public's right to have their government respond to the public's concerns. The government of California, as well as Santa Barbara County governments, have thwarted the rights of the people by refusing to properly respond to questions during the environmental review process of transportation projects and planning documents. If the California government carries through on its threat to sue U.S. EPA, it should be pointed out in federal court, that the state intentionally refuses to work with its own citizens to develop and implement planning documents and transportation projects that would reduce motor vehicle usage and fuel consumption.

In closing, CAB would be very happy to assist US EPA, US Department of Transportation and US Department of the Interior, in their efforts to advance and promote President Trump's agenda. And just a blunt reminder: The best thing for the citizens of motor vehicle manufacturing states like Michigan and Ohio, is cheap gasoline and a thriving Made in the USA automobile manufacturing industry. EPA, DOT and Interior better get on the ball NOW, because November is not that far away.

Tom Becker

Cars Are Basic

lesdeplorable7@gmail.com

6/22/19

To: California Air Resources Board

From: Tom Becker

Subject: Zero emission airport shuttle regulation

1) The State of California is opposed to the EPA/NHTSA revision of Obama era CAFE standards.
2) The State of California is opposed to EPA's decision to revoke California's emission waiver.
3) The State of California has threatened to sue NHTSA and EPA over CAFE standards and the revocation of the state's emission waiver.
4) In order for the state to prevail in federal court, it must demonstrate that it acted in good faith with EPA, NHTSA and its own residents.

The zero emission airport shuttle regulation ("the regulation") is unique in one sense: This is the first time (that I know of) where the State of California is attempting to force private citizens and companies, who have no contractual agreements with the state, to purchase electric vehicles.

Many businesses who enter into contracts with the State of California are required to meet extraordinary state emission requirements as part of the contract. For instance, Mission Linen Supply was required to purchase hybrid delivery trucks as part of Mission Linen's contract with the state to provide laundry service for the state prison system.

With the regulation, the state is forcing persons and companies who simply drop off and pick up people at airports to either purchase and operate electric buses or stop entering and parking at airports. CARB has intentionally excluded all other technologies from eligibility to meet the regulation requirements, even those technologies that, if utilized on other motor vehicles, would result in the entire South Coast Air Quality Management District (SCAQMD) meeting both state and federal air quality standards.

The state has acknowledged that the zero emission shuttle regulation is a test bed for future efforts by the state to impose electric vehicle mandates on all California residents and businesses, mandates that would force California residents to purchase and/or operate only electric vehicles, and would make operating a vehicle powered by any other technology a violation of the law.

As part of public participation in the zero emission airport shuttle regulation, 26 entities (individuals, businesses, government agencies and nongovernment organizations) submitted 29 comment letters. I submitted 2 letters.

CARB is operating under the California Environmental Quality Act (CEQA) in the preparation of the regulation. CARB even waived several exemptions it was entitled to under CEQA. As such, CARB is required to respond completely, truthfully and fairly to all comments and questions received from the public that, in any way, address the scope and adequacy of the regulation, or propose alternatives. CARB is also required to provide the public with requested documents, that CARB has in its possession, that the public needs to prepare comments on environmental reports and statements that are prepared under CEQA rules, regulations and statutes. Under CEQA, the State of California must act in good faith.

Many of the comments submitted by the public concern alternative fueled Internal Combustion Engine (ICE) shuttle buses. My comments included requests to CARB to include in the alternatives section of the regulation environmental document a scientific analysis of butanol fueled shuttle buses. Other members of the public requested scientific reviews of CNG and biodiesel. In addition to the aforementioned fuels, I will also request a scientific review of ethanol fueled shuttle buses.

I, along with several other commenters, also requested a scientific comparison between alternative fueled ICE shuttle buses and electric buses. The requested comparisons include comparisons in vehicle purchase costs, comparisons in supporting infrastructure costs, comparisons in fuel costs per mile, comparisons in maintenance costs and comparisons in operating range.

Among the false and misleading statements CARB made in the regulation environmental document that were pointed out by several commenters are:

A) False statements of the actual purchase costs of electric shuttles.
B) False statements of the actual cost of electricity, in costs per kilowatt hours.
C) False statements of the availability of electric shuttle buses.
D) False statements of the cost of electric shuttle bus supporting infrastructure.
E) False statements of the durability and operational lifespan of electric shuttle buses.

And just to be clear, I have never communicated with any of the other commenters. Yet, independent of each other, we came to similar conclusions and made similar observations of the defects in the regulation environmental document.

Over the past decades, I have been involved in state transportation and environmental issues. In addition to involvement with CARB, I have also been involved with transportation projects or planning documents where the California Department of Transportation (Caltrans), the County of Santa Barbara and the City of Santa Barbara have been lead agencies on environmental reviews. I have submitted documents during the environmental reviews of public works projects and planning documents, either representing myself or nonprofit organizations. Many of those environmental documents were prepared under the rules, regulations and statutes of CEQA. Without exception, Caltrans, the County of Santa Barbara and the City of Santa Barbara have committed gross violations of CEQA in those environmental documents, specifically by making false statements, and intentionally refusing to respond truthfully, completely and fairly to public comments that address the scope and adequacy of the documents or that propose alternatives.

In many of the environmental reviews where Caltrans was lead agency, I submitted requests that Caltrans perform scientific analysis of non-construction alternatives to public works projects and planning documents that would reduce vehicle usage and Vehicle Miles Traveled (VMT). I pointed out that reducing VMT would save the taxpayers tens of millions of dollars in construction costs, avoid the environmental damage associated with construction, reduce vehicle emissions and reduce fuel consumption. The State of California, through Caltrans, deliberately, with possible malice, refused to consider non-construction alternatives, as well as similar requests made by other people. The State of California's actions were not only done with possible malice, but also have indications they were done with intent to commit fraud

upon federal taxpayers and federal courts of law. Complaints have been filed with the Federal Highway Administration (FHWA) concerning the expenditure of federal taxpayer money on Caltrans public works projects that utilize fraudulent environmental documents.

I request CARB delay the approval of the Final Regulation Order and environmental review document until the following actions have been taken:

1a) CARB releases all responses to public comments submitted as part of the environmental review, including responses to the 15 day review period.

2a) CARB releases the Final Statement of Reasons.

3a) CARB releases the full text of the proposed Final Regulation Order and the full text of the final environmental review document, including all changes made to the regulation and environmental document incorporated into the body of said documents.

4a) CARB hold another 15 day review after actions 1a-3a have been taken, and the public has had time review the documents and submit responses.

On June 19, 2019, I requested CARB release the documents itemized in 1a-3a on or before June 21, 2019. CARB refused to do so. I stated that I needed the documents to prepare my comments to be submitted to the CARB board on or before the CARB Hearing on June 27. CARB still refused. Because of CARB's refusal to release the documents, it has damaged my right to submit a much more detailed comment than what is contained in this letter. This deliberate, and possibly malicious, action on the part of CARB is indicative of the attitude of the government of the State of California towards its own residents who attempt to exercise their rights under CEQA.

As mentioned earlier, the State of California has threatened to sue EPA and NHTSA. As I have pointed out in this comment letter, the state has deliberately, with possible malice, prevented its own citizens from enjoying their rights afforded under CEQA. CEQA gives citizens the right to fully participate in the environmental review process, and is designed to make state government responsive to the people. The State of California has, with possible malice, thwarted the rights of its own citizens. One of the purposes of CEQA is to provide a means to settle disputes during the environmental review process, so issues raised during environmental reviews do not wind up in a court of law. That purpose is clearly stated and codified in CEQA.

The State of California routinely violates that purpose of CEQA, and deliberately ignores opportunities to resolve issues during the CEQA process. The state then threatens to sue in courts of law, using the threat of protracted legal action to intimidate people, businesses and other government agencies into accepting environmental documents and practices that have been produced by fraud, deceit and violations of state law. Courts of law are intended to be the last resort to settle disputes. The State of California has turned the courts into the first weapon in its arsenal to bludgeon opponents into submission.

I encourage the State of California to work with its own citizens to develop workable environmental and planning strategies to improve air quality. A proper review of the zero emission airport shuttle regulation, faithfully following the legal requirements of CEQA, will move the state towards workable, scientifically sound strategies that will meet state and federal air quality standards. I encourage both CARB and Caltrans to not engage in unlawful, malicious and fraudulent practices that damage the CEQA process. And I encourage CARB to work with the citizens of the State of California in good faith to avoid the EPA/NHTSA CAFE standard revision and California waiver revocation from winding up in a court of law.

Thank you,

Tom Becker

Buellton, CA

lesdeplorable7@gmail.com

# Attachment

To: CARB

From: Tom Becker

Subject: Advanced Clean Fleets Rulemaking public comment.

1- All air pollutant reductions required for the state to meet federal air quality standards can be achieved by reducing VMT in the state.

2- Reducing imports into the ports of Los Angeles/ Long Beach by at least 50%, with the corresponding reduction in truck, port equipment and shipping activity, can result in the South Coast Air Basin achieving federal air quality standards with no additional on-road and off-road vehicle emission standards, such as those proposed in the Advanced Clean Fleets Rule.

3- Reducing VMT in all on-road vehicle categories by 15%, and maintaining that reduction, is feasible.

4- The State of California requesting an emission waiver from U.S EPA for emission standards that are unnecessary for the state to achieve federal air quality standards is unlawful.

5- The state's imposing unnecessary emissions standards on vehicles sold in California will adversely impact consumers in other states, as vehicle manufacturers will be required to build all their vehicles to meet California's unnecessary emission standards. That would violate the Commerce Clause.

6- Statewide GHG emissions from on-road and off-road vehicles can be reduced by 85% using the existing fleet by converting the state's current petroleum-based fuels to GHG closed loop biofuels, such as biodiesel, bioethanol and biobutanol. The state's favoritism towards battery powered vehicle manufacturers and battery powered vehicles harms manufacturers of other technologies and may be unlawful.

7- The State of California has officially accepted the scientific conclusion that worldwide GHG reductions greater that 50% from the year 2000 baseline will have an insignificant impact on the reduction of atmospheric GHG concentrations.

Thank you,

Tom Becker, Buellton, CA

# Attachment

**State of California**
**AIR RESOURCES BOARD**

**Executive Order G-20-239**

**Southern California Association of Governments'**
**(SCAG)**
**2020 Sustainable Communities Strategy**
**CARB Acceptance of GHG Quantification Determination**

WHEREAS, SB 375 (Steinberg, Chapter 728, Statutes of 2008), also known as the Sustainable Communities and Climate Protection Act, aims to reduce greenhouse gas (GHG) emissions from passenger vehicle travel through improved transportation and land use planning at the regional scale;

WHEREAS, SB 375 requires each of the State's 18 federally designated Metropolitan Planning Organizations (MPOs), including the Southern Califoria Association of Governments (SCAG), to develop a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy that meets the regional GHG emissions reduction targets for automobiles and light trucks set by the California Air Resources Board (CARB or Board);

WHEREAS, on September 23, 2010, the Board set targets for the SCAG region of an 8 percent per capita reduction by 2020, and a 13 percent per capita reduction by 2035 relative to 2005 levels;

WHEREAS, on June 4, 2012, CARB accepted SCAG's quantification of GHG emissions reductions for automobiles and light trucks as meeting the applicable targets in its first SCS, adopted by the SCAG Regional Council on April 4, 2012;

WHEREAS, on June 28, 2016, CARB accepted SCAG's quantification of GHG emissions reductions for automobiles and light trucks as meeting the applicable targets in its second SCS, adopted by the SCAG Regional Council on April 7, 2016;

WHEREAS, on March 22, 2018, the Board set targets for the SCAG region of an 8 percent per capita reduction by 2020 and a 19 percent per capita reduction by 2035 relative to 2005 levels;

WHEREAS, in preparation for its 2020 SCS, SCAG staff engaged the public via advisory committee meetings, stakeholder working group meetings, public workshops, and public hearings between September 2018 and September 2020;

WHEREAS, in November 2019, SCAG published its draft 2020 SCS, which was available for public review through January 2020;

WHEREAS, on September 3, 2020, SCAG's Regional Council adopted the final 2020 SCS, known as the Connect SoCal 2020 - 2045 Regional Transportation

Plan/Sustainable Communities Strategy, with a determination that the SCS would achieve the region's GHG target of an 8 percent per capita reduction by 2020 and a 19 percent per capita reduction by 2035 relative to 2005 levels;

WHEREAS, SCAG submitted the final 2020 SCS to CARB on September 11, 2020, as required by California Government Code section 65080, subdivision (b)(2)(J)(ii), and completed its submittal of supporting information on October 9, 2020;

WHEREAS, CARB staff performed an evaluation of the 2020 SCS's quantification of the GHG emissions reductions the strategy would achieve and the technical methodology used to obtain that result based on CARB's November 2019 document entitled *Final Sustainable Communities Strategy Program and Evaluation Guidelines*;

WHEREAS, CARB staff's evaluation indicated that SCAG appropriately included a determination as to whether its 2020 SCS meets the 2020 GHG emissions reduction target, however, CARB staff found that the determination was made relying on modeled evidence only, without consideration of observed data and performance indicators as called for in CARB's SCS evaluation guidelines, which prevented CARB from performing an evaluation of the 2020 target determination;

WHEREAS, CARB staff's evaluation indicated that SCAG used technical methodologies that would reasonably quantify GHG emissions reductions from the 2020 SCS for 2035;

WHEREAS, CARB staff's evaluation indicated that SCAG's 2020 SCS included strategies, key actions, and investments to support its stated GHG emissions reductions for 2035;

WHEREAS, CARB staff's evaluation showed SCAG's 2020 SCS, when implemented, would meet the applicable GHG emissions reduction target that the Board established for the region for 2035;

WHEREAS, CARB staff's technical evaluation of SCAG's GHG emissions reduction determination is included in Attachment A, Evaluation of the Southern California Association of Governments' SB 375 2020 Sustainable Communities Strategy, October 2020;

WHEREAS, California Government Code section 65080, subdivision (b)(2)(J)(ii), calls for CARB to accept or reject an MPO's determination that the Sustainable Communities Strategy submitted would, if implemented, achieve the GHG emissions reduction targets established by the Board;

WHEREAS, California Health and Safety Code sections 39515 and 39516 delegate to the Board's Executive Officer the authority to act on behalf of the Board in this manner;

NOW, THEREFORE, BE IT RESOLVED that under California Government Code section 65080, subsection (b)(2)(J)(ii), the Executive Officer hereby accepts SCAG's determination that the SCS adopted by the SCAG Regional Council on September 3, 2020, would, when implemented, achieve the applicable GHG emissions reduction target for automobiles and light trucks of 19 percent per capita reduction by 2035,

relative to 2005 levels, as established by CARB for the region.

NOW, THEREFORE, CARB staff is directed to forward this executive order to the SCAG Executive Director.

Executed at Sacramento, California this 30th day of October 2020.

Richard W. Corey
Executive Officer

# Attachment

5/15/21

To: CARB

From: Tom Becker

Subject: Public comment, agenda item 21-4-1, May 20 Board meeting.

1- Every single Internal Combustion Engine (ICE) vehicle registered in California can operate on renewable biofuels. There are 50 times more biofuel capable vehicles in California than Battery Electric Vehicles (BEV). A BEV is a motor vehicle that is powered solely by on board batteries.
2- The State of California is spending at least 20 times more money and effort supporting BEV's and BEV infrastructure compared to the state's support of renewable biofuel vehicles and biofuel infrastructure.
3- Biofuels include ethanol, butanol, biodiesel, bioCNG and biogasoline.
4- Biofuel manufacturing is moving towards producing CO2 "closed loop" fuels.
5- Every existing gasoline powered vehicle in California can operate on E15.
6- Butanol is considered a "drop-in" fuel, capable of operating in the existing gasoline powered fleet with no modifications to vehicles or fueling infrastructure. Existing gasoline powered vehicles can operate on 90% butanol, with 10% ethanol mixed in as an anti-knock additive.
7- The state must be technology neutral. The state must not favor BEV technology over Spark Ignition Internal Combustion Engine (SIICE) technology powered by biofuels.
8- The state is failing to effectively reduce VMT by a meaningful amount, and is supporting VMT inducing projects.
9- Reducing statewide VMT by 25% from its 2014 baseline is feasible, and can be achieved by 2030.
10- A 25% statewide reduction in VMT, coupled with a statewide SIICE fuel mix of 60% gasoline and 40% biofuel by 2030, which is feasible, will result in a 55% reduction in CO2 emissions from passenger cars and light duty trucks by 2030, and will achieve passenger car and light duty truck NOX/NMHC reduction requirements necessary to comply with federal air quality standards throughout the state.
11- The percentage of biofuel usage in the statewide SIICE fuel mix can be increased by at least 2% every year from 2030.
12- The reduction in VMT, coupled with biofuel usage, would achieve a 55% CO2 reduction from passenger cars and light duty trucks by 2030, compared to no more than a 10% reduction by 2030 using BEV technology and the state's current feeble VMT reduction efforts.
13- The proposed program/project must include vehicles powered by biofuels, and must not discriminate for or against any technology.

Thank you

Tom Becker

Buellton, CA

tsbecker069@gmail.com

# Attachment

1/14/21

Subject: Additional Connect 2050 EIR scoping public comments

From: Tom Becker

1A)- The EIR should study the impact Port of Los Angeles/Long Beach truck transportation has on regional transportation in the tri-county area.

2A) – The EIR should study the reduction in Port of Los Angeles/Long Beach truck traffic that can be achieved by reducing imports into the United States from countries, such as China, and what impact that reduction would have on regional transportation in the tri-county area.

3A) – The EIR should study what reduction in VMT, if any, occurred county wide between 2010 and 2019 as a result of bicycle usage.

4A) – The EIR should determine if the Hispanic population is being overly targeted by county wide government agencies as potential occupants of high density housing, compared to the white population.

5A) – The EIR should study the potential for reducing commuter VMT by relocating government employment closer to employee's homes, such as relocating long distance commuter's government jobs located in The City of Santa Barbara to Carpinteria or Santa Maria.

6A) – The EIR should study VMT impacts that are induced by the tourist and hospitality industry in the county. The EIR should study what reductions in overall VMT can be achieved by reducing the size of the tourist industry in the county, and replacing the tourist industry with other industries that do not induce tourist VMT.

7A) – The EIR should study the potential reduction in VMT that can be achieved by encouraging businesses located in high housing cost areas in Santa Barbara County to relocate to communities where employees can afford housing costs, eliminating long distance commuting that occurs when employees are unable to afford housing near their places of employment.

8A) The EIR should study the health and economic impact disparities between the Hispanic community and the White community caused by the Hispanic population being overly represented in high density housing developments.

Gmail S T <tsbecker069@gmail.com>

# Summary of intent and purpose for submitted comments, Connect 2050 EIR scoping process, to be attached to previously submitted comments.

2 messages

**S T** <tsbecker069@gmail.com> Fri, Jan 15, 2021 at 8:31 AM
To: info@sbcag.org, jcarvalho@sbcag.org

To SBCAG,

I have submitted 2 documents containing 24 itemized points of interest for the Connect 2050 EIR scoping process. My purpose and intent for submitting those comments is to analyze the environmental and social justice impacts of Connect 2050 projects and policies, and analyze alternatives to Connect 2050 projects and policies that provide greater environmental protections and environmental justice when compared to Connect 2050 projects and policies. Among those projects and policies are the following:

- Highway 101 HOV project and mitigations. This includes segments and mitigations that have not yet received permits, and can be denied permits if they are determined not to conform with, to conflict with or damage the VMT/greenhouse gas reductions goals and legal requirements of Connect 2050 and/or state statutes and policies.

- The promotion or support of high density housing development.

- The promotion or support of the tourist and hospitality industry.

I have been invited by Michael Becker to discuss my scoping comments with him. I will be contacting Michael to ensure my comments are properly formatted and worded so they meet the requirements for analysis in the EIR.

Please attach this page to my previously submitted comments. Please confirm that this email was received.

Thank you
Tom Becker
tsbecker069@gmail.com

**Michael Becker** <MBecker@sbcag.org> Fri, Jan 15, 2021 at 8:33 AM
To: S T <tsbecker069@gmail.com>
Cc: Jared Carvalho <JCarvalho@sbcag.org>, Terry Contreras <TContreras@sbcag.org>, Mary Jane Wells <MWells@sbcag.org>

Hi Tom:

We've received this page as well. The comments in your email will be included with the two pdf files.

Thanks,

Mike

**Michael Becker**

Director of Planning

831.915.9466 (mobile/text)

[Quoted text hidden]

Gmail S T <tsbecker069@gmail.com>

# Additional comment for Connect 2050 EIR scoping.

5 messages

**S T** <tsbecker069@gmail.com>
To: info@sbcag.org, jcarvalho@sbcag.org
Fri, Jan 15, 2021 at 12:58 AM

Please find attached additional comments for the Connect 2050 EIR scoping process. Please confirm that this email was received.

Thank you
Tom Becker
tsbecker069@gmail.com
1/15/21

**Connect 2050 EIR scoping comments, Part two.pdf**
70K

**Terry Contreras** <TContreras@sbcag.org>
To: S T <tsbecker069@gmail.com>
Fri, Jan 15, 2021 at 4:50 AM

Thanks Tom, we received your additional comments. TLC

[Quoted text hidden]

**Michael Becker** <MBecker@sbcag.org>
To: S T <tsbecker069@gmail.com>
Cc: Terry Contreras <TContreras@sbcag.org>, Mary Jane Wells <MWells@sbcag.org>, Jared Carvalho <JCarvalho@sbcag.org>
Fri, Jan 15, 2021 at 8:31 AM

Hi Tom:

Your second set of comments have been received.

Thank you,

Mike

Michael Becker

Director of Planning

831.915.9466 (mobile/text)

**From:** S T <tsbecker069@gmail.com>
**Sent:** Friday, January 15, 2021 12:59 AM
**To:** SBCAG Information Requests <sbcaginfo@sbcag.org>; Jared Carvalho <JCarvalho@sbcag.org>
**Subject:** Additional comment for Connect 2050 EIR scoping.

Please find attached additional comments for the Connect 2050 EIR scoping process. Please confirm that this email was received.

[Quoted text hidden]

---

**S T** <tsbecker069@gmail.com> Fri, Jan 15, 2021 at 8:35 AM
To: Michael Becker <MBecker@sbcag.org>

Mike,

I just sent a third comment email. I will take you up on your invitation to discuss my comments with you. I'll contact you in a week or so, which will give you time to review my comments. I wish to ensure my comments are formatted and worded properly so they are accepted at valid requests for consideration in the EIR.

Thank you
Tom Becker
tsbecker069@gmail.com
[Quoted text hidden]

---

**Michael Becker** <MBecker@sbcag.org> Fri, Jan 15, 2021 at 8:40 AM
To: S T <tsbecker069@gmail.com>

Hi Tom:

That sounds good. I'll ask our consultant to read through them too and identify any potential issues.

Thanks,

[Quoted text hidden]

Gmail

S T <tsbecker069@gmail.com>

# Additional comments for Connect 2050 EIR

1 message

S T <tsbecker069@gmail.com>
To: jcarvalho@sbcag.org, Michael Becker <MBecker@sbcag.org>

Fri, Jan 22, 2021 at 2:55 PM

I am hoping that the following additional points can be included with my original points submitted on or before 1/15/21:

1A1- The EIR should analyze the risk of COVID-19 infection for commuters using mass transit systems, such as SBMTD buses and the commuter train service that was part of the "Lane and a Train" 101 HOV mitigation.

1A2- The EIR should include a comparative analysis of COVID-19 infection risk for commuters using mass transit systems and commuters traveling alone in single occupancy cars.

1A3- The EIR should include a comparative analysis of COVID-19 infection risk for the Hispanic population that commutes using mass transit systems and the Hispanic population that commutes in single occupancy vehicles.

1A4- The EIR should include a comparative analysis of COVID-19 infection risk for commuters using mass transit systems between Ventura and Santa Barbara and commuters driving the same commute in single occupancy vehicles.

Thank you
Tom Becker
tsbecker069@gmail.com

Gmail

Thomas Becker <lesdeplorable7@gmail.com>

# Public comment, Agenda item #2, BOS meeting of 1/26/21

2 messages

**Thomas Becker** <lesdeplorable7@gmail.com>
To: sbcob@co.santa-barbara.ca.us, "Michael D. Becker" <MBecker@sbcag.org>
Fri, Jan 22, 2021 at 9:32 AM

- The California Coastal Act and the County's CLUP requires all new development in the coastal zone minimize VMT and energy consumption. This requirement exceeds the CEQA requirement for GHG impacts.

- County P&D, last week, acknowledged in writing that Coastal Act and County CLUP requirements for VMT and energy reduction exceeds CEQA requirements, requiring VMT and energy impacts from new projects located in the coastal zone to be reduced beyond "less that significant" when feasible.

- Commercial and business projects that are constructed in high housing cost areas should be analyzed for inducing high commuter VMT caused by employees living in low housing cost areas commuting to jobs located in high housing cost areas.

- Environmental studies for commercial and business projects proposed in high housing cost areas should include a comparative analysis of commuter induced VMT, GHG and energy impacts between the proposed project and construction of the project in a low housing cost area. That analysis should be considered as an alternative to the proposed project.

Tourist and travel related projects should be analysed for tourist travel VMT and GHG impacts, and those VMT and GHG impacts should be added to the total project VMT and GHG impacts.

Thank you
Tom Becker
tsbecker069@gmail.com

**Thomas Becker** <lesdeplorable7@gmail.com>
To: "Kubran, Michelle@Coastal" <michelle.kubran@coastal.ca.gov>
Fri, Jan 22, 2021 at 11:15 AM

[Quoted text hidden]

Gmail

Thomas Becker <lesdeplorable7@gmail.com>

# Additional public comment, agenda item #2, BOS meeting of 1/26/21

1 message

**Thomas Becker** <lesdeplorable7@gmail.com> Fri, Jan 22, 2021 at 11:00 AM
To: sbcob@co.santa-barbara.ca.us, "Michael D. Becker" <MBecker@sbcag.org>

One final fact- Tourist industry related GHG emissions in Santa Barbara County were ~ 2,500 tons/day, ~ 900,000 tons/year in 2019. Compare that to GHG emissions from manufacturing industries in Santa Barbara County in 2019.

Tom Becker
tsbecker069@gmail.com

# Letter 3

**COMMENTER:** Tom Becker

**DATE:** 7/11/2021

## Response TB1 through TB9

The commenter expresses an opinion that the PEIR is required to include estimates of future GHG reductions from strategies, projects, and programs in Connected 2050 based on observed data from existing, implemented strategies, programs, and projects and not solely on modeling data. The commenter claims the PEIR is required to contain estimates of the quantity of future GHG emission reductions to be achieved from each of the strategies, projects, and programs in Connected 2050, including those related to bicycles, mass transit, and the jobs-housing balance. The commenter asserts that the PEIR is required to observe the correct application of the scientific method and that SBCAG must change the model and/or data fed into the model if it makes faulty projections. The commenter expresses an opinion that SBCAG is not allowed to use faulty or manipulated models or data and must use models and data that are proven to make correct projections based on their ability to make projections that match observed data.

CEQA does not include specific requirements for the GHG emissions modeling methodology. Rather, CEQA Guidelines Section 15064.4(a) states:

> *The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:*
>
> *(1) Quantify greenhouse gas emissions resulting from a project; and/or*
>
> *(2) Rely on a qualitative analysis or performance based standards.*

Furthermore, CEQA Guidelines Section 15064.4(c) states:

> *A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.*

In accordance with CEQA Guidelines Section 15064.4(c), SBCAG, as the CEQA lead agency, has the discretion to select the methodology it considers most appropriate to estimate the project's GHG emissions in the PEIR for Connected 2050. As explained in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, of the Draft PEIR, SBCAG chose to use CARB's EMFAC2017 model; CARB's off-model adjustment factors to account for the effects of the SAFE Vehicles Rule; and regional VMT from SBCAG's travel demand forecasting model to estimate the project's GHG emissions.

As stated in Section 4.8.3, *Methodology and Significance Thresholds*, in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, of the Draft PEIR, CARB's EMFAC2017 emission factors are

established by CARB and incorporate mobility assumptions (e.g., vehicle fleets, speed, delay times, average trip lengths, time of day and total travel time) and socioeconomic growth projections based on a variety of data sources. EMFAC2017 represents CARB's latest U.S. EPA-approved iteration of its mobile source emissions model, which CARB regularly updates to reflect observed data and trends in fleet characterization, vehicle activity profiles, vehicle testing data for emissions rates, and new regulations and policies. Similarly, CARB's off-model adjustment factors were utilized to account for the effects of the SAFE Vehicle Rule on the project's GHG emissions, thereby providing a more accurate estimate of GHG emissions in light of the evolving regulatory scheme for mobile source GHG emissions. The GHG emissions modeling is also based on the total VMT estimates for existing (2020) conditions, future No Connected 2050 conditions, and Connected 2050 conditions as calculated by SBCAG's travel demand forecasting model, which are shown in Table 4.8-2 in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, of the Draft PEIR.

The SBCAG Regional Travel Demand Model (TDM) was used to comply with federal and state requirements, to evaluate alternative strategies, and to quantify GHG emission reductions associated with the SCS *(See Chapter 6, Regional GHG Emissions Requirements and Considerations in the RTP).* As noted in the 2017 Regional Transportation Guidelines:

> *A TDM utilizes a series of mathematical equations that forecast travel behavior and transportation service demand in a given region. The inputs include but are not limited to population, employment, land use, and the transportation network. The outputs of a TDM are used to assist decision-makers in developing policies and strategies, to inform the public, and for the National Environmental Protection Act (NEPA) and the California Environmental Quality Act (CEQA) analysis. For additional guidance see the latest CARB, Methodologies for Review of GHG Reduction for SCSs Pursuant to SB 375 Document.*[1]

## TDM Quality Control & Consistency

SBCAG completed a full land use and travel model update in 2012 to comply with the updated legislative requirements of Senate Bill 375. The model documentation is available upon request. The regional TDM runs on the TransCAD platform. Staff applies and maintains the model in-house and works in close cooperation with State, regional and local agencies to forecast traffic growth, assess demand for transportation infrastructure improvements, and evaluate corridor alignment alternatives.

The SBCAG model is a 4-step travel demand model that performs the following classical modeling steps: trip generation, trip distribution, mode choice, and assignment. The mode choice model is a nested logit model that is employed to analyze and predict choices of travel mode. Mode choice outputs include auto (including drive-alone and carpool), transit, bike, and walk trips. Once transit trips are estimated, they are assigned to the transit route network. The 2001 Caltrans Household Survey for Santa Barbara County provides crucial travel information on trip purpose, modes, trip lengths, frequency, and other travel characteristics including time-of-day distributions for model calibration and validation. From the peak and off-peak mode choice models, the time of day models split the trips into 7 distinct time periods: AM (7-9 AM), Late AM (9 AM-12 PM), Lunch (12-2 PM), Early PM (2-4 PM), PM (4-6 PM), Evening (6-8 PM), Late Evening (8 PM-12 AM), and Night (12-7 AM).

[1] Regional Transportation Plan Guidelines, California Department of Transportation, 2017.

## Model Inputs & Assumptions

Updated planning assumptions were utilized for the Connected 2050 RTP-SCS. Staff utilized the 2019 Regional Growth Forecast estimates of population, employment, and households and developed default assignment variables for each of the land uses in the UPlan land use model to assign growth for the future scenario years. These were used as inputs to the regional TDM.

## Data

SBCAG worked with our model consultant, Caliper Corporation, to develop base year 2015 traffic estimates for the region in the 4-step model and to calibrate accordingly. Future model runs were developed for analysis years 2020, 2035, and 2050 under a variety of different scenarios, for the public outreach phase. The updated regional (TDM) includes modified traffic analysis zones (TAZs). Some TAZ boundaries and the total number of TAZs has increased slightly from the prior iteration.

Caliper developed an enhanced population synthesis procedure that matches both households and individual characteristics and does so at multiple geographic levels. The data sets in the hybrid population synthesis module include:

- 2012-2016 Census ACS Block Groups
  - Population by age, gender
  - HHs by income, size, vehicles
- 2010 Census Blocks
  - Population, HHs
- 2012-2016 PUMS Micro sample
  - Seed HHs, population
- Database USA
  - Population and HHs

## Model Calibration & Validation

The CA RTP Guidelines state:

> *Calibration is used to adjust the model parameters until the model matches observed regional travel patterns and demand. Validation involves testing the model's predictive capabilities (ability to replicate observed conditions (within reason)) before it is used to produce forecasts. The outputs and observed or empirical travel data are compared, and the model's parameters are adjusted until the outputs fall within an acceptable range of error. Static validation tests compare the model's base year traffic volume estimates to traffic counts using statistical measures and threshold criteria.*

Federal and state guidelines encourage MPOs to meet the recommended static validation and transit assignment validation thresholds. Where a model does not meet the thresholds, the MPO is encouraged to clearly document impediments. The SBCAG regional TDM validation criteria for Connected 2050 are listed below.

### SBCAG Regional TDM Static Validation Thresholds: Connected 2050 RTP-SCS

| Validation Metric | Thresholds | SBCAG Regional TDM Connected 2050 – Base Year 2015 |
|---|---|---|
| % of links with volume-to-count ratios within Caltrans deviation allowance (a) | At least 75% | 63%<br>(79% for count > 5000) |
| Correlation Coefficient (b) | At least 0.88 | 0.965 |
| Percent Root Mean Squared Error (RMSE) (c) | Below 40% | 32.63 |

(a) Volume-to-count ratio – is computed by dividing the volume assigned by the model and the actual traffic count for individual roadways model-wide. It provides a general context for the relationship (i.e., high or low) between model volumes and counts. Percent of links with volume-to-count within Caltrans deviation allowance – the deviation is the difference between the model volume and the actual count divided by the actual count. The Caltrans deviation thresholds recognize that allowances shrink as the count increases (i.e., lower tolerance for differences between the model volume estimates and counts).

(b) Correlation coefficient – estimates the correlation (strength and direction of the linear relationship) between the actual traffic counts and the estimated traffic volumes from the model.

(c) Percent root mean square error (RMSE) – is the square root of the model volume minus the actual count squared divided by the number of counts. It is a measure similar to standard deviation in that it assesses the accuracy of the entire model.

### SBCAG Regional TDM Transit Assignment Validation Thresholds: Connected 2050 RTP-SCS

| Validation Metric | Thresholds | SBCAG Regional TDM Connected 2050 – Base Year 2015 |
|---|---|---|
| Difference between actual counts and model results for a given year by route group (all routes) | +/- 20% | System Model Boardings: 29,472<br>System Ridership: 29,425<br>Boardings vs. Ridership: +0.15% |

The VMT estimates include VMT reductions to be achieved through implementation of the strategies, programs, and projects contained in Connected 2050. The holistic analysis of GHG emissions for the total VMT associated with implementation of Connected 2050 (as shown in Table 4.8-3 of Section 4.8, *Greenhouse Gas Emissions and Climate Change*, of the Draft PEIR) constitutes a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project pursuant to CEQA Guidelines Section 15064.4(a). Therefore, it is not necessary to separate out the VMT reductions and associated GHG emission reductions achieved by each strategy, program, and project of Connected 2050

The complete, holistic analysis of the GHG emissions associated with Connected 2050 based on total VMT sufficiently enables an adequate comparison of GHG emissions to the threshold of significance, which is a net zero increase. As a result, the GHG emissions modeling in the Draft PEIR offers a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences in compliance with CEQA Guidelines Section 15151, which states:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The*

*courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

Furthermore, the commenter does not provide specific references to substantiate claims that the GHG emission estimates in the PEIR must be based on observed data from existing, implemented strategies, programs and projects and not solely on modeling data. The commenter also does not provide evidence, or even assert, that SBCAG has utilized faulty or manipulated models or data in its modeling of the project's GHG emissions estimates. Therefore, the commenter's claims consist of unsubstantiated opinion rather than substantial evidence, which is defined in CEQA Guidelines Section 15384 as "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." The GHG emissions modeling utilized for the Draft PEIR is complete and adequate for the purposes of CEQA and is in compliance with the applicable provisions of the CEQA Guidelines as referenced above.

## Response TB10

Connected 2050 sets forth a forecasted development pattern and voluntary growth strategy that retains local government land use autonomy. Connected 2050 presents a preferred Sustainable Community Strategy (SCS) land use scenario that applies model weightings with a housing growth emphasis in South County. Connected 2050 acknowledges that under the preferred land use scenario, local congestion in the South Coast will be worse in 2050 than the future baseline scenario while system-wide congestion will improve. The DEIR assesses the environmental impacts of Connected 2050, including the preferred SCS land use scenario as required under the CEQA guidelines. The DEIR Alternatives section compares impacts from several different SCS land use scenarios. Connected 2050 does not include a worker relocation or housing construction program. Local and state housing development and housing construction programs are not within the scope of this project, and therefore are not addressed in the DEIR.

## Response TB11

See response to Comment TB10 above. Additionally, the PEIR addresses at a programmatic level the impacts from construction and implementation of the SCS. Pursuant to SB 743, congestion is no longer a transportation impact metric under CEQA, replaced with VMT (vehicle miles traveled). As referenced in the comment, one of the SCS project characteristics is, "Allocation of future growth directly addresses jobs-housing balance issues by emphasizing job growth and economic opportunity in the North County and housing growth in the South County." Each of the issue area impact analyses in Chapter 4 *Environmental Impact Analysis* assesses the potential result of this buildout of the SCS. Section 3.4.3 *Approach for Direct Impact Analysis*, explains how Connected 2050 "impacts are examined for both transportation network improvements and the regional growth and land use changes forecasted."

## Response TB12

See response to Comment TB10 above. Connected 2050 does not include a worker relocation program.

## Response TB13

See response to Comment TB10, 11, and 12 above.

## Response TB14

SB 375 enhances the State's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets and affordable housing allocations. CARB assigns regional targets to reduce GHG emissions as further discussed in the DEIR *Greenhouse Gas Emissions and Climate Change* Section 4.8. Connected 2050 is intended to meet these targets. A discussion of consistency with state regulations, including those coordinated and overseen by CARB is included in the DEIR *Greenhouse Gas Emissions and Climate Change* Section 4.8.

See also response to comment TB10, 11, and 12 above.

## Response TB15

Pursuant to the CEQA *Guidelines*, the DEIR assesses a range of reasonable alternatives to the proposed project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. Connected 2050, including the preferred land use scenario, was developed in close coordination with SBCAG member agency planning staff and reflects local general plans and general plan updates in process or completed. The land use scenario reflects allowable development within each land use type, consistent with adopted local general plans. As further discussed in the DEIR *Effects Considered Less Than Significant,* Connected 2050 would not require or promote any unplanned growth to meet its goals and is consistent with the RHNA allocation and projected housing needs. In addition, neither SBCAG nor local or County jurisdictions have the authority to require businesses providing jobs in the South County to relocate to the North County.

See also response to comment TB10, 11, and 12 above.

## Response TB16

Pursuant to the CEQA *Guidelines*, the DEIR included all comments received during the Notice of Preparation (NOP) scoping process in Chapter 1, Table 1-1 of the PEIR, which identifies how each comment was addressed in the PEIR.

# County of Santa Barbara
## Planning and Development

**Lisa Plowman, Director**
Jeff Wilson, Assistant Director
Steve Mason, Assistant Director


July 8, 2021

Jared Carvalho
Santa Barbara County Association of Governments (SBCAG)
260 North San Antonio Road, Suite B
Santa Barbara, CA 93110
Email: JCarvalho@sbcag.org

RE: County of Santa Barbara (County) Planning and Development Department (P&D) Comments on the "Connected 2050" Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and Programmatic Environmental Impact Report (PEIR)

Dear Mr. Carvalho:

Thank you for notifying us of the release of, and affording us the opportunity to comment on, the Connected 2050 RTP/SCS and PEIR. Our comments on these documents are set forth below, organized by document with references to the applicable chapter or section.

**RTP/SCS**

Chapter 1

COUNTY1 • The watermark obscures a lot of the text. We suggest moving *"draft (date)"* to the header or elsewhere in the document instead of a watermark.

COUNTY2 • Figure 1-5: The text does not mention Figure 1-5. Please briefly explain the purpose and content of Figure 1-5. This comment also applies to Table 3-1 and some other tables.

COUNTY3 • Page 1-11: The text states that the preferred scenario reduces greenhouse gasses (GHGs) emissions and reactive organic gases in 2020. If this is an error, please correct the date; if not, please explain how the preferred scenario can retroactively reduce GHGs emissions and reactive organic gases in 2020.

Chapter 2

COUNTY4 • Figure 2-10: This figure is small and difficult to read. We suggest that you put it on a separate page to improve readability.

COUNTY5 • "Plan Performance" subsection: Please clarify whether SBCAG established performance measures for previous RTPs and, if so, whether the region met those performance measures.

COUNTY6 • Page 2-24: The "National Highways" section references Figures 34 through 36, but the draft RTP/SCS does not include these figures. Please provide these figures.

COUNTY7 • Page 2-31: Please provide the table number that is missing in the first sentence on this page.

COUNTY8 • "Public Transit Services" section: Please include a description of transit services for students. Please provide the number of students who are served and the number of school buses used to transport them. Transportation and circulation analyses typically do not consider school transit services, but we acknowledge that they are a resource that can reduce passenger trips.

COUNTY9 • Table 2-6: Please revise the table to show that Southwest Airlines operates out of the Santa Barbara Airport.

Chapter 3

COUNTY10 • "Regional Growth Forecast" section: Although the University of California, Santa Barbara (UCSB) campus is not part of the "jurisdiction" under analysis in the RTP/SCS, the regional growth forecast should address UCSB's plans for increasing student population, in order to provide a more accurate description of the population dynamics that the region is expected to experience.

COUNTY11 • Page 3-13: Please define and/or provide a description of a "commercial growth management ordinance."

COUNTY12 • Page 3-30: Figure 3-5, Transit Priority Project areas – South Coast Region, shows many transit priority projects (purple) in Isla Vista. However, the text does not describe these projects. Please describe these projects.

COUNTY13 • Page 3-39 (related page 3-41 and Executive Summary): This text states that the preferred scenario would increase vehicle miles traveled (VMT), daily traffic volumes, vehicles hours of delay, and vehicle hours traveled within the cities of Santa Barbara and Goleta (as compared to the baseline scenario). However, the PEIR states on page 3-41 and in the Executive Summary that the preferred scenario would reduce overall VMT, vehicle hours, average daily traffic, and overall congestion. Please specify which regions of the county would experience these beneficial effects of the preferred scenario.

COUNTY14 • Please suggest additional methods to mitigate the increased VMT, congestion, etc., in the South Coast under the preferred scenario (e.g., dedicated travel lanes and public charging/docking stations for electric bikes and scooters).

COUNTY15 • The draft PEIR states that the RTP/SCS did not factor in Governor Newsom's Executive Order N-79-20 from September 23, 2020, which requires 100 percent of in-state sales of new passenger cars and trucks to be zero-emission by 2035. Please add this information to the RTP/SCS to provide a more accurate/complete description of potential future GHGs-reducing measures which are relevant to the RTP/SCS.

COUNTY16 • Pages 3-38 and 3-45: Please acknowledge, and provide an analysis of, potential long-term effects of COVID-19 on transit ridership—particularly the potential for reduced ridership (as compared to the forecasted ridership)—due to (1) increased numbers of employees working from home, and (2) some members of the public's concern with exposure in confined transit vehicles. SBCAG did not model the "telecommuting" off-model strategy, but the RTP/SCS should discuss the potential effects on transit ridership.

**PEIR**

Air Quality Section

COUNTY17 • Impact AQ-2: Nearly all of Santa Barbara County is currently under "Extreme Drought" conditions. Regarding requiring water trucks or sprinkler systems to frequently water exposed dirt areas, the PEIR should include recommendations such as the use of recycled water, soil binders or dust palliatives during times of severe or extreme drought.

Cultural Resources

COUNTY18 • Please identify the Transit Priority Project Areas that are currently vacant versus how many are "underutilized" and require demolition of existing structures before constructing more dense residential (or other) buildings. This information would help gauge the level of potential impacts to potentially historic structures.

COUNTY19 • Impact CR-3: It is unclear/unsubstantiated as to why the PEIR concludes that potential impacts to human remains would be insignificant. Please clarify whether the analysis is based on the assumption that the remains would be left in place and covered, or somehow otherwise prevented from further disturbance. If human remains must be relocated, the proposed project will have at least a potentially significant—if not, unavoidably significant—impact with regard to cultural resources. Please address this in the PEIR analysis by either:

(1) Providing additional analysis supported by substantial evidence to demonstrate how impacts to human remains would be insignificant; or

(2) Changing the conclusions of the analysis such that the proposed project's impacts to human remains will be potentially significant, and set forth mitigation measures to reduce the impacts.

Energy

COUNTY20 • Santa Barbara County has challenges with energy resiliency given its location at the "end of the line" for two electric service providers (Southern California Edison and Pacific Gas and Electric). Also, local topography creates barriers to a more regional interconnected grid system. Indeed, the utilities must implement public safety power shutoffs during times of sundowner wind events, high temperatures, and other times of peak energy usage or potential disruption. Adding 25,000 residential units in the next 10 years would dramatically increase the existing electric grid load. The PEIR should describe the new facilities which would be required to accommodate this increase in grid load, impacts resulting from the construction and use of the facilities, and mitigation measures to reduce any potentially significant impacts resulting from the construction and use of the facilities.

Geologic Constraints

COUNTY21 • The County's *Environmental Thresholds and Guidelines Manual* (page 80) states that a proposed project will have a potentially significant geological impact if the proposed project includes construction of a cut slope over 15 feet in height as measured from the lowest finished grade. However, the PEIR item GEO-1(b) uses a 20-foot cut slope—rather than the County's

actual 15-foot cut slope—as the significance threshold. Please revise the analysis in item GEO-1(b) using the County's 15-foot cut slope threshold.

COUNTY22 • The County's *Environmental Thresholds and Guidelines Manual* (page 80) states that a proposed project will have a potentially significant geological impact if the proposed project is located on slopes exceeding 20 percent grade. Please revise the PEIR to include an analysis of potentially significant impacts associated with the construction of facilities on slopes exceeding 20 percent grade.

GHGs Emissions and Climate Change

COUNTY23 • Page 4.8-11: In 2017, the County conducted a GHGs emissions inventory, pursuant to the requirements of the County's 2015 Energy and Climate Action Plan (ECAP) (Implementation Item 6-2). The emissions inventory revealed that the ECAP was not projected to meet its 2020 GHG emissions reduction target and, therefore, in 2018, the County Board of Supervisors directed staff to prepare: (1) a new climate action plan; and (2) new GHG California Environmental Quality Act (CEQA) thresholds to be used until the County adopts the new climate action plan (estimated 2022) ("interim GHGs thresholds"). In January 2021, the County Board of Supervisors adopted the interim GHGs thresholds, which are set forth in Chapter 10 of the County's *Environmental Thresholds and Guidelines Manual*. [These interim GHGs emissions thresholds of significance are the same thresholds described in our January 13, 2021, letter to you, regarding the Notice of Preparation for the PEIR (enclosed with this letter).]

  Please revise the projected 2030 GHGs emissions and corresponding analysis of impacts that are anticipated to result from such emissions, pursuant to the interim GHGs thresholds set forth in Chapter 10 of the County's *Environmental Thresholds and Guidelines Manual.* Please consult the following memorandum that provides additional technical guidance for the analysis, and refer to it in the "Local Regulations" section of the PEIR:

  - "Santa Barbara County Interim Greenhouse Gas Thresholds Justification," prepared by Ascent Environmental (Ascent) for the County of Santa Barbara Planning and Development Department, October 14, 2020.

  The memorandum describes the updated "business as usual" emissions projected by 2030, based on a 2016 GHGs emissions inventory. The memorandum is available here and is enclosed with this letter.

COUNTY24 • Page 4.8-22: When the County Board of Supervisors decided to prepare a new climate action plan (discussed above), it adopted a new target to reduce emissions by 50 percent below 2007 levels by 2030. In the PEIR, please refer to, and provide a revised analysis of the proposed project based on, the County's 2030 GHGs emissions reduction target, instead of the 2020 target in the County's 2015 ECAP. Please state whether Connected 2050 will conflict with the County's goal to reduce GHGs emissions in the unincorporated county areas 50 percent by the 2030. Please use the County's adopted interim GHGs emissions Significance Threshold of 3.8 metric tons of carbon dioxide equivalent per service population, per year (Chapter 10 of the County's *Environmental Thresholds and Guidelines Manual*).

Transportation and Circulation

COUNTY25 • Please consider adding the following as VMT-reducing and GHG-reducing measures:
  - Provision of dedicated routes/lanes and on-site amenities for electric bicycles and electric scooters, including on-site charging.
  - Provision of new or improved transit and pedestrian amenities for school bus stops.

COUNTY26 • In the Existing Conditions section, please discuss the school bus network. School buses are not mentioned, but they are a transportation resource as stated above in this letter.

COUNTY27 • Page 4.12-16: The County is in the process of preparing an Active Transportation Plan for the unincorporated areas.

COUNTY28 • Page 4.12-17: Please acknowledge SBMTD's "net zero" goal by the year 2030.

Other

COUNTY29 • The draft PEIR does not discuss coastal resources. (See Chapter 7 of the County of Santa Barbara's *Environmental Thresholds and Guidelines Manual*.) Some of the "Transit Priority Areas" in Figure 3-3 of the draft RTP/SCS appear to be in the Coastal Zone, including in Isla Vista and the Carpinteria/Rincon area. Please assess whether implementation of the proposed RTP/SCS scenario would affect coastal resources due to the proliferation of seawalls/coastal protective structures.

COUNTY30 • Please add implementation of the County's Active Transportation Plan (under development) to the Programmed Projects List included in Appendix C.

Thank you for the opportunity to provide comments on the "Connected 2050" draft RTP/SCS and PEIR. Please contact Dan Klemann at (805) 453-4803 or dklemann@countyofsb.org if you have any questions.

Regards,

**Lisa Plowman**
Director
County of Santa Barbara Planning and Development Department

Encl.: 1. January 13, 2021, County comment letter regarding the Notice of Preparation for the PEIR
2. October 14, 2020, County Interim Greenhouse Gas Thresholds Justification Memo

cc Mike Becker, Director of Planning, SBCAG, 260 North San Antonio Road, Suite B, Santa Barbara, CA 93110
Dan Klemann, Deputy Director, County of Santa Barbara Planning and Development Department
Allen Bell, Supervising Planner, County of Santa Barbara Planning and Development Department
Zoe Carlson, Senior Planner, County of Santa Barbara Planning and Development Department
Selena Evilsizor Whitney, Senior Planner, County of Santa Barbara Planning and Development Department

G:\GROUP\COMP\Resp. Agency Review\RAR Projects by Agency\SBCAG\Connected 2050 Draft RTP_SCS and EIR

# County of Santa Barbara
## Planning and Development

Lisa Plowman, Director
Steve Mason, Assistant Director


January 13, 2021

Jared Carvalho
Santa Barbara County Association of Governments
260 North San Antonio Road, Suite B
Santa Barbara, CA 93110

Email: JCarvalho@sbcag.org

**RE: Santa Barbara County Association of Governments (SBCAG) Connected 2050 Environmental Impact Report (EIR)**

Dear Mr. Carvalho:

Thank you for the opportunity to comment on the scope and content of the EIR for the update to the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) (collectively, "Connected 2050"). During SBCAG's virtual hearing on January 5, 2021, SBCAG staff stated that the draft Connected 2050 would not be complete and released until this summer. As a result, County staff can only provide preliminary comments on the general methodology for preparing the EIR. We have no basis for "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed" or offering other comments at this time according to California Environmental Quality Act (CEQA) Guidelines Section 15083.

County staff offer the following preliminary comments regarding the EIR:

1. Environmental Checklist: The County recognizes that SBCAG will use the Environmental Checklist from Appendix G of the CEQA Guidelines (Appendix G). County departments are likely to serve as responsible agencies for the project; must rely on the EIR for the environmental analysis of discretionary decisions that they make regarding the project; and must use the County's initial study assessment guidelines when conducting the environmental analysis of the project. As such, please analyze the project pursuant to the requirements of the County's assessment guidelines (http://countyofsb.org/plndev/permitting/environmentalreview.sbc), as well as Appendix G.

The County's assessment guidelines rely on the County's recently adopted vehicles miles traveled (VMT) thresholds of significance. The EIR should include these thresholds of significance in the analysis of project impacts. The County's Environmental Thresholds and Guidelines Manual contains these and other adopted thresholds of significance: https://cosantabarbara.app.box.com/s/vtxutffe2n52jme97lgmv66os7pp3lm5

In addition, on January 26, 2021, the County of Board of Supervisors (Board) will be considering amendments to the County's greenhouse gas (GHGs) emissions thresholds of significance. Assuming that the Board adopts these amendments, the EIR should include the analysis that is required pursuant to the amended thresholds.

2. Transportation Impacts (Senate Bill (SB) 743): The County and several other local jurisdictions are working on implementing SB 743. The County also is currently working on adopting an Active Transportation Plan (ATP), which will be followed by an update to the Circulation Element. (See the descriptions of these projects at http://countyofsb.org/plndev/projects/projects.sbc.) Please consider and disclose the relationships between, and the cumulative impacts of, these projects and similar projects of other local jurisdictions.

We look forward to reviewing the draft Connected 2050 and draft EIR and anticipate providing additional comments as the documents become available. If you have any questions or require further information, please contact me at (805) 568-2086 or Dan Klemann at (805) 568-2072.

Regards,

Lisa Plowman, Director
Planning and Development Department

cc: Dan Klemann, Deputy Director, Long Range Planning Division, P&D
Selena Evilsizor Whitney, Senior Planner, P&D
Zoë Carlson, Senior Planner, P&D
File

G:\GROUP\COMP\Resp. Agency Review\RAR Projects by Agency\SBCAG

# Memo

1230 Columbia Street, Suite 440
San Diego, CA 92101
619.219.8000

**Date:** October 14, 2020

**To:** Selena Evilsizor Whitney, AICP, County of Santa Barbara

**From:** Brenda Hom and Poonam Boparai

**Subject:** Santa Barbara County Interim Greenhouse Gas Thresholds Justification

---

# 1 INTRODUCTION

The County of Santa Barbara (County) is developing interim greenhouse gas (GHG) emissions thresholds to apply to new development projects while the County updates its Energy and Climate Action Plan (ECAP). The updated ECAP, now referred to as the 2030 Climate Action Plan (CAP), will identify reductions needed in both existing and new developments in the county to meet its 2030 GHG emissions reduction target. In July 2020, the County adopted a new target to reduce its emissions by 50 percent below 2007 levels by 2030 with direction from the Board of Supervisors (County of Santa Barbara 2020). The interim thresholds will help the County process discretionary projects under the California Environmental Quality Act (CEQA) and continue to achieve GHG emissions reductions from new development while it prepares the 2030 CAP.

The County Planning and Development Department is developing the interim GHG emissions thresholds to assist project applicants to comply with the requirements of CEQA regarding potentially adverse impacts to climate change. The determination on whether or not a project may have a significant effect on the environment shall be based in part on the thresholds of significance. The proposed interim thresholds for GHG emissions are quantitative measures of environmental change. Thresholds of significance supplement provisions in the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) for the determination of significant environmental effects, including Sections 15064, 15065, 15382 and Appendix G incorporated herein. The primary purpose of the interim GHG emissions thresholds is to provide a means to identify proposed local plans and development projects that may have a significant adverse effect related to GHGs. Subsequent sections of this memorandum present the justifications for the recommended interim GHG emissions thresholds.

The CEQA Guidelines address GHG emissions as a cumulative impact due to the global nature of climate change (CEQA Guidelines, § 15064.4.(b)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself" (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 512.). A project's significant GHG impacts must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact (CEQA Guidelines, §§ 15064.4.(b) and 15183.5). Therefore, the impacts analysis of GHG emissions is global in nature and should be considered in a broader context. A project's incremental

contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions (CEQA Guidelines, § 15064.4.(b)). The interim GHG emissions thresholds are set at a level of impact that identifies either (1) a cumulatively considerable contribution to an existing adverse condition, or (2) a cumulatively significant impact in combination with other projects causing related impacts.

# 2 JUSTIFICATION FOR UPDATING THRESHOLDS

To determine the level of significance of an impact, CEQA analyses include an assessment of the nature and extent of each project-generated impact. CEQA gives lead agencies discretion on how to determine the significance of an environmental impact. Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the lead agency draws the line of significance when distinguishing adverse impacts it considers to be significant and unavoidable, from those it considers to be either significant but mitigable, insignificant, have no impact, or have a beneficial impact. This policy judgment must be based on scientific information and other factual data to the extent possible (CEQA Guidelines, § 15064(b)).

The point at which a lead agency considers an environmental impact significant is fluid over time due to advances in science providing new or refined factual data, advances in technology, and the gradual improvement or degradation of an environmental resource. Other influential factors include new or revised regulations and standards, case law updates, and emerging new areas of concern.

Since the County adopted its ECAP in 2015, several changes occurred that affect the regulatory framework related to GHGs. In the past decade, estimates of global atmospheric temperature and GHG concentration limits needed to stabilize climate change have been adjusted downward (i.e., made more stringent). Simultaneously, the increasingly adverse anticipated impacts of climate change have already been realized. Previous scientific assessments assumed that stabilizing carbon dioxide ($CO_2$) concentrations in the range of 450 to 550 parts per million (ppm) would limit average global temperature rise to 2 to 3 degrees Celsius (˚C) above pre-industrial levels, which would be sufficient to minimize catastrophic climate change effects. Now, scientific study indicates that a rise of only 2 ˚C would be substantial enough to disrupt the global climate and result in a variety of catastrophic impacts on a global and local scale. To avoid such impacts, scientists recommend that concentrations of $CO_2$ should be kept below 350 ppm, a sizeable reduction from the current level of 410 ppm (Hansen et al., 2013).

Furthermore, the State has codified progressive GHG emissions reduction goals considering the evolving scientific data surrounding climate change. To further the goals of Executive Order S-3-05, Executive Order B-30-15, and Assembly Bill (AB) 32, the California legislature adopted Senate Bill (SB) 32 in 2016 to establish a statewide goal of reducing GHG emissions to 40 percent below 1990 inventory levels by 2030. SB 32 serves as an extension of the State's original climate change goal to reduce statewide GHG emissions to 1990 levels by 2020, as mandated by AB 32. Further, SB 32 may be perceived as a benchmark reduction goal for the State's pathway to 80 percent below 1990 levels of GHG emissions by 2050, as directed by Executive Order S-3-05. Agencies and project proponents must do their fair share to reduce local GHG emissions, which may be evaluated during the environmental review process, to meet these goals. In addition, on December 14, 2017, the California Air Resources Board (CARB) adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), the strategy for achieving California's 2030 GHG target (CARB 2017).

The County does not currently have an adopted threshold, qualified GHG emissions reduction plan, or other means to determine the significance of GHG emissions from proposed projects other than industrial stationary source projects. The County's current ECAP does not provide a framework for GHG emissions reductions through 2030. The County is currently in the process of developing the 2030 CAP that will address 2030 GHG reductions in the county. Once the County adopts its 2030 CAP, the County will provide updated thresholds of significance related to new, non-industrial stationary source projects.

Until the approval of the 2030 CAP and for all the reasons discussed above, the County is developing interim GHG emission thresholds to apply to new project applications submitted prior to the adoption of the 2030 CAP. The overall goal of this effort is to develop CEQA significance criteria that ensure new development includes all appropriate and feasible GHG emission reduction measures to mitigate significant climate change impacts.

# 3 THRESHOLD APPLICABILITY AND FRAMEWORK

This memorandum recommends interim thresholds that apply to land use development projects, which include both project level residential and non-residential development and plans (e.g., specific plans and community plans). These thresholds would not apply to GHG-emitting power plants, oil and gas facilities, or other industrial stationary sources as the County has an adopted bright line threshold of 1,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year for industrial stationary sources.

Ascent proposes a two-step approach to assessing GHG emissions associated with projects. The interim thresholds will only apply to non-exempt discretionary projects under CEQA. Under Step 1, applicants first compare non-exempt project applications against a screening threshold. Applicants can either qualitatively compare the project size to project screening criteria, or, if the screening criteria are not applicable, quantitatively calculate project-specific emissions (see Table 3). Examples of projects that may not be able to use project screening criteria include (1) project types not included in Table 3, or (2) projects that include emissions sources not accounted for in the modeled assumptions for the proposed land use type shown in Table 3 (See step 2 under Section 4.1). Ascent recommends that the screening threshold be no greater than 300 $MTCO_2e$ per year, based on the estimated effectiveness of mitigation measures for new development. This threshold would result in approximately 15 percent of all applicable future projects and 87 percent of all applicable future land use emissions being subject to the efficiency threshold under Step 2.

Under Step 2, any project with 2030 estimated emissions exceeding the screening threshold will be subject to an efficiency GHG emissions threshold based on the project's estimated service population. For projects exceeding the screening threshold, Ascent recommends application of an efficiency threshold of 3.8 $MTCO_2e$/year per service population (SP) in 2030. Ascent also recommends that projects subject to the efficiency threshold amortize any construction emissions over the lifetime of the project (e.g., 30 years). The efficiency threshold would apply to the sum of the amortized construction emissions and the estimated annual operational emissions.

These thresholds are consistent with CARB's recommendation for setting project-level thresholds. In the 2017 Scoping Plan, CARB states that "[l]ead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals" (CARB 2017:102). Ascent developed both the recommended mass-emissions screening threshold and efficiency-based threshold based on service population using evidence from historical project data and GHG targets for the county consistent with State targets.

Ascent recommends that the County make determinations for threshold use based on project attributes as certain projects may not fit within the definitions used in the development of the thresholds and may require a project-specific analysis. Examples include where a project would have a low service population due to limited employment but would have other users that are not included in the definition of service population. See Section 5 for additional information.

Figure 1 outlines the decision process for applying the interim thresholds.

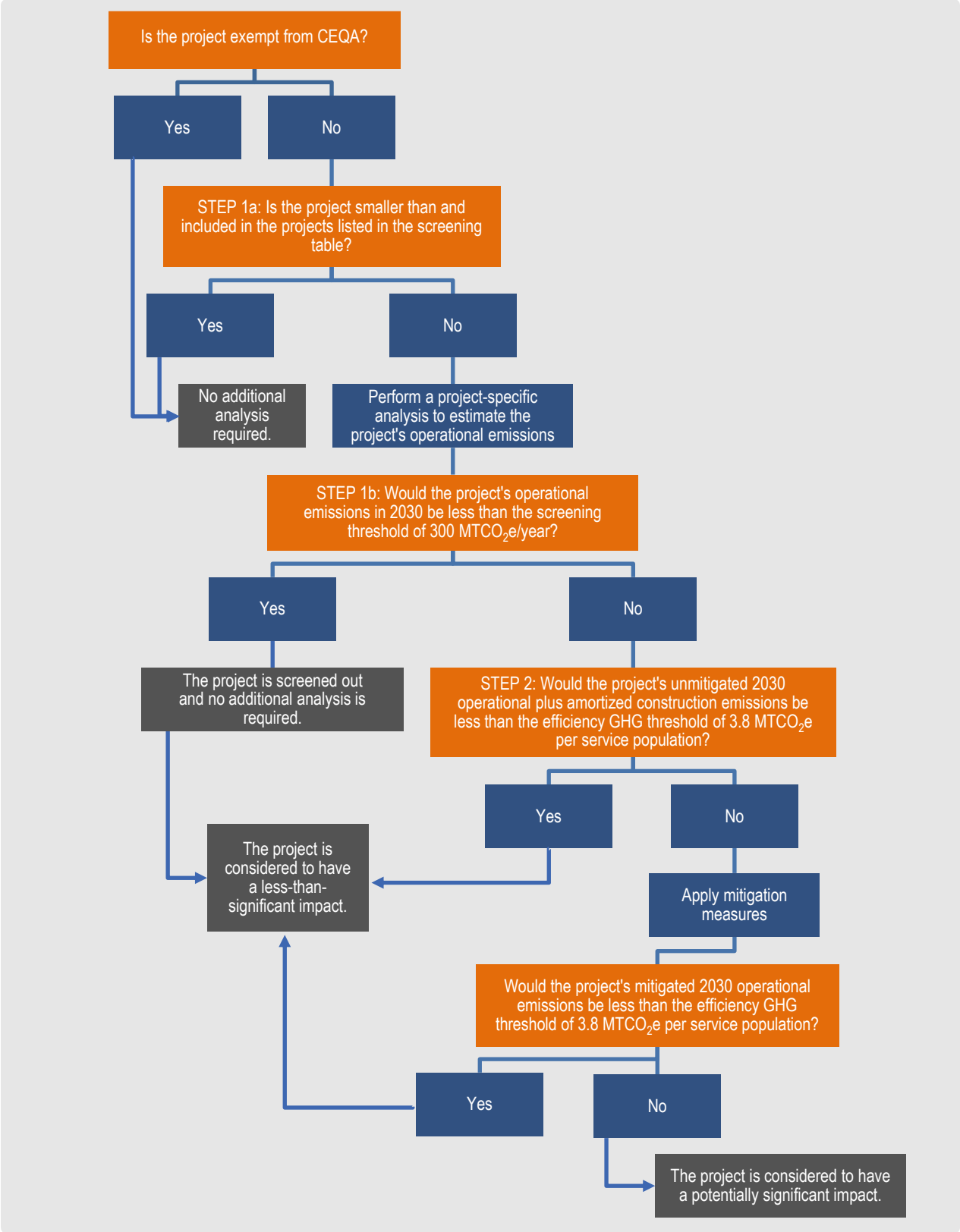



Figure 1 Interim GHG Emissions Threshold Decision Tree for Project Analyses

# 4 SCREENING THRESHOLD (STEP 1)

This section describes the methodology that Ascent used to develop the screening threshold, which considers past land use projects reviewed and approved by the County and anticipated growth projections based on historical permit trends. The steps used to develop the screening threshold are outlined below.

1) Ascent estimated past, or historical, GHG emissions from projects that the County approved in the unincorporated county in the past ten years (2010-2019). Project data obtained included project name, land use or project type (e.g., residential, commercial), project size metrics (e.g., square feet, acres), and annual unmitigated GHG emissions (if available from the project environmental document). As part of this exercise, Ascent evaluated over 7,000 permits, which are associated with nearly 4,000 unique project locations including both exempt and non-exempt CEQA projects.

2) For the approved projects that do not have estimated GHG emissions, Ascent estimated annual operational GHG emissions using the California Emissions Estimator Model (CalEEMod) based on the land use or project type for each project. To organize the data set, Ascent matched projects to one of eight different project types in CalEEMod (e.g., single family home, office park). Ascent approximated wineries as the "Refrigerated Warehouse-No Rail" land use type in CalEEMod. For two other types of projects not characterized in CalEEMod (i.e., cellular towers and cannabis grows), Ascent used more specific emissions estimates based on additional research on these types of projects and their emissions characteristics and profiles. Just over 65 percent of the applicable projects were estimated to emit less than 100 $MTCO_2e$/year, including all cellular tower and cannabis projects.

3) Ascent evaluated the resulting list of historical projects and their estimated emissions to develop an estimate of the average annual number of projects approved by the County and the average annual operational emissions associated with those projects. Based on the results from 2), excluding oil and gas projects, the County approved an average of 22 CEQA projects per year, emitting an average of 85 $MTCO_2e$/year per project. This average includes emissions from all applicable CEQA projects including renewable energy projects. Ascent used these averages to represent business-as-usual emissions from new development, as it relates to the county's 2016 GHG emissions inventory (i.e., new development constructed from 2017 through 2030). Although the threshold would only apply to current new development as of 2020, Ascent used this definition of "new development" as part of developing the maximum allowable emissions from new development under the County's 2030 GHG emissions target, as discussed in 4), and because the County does not currently have a 2020 GHG emissions inventory.

4) To assign a target level of emissions against which the screening threshold would be aligned, Ascent calculated the maximum allowable emissions attributable to new development per the County's 2030 target to reduce emissions to 50 percent below 2007 levels. According to the adjusted business-as-usual (ABAU) 2030 emissions forecast for the unincorporated County, four percent of emissions in 2030 would be associated with new development (Ascent Environmental 2020). Under the County's 2030 target, emissions from the unincorporated county are not to exceed 675,865 $MTCO_2e$, which is 37 percent lower than the level of emissions anticipated in 2030 under the ABAU scenario. The 2030 CAP will provide the analysis for the proportion of the 2030 emissions limit that will come from new development. To determine the proportion of the 2030 emissions limit associated with new development for this interim thresholds analysis, Ascent multiplied the 675,865 $MTCO_2e$ by four percent (i.e., the estimated proportion of 2030 emissions from new development). This resulted in a maximum emissions limit from new development in 2030 of approximately 24,680 $MTCO_2e$, meaning that all new development constructed between 2017 and 2030 should collectively emit no more than 24,680 $MTCO_2e$ in 2030 in order to be consistent with the County's 2030 target. This

approach assumes that both existing and new development are responsible for reducing emissions by 37 percent from the ABAU scenario. In reality, the rate at which the 2030 CAP and other County measures will reduce emissions from new development and existing development may differ. Therefore, Ascent recommends that the County revise the proportion of GHG emissions reductions from new development to meet the County's 2030 target once the County finalizes the portfolio of 2030 CAP measures. Table 1 shows these calculations.

5) Ascent estimated a mitigation measure effectiveness level to determine the level of reduction future mitigation measures would have on projects captured by (i.e., exceeding) the screening threshold. Typically, a CAP would determine the level of reduction from GHG reduction measures applicable to new development. However, the County is in the process of developing the 2030 CAP. As a proxy for reductions anticipated from new development under the CAP, Ascent used applicable legislations (e.g., improved energy efficiency standards for new buildings under Title 24) to determine targeted reductions from new development by 2030. Based on the distribution of historical project land use types and sizes, Ascent estimated that the applicable reductions will have at least a 12 percent reduction effectiveness from ABAU emission rates for new projects, representative of projects approved within the last ten years. Ascent considers a 12 percent reduction to be conservative in light of potential emissions reductions from new development under the 2030 CAP, which may require additional reductions from new development to maximize effectiveness from the County's land use permitting authority. As discussed in 5), the County targets a 37 percent reduction from the ABAU scenario, which is higher than the estimated 12 percent mitigation measure effectiveness. Actual reductions will likely be higher than 12 percent and may be closer to or higher than 37 percent considering the County's permitting authority over new development and ability to achieve higher reductions from proposed projects.

6) By starting with a placeholder screening threshold, Ascent estimated emissions captured by the screening threshold based on the emissions profile of evaluated projects with emissions greater than zero. This capture rate should be relatively high, greater than 80 percent. Ascent calculated the threshold by dividing the annual emissions from projects with emissions exceeding the screening threshold (i.e., emissions captured by the threshold) by the total annual emissions from the list of applicable projects. Applying the mitigation effectiveness from 5) to the anticipated emissions from new development (assuming 85 $MTCO_2e$ per project per year per project and an average of 22 projects per year from 2017 through 2030) captured by the screening threshold results in the mitigated emissions from new development.

7) To determine an effective screening threshold, the sum of unmitigated emissions from CEQA projects not captured by the screening threshold and mitigated emissions from CEQA projects captured by the screening threshold in 6) should be no greater than the target emissions from new development in 2030 (approximately 24,680 $MTCO_2e$ from 4). For each iteration of the assigned capture rate, Ascent compared the sum of unmitigated emissions and mitigated emissions from 6) to the 2030 target from 4).

8) Through an iterative process, Ascent derived a screening threshold of 300 $MTCO_2e$ which resulted in the sum of unmitigated and mitigated emissions from new development, in 7), to be approximately 23,471 $MTCO_2e$, which is less than the estimated emissions from new development attributed to the 2030 emissions target calculated in 4). In this exercise, the initial screening thresholds to begin the iterative process ranged between 50 to 500 $MTCO_2e$/year.

Based on the above methodology, the mass emissions level that achieves the goals outlined in 8) is 300 $MTCO_2e$ per year. This level would capture 87 percent of operational emissions from new CEQA projects and would achieve adequate reductions from captured emissions to meet the County's 2030 emissions reduction target. In other words,

87 percent of emissions from new CEQA projects would be subject to mitigation and would achieve reductions consistent with the County's GHG emissions reduction target for 2030. Projects that fall below this level would be considered less than significant and would not interfere with the County's ability to meet its 2030 GHG emissions reduction target. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative. A screening threshold of 300 $MTCO_2$ would capture an adequate amount of emissions from new development so as to not interfere with the County's 2030 GHG emissions reduction target as described above. Projects exceeding the screening threshold would be required to further analyze and mitigate their emissions, as applicable, to achieve reductions consistent with the County's goals. Thus, the screening threshold would ensure that emissions from new development projects consistent with the threshold would not result in a significant cumulative impact related to GHG emissions.

Ascent based the review of historical permit data on all discretionary applications processed by the County between 2009 and 2019. This included projects that the County determined to be categorically or statutorily exempt under CEQA. Typically, notices of exemption (NOEs) accompany actions that directly result in either minimal or no new operational emissions, such as small non-roadway infrastructure projects, rezones, conditional use permits, and residential remodels and additions. Further, many exempt development projects are, at some point, largely captured under CEQA, such as through an Environmental Impact Report (EIR) prepared for a proposed subdivision. Projects that are exempt are typically small or would otherwise meet a category that exempts the projects (plus lead agencies cannot, under CEQA, categorically exempt projects that considerably contribute to cumulative impacts or may have potentially significant impacts). Therefore, Ascent assumed the quantity of emissions from potential development that is exempt is not considerable. Ascent concluded that NOEs represent a less-than-substantial portion of total projected development in the unincorporated county and the development of the screening level focused on capturing non-exempt projects.

Although capture rates higher than 87 percent would mean that more emissions from projects could be captured and reduced, such a rate is not required to meet the County's 2030 emissions reduction target. Indeed, with more projects potentially reducing their emissions to meet the threshold, the overall reduction in emissions from new development would help to achieve the County's GHG emissions reduction target. However, the County's GHG emissions reduction target is based on a set value for the entire unincorporated county's emissions and are not wholly dependent on new development. This means meeting the County's 2030 GHG emissions target requires reductions from both new and existing development. To allow effective processing of project applications, Ascent set the capture rate at a level that allows achievement of new development's fair share of reductions while capturing a meaningful level of emissions that would be reduced in compliance with the efficiency threshold. Tables 1 and 2 list the assumptions and calculations shown in 4) through 8) for the maximum screening threshold level needed to achieve the targeted reductions from new development.

**Table 1 Emissions Target Assumptions for New Development (4)**

| Assumptions | Value | Source/Notes |
|---|---|---|
| ABAU Emissions in 2030 from new sources ($MTCO_2e$) | 38,898 | Updated 2030 Forecast |
| ABAU Emissions in 2030 from new and existing sources ($MTCO_2e$) | 1,065,245 | Updated 2030 Forecast |
| Percent of emissions in 2030 attributed to new development | 4% | Calculated from ABAU forecasts |
| County Emissions in 2007 ($MTCO_2e$) | 1,351,730 | County ECAP inventory |
| Targeted County Emissions in 2030 from all sources ($MTCO_2e$) | 675,865 | Reflects target of 50% below 2007 levels by 2030 |
| Targeted County Emissions in 2030 from new development ($MTCO_2e$) | 24,680 | Assumes that emissions from new development will be reduced at the same rate as existing development in order for the county's emissions to meet the 2030 target. Emissions from new development should not exceed this amount. |

Notes: ABAU = Legislative adjusted business-as-usual forecast; ECAP = Energy and Climate Action Plan; $MTCO_2e$ = metric tons of carbon dioxide equivalent
Source: Analysis conducted by Ascent Environmental in 2020

**Table 2 Screening Threshold Justification (5 through 8)[1]**

| Assumptions | Value | Source/Notes |
|---|---|---|
| Average annual number of new projects | 22 | Average annual number of non-exempt CEQA project applications between 2010 and 2019 |
| Average annual emissions per project ($MTCO_2e$/year) | 85 | Estimated average annual operational emissions per applicable project |
| 2030 Emissions from new development ($MTCO_2e$) | 26,194 | Calculated from annual project data. Assumes new development starts from 2017. |
| Maximum Screening Threshold ($MTCO_2e$/year) | 300 | Rounded final screening threshold developed that would achieve 2030 reduction targets |
| Project Capture Rate | 15% | Proportion of annual projects that would exceed the screening threshold |
| Screening Threshold Emissions Capture Rate | 87% | Proportion of emissions captured projects that would be subject to mitigation. |
| 2030 Emissions from new development captured by screening threshold ($MTCO_2e$) | 22,697 | Calculated from screening threshold capture rate |
| Assumed mitigation measure effectiveness on non-exempt CEQA projects[2] | 12% | 12% is consistent with minimum reductions focused on building energy use only, such as applying a 2019 Title 24 Building Energy Efficiency Standards over 2013 standards, while also accounting for the contribution of non-building energy-related emissions. |
| Mitigated 2030 emissions from new development captured by screening threshold ($MTCO_2e$)[3] | 19,973 | Calculated from the mitigation measure effectiveness |
| Unmitigated 2030 emissions from projects not captured by the screening threshold ($MTCO_2e$)[3] | 3,498 | Calculated from screening threshold capture rate |

| Assumptions | Value | Source/Notes |
|---|---|---|
| 2030 Emissions from new development after mitigation ($MTCO_2e$/year) | 23,471 | Must be equal to or less than maximum allowable 2030 emissions from new development (24,680 $MTCO_2e$/year). |

Notes: ABAU = Legislative adjusted business-as-usual forecast; $MTCO_2e$ = metric tons of carbon dioxide equivalent
[1] This table shows the final iteration of the screening threshold needed to achieve the maximum allowable emissions from new development.
[2] Percent reduction from new development under ABAU.
[3] Refers to non-exempt CEQA projects.
Source: Analysis conducted by Ascent Environmental in 2020

# 4.1 PROJECT SIZE-BASED SCREENING CRITERIA

Ascent established a GHG screening threshold (Step 1) of 300 $MTCO_2e$/year for new development projects in order to determine if a project would require analysis against the efficiency GHG emissions threshold (Step 2). Projects projected to emit fewer than 300 $MTCO_2e$ annually require no further analysis and would have an insignificant impact on climate change. As shown in Figure 1, projects projected to emit more than 300 $MTCO_2e$ of GHGs annually would need to analyze their estimated GHG efficiency against an efficiency GHG emissions threshold and apply mitigation measures, as appropriate.

Table 3 lists types and sizes of projects that correspond to the 300 $MTCO_2e$ GHG screening threshold. Applicants for project types not listed in this table will need to estimate the proposed project's GHG emissions using CalEEMod or a similar GHG emissions estimator model.

**Table 3 Size-Based Project Screening Criteria**

| Project/Plan Type [1] | Screening Criteria [2] |
|---|---|
| Single-Family Housing [3] | 62 ksf [6] |
| Multi-Family Housing [4] | 55 ksf [6] |
| Commercial Space [5] | 26 ksf |
| Regional Shopping Center | 12 ksf |
| General Office Building | 28 ksf |

Notes: ksf = thousand square feet; $MTCO_2e$ = metric tons of carbon dioxide equivalent

[1] For project types not listed in this table, the need for GHG analysis will be made on a project-specific basis, considering the 300 $MTCO_2e$ per year screening level. In addition, projects that may match the categories listed in this table but have additional emissions sources that are not typical of the listed project type nor are included in the emissions included in CalEEMod for the project type (e.g., warehouse with boilers) should also be evaluated on a project-specific basis.

[2] The screening criteria represent the maximum project size at which a project is estimated to emit less than 300 $MTCO_2e$ per year without the application of additional GHG reducing measures. Projects proposing greater unit or square footage amounts than the above screening thresholds would be required to analyze their emissions with respect to the efficiency GHG emissions threshold.

[3] Single-Family Housing developments are defined as single-family homes on individual lots.

[4] Multi-Family Housing developments are defined as low-rise multi-family housing complexes, modeled as "Apartments-Low Rise" in CalEEMod.

[5] Commercial space is modeled as "Office Park" in CalEEMod.

[6] Measure residential square footage as the "gross floor area" as defined in the Land Use and Development Code (LUDC)/ Montecito Land Use and Development Code (MLUDC). Do not count accessory structures (as defined in the LUDC/MLUDC) toward the residential square footage. Include the square footage of proposed accessory dwelling units (ADUs). If the proposed ADU size is unknown, estimate that each ADU is 800 sf in size. For subdivisions, estimate that 20% of the proposed residential lots will contain an ADU, unless more precise information is provided in the project application.

Source: Analysis conducted by Ascent Environmental in 2020

Ascent recommends that project applicants apply the 300 $MTCO_2e$ level as a screening threshold and not as a threshold of significance. In other words, projects that exceed this emissions level may not propose mitigation measures to reduce emissions below 300 $MTCO_2e$. As noted, Ascent recommends that the County require projects with GHG emissions exceeding the screening level to analyze their project emissions against the efficiency GHG emissions threshold under Step 2.

# 5 EFFICIENCY GREENHOUSE GAS THRESHOLD (STEP 2)

Projects that exceed the screening threshold under Step 1 would apply the recommended efficiency GHG emissions threshold of 3.8 $MTCO_2e$ per service population per year under Step 2. According to the Bay Area Air Quality Management District (BAAQMD), service population is the sum of number of residents and jobs anticipated to be generated by the project (BAAQMD 2017). Ascent calculated this efficiency threshold by dividing the targeted emissions from new development in 2030 [24,680 $MTCO_2e$ in 4) above] by the new forecasted employment and population added to the county from 2017 through 2030, based on updated demographics forecasts from the Santa Barbara County Association of Governments (SBCAG) (SBCAG 2019). Use of an efficiency GHG emissions threshold is consistent with CARB's recommendation for local communities setting GHG reduction targets (CARB 2017:102). In the 2017 Scoping Plan, CARB states that "[l]ead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals" (CARB 2017). Using the service population metric is an accepted approach to developing an efficiency GHG emissions threshold that achieves GHG emission reduction targets at the county-level and may underestimate the number of "users" for certain land uses such as schools, hotels, and community centers.

The County should interpret this definition of service population as the sum of full-time employees and full-time residents of a project. Therefore, projects or plans, regardless of type, should also use this definition in quantifying their GHG emissions efficiency. For example, a hotel project should divide the total annual emissions anticipated to occur in its first year of full operation by the total number of full-time employees and full-time residents (if any) to calculate their GHG emissions efficiency. Visitors and guests should not be counted toward this project's service population, because they are residents of other locations. Similarly, an elementary school project, while it serves many students, would account for the full-time equivalent staff, but would not include students in its service population, unless they are living on campus.

For projects that do not serve the typical service population, as defined by population and jobs, as previously mentioned, Ascent recommends that the County make determinations on whether projects that may not fit within the definitions used in the development of the thresholds should apply the efficiency threshold or perform an more in-depth project-specific analysis.

The efficiency GHG emissions threshold approach requires applicants to quantify their GHG emissions in 2030 and estimate any reductions necessary to achieve the efficiency GHG emissions threshold. The type, character, and level of mitigation would depend on the project type, size, location, context, and other factors. The availability of mitigation measures can change over time as well, with new technologies, building materials, building design practices, and other changes. Therefore, in developing project-specific reduction measures, Ascent recommends that a project applicant refer to the County's list of feasible GHG mitigation measures, along with current guidance from the California Air Pollution Control Officers Association, the California Air Resources Board, the Governor's Office of Planning and Research, the California Attorney General, Santa Barbara County Air Pollution Control District, and SBCAG to determine applicable mitigation measures and estimate their effectiveness.

Table 4 shows the quantification of the efficiency GHG emissions threshold.

**Table 4 Efficiency GHG Emissions Threshold Calculation**

| | 2030 |
|---|---|
| Targets | |
| County ABAU Emissions Forecast ($MTCO_2e$) | 1,065,245 |
| Target Percent Reduction from 2007[1] | 50% |
| Target Emissions ($MTCO_2e$) | 675,865 |
| Emissions from New Development | |
| Emissions from Existing Development as of 2016 ($MTCO_2e$) | 1,026,346 |
| Emissions from New Development as of 2016 ($MTCO_2e$) | 38,898 |
| Percent of emissions from new development | 4% |
| Maximum allowable emissions from new development under Target ($MTCO_2e$) | 24,680 |
| Forecasted Service Population (Growth between 2017 and 2030) | |
| New population | 233 |
| New Jobs | 6,283 |
| Service Population (SP) | 6,516 |
| Efficiency GHG emissions threshold | |
| Target emissions from new development ($MTCO_2e$) | 24,680 |
| Efficiency threshold ($MTCO_2e$/SP) | 3.8 |

Notes: ABAU = Legislative adjusted business-as-usual forecast; $MTCO_2e$ = metric tons of carbon dioxide equivalent
[1] Based on 2007 emissions inventory of 1,351,730 $MTCO_2e$
Source: Analysis conducted by Ascent Environmental in 2020

# 6 REFERENCES

Ascent Environmental. (September 16). *Santa Barbara County Greenhouse Gas Inventory 2020-2050 Forecast Update*. Letter memorandum to Selena Evilsizor Whitney of County of Santa Barbara. Santa Barbara, CA.

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2017. California Environmental Quality Act Air Quality Guidelines. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed September 16, 2020.

CARB. *See* California Air Resources Board.

California Air Resources Board. 2017 (November). California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. Adopted by the California Air Resources Board on December 14, 2017. Available: https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed: May 12, 2020.

California Energy Commission. 2016. 2016 Building Energy Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf. Accessed July 18, 2017.

_____.2018 (March). 2019 Building Energy Efficiency Standards Frequently Asked Questions. Available: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed September 16, 2020.

Hansen J, Kharecha P, Sato M, Masson-Delmotte V, Ackerman F, Beerling DJ, et al. (2013) Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature. PLoS ONE 8(12): e81648. https://doi.org/10.1371/journal.pone.0081648

Santa Barbara County Association of Governments. 2012. Regional Growth Forecast 2010-2040. Available: http://www.sbcag.org/uploads/2/4/5/4/24540302/regional_growth_forecast_2010-2040.pdf. Accessed May 10, 2018.

_____.2019 (January). Regional Growth Forecast 2050 Santa Barbara County. Prepared by Santa Barbara County Association of Governments. Santa Barbara, CA.SBCAG. *See* Santa Barbara County Association of Governments.

County of Santa Barbara. 2020. *2030 Climate Action Plan*. Santa Barbara, CA. Agenda Letter the County of Santa Barbara Board of Supervisors from George Chapjian, Community Services Director for the County of Santa Barbara. Santa Barbara, CA. Available: https://santabarbara.legistar.com/View.ashx?M=F&ID=8646917&GUID=4C5C88F1-7164-4FD9-979A-01FE583FEE54. Accessed September 16, 2020.

# Letter 4

**COMMENTER:** Lisa Plowman, Director, County of Santa Barbara Planning and Development Department

**DATE:** 7/8/2021

## COUNTY1-16

County comments numbered one through 16 are comments on Connected 2050 and not on the PEIR. Responses to these comments are found in the Connected 2050 response to comments.

## Response COUNTY17

The commenter requests the inclusion of recommendations in Impact AQ-2 in Section 4.2, *Air Quality*, of the Draft PEIR to use recycled water, soil binders, or dust palliatives to control fugitive dust during times of severe or extreme drought.

Mitigation Measure AQ-2(a) in Section 4.2, *Air Quality*, of the Draft PEIR encourages the use of reclaimed water for site watering during construction whenever possible. In addition, this mitigation measure provides the option to use soil binders to treat disturbed areas. Nevertheless, Mitigation Measure AQ-2(a) has been revised to incorporate the commenter's suggestions, as shown in Response APCD15.

## Response COUNTY18

The PEIR is a programmatic document and does not go into that level of detail to examine impacts. The requested analysis to determine the number of structures potentially demolished is not readily available and would be speculative on SBCAG's part to try to determine if a building is underutilized.

As stated in the PEIR under Impact CR-1, "A review of the NRHP and the California State Office of Historic Preservation's Built Environment Resource Directory shows there are more than 400 known historical resources listed in or eligible for the NRHP and CRHR and local registers located throughout the Plan Area. Additionally, there may be other yet unidentified resources eligible for inclusion in the NRHP or CRHR or for designation as a local Landmark." Therefore, it was determined that, "Redevelopment or demolition could result in the permanent loss of historic structures." As such it was determined that impacts to historical resources would be significant and unavoidable.

## Response COUNTY19

Impacts to human remains, Impact CR-3, was determined to be less than significant. This determination was made based on the requirement of any agency constructing a project under Connected 2050 must follow California Health and Safety Code Section 7050.5 states no further disturbance may occur if remains are discovered until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. As this is a state regulation that must be followed to addresses impacts to the discovery of human remains, no mitigation is required.

## Response COUNTY20

The SCS buildout is based on local planning documents - City and County General Plans. Therefore the SCS does not increase the amount of residents beyond what is planned by the cities in, and County of Santa Barbara over what is already planned for. Because this is all planned growth, the SCS is not causing the need for new facilities or construction of new facilities.

## Response COUNTY21

The commenter requests a revision of PEIR mitigation measure GEO-1(b). The mitigation measure recommends during construction, a potentially significant impact would occur if the project includes a cut slope of over 20-feet. However, the County's standard is a 15-foot cut slope as the threshold. Mitigation Measure GEO-1(b) has been revised to incorporate the commenter's request to change the threshold to cut slopes over 15 feet in height.

## Response COUNTY22

The commenter requests for the addition of the *County's Environmental Thresholds and Guidelines Manual* (page 80) which states that a proposed project will have a potentially significant geological impact if the proposed project is located on slopes exceeding 20 percent grade. This threshold has been added to mitigation GEO-1(b) in the PEIR per the commenter's suggestion. Slopes exceeding 20 percent grade shall require hillside stability evaluations and/or specific slope stabilization studies conducted by a qualified geotechnical expert.

## Response COUNTY23

The commenter requests revisions to the setting and impacts analysis in Section 4.8, Greenhouse Gases and Climate Change, to reflect the contents of the County's Environmental Thresholds and Guidelines Manual and the "Santa Barbara County Interim Greenhouse Gas Thresholds Justification" memorandum.

Section 4.8.1(c), *Local Regulations*, in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, has been revised as follows to incorporate the updated baseline inventory and forecast for the County as well as the County's interim GHG emissions thresholds as presented in the "Santa Barbara County Interim Greenhouse Gas Thresholds Justification" memorandum and the County's Environmental Thresholds and Guidelines Manual (Ascent Environmental 2020; County of Santa Barbara 2021).

### Local Regulations and CEQA Requirements

Three of SBCAG's member jurisdictions have climate action plans (CAP) that set goals and targets on the reduction of GHG emissions, and outline policies to help achieve those goals. The Cities of Goleta and Santa Barbara, as well as Santa Barbara County, have conducted baseline emissions inventories, which establish a reference point for GHG emissions reduction. The City of Goleta CAP (2014), City of Santa Barbara CAP (2012), and County of Santa Barbara Energy and Climate Action Plan (ECAP) (2015) also establish GHG reduction targets and reduction measures to meet those targets[2]. In addition, in July 2020, the County

[2] The County of Santa Barbara is currently in process of preparing the 2030 Climate Action Plan which is anticipated in 2022, replacing the 2015 Energy Action Plan.

of Santa Barbara Board of Supervisors also adopted an updated target to reduce emissions in unincorporated Santa Barbara County by 50 percent below 2007 levels by 2030. To date, the Cities of Buellton, Carpinteria, Guadalupe, Lompoc, Santa Maria, and Solvang do not have adopted CAPs. Baseline and projected 2020 and 2030 GHG emissions from the respective CAPs and jurisdiction are shown in Table 4.8-1 below.

**Table 4.8-1 Climate Action Plans in the SBCAG Plan Area**

| Jurisdiction | Annual GHG Emissions (MT $CO_2e$) | |
|---|---|---|
| | 2007 Baseline Emissions | Projected 2030 Business As-Usual Emissions |
| Goleta | 325,532 | 429,295 |
| Santa Barbara | 719,833 | 943,225 |
| Santa Barbara County | ~~1,192,970~~ 1,351,730 | ~~1,540,000~~1,065,245[1] |

[1] County of Santa Barbara emissions are 2035 not 2030

Sources: City of Goleta, July 2014; City of Santa Barbara, September 2012; ~~County of Santa Barbara, May 2015~~ Ascent Environmental, October 2020

The completed CAPs in the area address emissions produced by transportation, electricity and natural gas consumptions, water supply and conveyance, wastewater treatment, and solid waste disposal. The types and quantity of emissions produced in the SBCAG region vary among jurisdictional boundaries. However, for most jurisdictions, transportation and energy consumption are responsible for the majority of GHG emissions. Policies included in the climate action plans in the region establish a framework for improved circulation networks and energy conservation. Transportation policies aim to reduce vehicle miles traveled (VMT) by offering more opportunities for alternative transportation modes, such as bicycling and transit use. In addition, many of the climate action plans include policies to promote transit-oriented development. In order to reduce emissions caused by energy usage, jurisdictions have established policies that will facilitate and encourage energy efficiency for both residential and commercial land uses. Cities and counties include programs to improve energy efficiencies in old and new buildings and decrease the use of fossil fuels by providing incentives for use of renewable energy.

To date, the County of Santa Barbara is the only SBCAG member jurisdiction that has adopted thresholds for evaluating the significance of GHG emissions under CEQA. These thresholds are outlined in the "Santa Barbara County Interim Greenhouse Gas Thresholds Justification" and the County's *Environmental Thresholds and Guidelines Manual* and include a screening threshold of 300 MT of $CO_2e$ per year and an efficiency threshold of 3.8 MT of $CO_2e$ per service person per year for projects with emissions in excess of the screening threshold (Ascent Environmental 2020; County of Santa Barbara 2021).

As stated in Section 4.8.3(a), *Methodology and Significance Thresholds*, in Section 4.8, *Greenhouse Gas Emissions and Climate Change*:

> *The interim GHG emissions thresholds for land use projects and plans adopted by the County are based on the County's 2030 GHG emissions target (i.e., 50 percent below 2007 levels by 2030). The County's thresholds are intended to be utilized only for projects located in the unincorporated area of the County; however, Connected 2050 is a countywide plan that*

*would influence GHG emissions in both incorporated and unincorporated areas of the county of Santa Barbara. Therefore, these thresholds are not applicable to Connected 2050.*

For this reason, the County's thresholds were not utilized to evaluate the GHG emissions impacts of Connected 2050 in the Draft PEIR. Furthermore, the GHG emissions analysis utilized a threshold of a net-zero increase in GHG emissions as compared to existing and future (2050) No Project conditions, which is more conservative than the County's interim thresholds.

Nevertheless, an evaluation of the project's emissions as compared to the County's thresholds is provided here for informational purposes. As shown in Table 4.8-3 under Impact GHG-1 in Section 4.8, *Greenhouse Gas Emissions*, Connected 2050 would result in a net decrease in total GHG emissions of 454,191 MT of $CO_2e$ per year as compared to existing conditions and a net decrease in total GHG emissions of 209,623 MT of $CO_2e$ per year as compared to future (2050) No Project conditions. In both scenarios, the net decrease in total GHG emissions under Connected 2050 is less than the County's screening threshold of a net increase of 300 MT of $CO_2e$ per year. Because project emissions would not exceed the screening threshold, evaluation of GHG emissions under the efficiency threshold of 3.8 MT of $CO_2e$ per service population per year is not necessary, pursuant to the County's *Environmental Thresholds and Guidelines Manual* (2021).

## Response COUNTY24

The commenter requests analysis of whether the project would conflict with the County's updated 2030 GHG emissions reduction target and use of the County's GHG emissions significance threshold of 3.8 MT of $CO_2e$ per service population per year.

A reference to the County's goal of reducing GHG emissions to 50 percent below 2007 levels by 2030 has been added to Section 4.8.1(c), *Local Regulations*, in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, as shown under Response COUNTY23. In addition, the discussion under Impact GHG-3 in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, has been revised as follows to evaluate project consistency with the County's most recent 2030 GHG emissions reduction goal:

### Local Climate Action Plans

Three of SBCAG's member jurisdictions (the Cities of Goleta and Santa Barbara and the County of Santa Barbara) have adopted climate action plans that set goals and targets for the reduction of GHG emissions, and outline policies to help achieve those goals (City of Goleta 2014; City of Santa Barbara 2012; County of Santa Barbara 2015).[3] The local climate action plans and GHG reduction plans were adopted in an effort to comply with the GHG emissions reduction goals recommended for local governments in the AB 32 Scoping Plan, which was aimed at reducing GHG emissions to 1990 levels by 2020 in accordance with AB 32. These climate action plans are also intended to make progress toward the State's 2030 target of reducing GHG emissions by 40 percent below 1990 levels, as first set forth in EO S-3-05 in 2005 and later codified by SB 32 in 2017. <u>In addition, the County of Santa Barbara Board of Supervisors adopted a target to reduce emissions in unincorporated Santa Barbara County by 50 percent below 2007 levels by 2030, which was found to be in line with the State's goal under SB 32 (County of Santa Barbara 2021).</u> As discussed previously,

[3] The City of Santa Barbara and County of Santa Barbara are currently updating their climate action plans with publication expected sometime in 2021.

> Connected 2050 was determined to be potentially inconsistent with the goals of SB 32 and EO S-3-05. Therefore, it would also conflict with the goals of local climate action plans designed to meet the same State goals, and impacts would be potentially significant.

Refer to Response COUNTY23 for an explanation of why the County's GHG emissions significance threshold of 3.8 MT of $CO_2e$ per service population per year was not utilized in the GHG emissions analysis of the Draft PEIR.

## Response County25

The commenter requests that SBCAG consider additional VMT- and GHG-reducing measures in the Transportation and Circulation section of the EIR. Specifically, the commenter requests dedicated routes/lanes and on-site amenities for electric bicycles and electric scooters, including on-site charging, and new or improved transit and pedestrian amenities for school bus stops. Mitigation Measure T-2a contains a list of strategies to reduce VMT from Future Land Use Development. The two additional strategies requested in the comment have been added to the list of potential VMT reduction strategies as part of the FEIR. Please see "Corrections and Additions" in the FEIR.

## Response County26

The commenter requests that the Transportation and Circulation section of the EIR acknowledge the school bus network as part of the existing conditions. Section 4.12.1, Setting, describes transit service and transit service providers in Santa Barbara County. Additional information regarding the school bus network has been added to this section as part of the FEIR. Please see "Corrections and Additions" in the FEIR.

## Response County27

The commenter requests that the Transportation and Circulation section of the EIR acknowledge that the County is in the process of preparing an Active Transportation plan for the unincorporated areas. Section 4.12.2, Regulatory Setting, describes local regulations related to transportation planning in the County including adopted bicycle, pedestrian and trails master plans and active transportation plans. Acknowledgement of the County's current efforts to prepare an Active Transportation Plan has been added to this section as part of the FEIR. Please see "Corrections and Additions" in the FEIR.

## Response County28

The commenter requests that the Transportation and Circulation section of the EIR acknowledge Santa Barbara Metropolitan Transit District's (SBMTD) "net zero" goal by the year 2030. Section 4.12.2, Regulatory Setting, describes local regulations related to transportation planning in the County including transit performance standards and thresholds. SBMTD's adopted goal of having a 100 percent zero-emissions fleet by the year 2030 has been added to this section as part of the FEIR. Please see "Corrections and Additions" in the FEIR.

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Liane M. Randolph, Chair

July 12, 2021

Ms. Marjie Kirn, Executive Director
Santa Barbara County Association of Governments
260 N. San Antonio Road Suite B
Santa Barbara, California 93110
*MKirn@sbcag.org*

Dear Ms. Kirn:

California Air Resources Board (CARB) staff appreciates the opportunity to review and engage with the Santa Barbara County Association of Governments (SBCAG) staff on the draft update to its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) known as "Connected 2050." This work is more important than ever as CARB's first SB 150 progress report[1] showed that California is not on track to meet the greenhouse gas (GHG) reductions expected under Senate Bill (SB) 375 for 2020 and that vehicle miles traveled (VMT) is increasing. To achieve the State's climate mandates, California needs significant and immediate changes to how we plan, fund, and build our communities and transportation systems. Recognizing this, Governor Newsom signed Executive Order N-19-19 in September 2020 to redouble the State's efforts to reduce GHG emissions, explicitly focusing on lowering VMT. The SCS plays a critical role in supporting the State's climate efforts, as well as local objectives to create an economically vibrant region that responds to the needs of its diverse communities and provides better access to jobs and cleaner air for its residents. We appreciate SBCAG's work as we endeavor together to achieve these shared goals.

In reviewing the draft 2021 RTP/SCS, CARB staff looked to identify whether additional information would be needed to conduct its final SCS GHG evaluation under SB 375. As discussed in meetings with SBCAG staff in September 2020 and March 2021, for all third round RTP/SCSs, like Connected 2050, CARB staff will focus on assessing whether SCS GHG reductions are reasonably supported by the plan. CARB staff will conduct its final evaluation, as outlined in the *Final Sustainable Communities Strategy Program and Evaluation Guidelines* (SCS Evaluation Guidelines) and requests that as SBCAG finalizes and adopts its 2021 RTP/SCS that it provides the following additional information.

CARB1 **2020 GHG Emission Reduction Target**

State law requires CARB to provide 2020 GHG targets and MPOs to develop an SCS that achieves the GHG targets approved by CARB.[2] Given that 2020 is a specific milestone in SB 375, CARB staff expect that MPOs will continue to monitor, and report observed data as it relates to that target in the SCS. As part of the SCS submittal, CARB staff will need further information on SBCAG's 2020 target determination. Consistent with the SCS Evaluation Guidelines, SBCAG could compare available observed data with performance indicators to

[1] CARB's *2018 Progress Report: California's Sustainable Communities and Climate Protection Act*.
[2] Senate Bill 375 (Statues of 2008, Chapter 728). Sections 65080(b)(2)(A) and 65080(b)(2)(B).

understand whether the region is moving in a direction consistent with the SCS's planned outcomes to meet the 2020 target. If, based on this evidence, the region is not meeting its 2020 targets, SBCAG should identify what adjustments and changes the region has prioritized in the SCS to get the region on track to achieve its 2020 target when it is reasonably practical.

**SCS Strategies to Reduce GHG Emissions**

Clarify for each SCS strategy what SBCAG staff is assuming regarding the applicable geographic scope, with specific locations if known; the implementation timeframes; and what measurable actions and investments SBCAG and its member agencies will make to support and track SCS strategy implementation. CARB will use this information to assess whether the strategies are likely to be implemented as assumed and are therefore reasonable for inclusion and credit. Adding this information is especially important for the following draft 2021 RTP/SCS strategies:

CARB2
- Land Use: The draft 2021 RTP/SCS assumes land use related strategies that focus future growth within existing urbanized areas and avoid resource areas identified in the Regional Greenprint. However, the draft 2021 RTP/SCS at Chapter 3, page 12, states, "Whether, when and how to implement the RTP-SCS preferred scenario is solely up to each SBCAG member jurisdiction to decide through its local land use planning processes. Land uses assumed in the RTP/SCS preferred scenario do not represent a commitment or intention by any SBCAG member jurisdictions to implement them." While CARB recognizes that local governments have authority to control land use within their jurisdictions, CARB requests evidence of policy, funding, or technical assistance commitments from SBCAG and its local member jurisdictions that support the projected land use assumptions and strategies assumed in the draft 2021 RTP/SCS.

CARB3
- Enhanced Transit: From the strategy discussion in the draft 2021 RTP/ SCS at Chapter 3, page 34-35, it is not clear to CARB staff if SBCAG is taking credit for the Enhanced Transit strategy based on projects that are beyond what is included in the fiscally constrained project list, or that are part of the modeled transportation network for the 2021 RTP/SCS preferred scenario modeling. If SBCAG is seeking credit for this strategy based on projects that are outside what is in the fiscally constrained project list, SBCAG needs to provide CARB staff with its quantification method, the list of associated projects being assumed, and associated policy commitments. SBCAG should also identify where the forecasted funding of $204 million towards this strategy is expected to come from.

CARB4
- Electric Vehicle Infrastructure: The draft 2021 RTP/SCS at Chapter 3, page 38, indicates it will be taking credit for GHG reductions associated with a recent California Energy Commission California Electric Vehicle Infrastructure Program grant. SBCAG should confirm and clarify that it is only seeking GHG emission reduction credit for reductions associated with the local match fund portion of this project. SBCAG should also provide additional supporting information on what assumptions are being used regarding implementing this strategy, including scope of proposed installation sites to

ensure the chargers are fully utilized (i.e., not installed in industries that participates in the telework strategy), and the assumed installation timeline.

CARB5
- Telework: The draft 2021 RTP/SCS at Chapter 3, page 38, also indicates SBCAG will be assuming increased telework as a strategy that reduces VMT. SBCAG should provide additional supporting data or references for its key assumptions of 50-80 percent participation at 2-4 days of remote work per week.

CARB6 **Strategy Funding and Revenues**
The draft RTP/SCS at Chapter 5, page 2 states, "The total amount of revenue anticipated from federal, state, regional, and local sources over the life of Connected 2050 is approximately $11.3 billion. The total cost of the projects in Connected 2050 is approximately $8.2 billion." CARB staff would like to better understand from SBCAG staff the reason for this difference in projected revenue and project costs, as well as which SCS strategies rely on investment of this projected revenue for implementation.

CARB7 **Induced Travel Impacts**
The draft RTP/SCS at Chapter 2, page 42, lists the inclusion of a few roadway capacity expansion projects. However, it is unclear from the draft RTP/SCS how SBCAG has considered the impacts of road expansion projects on short- and long-run induced travel in the region. SBCAG should document its quantitative analysis of induced travel and how results were incorporated into its RTP/SCS's associated VMT and GHG estimates, along with supporting information such as maps showing the locations of regional road expansion projects compared to anticipated growth areas.

CARB staff are committed to working with SBCAG staff on potential approaches to address these requests and offer remedies, where applicable. It would be helpful to receive the identified information before the 2021 RTP/SCS adoption, so that we have an opportunity to discuss any further issues.

We look forward to continuing our collaboration with SBCAG. If you have any questions, please contact me at *Lezlie.Kimura@arb.ca.gov*, or my staff, Lana Wong, at *Lana.Wong@arb.ca.gov*.

Sincerely,

Lezlie Kimura Szeto

Lezlie Kimura Szeto, Manager
Sustainable Communities Policy and Planning Section

cc: See next page.

cc: Michael Becker, Director of Planning, SBCAG
*MBecker@sbcag.org*
Andrew Orfila, Principal Transportation Planner, SBCAG
*AOrfila@sbcag.org*
Lana Wong, Regional Liaison, Sustainable Communities Policy & Planning Section

# Letter 5

**COMMENTER:** Lezlie Kimura Szeto, Manager, California Air Resources Board

**DATE:** 7/12/2021

## Response CARB1-7

California Air Resources Board (CARB) comments numbered one through 7 are comments on Connected 2050 and not on the PEIR. Responses to these comments are found in the Connected 2050 response to comments.

**DEPARTMENT OF TRANSPORTATION**
CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711
www.dot.ca.gov/dist05/

*Making Conservation a California Way of Life.*

July 12, 2021 SCH# 2020120233

Jared Carvalho
Santa Barbara County Association of Governments
260 North San Antonio Road, Suite B
Santa Barbara, CA 93110

COMMENTS FOR THE DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE CONNECTED 2050 – REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY

Dear Mr. Carvalho:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Draft Program Environmental Impact Report (PEIR) for the Connected 2050 – Regional Transportation Plan and Sustainable Communities Strategy (RTP-SCS). Caltrans offers the following comments at this time.

Caltrans supports local development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development. Projects that support smart growth principles which include improvements to pedestrian, bicycle, and transit infrastructure (or other key Transportation Demand Strategies) are supported by Caltrans and are consistent with our mission, vision, and goals.

As a result of Senate Bill (SB) 743, effective July 2020 Caltrans replaced vehicle level of service (LOS) with vehicle miles traveled (VMT) as the primary metric for identifying transportation impacts from local development. The focus now will be on how projects are expected to influence the overall amount of automobile use instead of traffic congestion as a significant impact. For more information, please visit: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

Employing VMT as the metric of transportation impact Statewide will help to promote Green House Gas (GHG) emission reductions consistent with SB 375 and can be achieved through influencing on-the-ground development. Implementation of this change will rely, in part, on local land use decisions to reduce GHG emissions associated with the transportation sector, both at the project level, and in long-term plans (including general plans, climate action plans, specific plans, and transportation plans) and supporting Sustainable Community Strategies (SCS) developed under SB 375.

Caltrans1 Caltrans encourages a Transportation Demand Strategies (TDM) plan that increases the efficiency of the transportation system by providing options for users other than driving alone, or by shifting travel away from peak periods to help lower VMT. Examples include: locating higher density projects near transit; incorporating Complete Streets; mixed-use developments; and traffic calming measures to enhance walkability.

Caltrans2 Climate change's impact on the State Highway System (SHS) and local roadways should be addressed given the forecasted regional increase in wildfires, precipitation, and sea level rise. The SHS is the backbone of most county-level evacuation plans and often provides the only high-capacity evacuation routes from rural communities. Further, the SHS serves as the main access routes for emergency responders, and may serve as a physical line of defense such as a firebreak or an embankment against floodwaters, etc.

Caltrans3 The PEIR should consider the effects on pedestrians, bicyclists, travelers with disabilities, and transit users, including countermeasures and trade-offs resulting from mitigating VMT increases. Access for pedestrians and bicyclists to transit facilities must be maintained.

We look forward to continued partnership with SBCAG on this effort. If you have any questions, or need further clarification on items discussed above, please contact me at (805) 835-6555 or ingrid.mcroberts@dot.ca.gov.

Sincerely,

Ingrid McRoberts

Ingrid McRoberts
Development Review Coordinator
District 5, LD-IGR South Branch

# Letter 6

**COMMENTER:** Ingrid Roberts, Development Review Coordinator, California Department of Transportation

**DATE:** 7/12/2021

## Response CALTRANS1

Connected 2050 includes projects to shift travel away from single occupancy vehicles (driving alone) and other TDM strategies to lower VMT. PEIR Mitigation Measure GHG-3 *Transportation-Related GHG Reduction Measures* lists additional measures commonly used as TDM strategies to reduce VMT, as follows:

> *GHG-3 Transportation-Related GHG Reduction Measures*
>
> The implementing agency shall incorporate the most recent GHG reduction measures and/or technologies for reducing VMT and associated transportation-related GHG emissions. The measures shall be incorporated into construction plans, as appropriate, and the implementing agency shall verify implementation when practicable. Current GHG-reducing measures include the following:
>
> - Installation of electric vehicle charging stations beyond those required by State and local codes
> - Utilization of electric vehicles and/or alternatively-fueled vehicles in company fleet
> - Provision of dedicated parking for carpools, vanpool, and clean air vehicles
> - Provision of vanpool and/or shuttle service for employees
> - Implementation of reduced parking minimum requirements
> - Implementation of maximum parking limits
> - Provision of bicycle parking facilities beyond those required by State and local codes
> - Provision of a bicycle-share program
> - Expansion of bicycle routes/lanes along the project site frontage
> - Provision of new or improved transit amenities (e.g., covered turnouts, bicycle racks, covered benches, signage, lighting) if project site is located along an existing transit route
> - Expansion of existing transit routes
> - Provision of transit subsidies
> - Expansion of sidewalk infrastructure along the project site frontage
> - Provision of safe, pedestrian-friendly, and interconnected sidewalks and streetscapes
> - Provision of employee lockers and showers
> - Provision of on-site services that reduce the need for off-site travel (e.g., childcare facilities, automatic teller machines, postal machines, food services)
> - Provision of alternative work schedule options, such as telework or reduced schedule (e.g., 9/80 or 10/40 schedules), for employees

- Implementation of transportation demand management programs to educate and incentivize residents and/or employees to use transit, smart commute, and alternative transportation options

## Response CALTRANS2

Connected 2050 and the PEIR acknowledge the potential impact of climate change on the State Highway System (SHS)and local roadways. Please see response CC-1 regarding sea level rise and discussion regarding potential flooding from precipitation. Section 4.14 provides a full discussion regarding wildfire impacts on the SHS and local roadways, and Section 4.14.2 *Regulatory Setting*, identifies regional and local policies and hazard mitigation plans including the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan, which is updated every five years. These plans include identification of evacuation routes. The RTP includes projects that enhance and improve these evacuation routes.

## Response CALTRANS3

The commenter states that the PEIR should consider the effects on pedestrians, bicyclists, travelers with disabilities, and transit users, including mitigation strategies for reducing VMT, and states that access for pedestrians and bicyclists to transit facilities must be maintained. As explained under Impact T-1, Connected 2050 includes a comprehensive list of programmed and planned transportation investments that are intended to meet performance goals for mobility, safety, congestion relief, system preservation and environmental protection. Connected 2050 would improve transit service in the County, as shown in Table 4.12-7, by decreasing average travel times, increasing transit ridership, and improving transit access for the total population as well as the low-income population and for people with disabilities. Regarding bicyclists and pedestrians, Connected 2050 includes goals and policies to support bicycle and pedestrian travel and improve safety. As shown in Table 4.12-8, walking and biking trips are forecast to increase with Connected 2050 as a result of improving and expanding bicycle and pedestrian facilities.


July 12, 2021

***Sent via email***

Jared Carvalho
Transportation Planner II
Santa Barbara County Association of Governments
260 North San Antonio Road, Suite B
Santa Barbara, California 93110
JCarvalho@sbcag.org

**Re: Draft Programmatic Environmental Impact Report for Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy (State Clearing House Number 2020120233)**

Dear Mr. Carvalho:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the Draft Programmatic Environmental Impact Report ("DEIR") for the Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy for Santa Barbara County ("RTP/SCS"). The Center has reviewed the DEIR and RTP/SCS and provides these comments for consideration by the Santa Barbara County Association of Governments ("SBCAG"). As outlined in further detail below, we urge SBCAG to ensure that the DEIR fully considers and mitigates the impacts of the RTP/SCS on mountain lions, wildlife connectivity, and wildfire. As currently written, we are concerned that the DEIR does not meet these goals.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in the Central Coast and Southern California.

CBD1

## I. The EIR Must Analyze and Mitigate Impacts of the RTP/SCS to Mountain Lions (*Puma concolor*) throughout the Santa Barbara Region and Central Coast.

We are concerned that the DEIR does not adequately analyze or mitigate impacts of the RTP/SCS on mountain lions. In comments on the notice of preparation for the RTP/SCS, the California Department of Fish and Wildlife ("CDFW") specifically directed that the EIR include

a discussion of impacts to mountain lions. (DEIR at 1-3, citing DEIR, Appendix A at PDF p. 8.) CDFW correctly notes that the mountain lions in Santa Barbara County are part of the "Central Coast Central" population of mountain lions, which is provisionally listed under the California Endangered Species Act ("CESA"). (DEIR, Appendix A at PDF p. 8.) We join CDFW in requesting that – in compliance with CESA – all projects associated with the RTP/SCS be designed to allow safe passage of mountain lions under or over transportation projects that cross mountain lion movement corridors. (*Id*.) In addition, any structures adjacent to open space should include mitigation measures that reduce or eliminate mountain lion conflict (e.g., livestock should be kept in lion-proof enclosures at night), lighting should be turned away from open space, noise should be limited, pet cats and dogs should be kept indoors, and measures that reduce the risk of wildfire ignitions and/or spread should be required (e.g., avoiding new development in fire-prone areas and retrofitting existing communities with solar microgrids, ember-resistant vents and roofing, and 100-foot buffer immediately adjacent to structures with lightly irrigated native vegetation).

Moreover, while we note that the DEIR states that there is a discussion of potential impacts to mountain lions in section 4.3 (see DEIR at 1-3), we were unable to find any such discussion in the DEIR. Indeed, there is no mention of mountain lions in the DEIR except for a single passing reference on page 4.3-18.

The omission is inconsistent with SBCAG's obligations under the California Environmental Quality Act ("CEQA"). CEQA requires an EIR to provide decision-making bodies and the public with detailed information about the effect a proposed project is likely to have on the environment, to list ways in which the significant effects of a project might be minimized, and to indicate alternatives to the project. (Pub. Res. Code § 21061.) CEQA further requires a lead agency to mitigate to the extent feasible significant impacts. (CEQA Guidelines § 15064.4.) More specifically, CEQA requires a "mandatory finding of significance" if there is substantial evidence in the record that a proposed plan or project *may* cause a "wildlife *population* to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species . . . ." (CEQA Guidelines § 15065(a)(1).) This means that a project or plan is deemed to have a significant impact on the environment as a matter of law if it reduces the habitat of a species, or reduces the number or range of an endangered, rare, or threatened species. (See *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 792 fn. 12 [citing *Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1273–1274].)

Here, any further impairment of connectivity or destruction of habitat has the potential to significantly impact the Central Coast Central mountain lions, as well as the broader Evolutionarily Significant Unit ("ESU"). By way of background, there is ample scientific evidence that indicates mountain lion populations in Southern California and the Central Coast are threatened and that human activities and land use planning that does not integrate adequate habitat connectivity can have adverse impacts on mountain lions. Continued habitat loss and fragmentation has led to 10 genetically isolated populations within California. Several populations in Southern California are facing an extinction vortex due to high levels of inbreeding, low genetic diversity, and high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused

wildfires (Ernest et al. 2003; Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Benson et al. 2016; Gustafson et al. 2018; Benson et al. 2019). This is detailed in the Center's petition to the California Fish and Game Commission to protect Southern California and Central Coast mountain lions under CESA (Yap et al. 2019).

The primary threat to the long-term survival of mountain lions in the Southern California/Central Coast ESU is genetic isolation due to lack of connectivity caused by continuous development in mountain lion habitat with little regard of their movement needs. Thus, the persistence of the populations within Santa Barbara County relies heavily on being connected with mountain lions throughout the ESU *as well as* statewide. Mountain lions are wide ranging species that have home ranges of 75 to 200 $mi^2$; clearly, anthropogenic barriers are likely limiting their movement and preventing adequate gene flow for the long-term survival of mountain lions throughout the SBCAG region (Ernest et al. 2003; Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Gustafson et al. 2018; Benson et al. 2019). Yet the RTP/SCS will likely result in the allocation of funding for freeway and road expansions/widenings/construction without adequate mitigation for wildlife connectivity (*e.g.*, wildlife crossings), which fragments the landscape more severely and propagates sprawl development further out into mountain lion habitat and movement corridors. Such development without addressing wildlife connectivity issues and integrating effective wildlife crossings and corridors could lead to the extirpation of multiple mountain lion populations in the Santa Barbara and Central Coast region.

As the last remaining wide-ranging top predator in the region, impacts to mountain lions in the Santa Barbara Region could have severe ecological consequences; loss of the keystone species could have ripple effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function. In some ecosystems that lack mountain lions, increased deer populations can overgraze vegetation and cause stream banks to erode (Ripple and Beschta 2006; Ripple and Beschta 2008). Many scavengers, including foxes, raptors, and numerous insects, can lose a reliable food source without mountain lions (Ruth and Elbroch 2014; Barry et al. 2019). Fish, birds, amphibians, reptiles, rare native plants, and butterflies could diminish if this apex predator were lost (Ripple and Beschta 2006; Ripple and Beschta 2008; Ripple et al. 2014).

SBCAG also has an obligation to protect species that are listed or provisionally listed under CESA, including Central Coast and Southern California mountain lions. Under CESA, the SBCAG may not approve projects (including the RTP/SCS) that could jeopardize the continued existence of these populations or result in destruction of essential habitat (Cal. Fish & Game Code § 2053(a) and SBCAG must require that appropriate mitigation measures be implemented for projects that could destroy mountain lion habitat or impair connectivity (Cal. Fish & Game Code § 2054).

Given that the Central Coast South mountain lion population are a candidate species under the CESA, the DEIR must be revised and recirculated to analyze and fully mitigate potential impacts on these populations in compliance with both CESA and CEQA.

CBD2

## II. The EIR Must Analyze and Mitigate Impacts of the RTP/SCS on Wildlife Movement and Habitat Connectivity.

The EIR must analyze the potential impacts of the RTP/SCS and its associated projects on wildlife connectivity. Roads and development create barriers that lead to habitat loss and fragmentation, which harms native wildlife, plants, and people. As barriers to wildlife movement, poorly-planned development and roads can affect an animal's behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, landscapes, and ecosystem function (Mitsch and Wilson 1996; Trombulak and Frissell 2000; van der Ree et al. 2011; Brehme et al. 2013; Haddad et al. 2015; Marsh and Jaeger 2015; Ceia-Hasse et al. 2018). For example, as noted above, habitat fragmentation from roads and development has been shown to cause mortalities and harmful genetic isolation in mountain lions in southern California (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015), increase local extinction risk in amphibians and reptiles (Cushman 2006; Brehme et al. 2018), cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al. 2010; Loss et al. 2014; Kantola et al. 2019), and alter pollinator behavior and degrade habitats (Trombulak and Frissell 2000; Goverde et al. 2002; Aguilar et al. 2008). Habitat fragmentation also severely impacts plant communities. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes (Damschen et al. 2019). The authors conclude that efforts to preserve and enhance connectivity will pay off over the long-term (Damschen et al. 2019). In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes (Heller and Zavaleta 2009; Cushman et al. 2013; Krosby et al. 2018). Loss of wildlife connectivity decreases biodiversity and degrades ecosystems.

Edge effects of development in and adjacent to open space will likely impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks 2002; Riley et al. 2006; Delaney et al. 2010; Lee et al. 2012; Smith et al. 2015; Vickers et al. 2015; Smith et al. 2017; Wang et al. 2017), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Cushman 2006; Slabbekoorn and Ripmeester 2008; Benítez-López et al. 2010; Kociolek et al. 2011). Limiting movement and dispersal can affect species' ability to find food, shelter, mates, and refugia after disturbances like fires or floods. Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. Negative edge effects from human activity, such as traffic, lighting, noise, domestic pets, pollutants, invasive weeds, and increased fire frequency, have been found to be biologically significant up to 300 meters (~1000 feet) away from anthropogenic features in terrestrial systems (Environmental Law Institute 2003)

The EIR must also consider corridor redundancy (*i.e*. the availability of alternative pathways for movement) because it allows for improved functional connectivity and resilience. Compared to a single pathway, multiple connections between habitat patches increase the probability of movement across landscapes by a wider variety of species, and they provide more habitat for low-mobility species while still allowing for their dispersal (Mcrae et al., 2012; Olson

& Burnett, 2008; Pinto & Keitt, 2008). In addition, corridor redundancy provides resilience to uncertainty, impacts of climate change, and extreme events, like flooding or wildfires, by providing alternate escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008; Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008).

Corridor redundancy is critical when considering the impacts of climate change on wildlife movement and habitat connectivity. Climate change is increasing stress on species and ecosystems, causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure and processes, and increasing species extinction risk (Warren et al. 2011). A 2016 analysis found that climate-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed (Wiens 2016). A separate study estimated that nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their distribution (Pacifici et al. 2017). A 2016 meta-analysis reported that climate change is already impacting 82 percent of key ecological processes that form the foundation of healthy ecosystems and on which humans depend for basic needs (Scheffers et al. 2016). Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress (Parmesan and Yohe 2003; Root et al. 2003; Parmesan 2006; Chen et al. 2011; Maclean and Wilson 2011; Warren et al. 2011; Cahill et al. 2012).

The DEIR must also analyze the RTP/SCS's potential impacts to riparian corridors. Riparian ecosystems have long been recognized as biodiversity hotspots performing important ecological functions in a transition zone between freshwater systems and upland habitats. Many species that rely on these aquatic habitats also rely on the adjacent upland habitats (*e.g.*, riparian areas along streams, and grassland habitat adjacent to wetlands). In fact, 60% of amphibian species, 16% of reptiles, 34% of birds and 12% of mammals in the Pacific Coast ecoregion depend on riparian-stream systems for survival (Kelsey and West 1998). Many other species, including mountain lions and bobcats, often use riparian areas and natural ridgelines as migration corridors or foraging habitat (Dickson et al, 2005; Hilty & Merenlender, 2004; Jennings & Lewison, 2013; Jennings & Zeller, 2017). Additionally, fish rely on healthy upland areas to influence suitable spawning habitat (Lohse et al. 2008), and agricultural encroachment on these habitats and over-aggressive removal of riparian areas have been identified as a major driver of declines in freshwater and anadromous fish (e.g., Stillwater Sciences 2002; Lohse et al. 2008; Moyle et al. 2011). Therefore, buffers that allow for connectivity between the aquatic resource and upland habitat is vital for many species to persist.

It is estimated that 90-95% of historic riparian habitat in the state has been lost (Bowler 1989; Riparian Habitat Joint Venture 2009). Using 2002 land cover data from CalFire, the Riparian Habitat Joint Venture estimated that riparian vegetation makes up less than 0.5% of California's total land area at about 360,000 acres (Riparian Habitat Joint Venture 2004). This is alarming because riparian habitats perform a number of biological and physical functions that benefit wildlife, plants, and humans, and loss of what little is left will have severe, harmful impacts on special-status species, overall biodiversity, and ecosystem function. California cannot afford to lose more riparian corridors.

A literature review found that recommended buffers for wildlife often far exceeded 100 meters (~325 feet), well beyond the largest buffers implemented in practice (Robins 2002). For example, Kilgo et al. (1998) recommend more than 1,600 feet of riparian buffer to sustain bird diversity. In addition, amphibians, which are considered environmental health indicators, have been found to migrate over 1,000 feet between aquatic and terrestrial habitats through multiple life stages (Semlitsch and Bodie 2003; Trenham and Shaffer 2005; Cushman 2006; Fellers and Kleeman 2007). Accommodating the more long-range dispersers is vital for continued survival of species populations and/or recolonization following a local extinction (Semlitsch and Bodie 2003; Cushman 2006). In addition, more extensive buffers provide resiliency in the face of climate change-driven alterations to these habitats, which will cause shifts in species ranges and distributions (Cushman et al., 2013; Heller & Zavaleta, 2009; Warren et al., 2011). This emphasizes the need for sizeable riparian and upland buffers around streams and wetlands in and adjacent to any project included in the RTP/SCS, as well as connectivity corridors between heterogeneous habitats. Again, the EIR must adequately assess and mitigate impacts to local, regional, and global wildlife movement and habitat connectivity.

It is widely recognized that the continuing fragmentation of habitat by humans threatens biodiversity and diminishes our (humans, plants, and animals) ability to adapt to climate change. In a report for the International Union for Conservation of Nature (IUCN), world-renowned scientists from around the world stated that "[s]cience overwhelmingly shows that interconnected protected areas and other areas for biological diversity conservation are much more effective than disconnected areas in human-dominated systems, especially in the face of climate change" and "[i]t is imperative that the world moves toward a coherent global approach for ecological connectivity conservation, and begins to measure and monitor the effectiveness of efforts to protect connectivity and thereby achieve functional ecological networks" (Hilty et al. 2020).

Given the potential for the RTP/SCS to fragment and destroy important habitat, including riparian areas, the Center urges the SBCAG to avoid further fragmentation and degradation of existing, intact, heterogeneous habitats and incorporate clear and enforceable wildlife connectivity mitigation measures that address the needs of target species into the RTP/SCS and EIR. Unfortunately, as currently written, it appears that the DEIR does not include such measures. The RTP/SCS should encourage the involvement of wildlife connectivity experts from CDFW and other agencies, organizations, academic institutions, communities, and local groups starting at the initial planning stage of development and transportation projects so that habitat connectivity can be strategically integrated into project design and appropriately considered in the project budget. The RTP/SCS should require road and highway projects to include adequate wildlife crossing infrastructure in order to reduce impacts to mountain lions and other species.

In incorporating such measures into future drafts of the EIR and RTP/SCS, it is important to consider that different species have different behaviors and needs that affect how they move. For example, smaller species with poor dispersal abilities, like rodents and herpetofauna, would require more frequent intervals of crossings compared to larger wide-ranging species, like mountain lions or coyotes, to increase their chances of finding a crossing. Gunson et al. (2016) recommend that crossing structures generally be spaced about 300m (~0.19mi) apart for small

animals when transportation infrastructure bisects large expanses of continuous habitat, though they recognize that some amphibians may need more frequent crossings no more than 50m (~0.03mi) apart. And for many amphibian and reptile species, undercrossings should have grated tops so that the light and moisture inside the crossings are similar to that of the ambient environment. Brehme and Fisher (2020) also provides additional guidance regarding amphibian crossings. Therefore, multiple crossings designed for different target species may be required. In-depth analyses that include on-the-ground movement studies of which species are moving in the area and their home range area, habitat use, and patterns of movement are needed to determine how to best implement such crossings. In addition, associated crossing infrastructure (*e.g.*, exclusionary fencing appropriate for target species, berms to buffer crossings from sound and light) should be included to improve chances of wildlife using crossings, and such crossings and associated infrastructure should be designed and built in consultation with local and regional experts, including agency biologists. And to improve the effectiveness of any wildlife crossings, there should be protected habitat on both sides of the crossing; therefore, mitigation should also include acquiring unprotected lands on both sides of the roads where a wildlife crossing would be implemented, again, in consultation with local conservation organizations and stakeholders, and preserving and managing those lands in perpetuity to ensure that the wildlife crossings and associated infrastructure remain functional over time. Given that impacts of noise, light, and vibration can affect the use of wildlife crossings, even if crossings are designed with adequate parameters and fencing, the crossings should be built with wildlife responsive design; crossings should have sound and light berms to minimize light and sound at the entrance/exit as well as on/in/under the crossings structures, and they should be well-maintained on both sides of the crossing for animals to use them (Shilling 2020; Vickers 2020).

CBD3

## III. The EIR Must Adequately Assess and Mitigate Impacts of New Development in High Fire-prone Areas to Wildfire Risk.

Fire is a natural and necessary ecological process for many different ecosystems within the region; however, increased human-caused ignitions and the expansion of flammable non-native grasses has led to increased fire activity in the area, which is harmful to numerous biological resources and people.

CBD4

### A. The EIR Must Fully Inform the Public and Decisionmakers of the Potential Impacts of More Fire Ignitions from Placing Homes and People in High Fire-Prone Areas.

According to a report from Governor Gavin Newsom's Office, construction of more homes in the wildland-urban interface is one of the main factors that "magnify the wildfire threat and place substantially more people and property at risk than ever before" (Governor Newsom's Strike Force 2019). Syphard et al. (2019) found that housing and human infrastructure in fire-prone wildlands are the main drivers of fire ignitions and structure loss. This is not new information; scientists have been reporting it for many years in scientific, peer-reviewed journals, and firefighters have observed it.

As outlined in the Center's recent report, *Built to Burn*[1], increasing housing development in high fire-risk wildlands is putting more people in harm's way and contributing to a dramatic increase in costs associated with fire suppression and damages. Next 10 and UC Berkeley's recent report, *Rebuilding for a Resilient Recovery: Planning in California's Wildland Urban Interface*[2], likewise found that state and local land use policies are increasing the economic and human cost of wildfire by encouraging rebuilding in the high risk-wildland urban interface instead of focusing development away from fire-prone areas. Sprawl developments with low/intermediate densities extending into habitats that are prone to fire have led to more frequent wildfires caused by human ignitions, like power lines, arson, improperly disposed cigarette butts, debris burning, fireworks, campfires, or sparks from cars or equipment (Keeley et al. 1999; Keeley and Fotheringham 2003; Syphard et al. 2007; Syphard et al. 2012; Bistinas et al. 2013; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard et al. 2019). Human-caused fires account for 95-97% of all fires in Southern California's Mediterranean habitats (Syphard et al. 2007; Balch et al. 2017). In some Southern California counties, Keeley and Syphard (2018) found that human ignitions were responsible for 98-100% of fires between 1919-2016. Leapfrog developments in high fire-prone areas have the highest predicted fire risk (Syphard et al. 2013), and multiple studies indicate that developments with low/intermediate-density clusters surrounded by fire-dependent vegetation (*i.e.*, grasslands, chaparral, scrub) in areas with a history of fires have the highest chances of burning (Syphard et al. 2012; Bistinas et al. 2013; Syphard et al. 2013; Syphard et al. 2019). The EIR must clearly outline and summarize the scientific evidence linking development in high fire-prone wildlands with increased fire risk; the RTP/SCS could result in the placement of more homes, infrastructure, roads, and communities in high fire-prone areas that have burned in the past and will inevitably burn again.

The EIR must acknowledge the potential wildfire hazard from increased human-caused ignitions in the Santa Barbara region. By placing people in fire-prone areas, the induced sprawl perpetuated by the RTP/SCS would increase the number of potential ignition sources, and therefore the risk of wildfires occurring. In addition, power lines and electrical equipment are a significant source of human-caused ignitions (Keeley and Syphard 2018). The 2017 Thomas Fire, 2017 Tubbs Fire, 2018 Camp Fire, and 2018 Woolsey Fire were found to have been caused by electrical transmission lines and electrical equipment, and the 2019 Kincade Fire is suspected to have been caused by power lines as well. Placing homes and people in high fire-prone areas would only increase the potential likelihood of these ignition sources, as has been documented in multiple scientific studies (Keeley et al. 1999; Keeley and Fotheringham 2003; Syphard et al. 2007; Syphard et al. 2012; Bistinas et al. 2013; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard et al. 2019).

Although public utilities companies (*i.e.*, PG&E and Southern California Edison) are altering operations in the form of power outages and blackouts during extreme weather conditions (Callahan et al. 2019; Krishnakumar et al. 2019; Fry et al. 2019a), wildfires can still spark and spread quickly towards homes, as evidenced by the wildfires in Moraga (Hernández et

---

[1] Tiffany Yap, et al, *Built to Burn: California's Wildlands Developments Are Playing With Fire* (Feb. 2021), available at https://www.biologicaldiversity.org/programs/urban/pdfs/Built-to-Burn-California-Wildfire-Report-Center-Biological-Diversity.pdf.

[2] Next 10 and UC Berkeley, *Rebuilding for a Resilient Recovery: Planning in California's Wildland Urban Interface* (June 2021), available at https://www.next10.org/sites/default/files/2021-06/Next10-Rebuilding-Resilient-Final.pdf.

al. 2019) and Saddleridge/Sylmar (Fry et al. 2019b). And the power outages themselves disproportionately burden our most vulnerable communities, including the elderly, poor, and disabled (Chabria and Luna 2019), and can cause traffic jams and collisions (CBS San Francisco 2019). Michael Wara, Director of the Climate and Energy Policy Program and a senior research scholar at the Stanford Woods Institute for the Environment, estimated that PG&E's power outage in Northern and Central California could have an economic impact of $2.5 billion in losses, with most of the burden on businesses (Callahan et al. 2019). It is clear that placing more homes and businesses in known fire-prone areas and wind corridors is irresponsible and can lead to deadly and costly consequences.

While the DEIR does acknowledge that some projects associated with the RTP/SCS would have significant impacts (DEIR at 4.14-16 & 4.14-17), the DEIR must describe in detail the full extent of these impacts to people, ecosystems, and wildlife based upon the best available science. It must also fully consider alternatives to the proposed RTP/SCS that do not increase the risk of wildfires.

CBD5

**B. The EIR Must Adequately Assess and Mitigate the Impacts to Special-status Species Due to Increased Human-caused Ignitions.**

As mentioned previously, sprawl developments with low/intermediate densities extending into habitats that are prone to fire, such as chaparral and scrub/shrubland habitats, have led to more frequent wildfires caused by human ignitions, and these types of developments have the highest chances of burning (Keeley et al. 1999; Keeley and Fotheringham 2003; Syphard et al. 2007; Syphard et al. 2012; Bistinas et al. 2013; Syphard et al. 2013; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard et al. 2019). This could disrupt the natural fire regime and lead to a dangerous feedback loop of deadly fires and habitat destruction.

Significant portions of the Santa Barbara region are dominated by chaparral and scrub/shrublands, native California habitats that are adapted to infrequent (every 30 to 150 years or more), large, high-intensity crown fire regimes (Keeley and Fotheringham 2001). However, if these regimes are disrupted, the habitats become degraded (Keeley 2005; Keeley 2006; Syphard et al. 2018). When fires occur too frequently, type conversion occurs and the native shrublands are replaced by non-native grasses and forbs that burn more frequently and more easily, ultimately eliminating native habitats and biodiversity while increasing fire threat over time (Keeley 2005; Keeley 2006; Syphard et al. 2009; Safford and Van de Water 2014; Syphard et al. 2018). This could have serious consequences for special-status species in the Santa Barbara region that rely on these native habitats for survival, like California tiger salamanders and least bell's vireos. In addition, large-scale landscape changes due to vegetation-type conversion from shifts in natural fire regimes could impact wide-ranging species like mountain lions (Jennings 2018), whose populations are already struggling in the area due to lack of connectivity and genetic isolation (Gustafson et al. 2018; Dellinger 2019).

CBD6

### C. The FEIR Fails to Adequately Assess and Mitigate the Potential Health and Air Quality Impacts from Increased Smoke from Human-caused Ignitions.

Human-caused wildfires at the urban wildland interface that burn through developments are becoming more common with housing extending into fire-prone habitats. This is increasing the frequency and toxicity of smoke exposure to communities in and downwind of the fires. This can lead to harmful public health impacts due to increased air pollution not only from burned vegetation, but also from burned homes, commercial buildings, cars, etc. Buildings and structures often contain plastic materials, metals, and various stored chemicals that release toxic chemicals when burned, such as pesticides, solvents, paints, and cleaning solutions (Weinhold 2011).

Increased fire frequency due to human activity and ill-placed developments lead to increased occurrences of poor outdoor and indoor air quality from smoke (*e.g.*, Phuleria et al. 2005), which can have public health effects. Hospital visits for respiratory symptoms (*e.g.*, asthma, acute bronchitis, pneumonia, or chronic obstructive pulmonary disease) and cardiovascular symptoms have been shown to increase during and/or after fire events (Künzli et al. 2006; Viswanathan et al. 2006; Delfino et al. 2009; Rappold et al. 2012; Liu et al. 2015; Reid et al. 2016). Children, elderly, and those with underlying chronic disease are the most vulnerable to the harmful health effects of increases in wildfire smoke. The EIR does not include sufficient analysis of the RTP/SCS's potential impacts of increased smoke exposure due to increased human-caused ignitions.

CBD7

### D. The EIR Must Adequately Assess and Mitigate the Impact of Increased Wildfires on Fire Protection Services and Utilities.

The DEIR does not adequately consider the impacts on firefighters and first responders of the growth induced by the RTP/SCS in high fire-prone natural areas subject to intermittent wildfires. Adding more development to these wild areas will necessitate significant firefighting costs from both state and local authorities. Cal Fire is primarily responsible for addressing wildfires when they occur, and its costs have continued to increase as wildfires in the wildland urban interface have grown more destructive. During the 2017-2018 and the 2018-2019 fiscal years, Cal Fire's fire suppression costs were $773 million and an estimated $635 million, respectively (Cal Fire 2019). Note that this does not include the cost of lives lost, property damage, or clean up during these years, which is estimated to be billions of dollars. The vast majority of wildfires in southern California are caused by humans (Balch et al. 2017; Keeley and Syphard 2018), and inducing sprawl development in high fire hazard areas will increase the frequency and likelihood of such fires (Syphard et al. 2012; Syphard et al. 2013; Radeloff et al. 2018; Syphard et al. 2019). SBCAG should not be approving an RTP/SCS that will induce unsustainable sprawl in high fire-prone areas and burden future generations of California with the costs of defending and recovering even more cities from dangerous blazes.

According to Captain Michael Feyh of the Sacramento Fire Department, California no longer has a fire season (Simon 2018); wildfires in California are now year-round because of increased human ignitions in fire-prone areas. Emergency calls to fire departments have tripled

since the 1980s (Gutierrez and Cassidy 2018), and firefighters (and equipment) are being spread thin throughout the state. Firefighters often work 24- to 36-hour shifts for extended periods of time (often weeks at a time), and they are being kept away from their homes and families for more and more days out of the year (Bransford et al. 2018; Del Real and Kang 2018; Gutierrez 2018; Simon 2018; Ashton et al. 2018). In addition, the firefighting force often must rely on volunteers to battle fires year-round.

The extended fire season is taking a toll on the physical, mental, and emotional health of firefighters, as well as the emotional health of their families (Del Real and Kang 2018; Simon 2018; Ashton et al. 2018). The physical and mental fatigue of endlessly fighting fires and experiencing trauma can lead to exhaustion, which can cause mistakes in life-or-death situations while on duty, and the constant worry and aftermath that family members endure when their loved ones are away working in life-threatening conditions can be harrowing (Ashton et al. 2018). According to psychologist Dr. Nancy Bohl-Penrod, the strain of fighting fires without having sufficient breaks can impact firefighters' interactions with their families, their emotions, and their personalities (Bransford et al. 2018). There have also been reports that suicide rates and substance abuse have been increasing among firefighters (Simon 2018; Greene 2018). This is not sustainable.

The EIR must adequately assess and mitigate the impacts to fire protection services. Placing an additional development in fire-prone areas will further burden already strained people and resources. Funding is already lacking for the increasing costs of fire suppression and property damage from wildfires in California; costs were over $30 billion from 2010 to 2017, and the destruction from 2018's Camp Fire and Woolsey Fire will likely cost additional billions of dollars. And the draft RTP/SCS does not appear to provide a mechanism for developers to reimburse Cal Fire for the many millions (or billions) of dollars Cal Fire will likely expend when—not if—Central Coast and Southern California communities need to be defended from natural or human-caused wildfires in the vicinity. If costs are not sufficiently covered by the developers, California and federal residents end up paying in the form of fire insurance premiums and taxes that support Cal Fire and federal government subsidies and grants for homes in high risk areas. And these costs do not include other indirect/hidden costs associated with wildfires, such as the costs of doctors' appointments, medication, sick days taken from places of work, funerals, etc. As the costs of housing in California continues to increase, these costs will also continue to rise. Given the current lack of funding and shortage of firefighting personnel, any development in high fire-prone areas should be required to provide adequate funding and resources for firefighting operations and safety measures.

CBD8

### E. The FEIR Fails to Provide Adequate Fire Safety Measures to Effectively Mitigate Wildfire Impacts.

While the DEIR does provide WF-1 to mitigate the RTP/SCS's wildfire impacts (DEIR at ES-49), this measure does not constitute "all feasible mitigation measures," as required by CEQA. *First and foremost*, the primary policy to minimize impacts to wildfire risk should be to avoid placing human infrastructure in high fire-prone areas, yet this does not appear to be included in the mitigation measures (or the draft RTP/SCS). *Second*, developers should be required to go above and beyond current state and federal standards and building codes to further

minimize wildfire risk. While enforceable defensible space regulations are a laudable goal, recommending that developers follow the law and build to code is insufficient. Although defensible space immediately adjacent to structures and ember-resistant vents and roofing may help make homes *fire-resistant*, even the best mitigation cannot make a development *fire-proof*. According to an analysis conducted in the aftermath of the Camp Fire, while 51% of homes built to code survived the blaze, the remaining 49% did not (Kasler and Reese 2019). In addition, homes can add fuel to fires, and fire safety is not guaranteed.

There are other mitigation measures that should be implemented to minimize wildfire impacts sprawl development in high fire-prone areas. For example, external sprinklers with an independent water source would reduce flammability of structures (California Chaparral Institute 2018). Although external sprinklers are not required by law, water-protected structures are much less likely to burn compared to dry structures, yet the DEIR does not provide this in the recommended project level mitigation measures. We note, however, that the DEIR does report that the City of Goleta's General Plan does require automatic fire sprinklers on some buildings. (DEIR at 4.14-8.) The DEIR should require external sprinkler systems for any new development in wildfire zones. In addition, local solar power paired with batteries could reduce power flow (and therefore reduce extreme temperatures) in electricity lines, which would reduce the need for power outages during extreme weather conditions and provide power for communities when outages are necessary (Lee 2019). Michael Wara argues that solar power and batteries for homes and "microgrids" linking business districts would help make communities in high fire risk areas safer because it would provide backup power for medical devices, refrigerators, and the internet to run while allowing the main power grid to get shut down (Wara 2018).

Public safety threats are often exacerbated by infrastructure unable to accommodate the consequences of more human-caused fires at the wildland urban interface. Thus, it is imperative that adequate safety plans for residents and construction/maintenance workers that reflect real-world experience associated with wildfires in California are in place prior to an emergency. Notification systems may not function as expected during an emergency, and evacuation routes can get clogged with traffic quickly, endangering the lives of those trying to evacuate. In addition, the combination of smoke obscuring roads and signage, trees collapsing or being flung into roadways by the wind, and the emotional state of those fleeing for their lives can lead to deadly collisions and roadblocks. And survivors are left to cope with the death of loved ones, physical injuries, and emotional trauma from the chaos that wildfires have inflicted on their communities. These issues are heartbreakingly depicted in an article published in the Sacramento Bee on Oct 22, 2017 (Lundstrom et al. 2017).

It is important to note that even if an adequate evacuation plan is in place, in natural areas with high fire threat where fires have historically burned, a public safety or evacuation plan may not be enough to safeguard people and homes from fires. Having warning systems and evacuation routes in place is important for fire preparedness and fire safety, but these are not guaranteed to function when a fire occurs. And wildfires may ignite with little or no notice, and, as mentioned previously, in severe weather conditions, wind-driven fires can spread quickly—they can cover 10,000 hectares in one to two days as embers are blown ahead of the fires and towards adjacent fuels (e.g., flammable vegetation, structures) (Syphard et al. 2011). This occurred in the Camp Fire in Butte County, which spread at a rate of 80 hectares a minute (about

one football field per second) at its fastest, and in its first 14 hours burned over 8,000 hectares (Sabalow et al. 2018). In these types of emergencies warning systems can be slow and ineffective at reaching all residents in harm's way, and planned evacuation routes may not be sufficient. These issues were observed during the Camp Fire, which led to at least 85 deaths and 13,000 burned homes (Sabalow et al. 2018), as well as in last year's Tubbs Fire in Sonoma County and Thomas Fire in Santa Barbara County and Ventura County, which led to more than 40 deaths and almost $12 billion in property damage (Lundstrom et al. 2017; St. John 2017). The EIR must fully disclose the danger of fast-moving wildfires and mitigate the resulting impacts.

## IV. Conclusion

Thank you for the opportunity to submit comments on the DEIR for the RTP/SCS. We look forward to working with SBCAG to foster land use policy and growth patterns that promote wildlife movement and habitat connectivity and facilitate public health and safety. Please do not hesitate to contact the Center with any questions at the email addresses listed below.

Sincerely,

J.P. Rose
Senior Attorney
Center for Biological Diversity
660 S. Figueroa Street, Suite 1000
Los Angeles, California, 90017
jrose@biologicaldiversity.org

Tiffany Yap, D.Env/PhD
Wildlife Corridor Advocate
Center for Biological Diversity
1212 Broadway, Suite 800
Oakland, California 94612
tyap@biologicaldiversity.org

## References

(*provided on via OneDrive link*)


Aguilar R, Quesada M, Ashworth L, Herrerias-Diego Y, Lobo J (2008) Genetic consequences of habitat fragmentation in plant populations: Susceptible signals in plant traits and methodological approaches. Mol Ecol 17:5177–5188

Ashton A, Lillis R, Ramirez W (2018) 249 nights away at California fires : Firefighter families cope with a 'new normal.' Sacramento Bee

Balch JK, Bradley BA, Abatzoglou JT, Nagy RC, Fusco EJ, Mahood AL (2017) Human-started wildfires expand the fire niche across the United States. Proc Natl Acad Sci 114:2946–2951

Barry JM, Elbroch LM, Aiello-lammens ME, Sarno RJ, Seelye L, Kusler A, Quigley HB (2019) Pumas as ecosystem engineers: ungulate carcasses support beetle assemblages in the Greater Yellowstone Ecosystem. Oecologia 577–586

Benítez-López A, Alkemade R, Verweij PA (2010) The impacts of roads and other infrastructure on mammal and bird populations: A meta-analysis. Biol Conserv 143:1307–1316

Benson JF, Mahoney PJ, Sikich JA, Serieys LEK, Pollinger JP, Ernest HB, Riley SPD (2016) Interactions between demography, genetics, and landscape connectivity increase extinction probability for a small population of large carnivores in a major metropolitan area. Proc R Soc B Biol Sci 283:20160957

Benson JF, Mahoney PJ, Vickers TW, Sikich JA, Beier P, Riley SPD, Ernest HB, Boyce WM (2019) Extinction vortex dynamics of top predators isolated by urbanization. Ecol Appl 29:e01868

Bistinas I, Oom D, Sá ACL, Harrison SP, Prentice IC, Pereira JMC (2013) Relationships between human population density and burned area at continental and global scales. PLoS One 8:1–12

Bowler PA (1989) Riparian woodland: An endangered habitat in southern California. Proc 15th Annu Symp South Calif Bot 3:80–97

Bransford S, Medina J, Del Real JA (2018) Firefighters Reflect on a Job Now 'Twice as Violent'. New York Times

Brehme CS, Fisher RN (2020) Research to Inform Caltrans Best Management Practices for Reptile and Amphibian Road Crossings

Brehme CS, Hathaway SA, Fisher RN (2018) An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California. Landsc Ecol 33:911–935

Brehme CS, Tracey JA, Clenaghan LRMC, Fisher RN (2013) Permeability of roads to movement of scrubland lizards and small mammals. Conserv Biol 27:710–720

Cahill AE, Aiello-Lammens ME, Fisher-Reid MC, Hua X, Karanewsky CJ, Ryu HY, Sbeglia GC, Spagnolo F, Waldron JB, Warsi O, Wiens JJ (2012) How does climate change cause extinction? Proc R Soc B Biol Sci 280:20121890

Cal Fire (2019) Emergency Fund Fire Suppression Expenditures

California Chaparral Institute (2018) Independent external sprinklers to protect your home during a wildfire

Callahan M, Rossmann R, Schmitt W (2019) Winds pick up as PG&E shutoff enters second day. Press Democr.

CBS San Francisco (2019) Power Outage Results In Multiple Crashes , Injuries At Santa Rosa Intersections. CBS San Fr.

Ceia-Hasse A, Navarro LM, Borda-de-Água L, Pereira HM (2018) Population persistence in landscapes fragmented by roads: Disentangling isolation, mortality, and the effect of dispersal. Ecol Modell 375:45–53
Chabria A, Luna T (2019) PG&E power outages bring darkness , stress and debt to California's poor and elderly. Los Angeles Times
Chen I-C, Hill JK, Ohlemüller R, Roy DB, Thomas CD (2011) Rapid range shifts of species associated with high levels of climate warming. Science (80- ) 333:1024–1026
Crooks KR (2002) Relative sensitivities of mammalian carnivores to habitat fragmentation. Conserv Biol 16:488–502
Cushman SA (2006) Effects of habitat loss and fragmentation on amphibians: A review and prospectus. Biol Conserv 128:231–240
Cushman SA, McRae B, Adriaensen F, Beier P, Shirley M, Zeller K (2013) Biological corridors and connectivity. In: Macdonald DW, Willis KJ (eds) Key Topics in Conservation Biology 2, First Edit. John Wiley & Sons, Ltd., pp 384–403
Damschen EI, Brudvig LA, Burt MA, Jr RJF, Haddad NM, Levey DJ, Orrock JL, Resasco J, Tewksbury JJ (2019) Ongoing accumulation of plant diversity through habitat connectivity in an 18-year experiment. Science (80- ) 365:1478–1480
Del Real JA, Kang I (2018) California Today: The Increasing Strain on State Firefighters. New York Times
Delaney KS, Riley SPD, Fisher RN (2010) A rapid, strong, and convergent genetic response to urban habitat fragmentation in four divergent and widespread vertebrates. PLoS One 5:1–11
Delfino RJ, Brummel S, Wu J, Stern H, Ostro B, Lipsett M, Winer A, Street DH, Zhang L, Tjoa T, Gillen DL (2009) The relationship of respiratory and cardiovascular hospital admissions to the southern California wildfires of 2003. Occup Environ Med 66:189–197
Dellinger J (2019) Relationship between habitat and genetics in a wide-ranging large carnivore. Temecula, CA
Dickson BG, Jennes JS, Beier P (2005) Influence of Vegetation, Topography, and Roads on Cougar Movement in Southern California. J Wildl Manage 69:264–276
Environmental Law Institute (2003) Conservation thresholds for land use planners
Ernest HB, Boyce WM, Bleich VC, May B, Stiver SJ, Torres SG (2003) Genetic structure of mountain lion (Puma concolor) populations in California. Conserv Genet 353–366
Ernest HB, Vickers TW, Morrison SA, Buchalski MR, Boyce WM (2014) Fractured genetic connectivity threatens a Southern California puma (Puma concolor) population. PLoS One 9:
Fellers GM and, Kleeman PM (2007) California Red-Legged Frog (Rana draytonii) Movement and Habitat Use : Implications for Conservation. J Herpetol 41:276–286
Fry H, Dolan M, Luna T, Serna J (2019a) Gov. Newsom slams PG&E over 'unacceptable' power outages and failure to fix systems. Los Angeles Times
Fry H, Miller L, Ormseth M, Serna J (2019b) Saddleridge fire explodes to 4 , 700 acres , burns 25 homes in San Fernando Valley. Los Angeles Times
Goverde M, Schweizer K, Baur B, Erhardt A (2002) Small-scale habitat fragmentation effects on pollinator behaviour: Experimental evidence from the bumblebee Bombus veteranus on calcareous grasslands. Biol Conserv 104:293–299
Governor Newsom's Strike Force (2019) Wildfires and Climate Change: California's Energy Future
Greene D (2018) California Firefighters Battle Exhaustion. Natl. Public Radio

Gunson K, Seburn D, Kintsch J, Crowley J (2016) Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario
Gustafson KD, Gagne RB, Vickers TW, Riley SPD, Wilmers CC, Bleich VC, Pierce BM, Kenyon M, Drazenovich TL, Sikich JA, Boyce WM, Ernest HB (2018) Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. Conserv Genet 20:215–227
Gutierrez M (2018) California blazes tax budgets, firefighters : 'Fatigue is starting to set in''.' SFChronicle
Gutierrez M, Cassidy M (2018) As California burns, volunteer firefighters become harder to find. SFChronicle
Haddad NM, Brudvig LA, Clobert J, Davies KF, Gonzalez A, Holt RD, Lovejoy TE, Sexton JO, Austin MP, Collins CD, Cook WM, Damschen EI, Ewers RM, Foster BL, Jenkins CN, King AJ, Laurance WF, Levey DJ, Margules CR, Melbourne BA, Nicholls AO, Orrock JL, Song D, Townshend JR (2015) Habitat fragmentation and its lasting impact on Earth's ecosystems. Sci Adv 1:1–9
Heller NE, Zavaleta ES (2009) Biodiversity management in the face of climate change: A review of 22 years of recommendations. Biol Conserv 142:14–32
Hernández L, Gafni M, Bauman A (2019) Moraga blaze 100% contained. San Fr. Chron.
Hilty J, Worboys G, Keeley A, Woodley S, Lausche B, Locke H, Carr M, Pulsford I, Pittock J, White W, Theobald D, Levine J, Reuling M, Watson J, Ament R, Tabor G (2020) Guidelines for conserving connectivity through ecological networks and corridors. Gland, Switzerland
Hilty JA, Merenlender AM (2004) Use of Riparian Corridors and Vineyards by Mammalian Predators in Northern California. Conserv Biol 18:126–135
Jennings M (2018) Effects of Wildfire on Wildlife and Connectivity
Jennings M, Lewison R (2013) Planning for Connectivity Under Climate Change: Using Bobcat Movement To Assess Landscape Connectivity Across San Diego County's Open Space
Jennings M, Zeller K (2017) Comprehensive Mmulti-species Connectivity Assessment and Planning for the Highway 67 Region of San Diego County, California
Kantola T, Tracy JL, Baum KA, Quinn MA, Coulson RN (2019) Spatial risk assessment of eastern monarch butterfly road mortality during autumn migration within the southern corridor. Biol Conserv 231:150–160
Kasler D, Reese P (2019) The weakest link: Why your house may burn while your neighbor's survives the next wildfire. Sacramento Bee
Keeley JE (2005) Fire as a threat to biodiversity in fire-type shrublands
Keeley JE (2006) Fire management impacts on invasive plants in the western United States. Conserv Biol 20:375–384 . doi: 10.1111/j.1523-1739.2006.00339.x
Keeley JE, Fotheringham CJ (2003) Impact of Past Present and Future Fire Regimes on North American Mediterranean Shrublands. In: Fire and climatic change in temperate ecosystems of the Western Americas. pp 218–262
Keeley JE, Fotheringham CJ (2001) Historic fire regime in southern California shrublands. Conserv Biol 15:1536–1548
Keeley JE, Fotheringham CJ, Morais M (1999) Reexamining fire suppression impacts on brushland fire regimes. Science (80- ) 284:1829–1832
Keeley JE, Syphard AD (2018) Historical patterns of wildfire ignition sources in California ecosystems. Int J Wildl Fire 27:781

Kilgo JC, Sargent RA, Chapman BR, Miller K V. (1998) Effect of stand width and adjacent habitat on breeding bird communities in bottomland hardwoods. J Wildl Manage 62:72–83
Kociolek AV, Clevenger AP, St. Clair CC, Proppe DS (2011) Effects of Road Networks on Bird Populations. Conserv Biol 25:241–249
Krishnakumar P, Welsh B, Murphy R (2019) Where SoCal Edison may shut o power in California. Los Angeles Times
Krosby M, Theobald DM, Norheim R, Mcrae BH (2018) Identifying riparian climate corridors to inform climate adaptation planning. PLoS One 13:
Künzli N, Avol E, Wu J, Gauderman WJ, Rappaport E, Millstein J, Bennion J, McConnell R, Gilliland FD, Berhane K, Lurmann F, Winer A, Peters JM (2006) Health effects of the 2003 Southern California wildfires on children. Am J Respir Crit Care Med 174:1221–1228
Lee A (2019) My turn: Here's how rooftop solar can combat wildfires. CAL Matters
Lee JS, Ruell EW, Boydston EE, Lyren LM, Alonso RS, Troyer JL, Crooks KR, Vandewoude S (2012) Gene flow and pathogen transmission among bobcats (Lynx rufus) in a fragmented urban landscape. Mol Ecol 21:1617–1631
Liu JC, Pereira G, Uhl SA, Bravo MA, Bell ML (2015) A systematic review of the physical health impacts from non- occupational exposure to wildfire smoke. Environ Res 136:120–132 . doi: 10.1016/j.envres.2014.10.015.A
Lohse KA, Newburn DA, Opperman JJ, Merenlender AM (2008) Forecasting relative impacts of land use on anadromous fish habitat to guide conservation planning. Ecol Appl 18:467–482
Loss SR, Will T, Marra PP (2014) Estimation of bird-vehicle collision mortality on U.S. roads. J Wildl Manage 78:763–771
Lundstrom M, Kasler D, Lillis R (2017) "It's just luck - kismet." Why some people lived and others died in California fires. Sacramento Bee
Maclean IMD, Wilson RJ (2011) Recent ecological responses to climate change support predictions of high extinction risk. Proc Natl Acad Sci 108:12337–12342
Marsh DM, Jaeger JAG (2015) Direct effects of roads on small animal populations. In: Roads and ecological infrastructure: Concepts and applications for small animals. pp 42–56
Mcrae BH, Dickson BG, Keitt TH, Shah VB (2008) Using circuit theory to model connectivity in ecology , evolution , and conservation. Ecology 89:2712–2724
Mcrae BH, Hall SA, Beier P, Theobald DM (2012) Where to restore ecological connectivity? Detecting barriers and quantifying restoration benefits. PLoS One 7:e52604
Mitsch WJ, Wilson RF (1996) Improving the success of wetland creation and restoration with know-how, time, and self-design. Ecol Appl 6:16–17
Moyle PB, Katz JVE, Quiñones RM (2011) Rapid decline of California's native inland fishes: A status assessment. Biol Conserv 144:2414–2423
Olson DH, Burnett KM (2013) Geometry of forest landscape connectivity: pathways for persistence. In: Density Management in the 21st Century: West Side Story: Proceedings of the Density Management Workshop, 4-6 October 2011, Corvalllis, Oregon.
Pacifici M, Visconti P, Butchart SHM, Watson JEM, Cassola FM, Rondinini C (2017) Species' traits influenced their response to recent climate change. Nat Clim Chang 7:205–208
Parmesan C (2006) Ecological and Evolutionary Responses to Recent Climate Change. Annu Rev Ecol Evol Syst 37:637–669
Parmesan C, Yohe G (2003) A globally coherent fingerprint of climate change ipacts across natural systems. Nature 421:37–42
Phuleria HC, Fine PM, Zhu Y, Sioutas C (2005) Air quality impacts of the October 2003

Southern California wildfires. J Geophys Res 110: . doi: 10.1029/2004JD004626
Pinto N, Keitt TH (2008) Beyond the least-cost path: Evaluating corridor redundancy using a graph- theoretic approach. Landsc Ecol 24:253–266
Radeloff VC, Helmers DP, Kramer HA, Mockrin MH, Alexandre PM, Bar-Massada A, Butsic V, Hawbaker TJ, Martinuzzi S, Syphard AD, Stewart SI (2018) Rapid growth of the US wildland-urban interface raises wildfire risk. Proc Natl Acad Sci 115:3314–3319
Rappold AG, Cascio WE, Kilaru VJ, Stone SL, Neas LM, Devlin RB, Diaz-Sanchez D (2012) Cardio-respiratory outcomes associated with exposure to wildfire smoke are modified by measures of community health. Environ Heal A Glob Access Sci Source 11: . doi: 10.1186/1476-069X-11-71
Reid CE, Brauer M, Johnston FH, Jerrett M, Balmes JR, Elliott CT (2016) Critical review of health impacts of wildfire smoke. Environ Health Perspect 124:1334–1343
Riley SPD, Pollinger JP, Sauvajot RM, York EC, Bromley C, Fuller TK, Wayne RK (2006) A southern California freeway is a physical and social barrier to gene flow in carnivores. Mol Ecol 15:1733–1741
Riley SPD, Serieys LEK, Pollinger JP, Sikich JA, Dalbeck L, Wayne RK, Ernest HB (2014) Individual behaviors dominate the dynamics of an urban mountain lion population isolated by roads. Curr Biol 24:1989–1994
Riparian Habitat Joint Venture (2009) California Riparian Habitat Restoration Handbook
Riparian Habitat Joint Venture (2004) The Riparian Bird Conservation Plan: A strategy for reversing the decline of riparian associated birds in California
Ripple WJ, Beschta RL (2006) Linking a cougar decline , trophic cascade , and catastrophic regime shift in Zion National Park. Biol Conserv 133:397–408
Ripple WJ, Beschta RL (2008) Trophic cascades involving cougar, mule deer, and black oaks in Yosemite National Park. Biol Conserv 141:1249–1256
Ripple WJ, Estes JA, Beschta RL, Wilmers CC, Ritchie EG, Hebblewhite M, Berger J, Elmhagen B, Letnic M, Nelson MP, Schmitz OJ, Smith DW, Wallach AD, Wirsing AJ (2014) Status and ecological effects of the world ’s largest carnivores. Science (80- ) 343:1241484
Robins JD (2002) Stream Setback Technical Memo
Root TL, Price JT, Hall KR, Schneider SH, Resenzweig C, Pounds JA (2003) Fingerprints of global warming on wild animals and plants. Nature 421:57–60
Ruth TK, Elbroch LM (2014) The carcass chronicles : carnivory, nutrient flow, and biodiversity. Wild Felid Monit 14–19
Sabalow R, Lillis R, Kasler D, Yoon-Hendricks A, Reese P (2018) ‘This fire was outrunning us ’: Surviving the Camp Fire took bravery, stamina and luck. Sacramento Bee
Safford HD, Van de Water KM (2014) Using Fire Return Interval Departure (FRID) analysis to map spatial and temporal changes in fire frequency on National Forest lands in California. Pacific Southwest Res Stn - Res Pap PSW-RP-266 1–59 . doi: Res. Pap. PSW-RP-266
Scheffers BR, De Meester L, Bridge TCL, Hoffmann AA, Pandolfi JM, Corlett RT, Butchart SHM, Pearce-Kelly P, Kovacs KM, Dudgeon D, Pacifici M, Rondinini C, Foden WB, Martin TG, Mora C, Bickford D, Watson JEM (2016) The broad footprint of climate change from genes to biomes to people. Science (80- ) 354:
Semlitsch RD, Bodie JR (2003) Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conserv Biol 17:1219–1228
Shilling F (2020) Wildlife Behavior in Response to Traffic Disturbance Wildlife Behavior in

Response to Traffic Disturbance
Simon S (2018) Constant Wildfires Leave California Firefighters Strained. Natl. Public Radio
Slabbekoorn H, Ripmeester EAP (2008) Birdsong and anthropogenic noise: implications and applications for conservation. Mol Ecol 17:72–83
Smith JA, Suraci JP, Clinchy M, Crawford A, Roberts D, Zanette LY, Wilmers CC (2017) Fear of the human 'super predator' reduces feeding time in large carnivores. Proc R Soc B Biol Sci 284:20170433
Smith JA, Wang Y, Wilmers CC (2015) Top carnivores increase their kill rates on prey as a response to human-induced fear. Proc R Soc B Biol Sci 282:
St. John P (2017) Alarming failures left many in path of California wildfires vulnerable and without warning. LA Times
Stillwater Sciences (2002) Napa River Basin Limiting Factors Analysis
Syphard AD, Brennan TJ, Keeley JE (2018) Chaparral Landscape Conversion in Southern California. In: Valuing Chaparral. pp 323–346
Syphard AD, Keeley JE, Brennan TJ (2011) Comparing the role of fuel breaks across southern California national forests. For Ecol Manage 261:2038–2048
Syphard AD, Keeley JE, Massada AB, Brennan TJ, Radeloff VC (2012) Housing arrangement and location determine the likelihood of housing loss due to wildfire. PLoS One 7:e33954
Syphard AD, Massada AB, Butsic V, Keeley JE (2013) Land use planning and wildfire : Development policies influence future probability of housing loss. PLoS One 8:e71708
Syphard AD, Radeloff VC, Hawbaker TJ, Stewart SI (2009) Conservation threats due to human-caused increases in fire frequency in mediterranean-climate ecosystems. Conserv Biol 23:758–769
Syphard AD, Radeloff VC, Keeley JE, Hawbaker TJ, Clayton MK, Stewart SI, Hammer RB, Syphard AD, Radeloff VC, Keeley JE, Hawbaker TJ, Stewart SI, Hammer RB (2007) Human influence on California fire regimes. Ecol Soc Am 17:1388–1402
Syphard AD, Rustigian-romsos H, Mann M, Conlisk E, Moritz MA, Ackerly D (2019) The relative influence of climate and housing development on current and projected future fire patterns and structure loss across three California landscapes. Glob Environ Chang 56:41–55
Trenham PC, Shaffer HB (2005) Amphibian upland habitat use and its consequences for population viability. Ecol Appl 15:1158–1168
Trombulak SC, Frissell CA (2000) Review of ecological effects of roads on terrestrial and aquatic communities. Conserv Biol 14:18–30
van der Ree R, Jaeger JAG, van der Grift EA, Clevenger AP (2011) Effects of roads and traffic on wildlife populations and landscape function: Road ecology is moving toward larger scales. Ecol Soc 16:48
Vickers TW (2020) Project Title: Santa Ana Mountains to eastern Peninsular Range Conservation Connectivity Infrastructure Planning Project for Interstate 15 and Closely Associated Roadways
Vickers TW, Sanchez JN, Johnson CK, Morrison SA, Botta R, Smith T, Cohen BS, Huber PR, Ernest HB, Boyce WM (2015) Survival and mortality of pumas (Puma concolor) in a fragmented, urbanizing landscape. PLoS One 10:1–18
Viswanathan S, Eria L, Diunugala N, Johnson J, Mc Clean C (2006) An analysis of effects of San Diego wildfire on ambient air quality. J Air Waste Manag Assoc 56:56–67 . doi: 10.1080/10473289.2006.10464439

Wang Y, Smith JA, Wilmers CC (2017) Residential development alters behavior, movement, and energetics in a top carnivore. PlosOne 1–17
Wara MW (2018) Op-Ed: There ' s a quick way to help prevent wildfires : Shut off the power grid. Los Angeles Times
Warren R, Price J, Fischlin A, de la Nava Santos S, Midgley G (2011) Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise. Clim Change 106:141–177
Weinhold B (2011) Fields and forests in flames: Vegetation smoke and human health. Environ Health Perspect 119:A386–A393
Wiens JJ (2016) Climate-related local extinctions are already widespread among plant and animal species. PLoS Biol 14:1–18
Yap TA, Rose JP, Cummings B (2019) A Petition to List the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA)

# Letter 7

**COMMENTER:** J.P. Rose, Senior Attorney and Tiffany Yap, Wildlife Corridor Advocate, Center for Biological Diversity

**DATE:** 7/21/2021

## Response CBD1 and 2

Section 4.3 Biological Resources of the PEIR has been revised to provide additional discussion of project effects on mountain lions and is reflected in Section 3 of the FEIR. Mitigation Measure Bio-1(a) *Biological Resources Screening and Assessment,* states, "The BRA shall evaluate the potential for impacts to all sensitive biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities/critical habitat and other resources judged to be sensitive by local, state, and/or federal agencies." Because the mountain lion is legally classified as "specially protected species" and candidate species under the California Endangered Species Act (CESA), it would be required to be addressed on a project-by-project basis as a requirement of MM BIO-1(a). MM Bio 1(a) has been modified to better address wildlife movement impacts. MM BIO-1(e) and BIO-1(f) further clarify the required steps individual projects shall take to assess and mitigate for identified special status species that includes mountain lion to avoid direct and indirect impacts to those special status species.

Genetic isolation, as described in the letter, is "due to lack of connectivity caused by continuous development" in regard to movement needs. The PEIR includes a full discussion on wildlife movement corridors and identifies two essential connectivity areas within Santa Barbara County, one of which is a large area of the mountainous regions of southeastern Santa Barbara County. The PEIR also identifies three additional important movement corridors and states, "These areas are identified as important movement corridors for species such as steelhead, mountain lion, riparian birds, and other small carnivores."

The PEIR discusses riparian habitats and corridors in Section 4.3.1.1 Biological Resources, Setting, Habitats, "*Riparian habitats occur in and along the county's four major rivers (Santa Ynez, Santa Maria, Cuyama, and Sisquoc), as well as along the many creeks, streams, arroyos, and ravines in the county. Riparian areas are rich in wildlife species, providing foraging, migration, roosting, and nesting/breeding habitat."* Identified riparian areas in this section include *Montane Riparian Forest, Valley Foothill Riparian*, along with a full discussion of wetlands and aquatic habitats. The PEIR, under Impact Bio-3 discloses that projects, "could increase human activity in the vicinity of riparian areas, wildlife nurseries or corridors, and potentially sensitive coastal habitats." It also discloses potential direct impacts to wildlife on predators, which includes the mountain lion, as follows: "Direct impacts to wildlife include increased noise and human presence during construction, as well as increased trash which may attract predators to the project site and discourage wildlife use of surrounding natural habitat." It further discloses potential indirect impacts, "Indirect impacts include invasion of natural habitats by non-native species and increased presence of humans and domestic animals over the long-term. In addition, transportation improvement projects could include new segments of fencing or walls that that could hinder wildlife movement." The DPEIR has been revised to provide additional discussion regarding wildlife movement and habitat connectivity. Please see response to CBD1 for further details. The PEIR, therefore, identified impacts to wildlife corridors (Impact BIO-3) as a significant and unavoidable impact. Accordingly, the updated analysis

does not change the significance findings in the PEIR and recirculation of the Draft PEIR is not warranted.

## Response CBD3-8

Section 4.14 of the PEIR addresses wildfire impacts associated with Connected 2050As stated in the PEIR, "This program-level analysis is based on an overall understanding of the key fire safety concerns that could result from implementation of Connected 2050. The evaluation of wildfire impacts reasonably assumes that the construction and development under Connected 2050 would adhere to the latest federal, state and local regulations, and conform to the latest required standards in the industry, as appropriate for individual projects.". Due to the programmatic nature of Connected 2050, a precise, project-level analysis of the specific impacts associated with individual transportation and land use projects is not possible at this time. The impact significance thresholds for wildfires as listed in CEQA Appendix G are:

The thresholds used for this PEIR are as follows:

**Threshold:** Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Hazards)

**Threshold:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Threshold:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**Threshold:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**Threshold: I**f located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Draft PEIR addressed each of the commenter's wildfire impact concerns in several different impact discussions. Impact WF-1 addresses the impact of placing new development in or near fire severity zones and SRSAs (CBD-3) and impacts from the exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (CBD4). It also addresses exposure to increased smoke (CBD-6). Impacts to special status species (CBD5) is addressed in the PEIR under Section 4.3 Biological Resources. CEQA does not specify a requirement to address impacts to special status species under wildfire impacts. This section also addresses the potential risk to firefighters and first responders (CBD-7) identifying the potential increase to spark a wildfire through increased construction and human activity (PEIR page 4.14-16). Per CEQA Section 21082.2(c), the PEIR does not need to address economic impacts of the project on State and local authorities, as it is not considered substantial evidence of a physical impact on the environment. Mitigation measure WF-1 (a-d), at a programmatic level, provides a comprehensive list of measures

for responsible agencies to consider implementing to reduce wildfire risks on their individual projects (CBD8). The EIR concludes that even with inclusion of these mitigation measures, impacts would be reduced but, "it is not possible to prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires, despite implementation of mitigation WF-1." (DPEIR page 4.14-19). The DPEIR further concludes that no additional mitigation measures which are able to reduce this impact to less than significant levels are feasible, therefore this impact was determined to be significant and unavoidable.

# Table of Contents



## Tables



## Figures

# 3 Amendments to the Draft EIR

This section provides a summary record of all text amendments to the Draft EIR. Most amendments are the result of comments received during the public review period, and directly respond to those comments, or correct typographical errors within the Draft EIR. None of the changes would warrant recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5. The amendments serve to clarify and strengthen the content of the EIR, but do not introduce significant new information.

Changes in text are signified by strikeouts (~~strikeouts~~) where text is removed and by underlined font (underline font) where text is added. Other minor clarifications and corrections to typographical errors are also shown as corrected in this format, including corrections not based on responses to comments.

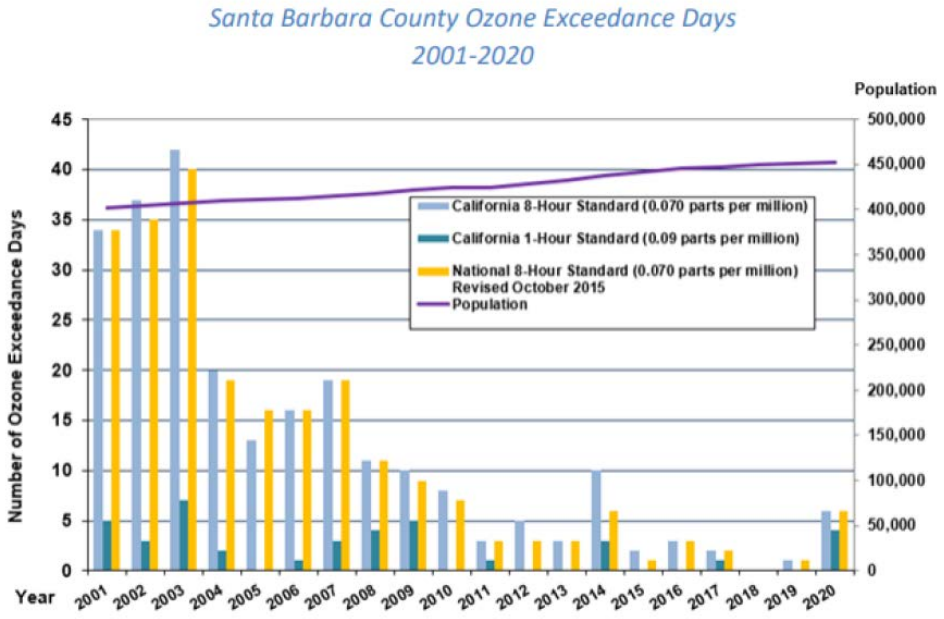
## Section 4.2, Air Quality

**Page 4.2-2**

The number of 8-hour ozone exceedance days range from a high of 101 days in 1991 to zero days in 2018 with one exceedance in 2019 and six exceedances in 2020.

**Page 4.2-4**

**Figure 4.2-1 Historical Santa Barbara County Ozone Exceedances ~~(2019)~~ (2020)**




Source: ~~SBCAPCD 2019 Ozone Plan (December 2019)~~ SBCAPCD 2021

**Page 4.2-11**

Therefore, the project's long-term impacts to air quality will be considered significant if Connected 2050 could result in mobile source emissions that ~~significantly~~ exceed existing levels, resulting in a long-term net increase in air pollutant emissions.

**Pages 4.2-14 through 4.2-15**

### *AQ-2(a) Application of SBCAPCD Feasible Mitigation Measures*

For all projects, the implementing agency shall incorporate the most recent SBCAPCD feasible mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Current SBCAPCD feasible mitigation measures include the following. Additional and/or modified measures may be adopted by SBCAPCD prior to implementation of individual projects under Connected 2050. The most current list of feasible mitigation measures at the time of project implementation shall be used.

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible, especially during times of severe or extreme drought. However, reclaimed water should not be used in or around crops for human consumption.
- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or applying dust palliatives, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. During times of severe or extreme drought, the use of soil binders and/or dust palliatives should be prioritized over watering.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

**Page 4.2-15**

### *AQ-2(d) Diesel Particulate Emission Reduction Measures*

For all projects, the implementing agency shall incorporate the following diesel particulate emission reduction measures when feasible based on analysis of individual sites and project circumstances:

- On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.

- Equipment/vehicles using alternative fuels, such as compressed natural gas, liquefied natural gas, propane or biodiesel, should be used on-site where feasible.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch on-site.
- Construction truck trips should be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- Proposed truck routes should minimize to the extent feasible impacts to residential communities and sensitive receptors.
- Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.

**Page 4.2-16**

Implementation of Measures AQ-2(a) through AQ-2(~~c~~d) would be required to reduce these emissions related to short-term construction emissions from individual projects and thus reduce the severity of impacts. However, implementation of these measures would not guarantee that the impact would be reduced to less than significant. Thus, because it cannot be determined if Measures AQ-2(a) through AQ-2(~~c~~d) would fully mitigate the significant impact, this impact would remain significant and unavoidable.

**Page 4.2-16**

**Table 4.2-3 Regional Air Pollutant Emissions**

| Scenario | VMT | ROC (tons/day) | $NO_X$ (tons/day) | $PM_{2.5}$ (tons/day)* | $PM_{10}$ (tons/day)* |
|---|---|---|---|---|---|
| 2020 Baseline | ~~11,066,811~~ 10,958,000 | ~~1.09~~ 2.92 | ~~5.13~~ 5.43 | ~~0.31~~ 0.32 | ~~0.69~~ 0.71 |
| 2050 No Project | ~~13,124,116~~ 13,676,600 | ~~0.33~~ 1.20 | ~~1.67~~ 2.40 | ~~0.30~~ 0.32 | ~~0.74~~ 0.78 |
| 2050 with RTP-SCS | ~~10,987,202~~ 11,539,600 | ~~0.28~~ 1.01 | ~~1.43~~ 2.02 | ~~0.25~~ 0.27 | ~~0.63~~ 0.66 |

* PM2.5 and PM10 includes tire wear and brake wear emissions

Notes: The on-road mobile source criteria pollutant emissions estimates for Connected 2050 were calculated using CARB's EMFAC2017 emission inventory model. VMT data were extracted from Fehr and Peers who utilized the SBCAG's Traffic Demand Model (as further described in Section 4.12, *Transportation and Circulation*) and include pass-through trips from vehicles travelling through the County that do not have an origin or destination within the county. $PM_{10}$ and NOx emissions are presented above using winter values and ROC emissions are presented above using winter values to provide a conservative estimate based on the seasons in which individual criteria pollutant emissions are highest.

Source: See Appendix B for EMFAC2017 modeling results

**Page 4.2-21**

### *AQ-4 Health Risk Reduction Measures*

Transportation implementing agencies shall implement the following measures:

- During project-specific design and CEQA review, the potential localized particulate ($PM_{10}$ and $PM_{2.5}$) impacts and their health risks shall be evaluated for the project. Localized particulate matter concentrations shall be estimated using procedures and guidelines consistent with U.S. EPA 2015's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and $PM_{10}$ Nonattainment and Maintenance Areas*. If required based on the project-level hotspot analysis, project-specific mitigation shall be added to the project design concept or scope to ensure that local particulate ($PM_{10}$ and $PM_{2.5}$) emissions would not reach a concentration at any location that would cause estimated cancer risk to exceed the ~~2015 Office of Environmental Health Hazard Assessment (OEHHA) threshold~~ SBCAPCD health risk notification level of 10 in one million. Per the U.S. EPA guidance (2015), potential mitigation measures to be considered may include but shall not be limited to: providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones and replacing older buses with cleaner buses. These measures can and should be implemented to reduce localized particulate impacts as needed.
- Retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of nearby residents to TAC concentrations. The HRA shall be conducted in accordance with the latest iteration of the SBCAPCD Modeling Guidelines for Health Risk Assessments: Form-15i.

## Section 4.3, Biological Resources

**Page 4.3-2**

Pacific madrone (*Arbutus menziesii*), tanoak (~~*Lithocarpus*~~ *Notholithocarpus densiflorus*), canyon live oak (*Quercus chrysolepis*), Coulter pine (*Pinus coulteri*), and coastal redwood (*Sequoia sempervirens*).

**Page 4.3-2**

These alliances can include, but are not limited to, *Arbutus menziesii* alliance, *Pinus coulteri* alliance, ~~*Lithocarpus*~~ *Notholithocarpus densiflorus* alliance, *Quercus chrysolepis* alliance, and *Sequoia sempervirens* alliance.

**Page 4.3-18**

In addition, although not listed in the CNDDB, mountain lions (*Puma concolor*) are legally classified as "specially protected species." In July 2019, the Center for Biological Diversity petitioned the Fish and Game Commission to list mountain lions as threatened under the California Endangered Species Act (CESA) within a proposed evolutionarily significant unit (ESU) located in Southern California and along the central coast of California. In April 2020, the Commission found that listing of this ESU may be warranted and designated mountain lion within the ESU as a candidate species under CESA. Mountain lions inhabit diverse habitats across most of California and can be found wherever deer are present, which includes the foothills and mountainous areas within Santa Barbara County.

**Page 4.3-29**

The remaining species shown in Tables ~~A~~C-1 and ~~A~~C-2 in Appendix C are protected through CEQA and/or through local ordinances.

**Page 4.3-29**

~~However~~Nevertheless, some special-status species are expected to be encountered at the locations where projects administered under Connected 2050 would occur, and it is assumed that certain resources would not be avoided and that potentially significant impacts would occur.

**Pages 4.3-30 through 4.3-31**

*BIO-1(a) Biological Resources Screening and Assessment*

On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to impact biological resources. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a biological resources assessment (BRA) or similar type of study to document the existing biological resources within the project footprint plus an appropriate buffer determined by a qualified biologist and to determine the potential impacts to those resources.

The BRA shall evaluate the potential for impacts to all sensitive biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities/critical habitat and other resources judged to be sensitive by local, state, and/or federal agencies. In addition, the assessment shall document potential modifications to existing infrastructure suitable for wildlife movement (e.g., culvert, underpass). Pending the results of the BRA, design alterations, further technical studies (i.e., protocol surveys) and/or consultations with the USFWS, CDFW and/or other local, state, and federal agencies may be required. The following Mitigation Measures [BIO-1(b) through BIO-1(k)] shall be incorporated, only as applicable, into the BRA for projects where specific resources are present, or may be present, and may be impacted by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the BRA where suitable habitat is present.

**Pages 4.3-39 through 4.3-42**

Large swaths of undeveloped areas within the County provide vegetative cover suitable for the movement of many terrestrial wildlife species, including medium to large-sized, mobile mammals with relatively large home ranges, such as coyote, deer, bobcat, grey fox, and mountain lion, and also provide foraging and breeding habitat for many species. Wildlife species can move through these vegetated areas routinely with some species also using concrete-lined or earthen stormwater channels in the area for movement.

As previously discussed under Impacts BIO-1 and BIO-2, transportation improvement projects envisioned in Connected 2050 and reasonably foreseeable land development envisioned in the SCS could occur within areas that support sensitive habitat (e.g., riparian areas, undeveloped natural areas). Direct and indirect disturbances to these areas could potentially interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors within the County.

Fragmentation of habitat by roads and development within the Santa Ynez Mountains and surrounding foothills is already a serious issue, and retaining existing connectivity (e.g., roadless area) between large undeveloped areas is considered important for the long-term viability of wildlife populations in the area, and therefore is very desirable from the standpoint of conservation planning.

Even in more urbanized locals such as Santa Barbara, Goleta, and Solvang, there are pockets of natural areas that are considered native wildlife nursery sites (e.g., San Antonio Canyon Park, Moore

Mesa, Lake Los Carneros, and Creekside Place Park). These areas have the potential to support nesting birds and other breeding wildlife. Development projects are required to comply with CFGC sections (e.g., Sections 3503, 3503.5, 3513, and 4150); thus, it is unlikely that infill development or TOD accommodated under Connected 2050 would result in the disturbance or destruction of active nest sites or the unauthorized take of birds or nongame mammals. Nevertheless, if development activities directly (e.g., cutting of trees or other vegetation, or removal of man-made structures containing an active bird nest or denning wildlife) or indirectly (e.g., if activities sufficiently harassed birds to cause nest abandonment) affect nesting birds and nongame mammals, a violation of the Fish and Game Code would result.

Using the *Guidance for Evaluating Impacts on Wildlife Movement in LA County* (Guidance) as an analogous resource for Santa Barbara County, project impacts to wildlife movement must consider the existing and post-project opportunities present to wildlife to enter and exit (County of Los Angeles 2020). An adequate assessment of impacts is one that looks at the cumulative impacts of a project considering existing constrictions and obstacles.

Per the Guidance, possible movement in the Connected 2050 Plan area needs to be assessed based on what could occur under unfragmented and fragmented conditions. Species that are more tolerant of adjacent urban uses, such as the coastal cactus wren, could find value in the native scrub habitats located along Phase III of the SR 246 Passing Lane Project.

Larger predatory mammals known to occur in the Plan area do not travel in large groups requiring large swaths of land;[1] thus, the reduction in capacity of migratory corridors would be less than significant. Conversely, game species such as mule deer, would be confined to narrower movement channels, which could lead to a reduction in capacity and could present a more opportunistic situation for predators (i.e., may increase predation rates). If prey are dispersing through a more confined corridor, this may provide a bottleneck of which a predator can take advantage, although there is no clear evidence that predation rates universally increase in a negative way due to corridors, and the relationship between predation and corridors is complex (Conservation Corridor 2021).

Development of wider roadways and associated infill development and TOD may also result in wildlife attempting to cross roadways at inopportune areas, (i.e., areas that are significantly narrower and confined by steeper hillsides or other barriers). This potential shift may lead to an increase in road mortality. Thus, impacts to wildlife movement based existing and post-project opportunities would be considered significant without incorporation of mitigation.

Direct impacts to wildlife include increased noise and human presence during construction, as well as increased trash which may attract predators to the project site and discourage wildlife use of surrounding natural habitat. Indirect impacts include invasion of natural habitats by non-native species and increased presence of humans and domestic animals over the long-term. These edge effects of development in and adjacent to open space have the potential to adversely affect wide ranging predators, such as mountain lions and bobcats. In addition, transportation improvement projects could include new segments of fencing or walls that that could hinder wildlife movement.

The future land use scenario envisioned by Connected 2050 would encourage infill development and TOD as part of the overall land use development within the SBCAG region. This land use scenario focuses future development within existing urbanized areas. The majority of the future infill and TOD development projects would be placed on parcels that provide limited or no wildlife

[1] This discussion is related to the carrying capacity of a movement corridor and not the home range requirement of a given large predatory mammal.

movement. However, even the elimination of limited wildlife movement could further isolate areas of native habitat occupied by both sensitive and common native wildlife species.

## Section 4.7, Geology and Soils

**Page 4.7-17**

### Landslide and Mudflow

Santa Barbara County is vulnerable to high slope instability in the South Coast, Santa Maria-Orcutt and the Santa Ynez Valley regions near as shown in Figure 4.7-3. Erosion problems are generally limited to restricted areas where grading has over-steepened slopes, has deposited fill in unstable areas, or where improper grading practices have not included provisions to seed or otherwise protect fresh slopes from eroding. They can also be caused by seismic events. Due to areas susceptible to slope instability throughout Santa Barbara County, erosion will continue to reduce slopes to lower and lower elevations. However, this normal function is incremental and slow enough so as to be imperceptible. This can change if the erosion functions are accelerated by events such as seismic activity or predominantly human activities related to development and grading. Roadway projects in mountainous areas or along steeply sloped streambanks are most susceptible to landslide or mudflows, especially when soils are wet and in areas adjacent to unstabilized cut or fill. Few projects proposed under Connected 2050 are located in such areas. However, projects involving cut slopes of over 15 feet in height, located on slopes more than 20 percent grade or projects located in areas of bedded or jointed bedrock are more likely to result in a landslide and would be potentially significant impacts according to the *County's Environmental Thresholds and Guidelines Manual* (page 65). Impacts related to cut slopes or significant grade would be required to incorporate mitigation measures to reduce impacts to a less than significant level. Impacts related to landslides are significant, especially in seismically active areas. Roadway projects in mountainous areas or along steeply sloped streambanks are most susceptible to landslide or mudflows when soils are wet, particularly adjacent to areas of unstabilized cut or fill. A substantial number of projects proposed under Connected 2050 are located near coastal bluffs or in the foothills and would be subject to landslides and/or mudflows. The highest risk of landslides occurs around U.S. Highway 101 in the Gaviota region and Summerland, as well as in parts of the SR-166 corridor east of the Twitchell Reservoir. Impacts would be less than significant with mitigation incorporated.

**Page 4.7-18**

*GEO-1(b) Hillside Stability Evaluation*

If a Connected 2050 project requires cut slopes over ~~20~~ 15 feet in height, located on slopes exceeding 20 percent grade, or is located in areas of bedded or jointed bedrock, the implementing agency shall ensure that hillside stability evaluations and/or specific slope stabilization studies are conducted by a qualified geotechnical expert. Projects shall follow the recommendations of these studies. Possible stabilization methods include buttresses, retaining walls and soldier piles.

## Section 4.8, Greenhouse Gas Emissions

**Page 4.8-11**

The City of Goleta CAP (2014), City of Santa Barbara CAP (2012), and County of Santa Barbara Energy and Climate Action Plan (ECAP) (2015) also establish GHG reduction targets and reduction

measures to meet those targets. In addition, in July 2020, the County of Santa Barbara Board of Supervisors also adopted an updated target to reduce emissions in unincorporated Santa Barbara County by 50 percent below 2007 levels by 2030. To date, the Cities of Buellton, Carpinteria, Guadalupe, Lompoc, Santa Maria, and Solvang do not have adopted CAPs.

**Page 4.8-11**

**Table 4.8-1 Climate Action Plans in the SBCAG Plan Area**

| Jurisdiction | Annual GHG Emissions (MT $CO_2e$) | |
|---|---|---|
| | 2007 Baseline Emissions | Projected 2030 Business As-Usual Emissions |
| Goleta | 325,532 | 429,295 |
| Santa Barbara | 719,833 | 943,225 |
| Santa Barbara County | ~~1,192,970~~ 1,351,730 | ~~1,540,000~~1,065,245[1] |

[1] County of Santa Barbara emissions are 2035 not 2030

Sources: City of Goleta, July 2014; City of Santa Barbara, September 2012; County of Santa Barbara, ~~May 2015~~ October 2020

**Page 4.8-12**

To date, the County of Santa Barbara is the only SBCAG member jurisdiction that has adopted thresholds for evaluating the significance of GHG emissions under CEQA. These thresholds are outlined in the "Santa Barbara County Interim Greenhouse Gas Thresholds Justification" and the County's *Environmental Thresholds and Guidelines Manual* and include a screening threshold of 300 MT of $CO_2e$ per year and an efficiency threshold of 3.8 MT of $CO_2e$ per service person per year for projects with emissions in excess of the screening threshold (Ascent Environmental 2020; County of Santa Barbara 2021). ~~To date, the County of Santa Barbara is the only SBCAG member jurisdiction that has adopted thresholds for evaluating the significance of GHG emissions under CEQA. These thresholds are outlined in the "Santa Barbara County Interim Greenhouse Gas Thresholds Justification" (2020) and include a screening threshold of 300 MT of $CO_2e$ per year and an efficiency threshold of 3.8 MT of $CO_2e$ per service person per year for projects with emissions in excess of the screening threshold.~~

**Page 4.8-24**

These climate action plans are also intended to make progress toward the State's 2030 target of reducing GHG emissions by 40 percent below 1990 levels, as first set forth in EO S-3-05 in 2005 and later codified by SB 32 in 2017. In addition, the County of Santa Barbara Board of Supervisors adopted a target to reduce emissions in unincorporated Santa Barbara County by 50 percent below 2007 levels by 2030, which was found to be in line with the State's goal under SB 32. As discussed previously, Connected 2050 was determined to be potentially inconsistent with the goals of SB 32 and EO S-3-05. Therefore, it would also conflict with the goals of local climate action plans designed to meet the same State goals, and impacts would be potentially significant.

## Section 4.12, Transportation

**Page 4.12-4**

In addition to the municipal transit providers and services described above, school buses also provide transit service in the region. The Santa Barbara County Education Office serves 20 public school districts and approximately 70,000 students. The provision of school buses varies by district,

with some districts providing regular bus service to students and others providing bus service to students with special needs.

**Page 4.12-16:**

Each of Santa Barbara County's nine local governments each have an adopted bicycle or active transportation plan. Additionally, Caltrans District 5 is in the process of completing a district-wide active transportation plan and the County of Santa Barbara is in the process of developing an Active Transportation Plan for the unincorporated areas of the county.

**Page 4.12-17**

In addition to the above goals, SBMTD's Board of Directors has adopted a goal of a 100 percent zero-emissions fleet by the year 2030.

**Page 4.12-29**

- Provide dedicated routes or lanes and on-site amenities for electric bicycles and electric scooters, including on-site charging.
- Provide new or improved transit and pedestrian amenities for school bus stops.

## Section 7, References

**Page 7-2**

____. 2021. "Santa Barbara County Air Pollution Control District Comments on the Draft Programmatic Environmental Impact Report for the Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy, SCH #2020120233." Accessed July 9, 2021.

**Page 7-3**

Conservation Corridor. 2021. Corridor Concerns website. Available at: https://conservationcorridor.org/corridor-concerns/. Accessed on July 14, 2021

County of Los Angeles. 2020. SEA Ordinance Implementation Guide, Appendix E. Guidance for Evaluating Impacts on Wildlife Movement. Appendix-E-Guidance-for-Evaluating-Impacts-on-Wildlife-Movement.pdf (lacounty.gov)

**Page 7-4**

Ascent Environmental. 2020. "Santa Barbara County Interim Greenhouse Gas Thresholds Justification. October 14, 2020. https://www.countyofsb.org/plndev/projects/CEQAGHGthresholds.sbc (accessed July 2021).

**Page 7-6**

_____. 2021. *Environmental Thresholds and Guidelines Manual*. January 2021. https://cosantabarbara.app.box.com/s/vtxutffe2n52jme97lgmv66os7pp3lm5 (accessed July 2021).

## Additional Biological Mitigation to Address Wildlife Connectivity

The Santa Barbara County Association of Governments (SBCAG) Board added the following mitigation measures in certifying the PEIR at their August 19, 2021 hearing.

**BIO-ADD: Additional Biological Mitigation.** Additional biological mitigation added by the SBCAG Board at their August 19, 2021 Hearing certifying this PEIR to address potential impacts to wildlife connectivity and protected species.

1. Lead agency shall consult with applicable counties, cities, Tribes, and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement related to local ordinances or conservation plans.
2. Lead agency and/or project applicant shall design projects to minimize impacts to wildlife movement and habitat connectivity and preserve existing and functional wildlife corridors.
3. Lead agency must conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site.
4. For long linear projects with the possibility of impacting wildlife movement (e.g., road expansion), lead agency shall analyze habitat linkages/wildlife movement corridors on a broad scale to avoid critical narrow choke points that could reduce the function of recognized movement corridors.
5. Lead agency must require review of construction drawings and habitat connectivity mapping by a qualified biologist to determine the risk of habitat fragmentation.
6. For projects with impacts to habitat linkages or corridors, lead agency shall ensure adequate preservation and mitigation of habitat linkages and corridors (e.g., through mitigation banking or purchasing, maintain or restoring offsite habitat).
7. Lead agency shall design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches where applicable.
8. Lead agency shall install overpasses, underpasses, or culverts as appropriate to create wildlife crossings in cases where a roadway or other transportation project may interrupt the flow of species through their habitat. Retrofitting of existing infrastructure in project areas should also be considered for wildlife crossings for purposes of mitigation.
9. Lead agency shall install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction.
10. Where avoidance of impacts is determined by the lead agency to be infeasible, the lead agency shall design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., United States Fish and Wildlife Service and/or CDFW) and in accordance with the respective county and city general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, where applicable: Wildlife movement buffer zones, appropriately spaced breaks in center barriers, culverts, construction of wildlife crossings such as freeway under- or overpasses, other comparable measures.
11. Lead agency shall implement berms and sound/sight barriers at all designated wildlife crossings where feasible to encourage wildlife to utilize crossings. Sound and lighting should also be minimized in developed areas, particularly those that are adjacent to or go through natural habitats.

12. Lead agency shall reduce lighting impacts on sensitive species through implementation of mitigation measures where feasible including, but not limited to:
    - Use high pressure sodium and/or cut-off fixtures instead of typical mercury vapor fixtures for outdoor lighting;
    - Design exterior lighting to confine illumination to the project site;
    - Provide structural and/or vegetative screening from light-sensitive uses;
    - Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces;
    - Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.
    - Minimize lighting at night.
13. Lead agency shall reduce noise impacts to sensitive species through implementation of the following mitigation measures where feasible including, but not limited to:
    - Install temporary noise barriers during construction.
    - Include permanent noise barriers and sound-attenuating features as part of the project design. Barriers could be in the form of outdoor barriers, sound walls, buildings, or earth berms to attenuate noise at adjacent sensitive uses.
    - Ensure that construction equipment is properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds silencers, wraps). All intake and exhaust ports on power equipment shall be muffled or shielded.
    - Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction to avoid noise associated with compressed air exhaust from pneumatically powered tools.
    - Using rubberized asphalt or "quiet pavement" to reduce road noise for new roadway segments, roadways in which widening or other modifications require re-pavement, or normal reconstruction of roadways where re-pavement is planned.
    - Use equipment and trucks with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible) for project construction.
    - Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures.

# Revised Appendix B

| Area | Sub-Area | Cal. Year | Season | Veh_Tech | EMFAC2007 Category | Population | VMT | Trips | ROG_TOTAL | NOx_TOTEX | PM10_TOTAL | PM2_5_TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBCAG | All Sub-Areas | 2020 | Winter | All Vehicles | All Vehicles | 311,976.7 | 10,958,000.0 | 1,561,926.8 | 2.92 | 5.43 | 0.7058 | 0.3216 |
| SBCAG | All Sub-Areas | 2020 | Winter | ALL OTHER BUSES - DSL | OBUS - DSL | 128.5 | 7,270.0 | 1,079.3 | 0.0029 | 0.0378 | 0.0021 | 0.0014 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDA - DSL | LDA - DSL | 2,001.4 | 74,362.7 | 9,320.5 | 0.0015 | 0.0115 | 0.0045 | 0.0023 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDA - GAS | LDA - GAS | 147,536.1 | 5,369,128.2 | 685,294.2 | 0.7957 | 0.5953 | 0.2751 | 0.1145 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDT1 - DSL | LDT1 - DSL | 23.3 | 384.4 | 76.0 | 0.0001 | 0.0007 | 0.0001 | 0.0001 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDT1 - GAS | LDT1 - GAS | 15,512.5 | 552,171.6 | 71,398.1 | 0.1360 | 0.0898 | 0.0286 | 0.0120 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDT2 - DSL | LDT2 - DSL | 377.5 | 15,658.4 | 1,844.9 | 0.0003 | 0.0011 | 0.0009 | 0.0004 |
| SBCAG | All Sub-Areas | 2020 | Winter | LDT2 - GAS | LDT2 - GAS | 65,015.7 | 2,210,776.7 | 294,759.2 | 0.7032 | 0.6370 | 0.1141 | 0.0479 |
| SBCAG | All Sub-Areas | 2020 | Winter | LHD1 - DSL | LHDT1 - DSL | 4,544.3 | 163,712.8 | 57,162.2 | 0.0354 | 0.5415 | 0.0224 | 0.0126 |
| SBCAG | All Sub-Areas | 2020 | Winter | LHD1 - GAS | LHDT1 - GAS | 5,748.3 | 186,079.9 | 85,641.1 | 0.2009 | 0.1479 | 0.0180 | 0.0077 |
| SBCAG | All Sub-Areas | 2020 | Winter | LHD2 - DSL | LHDT2 - DSL | 1,491.7 | 55,189.0 | 18,764.1 | 0.0109 | 0.1462 | 0.0081 | 0.0043 |
| SBCAG | All Sub-Areas | 2020 | Winter | LHD2 - GAS | LHDT2 - GAS | 895.6 | 29,608.7 | 13,343.6 | 0.0243 | 0.0213 | 0.0033 | 0.0014 |
| SBCAG | All Sub-Areas | 2020 | Winter | MCY - GAS | MCY - GAS | 9,981.3 | 87,724.1 | 19,962.6 | 0.3823 | 0.1229 | 0.0018 | 0.0008 |
| SBCAG | All Sub-Areas | 2020 | Winter | MDV - DSL | MDV - DSL | 989.0 | 40,603.8 | 4,794.3 | 0.0005 | 0.0032 | 0.0023 | 0.0011 |
| SBCAG | All Sub-Areas | 2020 | Winter | MDV - GAS | MDV - GAS | 49,027.1 | 1,664,124.6 | 221,853.9 | 0.4865 | 0.4525 | 0.0855 | 0.0357 |
| SBCAG | All Sub-Areas | 2020 | Winter | MH - DSL | MH - DSL | 361.0 | 3,413.7 | 36.1 | 0.0005 | 0.0184 | 0.0010 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | MH - GAS | MH - GAS | 1,213.7 | 9,951.4 | 121.4 | 0.0022 | 0.0082 | 0.0016 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | MOTOR COACH - DSL | OBUS - DSL | 28.6 | 3,654.1 | 417.7 | 0.0012 | 0.0230 | 0.0011 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | OBUS - GAS | OBUS - GAS | 165.8 | 9,994.7 | 3,316.9 | 0.0040 | 0.0115 | 0.0016 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | PTO - DSL | HHDT - DSL | 0 | 5,864.3 |  | 0.0023 | 0.0630 | 0.0007 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | SBUS - DSL | SBUS - DSL | 850.9 | 26,866.6 | 9,819.3 | 0.0030 | 0.2487 | 0.0238 | 0.0109 |
| SBCAG | All Sub-Areas | 2020 | Winter | SBUS - GAS | SBUS - GAS | 274.8 | 17,330.7 | 1,099.3 | 0.0056 | 0.0086 | 0.0144 | 0.0061 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 AG - DSL | MHDT - DSL | 23.4 | 280.7 | 103.0 | 0.0002 | 0.0031 | 0.0002 | 0.0001 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 CAIRP HEAVY - DSL | MHDT - DSL | 11.8 | 2,385.4 | 172.1 | 0.0001 | 0.0040 | 0.0005 | 0.0002 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 CAIRP SMALL - DSL | MHDT - DSL | 5.16 | 267.7 | 75.3 | 0.0000 | 0.0007 | 0.0001 | 0.0000 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 INSTATE CONSTRUCTION HEAVY - DSL | MHDT - DSL | 64.3 | 4,374.7 | 290.9 | 0.0024 | 0.0275 | 0.0014 | 0.0010 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 INSTATE CONSTRUCTION SMALL - DSL | MHDT - DSL | 337.5 | 17,227.0 | 1,525.6 | 0.0090 | 0.0885 | 0.0054 | 0.0037 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 INSTATE HEAVY - DSL | MHDT - DSL | 714.3 | 79,934.8 | 8,243.5 | 0.0192 | 0.4371 | 0.0208 | 0.0131 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 INSTATE SMALL - DSL | MHDT - DSL | 1,677.5 | 80,091.9 | 19,358.6 | 0.0247 | 0.3766 | 0.0234 | 0.0156 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 OOS HEAVY - DSL | MHDT - DSL | 6.52 | 1,312.4 | 95.2 | 0.0001 | 0.0022 | 0.0002 | 0.0001 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 OOS SMALL - DSL | MHDT - DSL | 3.15 | 163.3 | 46.0 | 0.0000 | 0.0004 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 PUBLIC - DSL | MHDT - DSL | 249.9 | 3,772.7 | 758.1 | 0.0006 | 0.0426 | 0.0008 | 0.0005 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6 UTILITY - DSL | MHDT - DSL | 53.5 | 892.3 | 614.9 | 0.0000 | 0.0035 | 0.0001 | 0.0001 |
| SBCAG | All Sub-Areas | 2020 | Winter | T6TS - GAS | MHDT - GAS | 603.2 | 34,125.1 | 12,068.3 | 0.0228 | 0.0474 | 0.0054 | 0.0023 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 AG - DSL | HHDT - DSL | 4.98 | 97.9 | 21.9 | 0.0001 | 0.0013 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 CAIRP - DSL | HHDT - DSL | 158.0 | 28,609.1 | 2,307.1 | 0.0040 | 0.1298 | 0.0047 | 0.0027 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 CAIRP CONSTRUCTION - DSL | HHDT - DSL | 17.1 | 3,142.4 | 77.2 | 0.0006 | 0.0178 | 0.0005 | 0.0003 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 NNOOS - DSL | HHDT - DSL | 172.9 | 34,890.5 | 2,523.7 | 0.0053 | 0.1414 | 0.0060 | 0.0035 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 NOOS - DSL | HHDT - DSL | 62.1 | 11,237.3 | 906.6 | 0.0017 | 0.0527 | 0.0018 | 0.0010 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 OTHER PORT - DSL | HHDT - DSL | 44.2 | 7,104.3 | 335.8 | 0.0020 | 0.0489 | 0.0010 | 0.0005 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 POAK - DSL | HHDT - DSL | 0.0000 | 0.0001 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 POLA - DSL | HHDT - DSL | 0.0000 | 0.0001 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 PUBLIC - DSL | HHDT - DSL | 268.4 | 5,440.3 | 814.1 | 0.0012 | 0.0801 | 0.0010 | 0.0006 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 SINGLE - DSL | HHDT - DSL | 431.8 | 29,534.0 | 4,983.5 | 0.0086 | 0.2817 | 0.0064 | 0.0043 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 SINGLE CONSTRUCTION - DSL | HHDT - DSL | 110.5 | 7,795.7 | 499.7 | 0.0047 | 0.0693 | 0.0021 | 0.0015 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 SWCV - DSL | HHDT - DSL | 180.2 | 7,338.9 | 702.8 | 0.0005 | 0.0473 | 0.0009 | 0.0003 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 TRACTOR - DSL | HHDT - DSL | 304.6 | 39,944.6 | 3,868.4 | 0.0075 | 0.2457 | 0.0084 | 0.0055 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 TRACTOR CONSTRUCTION - DSL | HHDT - DSL | 91.5 | 6,430.7 | 413.7 | 0.0041 | 0.0572 | 0.0016 | 0.0011 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7 UTILITY - DSL | HHDT - DSL | 14.0 | 284.7 | 161.3 | 0.0000 | 0.0021 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2020 | Winter | T7IS - GAS | HHDT - GAS | 3.71 | 196.9 | 74.3 | 0.0009 | 0.0028 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2020 | Winter | UBUS - DSL | UBUS - DSL | 161.8 | 14,313.7 | 647.2 | 0.0004 | 0.0246 | 0.0017 | 0.0007 |
| SBCAG | All Sub-Areas | 2020 | Winter | UBUS - GAS | UBUS - GAS | 33.3 | 2,940.5 | 133.4 | 0.0001 | 0.0006 | 0.0004 | 0.0002 |

| Area | Sub-Area | Cal. Year | Season | Veh_Tech | EMFAC2007 Category | Population | VMT | Trips | ROG_TOTAL | NOx_TOTEX | PM10_TOTAL | PM2_5_TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBCAG | All Sub-Areas | 2050 | Winter | All Vehicles | All Vehicles | 403,743.4 | 11,539,600.0 | 1,955,543.0 | 1.01 | 2.02 | 0.6571 | 0.2704 |
| SBCAG | All Sub-Areas | 2050 | Winter | ALL OTHER BUSES - DSL | OBUS - DSL | 217.8 | 11,208.8 | 1,829.5 | 0.0001 | 0.0299 | 0.0018 | 0.0008 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDA - DSL | LDA - DSL | 2,489.7 | 72,179.6 | 11,507.1 | 0.0003 | 0.0006 | 0.0036 | 0.0015 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDA - GAS | LDA - GAS | 211,839.4 | 6,180,961.4 | 980,502.0 | 0.3298 | 0.2499 | 0.3083 | 0.1241 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT1 - DSL | LDT1 - DSL | 3.37 | 91.4 | 15.2 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT1 - GAS | LDT1 - GAS | 25,364.9 | 683,759.0 | 113,795.8 | 0.0498 | 0.0324 | 0.0341 | 0.0138 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT2 - DSL | LDT2 - DSL | 816.7 | 22,529.5 | 3,707.6 | 0.0003 | 0.0006 | 0.0012 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT2 - GAS | LDT2 - GAS | 82,226.3 | 2,236,580.6 | 372,829.2 | 0.1718 | 0.0974 | 0.1117 | 0.0450 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD1 - DSL | LHDT1 - DSL | 3,571.7 | 107,550.6 | 44,927.2 | 0.0153 | 0.0136 | 0.0115 | 0.0052 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD1 - GAS | LHDT1 - GAS | 4,086.1 | 121,211.1 | 60,876.8 | 0.0315 | 0.0429 | 0.0116 | 0.0049 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD2 - DSL | LHDT2 - DSL | 1,502.7 | 42,859.8 | 18,902.4 | 0.0062 | 0.0079 | 0.0057 | 0.0028 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD2 - GAS | LHDT2 - GAS | 539.6 | 16,156.9 | 8,038.7 | 0.0038 | 0.0058 | 0.0018 | 0.0008 |
| SBCAG | All Sub-Areas | 2050 | Winter | MCY - GAS | MCY - GAS | 9,970.8 | 64,771.3 | 19,941.6 | 0.2525 | 0.0884 | 0.0013 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | MDV - DSL | MDV - DSL | 1,757.0 | 48,862.0 | 7,965.4 | 0.0002 | 0.0004 | 0.0025 | 0.0010 |
| SBCAG | All Sub-Areas | 2050 | Winter | MDV - GAS | MDV - GAS | 50,950.9 | 1,390,355.0 | 230,392.6 | 0.1211 | 0.0631 | 0.0694 | 0.0280 |
| SBCAG | All Sub-Areas | 2050 | Winter | MH - DSL | MH - DSL | 297.5 | 2,281.4 | 29.7 | 0.0002 | 0.0062 | 0.0004 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | MH - GAS | MH - GAS | 571.4 | 5,025.8 | 57.2 | 0.0001 | 0.0012 | 0.0008 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | MOTOR COACH - DSL | OBUS - DSL | 38.4 | 4,758.4 | 560.4 | 0.0003 | 0.0128 | 0.0009 | 0.0004 |
| SBCAG | All Sub-Areas | 2050 | Winter | OBUS - GAS | OBUS - GAS | 102.9 | 5,133.9 | 2,058.2 | 0.0012 | 0.0038 | 0.0008 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | PTO - DSL | HHDT - DSL | 0 | 8,950.8 |  | 0.0003 | 0.0460 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | SBUS - DSL | SBUS - DSL | 522.1 | 16,498.4 | 6,025.0 | 0.0003 | 0.0495 | 0.0139 | 0.0060 |
| SBCAG | All Sub-Areas | 2050 | Winter | SBUS - GAS | SBUS - GAS | 81.7 | 4,133.2 | 326.6 | 0.0014 | 0.0011 | 0.0034 | 0.0015 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 AG - DSL | MHDT - DSL | 2.76 | 0.0000 | 12.1 | 0.0000 | 0.0001 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 CAIRP HEAVY - DSL | MHDT - DSL | 21.3 | 3,436.8 | 310.7 | 0.0000 | 0.0040 | 0.0006 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 CAIRP SMALL - DSL | MHDT - DSL | 7.24 | 301.0 | 105.6 | 0.0000 | 0.0005 | 0.0001 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE CONSTRUCTION HEAVY - DSL | MHDT - DSL | 87.1 | 5,901.2 | 393.7 | 0.0001 | 0.0175 | 0.0010 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE CONSTRUCTION SMALL - DSL | MHDT - DSL | 474.4 | 23,237.9 | 2,144.7 | 0.0004 | 0.0605 | 0.0039 | 0.0017 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE HEAVY - DSL | MHDT - DSL | 769.9 | 73,318.2 | 8,884.1 | 0.0008 | 0.1527 | 0.0121 | 0.0054 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE SMALL - DSL | MHDT - DSL | 2,154.7 | 95,197.0 | 24,865.3 | 0.0011 | 0.2179 | 0.0157 | 0.0069 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 OOS HEAVY - DSL | MHDT - DSL | 11.1 | 1,811.3 | 162.6 | 0.0000 | 0.0021 | 0.0003 | 0.0001 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 OOS SMALL - DSL | MHDT - DSL | 4.85 | 198.2 | 70.8 | 0.0000 | 0.0003 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 PUBLIC - DSL | MHDT - DSL | 148.1 | 2,293.4 | 449.2 | 0.0001 | 0.0074 | 0.0004 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 UTILITY - DSL | MHDT - DSL | 59.4 | 989.7 | 683.2 | 0.0000 | 0.0031 | 0.0002 | 0.0001 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6TS - GAS | MHDT - GAS | 450.2 | 24,742.1 | 9,008.5 | 0.0056 | 0.0088 | 0.0039 | 0.0016 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 AG - DSL | HHDT - DSL | 1.72 | 1.15 | 7.58 | 0.0000 | 0.0001 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 CAIRP - DSL | HHDT - DSL | 181.2 | 37,338.1 | 2,645.2 | 0.0027 | 0.1169 | 0.0052 | 0.0026 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 CAIRP CONSTRUCTION - DSL | HHDT - DSL | 24.5 | 4,238.9 | 110.9 | 0.0002 | 0.0198 | 0.0006 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 NNOOS - DSL | HHDT - DSL | 283.1 | 45,541.0 | 4,134.0 | 0.0047 | 0.1548 | 0.0062 | 0.0030 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 NOOS - DSL | HHDT - DSL | 71.9 | 14,652.1 | 1,050.3 | 0.0013 | 0.0486 | 0.0020 | 0.0010 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 OTHER PORT - DSL | HHDT - DSL | 66.2 | 11,214.2 | 503.0 | 0.0005 | 0.0510 | 0.0014 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 POAK - DSL | HHDT - DSL | 0.0000 | 0.0002 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 POLA - DSL | HHDT - DSL | 0.0000 | 0.0002 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 PUBLIC - DSL | HHDT - DSL | 238.1 | 4,825.0 | 722.3 | 0.0004 | 0.0196 | 0.0006 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SINGLE - DSL | HHDT - DSL | 557.6 | 45,077.9 | 6,434.3 | 0.0021 | 0.1494 | 0.0055 | 0.0024 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SINGLE CONSTRUCTION - DSL | HHDT - DSL | 137.9 | 10,515.8 | 623.6 | 0.0006 | 0.0437 | 0.0013 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SWCV - DSL | HHDT - DSL | 312.9 | 12,757.2 | 1,220.2 | 0.0006 | 0.0115 | 0.0014 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 TRACTOR - DSL | HHDT - DSL | 414.2 | 51,288.4 | 5,260.4 | 0.0018 | 0.1198 | 0.0070 | 0.0035 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 TRACTOR CONSTRUCTION - DSL | HHDT - DSL | 117.8 | 8,674.6 | 532.5 | 0.0005 | 0.0451 | 0.0011 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 UTILITY - DSL | HHDT - DSL | 15.4 | 312.2 | 177.2 | 0.0000 | 0.0014 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7IS - GAS | HHDT - GAS | 1.74 | 229.8 | 34.8 | 0.0001 | 0.0009 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | UBUS - DSL | UBUS - DSL | 146.8 | 12,982.5 | 587.2 | 0.0006 | 0.0091 | 0.0016 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | UBUS - GAS | UBUS - GAS | 30.2 | 2,665.5 | 120.8 | 0.0001 | 0.0015 | 0.0004 | 0.0002 |

| Area | Sub-Area | Cal. Year | Season | Veh_Tech | EMFAC2007 Category | Population | VMT | Trips | ROG_TOTAL | NOx_TOTEX | PM10_TOTAL | PM2_5_TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBCAG | All Sub-Areas | 2050 | Winter | All Vehicles | All Vehicles | 478,512.0 | 13,676,600.0 | 2,317,686.8 | 1.20 | 2.40 | 0.7788 | 0.3204 |
| SBCAG | All Sub-Areas | 2050 | Winter | ALL OTHER BUSES - DSL | OBUS - DSL | 258.1 | 13,284.5 | 2,168.3 | 0.0002 | 0.0355 | 0.0022 | 0.0009 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDA - DSL | LDA - DSL | 2,950.8 | 85,546.4 | 13,638.1 | 0.0003 | 0.0007 | 0.0043 | 0.0017 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDA - GAS | LDA - GAS | 251,069.6 | 7,325,603.7 | 1,162,079.6 | 0.3908 | 0.2962 | 0.3654 | 0.1470 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT1 - DSL | LDT1 - DSL | 4.00 | 108.3 | 18.0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT1 - GAS | LDT1 - GAS | 30,062.1 | 810,383.3 | 134,869.4 | 0.0590 | 0.0384 | 0.0405 | 0.0163 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT2 - DSL | LDT2 - DSL | 967.9 | 26,701.7 | 4,394.2 | 0.0003 | 0.0007 | 0.0014 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | LDT2 - GAS | LDT2 - GAS | 97,453.7 | 2,650,769.3 | 441,872.8 | 0.2036 | 0.1155 | 0.1323 | 0.0533 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD1 - DSL | LHDT1 - DSL | 4,233.1 | 127,467.7 | 53,247.2 | 0.0182 | 0.0161 | 0.0136 | 0.0061 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD1 - GAS | LHDT1 - GAS | 4,842.8 | 143,658.0 | 72,150.5 | 0.0373 | 0.0508 | 0.0137 | 0.0059 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD2 - DSL | LHDT2 - DSL | 1,781.0 | 50,797.0 | 22,402.9 | 0.0073 | 0.0093 | 0.0067 | 0.0033 |
| SBCAG | All Sub-Areas | 2050 | Winter | LHD2 - GAS | LHDT2 - GAS | 639.5 | 19,148.9 | 9,527.4 | 0.0046 | 0.0069 | 0.0021 | 0.0009 |
| SBCAG | All Sub-Areas | 2050 | Winter | MCY - GAS | MCY - GAS | 11,817.3 | 76,766.2 | 23,634.6 | 0.2993 | 0.1047 | 0.0016 | 0.0007 |
| SBCAG | All Sub-Areas | 2050 | Winter | MDV - DSL | MDV - DSL | 2,082.4 | 57,910.7 | 9,440.5 | 0.0002 | 0.0005 | 0.0029 | 0.0012 |
| SBCAG | All Sub-Areas | 2050 | Winter | MDV - GAS | MDV - GAS | 60,386.4 | 1,647,832.6 | 273,058.6 | 0.1435 | 0.0747 | 0.0823 | 0.0331 |
| SBCAG | All Sub-Areas | 2050 | Winter | MH - DSL | MH - DSL | 352.6 | 2,703.9 | 35.3 | 0.0002 | 0.0073 | 0.0005 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | MH - GAS | MH - GAS | 677.3 | 5,956.5 | 67.8 | 0.0001 | 0.0015 | 0.0009 | 0.0004 |
| SBCAG | All Sub-Areas | 2050 | Winter | MOTOR COACH - DSL | OBUS - DSL | 45.5 | 5,639.5 | 664.2 | 0.0003 | 0.0152 | 0.0010 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | OBUS - GAS | OBUS - GAS | 121.9 | 6,084.7 | 2,439.3 | 0.0015 | 0.0045 | 0.0010 | 0.0004 |
| SBCAG | All Sub-Areas | 2050 | Winter | PTO - DSL | HHDT - DSL | 0 | 10,608.3 |  | 0.0003 | 0.0545 | 0.0001 | 0.0001 |
| SBCAG | All Sub-Areas | 2050 | Winter | SBUS - DSL | SBUS - DSL | 618.8 | 19,553.7 | 7,140.8 | 0.0004 | 0.0587 | 0.0165 | 0.0071 |
| SBCAG | All Sub-Areas | 2050 | Winter | SBUS - GAS | SBUS - GAS | 96.8 | 4,898.6 | 387.1 | 0.0017 | 0.0013 | 0.0041 | 0.0017 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 AG - DSL | MHDT - DSL | 3.27 | 0.0000 | 14.4 | 0.0000 | 0.0001 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 CAIRP HEAVY - DSL | MHDT - DSL | 25.2 | 4,073.3 | 368.2 | 0.0000 | 0.0047 | 0.0007 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 CAIRP SMALL - DSL | MHDT - DSL | 8.58 | 356.7 | 125.2 | 0.0000 | 0.0006 | 0.0001 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE CONSTRUCTION HEAVY - DSL | MHDT - DSL | 103.2 | 6,994.0 | 466.7 | 0.0001 | 0.0207 | 0.0012 | 0.0005 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE CONSTRUCTION SMALL - DSL | MHDT - DSL | 562.2 | 27,541.3 | 2,541.9 | 0.0005 | 0.0717 | 0.0046 | 0.0020 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE HEAVY - DSL | MHDT - DSL | 912.4 | 86,895.8 | 10,529.3 | 0.0010 | 0.1810 | 0.0144 | 0.0064 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 INSTATE SMALL - DSL | MHDT - DSL | 2,553.8 | 112,826.4 | 29,470.1 | 0.0012 | 0.2582 | 0.0186 | 0.0081 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 OOS HEAVY - DSL | MHDT - DSL | 13.2 | 2,146.8 | 192.7 | 0.0000 | 0.0025 | 0.0004 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 OOS SMALL - DSL | MHDT - DSL | 5.75 | 234.9 | 83.9 | 0.0000 | 0.0004 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 PUBLIC - DSL | MHDT - DSL | 175.5 | 2,718.1 | 532.4 | 0.0001 | 0.0088 | 0.0004 | 0.0002 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6 UTILITY - DSL | MHDT - DSL | 70.4 | 1,172.9 | 809.7 | 0.0000 | 0.0036 | 0.0002 | 0.0001 |
| SBCAG | All Sub-Areas | 2050 | Winter | T6TS - GAS | MHDT - GAS | 533.6 | 29,324.0 | 10,676.8 | 0.0067 | 0.0104 | 0.0047 | 0.0019 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 AG - DSL | HHDT - DSL | 2.04 | 1.37 | 8.98 | 0.0000 | 0.0001 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 CAIRP - DSL | HHDT - DSL | 214.7 | 44,252.7 | 3,135.1 | 0.0032 | 0.1386 | 0.0061 | 0.0031 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 CAIRP CONSTRUCTION - DSL | HHDT - DSL | 29.1 | 5,023.8 | 131.5 | 0.0002 | 0.0234 | 0.0007 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 NNOOS - DSL | HHDT - DSL | 335.6 | 53,974.7 | 4,899.5 | 0.0055 | 0.1835 | 0.0073 | 0.0035 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 NOOS - DSL | HHDT - DSL | 85.3 | 17,365.5 | 1,244.8 | 0.0015 | 0.0576 | 0.0024 | 0.0012 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 OTHER PORT - DSL | HHDT - DSL | 78.4 | 13,290.9 | 596.2 | 0.0006 | 0.0604 | 0.0017 | 0.0007 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 POAK - DSL | HHDT - DSL | 0.0000 | 0.0002 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 POLA - DSL | HHDT - DSL | 0.0000 | 0.0002 | 0.0000 | 0 | 0.0000 | 0 | 0 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 PUBLIC - DSL | HHDT - DSL | 282.2 | 5,718.5 | 856.1 | 0.0005 | 0.0232 | 0.0007 | 0.0003 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SINGLE - DSL | HHDT - DSL | 660.8 | 53,425.8 | 7,625.8 | 0.0025 | 0.1771 | 0.0065 | 0.0028 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SINGLE CONSTRUCTION - DSL | HHDT - DSL | 163.5 | 12,463.2 | 739.1 | 0.0007 | 0.0518 | 0.0016 | 0.0007 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 SWCV - DSL | HHDT - DSL | 370.8 | 15,119.7 | 1,446.2 | 0.0007 | 0.0136 | 0.0017 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 TRACTOR - DSL | HHDT - DSL | 490.9 | 60,786.4 | 6,234.5 | 0.0021 | 0.1420 | 0.0083 | 0.0041 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 TRACTOR CONSTRUCTION - DSL | HHDT - DSL | 139.6 | 10,281.1 | 631.1 | 0.0006 | 0.0535 | 0.0014 | 0.0006 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7 UTILITY - DSL | HHDT - DSL | 18.3 | 370.1 | 210.0 | 0.0000 | 0.0016 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | T7IS - GAS | HHDT - GAS | 2.06 | 272.3 | 41.3 | 0.0001 | 0.0011 | 0.0000 | 0.0000 |
| SBCAG | All Sub-Areas | 2050 | Winter | UBUS - DSL | UBUS - DSL | 174.0 | 15,386.7 | 695.9 | 0.0007 | 0.0108 | 0.0018 | 0.0007 |
| SBCAG | All Sub-Areas | 2050 | Winter | UBUS - GAS | UBUS - GAS | 35.8 | 3,159.1 | 143.1 | 0.0001 | 0.0018 | 0.0004 | 0.0002 |

# 4 Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure included in the Connected 2050 RTP/SCS Final Environmental Impact Report (Final EIR), specifications are made herein that identify the action required, the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in the Mitigation Monitoring and Reporting Program (MMRP).

Agencies considering approval of future projects under the Connected 2050 RTP/SCS would utilize the EIR as a basis in determining potential mitigation measures for subsequent activities. The agencies responsible for implementing the mitigation measures, described as “project sponsors” in the EIR, will be the lead agency for the individual future projects under the Connected 2050 RTP/SCS. The project sponsor for individual projects will involve one of the following agencies: Caltrans, SBCAG, Santa Barbara County, or the cities of Santa Maria, Guadalupe, Buellton, Solvang, Lompoc, Santa Barbara, Goleta, or Carpinteria. The project sponsor, which will be the lead agency for individual future projects under the Connected 2050 RTP/SCS, will be responsible to monitor mitigation measures that are required to be implemented for the project

| Mitigation Measure/ Condition of Approval | Action Required | Monitoring Timing | Monitoring Frequency | Responsible Agency | Compliance Verification Initial | Compliance Verification Date | Compliance Verification Comments |
|---|---|---|---|---|---|---|---|
| **Aesthetics** | | | | | | | |
| **AES-1(a): Tree Protection and Replacement**. New roadways, extensions and widenings of existing roadways, bridge replacement and enhancements, trails and facility improvement projects shall avoid the removal of existing mature trees to the extent possible consistent with adopted local City and County policies as applicable. The implementing agency of a particular Connected 2050 project shall replace any trees lost at a minimum 2:1 basis and incorporate them into the landscaping design for the roadway when feasible, or as required by local or County requirements. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance (see mitigation measures prescribed in Section 4.3 Biological Resources, Impact B-1). | Grading and site plans shall avoid the removal of existing mature trees to the extent possible.<br>Place conditions of approval on project to require tree replacement at a minimum 2:1 ratio.<br>Maintain replacement trees to ensure their success. | During project permitting and environmental review for roadway extensions and widening projects. | Monitor survivability of replace-ment trees periodically following construction. | Project sponsor. | | | |
| **AES-1(b): Design Measures for Visual Compatibility**. The project sponsor shall require measures that minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Strategies to achieve this include:<br>▪ Siting or designing projects to minimize their intrusion into important viewsheds;<br>▪ Avoiding large cuts and fills when the visual environment (natural or urban) would be substantially disrupted;<br>▪ Ensuring that re-contouring provides a smooth and gradual transition between modified landforms and existing grade; | Ensure grading plans and landscape plans avoid large cut and fills, provide re-contouring, replace trees and restore vegetation cover.<br>Confirm that architectural plans and building plans incorporate design compatible with surrounding existing structures. | During project permitting and environmental review. | Once. | Project sponsor. | | | |

| | | | | |
|---|---|---|---|---|
| ▪ Developing transportation systems to be compatible with the surrounding environments (e.g., colors and materials of construction material; scale of improvements);<br>▪ Designing and installing landscaping to add natural elements and visual interest to soften hard edges, as well as to restore natural features along corridors where possible after widening, interchange modifications, re-alignment, or construction of ancillary facilities. The implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation to ensure compliance with landscaping plans; and<br>▪ Designing new structures to be compatible in scale, mass, character and architecture with existing structures. | | | | |
| **AES-1(c): Discouragement of Architectural Features that Block Scenic Views.** Project sponsors shall design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. Setbacks and acoustical design of adjacent structures shall be preferentially used as mitigation for potential noise impacts arising from increased traffic volumes associated with adjacent land development. The use of sound walls, or any other architectural features that could block views from the scenic highways or other view corridors, shall be discouraged to the extent possible. Where use of sound walls is found to be necessary, walls shall incorporate offsets, accents and landscaping to prevent monotony. In | Ensure grading plans and landscape plans avoid large cut and fills, provide re-contouring, replace trees and restore vegetation cover.<br>Confirm that architectural plans and building plans incorporate design compatible with surrounding existing structures. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| addition, sound walls shall be complementary in color and texture to surrounding natural features. | | | | |
| **AES-1(d): Recontouring for Adjacent Landforms.** Where a particular Connected 2050 project affects adjacent landforms, the local jurisdiction in which the project is located shall ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade to the extent feasible. This requirement can be accomplished through the placement of conditions on the project by the implementing agency during the project specific environmental review. | Where applicable, confirm that development and building plans ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade to the extent feasible. | During individual design review. | Once during plan review; periodically during construction. | Project sponsor. |
| **AES-1(e): Landscaping for Landform Variation.** The local jurisdiction in which a particular project is located shall ensure that associated landscape materials and design enhance landform variation, provide erosion control and blend with the natural setting. This requirement can be accomplished through the placement of conditions on the project by the local jurisdiction during individual environmental review. To ensure compliance with approved landscape plans, the implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation. | Where applicable, confirm that development and building plans provide landscape plans that includes associated landscape materials and design enhance landform variation, provide erosion control and blend with the natural setting. These plans must be submitted to the local jurisdiction and implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation. | During project permitting and environmental review. | Once during plan review; periodically during construction. | Project sponsor and associated local jurisdiction. |
| **AES-3(b): Lighting Design Measures.** As part of planning, design, and engineering for projects, project sponsors shall ensure that projects proposed near light-sensitive uses avoid substantial spillover lighting. Potential design measures include, but are not limited to, the following:<br>▪ Lighting shall consist of cutoff-type fixtures that cast low-angle | Confirm that development and building plans satisfy the lighting requirements listed in the mitigation measure.<br>Confirm lights are installed as described and shown on plans. | During project permitting and environmental review. | Once during plan review. Once at completion of construc-tion. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| illumination to minimize incidental spillover of light into adjacent properties and undeveloped open space. Fixtures that project light upward or horizontally shall not be used.<br>▪ Lighting shall be directed away from habitat and open space areas adjacent to the project site.<br>▪ Light mountings shall be downcast, and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent private properties and undeveloped open space. Light poles will be 20 feet high or shorter. Luminary mountings shall have non-glare finishes.<br>▪ Exterior lighting features shall be directed downward and shielded in order to confine light to the boundaries of the subject project. Where more intense lighting is necessary for safety purposes, the design shall include landscaping to block light from sensitive land uses, such as residences. | | | | |
| **AES-3(c) Glare Reduction Measures.** Implementing agencies shall minimize and control glare from transportation and infill development projects near glare-sensitive uses through the adoption of project design features such as:<br>▪ Planting trees along transportation corridors to reduce glare from the sun;<br>▪ Creating tree wells in existing sidewalks;<br>▪ Adding trees in new curb extensions and traffic circles;<br>▪ Adding trees to public parks and greenways; | Confirm that development and building plans satisfy the glare reduction requirements listed in the mitigation measure.<br>Confirm measures are installed as described and shown on plans. | During project permitting and environmental review. | Once during plan review. Once at completion of construction. | Project sponsor |

| | | | | |
|---|---|---|---|---|
| ▪ Landscaping off-street parking areas, loading areas, and service areas;<br>▪ Limiting the use of reflective materials, such as metal;<br>▪ Using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;<br>▪ Screening parking areas by using vegetation or trees;<br>▪ Using low-reflective glass; and<br>▪ Complying with applicable general plan policies, municipal code regulations, city or local controls related to glare<br>▪ Tree species planted to comply with this measure shall provide substantial shade cover when mature. Utilities shall be installed underground along these routes wherever feasible to allow trees to grow and provide shade without need for severe pruning. | | | | |
| **Air Quality** | | | | |
| **AQ-2(a): Application of SBCAPCD Feasible Mitigation Measures.** For all projects, the implementing agency shall incorporate the most recent SBCAPCD feasible mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Current SBCAPCD feasible mitigation measures include the following. Additional and/or modified measures may be adopted by SBCAPCD prior to implementation of individual projects under Connected 2050. The most current list of feasible mitigation measures at the time of project implementation shall be used.<br>▪ During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to | Construction plans shall show SBCAPCD's standard dust control measures; implementing agency shall ensure implementation. | During project permitting and environmental review.<br>Prior to issuance of grading permits; periodically during construction. | Once during plan review; periodically during construction. | Project sponsor. |

prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible, especially during times of severe or extreme drought. However, reclaimed water should not be used in or around crops for human consumption.

- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or applying dust palliatives, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. During times of severe or extreme drought, the use of soil binders and/or dust palliatives should be prioritized over watering.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of

| | | | | |
|---|---|---|---|---|
| high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.<br>▪ The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.<br>▪ Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans. | | | | |
| **AQ-2(b): Diesel Equipment Emissions Standards.** The implementing agency shall ensure, to the maximum extent feasible, that diesel construction equipment meeting CARB Tier 4 emission standards for off-road heavy-duty diesel engines is used. If use of Tier 4 equipment is not feasible, diesel construction equipment meeting Tier 3 (or if infeasible, Tier 2) emission standards shall be used. These measures shall be noted on all construction plans and the implementing agency shall perform periodic site inspections. | Construction plans shall ensure that that construction equipment is subject to the CARB Regulation for In-use Off-road Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards; or at least Tier 2 standards; and perform periodic site inspections. | During project permitting and environmental review.<br>Prior to issuance of grading permits; periodically during construction. | Once during project plan review; periodically during construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| **AQ-2(c): Electric Construction Equipment.** The implementing agency shall ensure that to the extent feasible, construction equipment utilizes electricity from power poles rather than temporary diesel power generators and/or gasoline power generators. | Construction plans shall ensure that electricity from power poles is used to the extent possible. | During project permitting and environmental review.<br>Prior to issuance of grading permits; periodically during construction. | Once during project plan review; periodically during construction. | Project sponsor. |
| **AQ-2(d): Diesel Particulate Emission Reduction Measures.** For all projects, the implementing agency shall incorporate the following diesel particulate emission reduction measures when feasible based on analysis of individual sites and project circumstances:<br>▪ On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.<br>▪ Equipment/vehicles using alternative fuels, such as compressed natural gas, liquefied natural gas, propane or biodiesel, should be used on-site where feasible.<br>▪ Catalytic converters shall be installed on gasoline-powered equipment, if feasible.<br>▪ All construction equipment shall be maintained in tune per the manufacturer's specifications.<br>▪ The engine size of construction equipment shall be the minimum practical size.<br>▪ The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.<br>▪ Construction worker trips should be minimized by requiring carpooling and by providing for lunch on-site. | Construction plans shall ensure that that construction equipment implement diesel particulate emission measures when feasible. | During project permitting and environmental review.<br>Prior to issuance of grading permits; periodically during construction. | Once during project plan review; periodically during construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| ▪ Construction truck trips should be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.<br>▪ Proposed truck routes should minimize to the extent feasible impacts to residential communities and sensitive receptors.<br>▪ Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows. | | | | |
| **AQ-4: Health Risk Reduction Measures.** Transportation implementing agencies shall implement the following measures:<br>▪ During project-specific design and CEQA review, the potential localized particulate ($PM_{10}$ and $PM_{2.5}$) impacts and their health risks shall be evaluated for the project. Localized particulate matter concentrations shall be estimated using procedures and guidelines consistent with U.S. EPA 2015's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and $PM_{10}$ Nonattainment and Maintenance Areas*. If required based on the project-level hotspot analysis, project-specific mitigation shall be added to the project design concept or scope to ensure that local particulate ($PM_{10}$ and $PM_{2.5}$) emissions would not reach a concentration at any location that would cause estimated cancer risk to exceed the SBCAPCD health risk notification level threshold of 10 in one million. Per the U.S. EPA guidance (2015), potential mitigation measures to be considered may include but shall | Conduct project-level hot spot analysis.<br>Ensure a project-level HRA is prepared by a qualified air quality consultant.<br>Ensure project-level environmental review and site plans incorporate the measures to reduce particulate impacts, as listed in this mitigation measure. | During project permitting and environmental review; during construction as applicable. | Once during project-level environmental review; periodically during construction; following construction. | Project sponsor. |

not be limited to: providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones and replacing older buses with cleaner buses. These measures can and should be implemented to reduce localized particulate impacts as needed.

- Retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of nearby residents to TAC concentrations. The HRA shall be conducted in accordance with the latest iteration of the SBCAPCD Modeling Guidelines for Health Risk Assessments: Form-15i.
- If impacts result in increased risks to sensitive receptors above significance thresholds, Plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source. This measure would trap TACs emitted from pollution sources such as highways, reducing the amount of TACs to which residents and other sensitive populations would be exposed.

In addition, consistent with the general guidance contained in CARB's Air Quality and Land Use Handbook (April 2005) and Technical Advisory on Strategies to Reduce Air pollution Exposure Near High-Volume Roadways (April 2017), for land use projects, appropriate and feasible measures shall be incorporated into project building design for residential, school and other sensitive uses located

within 500 feet, or other distance as determined by the lead agency, of freeways, heavily travelled arterials, railways and other sources of diesel particulate matter, including roadways experiencing significant vehicle delays (CARB 2005). The appropriate measures shall include one or more of the following methods, as determined by a qualified professional, as applicable. The implementing agency shall incorporate health risk reduction measures based on analysis of individual sites and project circumstances. These measures may include:

- Avoid siting new sensitive land uses within 500 feet of a freeway or railway.
- Require development projects for new sensitive land uses to be designed to minimize exposure to roadway-related pollutants to the maximum extent feasible through inclusion of design components including air filtration and physical barriers.
- Do not locate sensitive receptors near the entry and exit points of a distribution center.
- Locate structures and outdoor living areas for sensitive uses as far as possible from the source of emissions. As feasible, locate doors, outdoor living areas and air intake vents primarily on the side of the building away from the freeway or other pollution source. As feasible, incorporate dense, tiered vegetation that regains foliage year-round and has a long life span between the pollution source and the project.

- Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year).
- Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the MERV 13. The HV system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85% supply filters should be used. Ongoing maintenance should occur.
- Retain a qualified HV consultant or Home Energy Rating Systems (HERS) rater during the design phase of the project to locate the HV system based on exposure modeling from the mobile and/or stationary pollutant sources.
- Maintain positive pressure within the building.
- Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air.
- Achieve a performance standard of at least 4 air exchanges per hour of recirculation. Achieve a performance standard of 0.25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized.
- Require project owners to provide a disclosure statement to occupants and buyers summarizing technical studies that reflect health concerns about exposure to highway exhaust emissions.

| | | | | |
|---|---|---|---|---|
| ▪ Implement feasible attenuation measures needed to reduce potential air quality impacts to sensitive receptors such as air filtration systems. | | | | |
| **AQ-5: Project-Level $PM_{10}$ Emissions Reduction.** Implementing agencies shall evaluate $PM_{10}$ emissions as part of project-specific CEQA review and discretionary approval decisions for land use projects within the SBCAG region. Where project-level significant impacts are identified, implementing agencies shall identify and implement measures that reduce $PM_{10}$ emissions below SBCAPCD standards to the extent feasible. $PM_{10}$ emissions reduction measures may include:<br>▪ Require new residential and commercial construction to apply dust suppressants, including water and non-toxic surfactants, and to comply with the maximum feasible dust and emissions control measures recommended by SBCAPCD, to reduce particulate matter emissions from construction areas.<br>▪ Require new construction projects to use the newest available (Tier 3 or better) construction equipment, which generate lower emissions of diesel particulate matter when operating. | Evaluate $PM_{10}$ emissions and ensure reduction of emissions below SBCAPCD standards by reduction measures listed in this mitigation measure or other measures of equivalent effectiveness. | During project permitting and environmental review; periodically during construction. | Once during project-level environmental review; periodically during construction. | Project sponsor. |
| **Biological Resources** | | | | |
| **BIO-1(a): Biological Resources Screening and Assessment.** On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to impact biological resources. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project | Ensure screening to determine whether the project has any potential impact to biological resources and incorporate measures listed in this mitigation measure if impacts are found. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a biological resources assessment (BRA) or similar type of study to document the existing biological resources within the project footprint plus an appropriate buffer determined by a qualified biologist and to determine the potential impacts to those resources. The BRA shall evaluate the potential for impacts to all sensitive biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities/critical habitat and other resources judged to be sensitive by local, state, and/or federal agencies. In addition, the assessment shall document potential modifications to existing infrastructure suitable for wildlife movement (e.g., culvert, underpass). Pending the results of the BRA, design alterations, further technical studies (i.e., protocol surveys) and/or consultations with the USFWS, CDFW and/or other local, state, and federal agencies may be required. The following Mitigation Measures [BIO-1(b) through BIO-1(k)] shall be incorporated, only as applicable, into the BRA for projects where specific resources are present, or may be present, and may be impacted by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the BRA where suitable habitat is present. | | | | |
| **BIO1(b): Special-status Plant Species Surveys.** If the project-specific BRA determines that special-status plant species may occur on-site, surveys for special-status plants shall be completed prior to any vegetation removal, grubbing, | If applicable, surveys for special status plants shall be completed.<br>Ensure a report of the survey is provided. | During project permitting and environmental review; prior to construction but no earlier than one year before construction commences. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| or other construction activity within each segment (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the blooming period of the target species identified in the project-specific BRA. All plant surveys shall be conducted by a qualified biologist approved by the implementing agency no more than two years before initial ground disturbance. All special-status plant species identified on-site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the implementing agency, and the CDFW and/or USFWS, as appropriate, for review and approval. | | | | |
| **BIO-1(c): Special-status Plant Species Avoidance, Minimization, and Mitigation.** If State listed or California Rare Plant List 1B species are found during special-status plant surveys [pursuant to Mitigation Measure BIO-1(b)], then the project shall be re-designed to avoid impacting these plant species, if feasible. Rare plant occurrences that are not within the immediate disturbance footprint, but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm. | If applicable, project shall be redesigned to avoid impacting rare plant species. If avoidance is not possible, mitigation shall be required pursuant to a restoration plan that must be developed for the project. | During project permitting and environmental review; prior to issuance of construction permits and approvals. | Once and as needed to confirm avoidance | Project sponsor. |
| **BIO-1(d): Restoration and Monitoring.** If special-status plants species cannot be avoided and will be impacted by a project implemented under Connected 2050, all | Grading and site plans shall avoid the removal of existing mature trees to the extent possible. | During project permitting and environmental review. | Monitor survivability of planted trees | Project sponsor. |

| | | |
|---|---|---|
| impacts shall be mitigated at a minimum ratio of 2:1 (number of acres/individuals restored to number of acres/individuals impacted) for each species as a component of habitat restoration. A restoration plan shall be prepared and submitted to the jurisdiction overseeing the project for approval (e.g., if a state listed plant species will be impacted, the restoration plan shall be submitted to the CDFW for approval). The restoration plan shall include, at a minimum, the following components:<br>▪ Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type);<br>▪ Goal(s) of the compensatory mitigation project [type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved including specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved;<br>▪ Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values);<br>▪ Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);<br>▪ Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule);<br>▪ Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages | Place conditions of approval on project to require tree replacement at a minimum 2:1 ratio.<br>Maintain replacement trees to ensure their success. | periodically following construction. |

| | | | | |
|---|---|---|---|---|
| to be established, restored, enhanced, and/or preserved, annual monitoring reports);<br>▪ Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type;<br>▪ An adaptive management program and remedial measures to address any shortcomings in meeting success criteria;<br>▪ Notification of completion of compensatory mitigation and agency confirmation; and<br>▪ Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism). | | | | |
| **BIO-1(e): Endangered/Threatened Species Habitat Assessment and Protocol Surveys.** Specific habitat assessment and survey protocols are established for several federally and state Endangered or Threatened species. If the results of the BRA determine that suitable habitat may be present, then any such species' protocol habitat assessments/surveys shall be completed in accordance with CDFW and/or USFWS protocols prior to issuance of any construction permits. If through consultation with the CDFW and/or USFWS it is determined that protocol habitat assessments/surveys are not required, said consultation shall be documented prior to issuance of any construction permits. Each protocol has different survey and timing requirements, and therefore the applicant(s) for each project shall be responsible for ensuring | If applicable, protocol habitat assessments/ surveys shall be completed in accordance with protocols. | During project permitting and environmental review; prior to commencement of project construction. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| they understand the protocol requirements. | | | | |
| **BIO-1(f): Endangered/Threatened Species Avoidance and Minimization.** The habitat requirements of endangered and threatened species throughout the County are highly variable. The potential impacts from any given project implemented under Connected 2050 are likewise highly variable. However, there are several avoidance and minimization measures that can be applied for a variety of species to reduce the potential for impact, with the final goal of no net loss of the species. Project sponsors shall select appropriate measures, as applicable, from the following measures that may be applied to aquatic and/or terrestrial species:<br>▪ Ground disturbance shall be limited to the minimum necessary to complete the project. The project limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance.<br>▪ All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species.<br>▪ All projects occurring within or adjacent to sensitive habitats that may support federally and/or state Endangered/Threatened species shall have a CDFW and/or USFWS-approved biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing | If applicable, project plans shall include project-specific mitigation measures to avoid and minimize impacts to endangered or threatened species. | During project permitting and environmental review; prior to and ongoing through project construction. | Periodically through construction. | Implementing agencies/project sponsor. |

activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for Endangered/Threatened species. Alternatively, and upon approval by CDFW and/or USFWS, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are being fully implemented.

- No Endangered/Threatened species shall be captured and relocated without expressed, authorized permission from the CDFW and/or USFWS.
- If at any time during construction of the project an Endangered/Threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A CDFW/USFWS-approved biologist shall document the occurrence and consult with CDFW and/or USFWS as appropriate.
- For all projects occurring in areas where Endangered/Threatened species may be present and are at risk of entering the project site during construction, exclusion fencing shall be placed along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of 3 feet above grade and 2 feet below grade and shall be attached to wooden stakes placed at intervals of not more than 5 feet. The fence shall

be inspected weekly and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete.

- All vehicle maintenance/fueling/staging shall occur a minimum of 100 feet away from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.
- All equipment operating within streams shall be in good conditions and free of leaks. Spill containment shall be installed under all equipment staged within stream areas and extra spill containment and clean up materials shall be located in close proximity for easy access.
- If project activities could degrade water quality, water quality sampling shall be implemented to identify the pre-project baseline, and to monitor during construction for comparison to the baseline.
- If water is to be diverted around work sites, a diversion plan shall be submitted (depending upon the species that may be present) to the CDFW, RWQCB, USFWS, and/or NMFS for their review and approval prior to the start of any construction activities (including staging and mobilization). If pumps are used, all intakes shall be completely screened with wire mesh

| | | | | |
|---|---|---|---|---|
| not larger than five millimeters to prevent animals from entering the pump system.<br>▪ At the end of each workday, excavations shall be secured with cover or a ramp provided to prevent wildlife entrapment.<br>▪ All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.<br>▪ The CDFW/USFWS-approved biologist shall remove invasive aquatic species such as bullfrogs and crayfish from suitable aquatic habitat whenever observed and shall dispatch them in a humane manner and dispose of properly.<br>▪ If any federal and/or state protected species are harmed, the CDFW/USFWS-approved biologist shall document the circumstances that led to harm and shall determine if project activities should cease or be altered in an effort to avoid additional harm to these species. Dead or injured special-status species shall be disposed of at the discretion of the CDFW and USFWS. All incidences of harm shall be reported to the CDFW and USFWS within 24 hours. | | | | |
| **BIO-1(g): Non-Listed Special-status Animal Species Avoidance and Minimization.** Several State Species of Special Concern may be impacted by projects implemented under Connected 2050. The ecological requirements and potential for impacts is highly variable among these species. Depending on the species identified in the BRA, several of the measures identified under BIO-1(f) shall be applicable to the project. In | If applicable, project plans shall include project-specific mitigation measures to reduce impacts to non-listed special status species. | During project permitting and environmental review; prior to, during and after project construction. | During all initial ground disturbance, as applicable. | Project sponsor. |

addition, measures shall be selected from among the following to reduce the potential for impacts to non-listed special-status animal species:

- For non-listed special-status terrestrial amphibians and reptiles, coverboard surveys shall be completed within three months of the start of construction. The coverboards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal. All non-listed special-status and common animals found under the coverboards shall be captured and placed in five-gallon buckets for transportation to relocation sites. All relocation sites shall be reviewed by the project sponsor and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is not harmed by construction of the project. Relocation shall occur on the same day as capture. CNDDB Field Survey Forms shall be submitted to the CDFW for all special-status animal species observed.
- Pre-construction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 200-foot buffer, if feasible, and shall identify all special-status animal species that may occur on-site. All

non-listed special-status species shall be relocated from the site either through direct capture or through passive exclusion. A report of the pre-construction survey shall be submitted to SBCAG/and or the local jurisdiction for their review and approval prior to the start of construction.

- A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special-status animal species unearthed by construction activities.
- Upon completion of the project, a qualified biologist shall prepare a Final Compliance report documenting all compliance activities implemented for the project, including the pre-construction survey results. The report shall be submitted within 30 days of completion of the project.
- If special-status bat species may be present and impacted by the project, a qualified biologist shall conduct presence/absence surveys within 30 days prior to the start of construction presence/absence surveys for special-status bats in consultation with the CDFW where suitable roosting habitat is present and in consultation with the CDFW. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost. If active roosts are located, exclusion devices such as netting shall be installed to discourage bats from occupying the site in consultation with the CDFW. If a roost is determined by a qualified biologist to be used by a large number of bats (large

| | | | | |
|---|---|---|---|---|
| hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. | | | | |
| **BIO-1(h): Preconstruction Surveys for Nesting Birds.** For any construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds (covered by the California Fish and Game Code and the Migratory Bird Treaty Act) shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal. The surveys shall include the entire segment disturbance area plus a 200-foot buffer around each project site. If active nests are located, all construction work shall be conducted outside an established buffer area around the nest. The buffer shall be a minimum of 50 feet for passerine bird species and at least 250 feet for raptor species, but appropriate buffer size will be determined by a qualified biologist. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer | If applicable, a survey for nesting birds shall be completed; if necessary, a buffer shall be created. | During project permitting and environmental review; prior to construction activities; during construction activities if required. | Once prior to construction; as needed during construction activities. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer. A report of these preconstruction nesting bird surveys shall be submitted to SBCAG and/or the local jurisdiction. | | | | |
| **BIO-1(i): Monarch Butterfly Avoidance and Minimization.** Prior to completion of the final design, a qualified biologist shall review the project for the potential to impact monarch butterflies. If known or potential winter roost sites may be impacted, the biologist shall make recommendations to avoid impacts including, but not limited to, relocation/redesign of project features to avoid roost sites, guidance regarding tree removal and trimming at roost sites, and recommendations regarding planting additional roost trees.<br>Between October 1 and March 1, construction shall not occur within 100 feet of known or potential roost sites, if feasible. If construction must occur during this period, a qualified biologist shall survey known and potential roost sites to confirm occupancy by monarch butterflies prior to start of any construction within 100 feet. Multiple surveys may be necessary, and the closest known roost sites shall be used as voucher sites to confirm the timing of butterfly arrival. If monarch butterflies are found at a roost site, construction shall not occur within 100 feet of the roost site until the biologist has determined that the butterflies have left the area. The biologist shall visit the voucher sites to confirm that butterflies have left the region. | If applicable, impacts to monarch butterflies shall be assessed and project plans shall include project-specific mitigation measures that avoid or minimize impacts to monarchs. | During individual environmental review; prior to construction activities; during construction activities if required. | Initially and as needed | Project sponsor |

| | | | | |
|---|---|---|---|---|
| **BIO-1(j): Worker Environmental Awareness Program (WEAP).** Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend WEAP training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form documenting that they have attended the WEAP and understand the information presented to them. The form shall be submitted to SBCAG and/or the local jurisdiction to document compliance. | If applicable, construction personnel shall attend WEAP training. | During project permitting and environmental review. | Once prior to construction. | Project sponsor. |
| **BIO-1(k): Tree Protection.** If it is determined that construction may impact trees protected by local agencies, the project sponsor shall procure all necessary tree removal permits. A tree protection and replacement plan shall be developed by a certified arborist, as appropriate. The plan shall include, but would not be limited to, an inventory of trees within the construction site, setbacks from trees and protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for | Grading and site plans shall avoid the removal of existing mature trees to the extent possible.<br>Place conditions of approval on project to require tree replacement at a minimum 2:1 ratio.<br>Maintain replacement trees to ensure their success. | During project permitting and environmental review. | Monitor survivability of replacement trees periodically following construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| replacement and maintenance of trees. If protected trees will be removed, replacement tree plantings of the same or similar species in accordance with local agency standards, but at a minimum ratio of 2:1 (trees planted to trees impacted), shall be installed on-site or at an approved off-site location, and a restoration and monitoring program shall be developed in accordance with Mitigation Measure BIO-1(d) and shall be implemented for a minimum of seven years or until stasis has been determined by certified arborist. If a protected tree will be encroached upon, but not removed, a certified arborist shall be present to oversee all trimming of roots and branches. | | | | |
| **BIO-2(a): Jurisdictional Delineation.** If projects implemented under Connected 2050 occur within or adjacent to wetland, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, RWQCB, and/or CCC, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report that shall be submitted to the implementing agency, USACE, RWQCB, CDFW, and CCC, as appropriate, for review and approval. If jurisdictional areas are expected to be impacted, then the RWQCB would require a Waste Discharge Requirements (WDR) permit and/or Section 401 Water Quality Certification (depending upon whether or not the feature falls under federal jurisdiction). If CDFW asserts its jurisdictional authority, | If applicable, a jurisdictional delineation shall be completed and submitted to the applicable agencies listed in this mitigation measure. | During project permitting and environmental review. | Once | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| then a Streambed Alteration Agreement pursuant to Section 1600 et seq. of the CFGC would also be required prior to construction within the areas of CDFW jurisdiction. If the USACE asserts its authority, then a permit pursuant to Section 404 of the Clean Water Act would likely be required. The CCC would also require a coastal development permit for projects falling within its jurisdiction. | | | | |
| **BIO-2(b): Wetland and Riparian Habitat Restored.** Impacts to jurisdictional wetland and riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted) and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan shall be developed by a qualified biologist in accordance with Mitigation Measure BIO-1(d) above and shall be implemented for no less than five years after construction of the segment, or until the SBCAG/local jurisdiction and/or the permitting authority (e.g., CDFW or USACE) has determined that restoration has been successful. | If applicable, project plans shall mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio determined by a qualified biologist.<br>A mitigation and monitoring plan shall be developed be developed by a qualified biologist. | During project permitting and environmental review. | Once | Project sponsor. |
| **BIO-2(c): Landscaping Plan.** If landscaping is proposed for a specific project, a qualified biologist/landscape architect shall prepare a landscape plan for that project. This plan shall indicate the locations and species of plants to be installed. Drought tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists 1, 2, and 4 shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats. | If applicable, a landscaping plan shall be prepared and include all requirements; species shall be similar to those in adjacent native habitats. | During project permitting and environmental review. | Once | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| **BIO-2(d): Sensitive Vegetation Community Avoidance and Mitigation.** If the results of measure B-1(a) indicates projects implemented under Connected 2050 would impact sensitive vegetation communities, impacts to sensitive communities shall be avoided through final project design modifications.<br>If the implementing agency determines that sensitive communities cannot be avoided, impacts shall be mitigated on-site or offsite at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist. Temporarily impacted areas shall be restored to pre-project conditions. A Restoration Plan shall be developed by a qualified biologist and submitted to the agency overseeing the project for approval. | If applicable, project plans shall include final project design modifications shall be developed to avoid impacts to sensitive vegetation communities. If avoidance is not possible, impacts shall be mitigated at a ratio determined by a qualified biologist, and a qualified biologist must provide a Restoration Plan. | During project permitting and environmental review. | Once following construction and then, when applicable, in accordance with the Restoration Plan. | Project sponsor. |
| **BIO-2(e): Invasive Weed Prevention and Management Program.** Prior to start of construction for each project, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist to prevent invasion of native habitat by non-native plant species. A list of target species shall be included, along with measures for early detection and eradication. All disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas. In areas where construction is ongoing, hydroseeding will be conducted in areas where construction activities have occurred for at least six weeks since ground disturbing activities ceased. If exotic species invade these areas prior to hydroseeding, weed removal shall occur in consultation with a qualified biologist and in accordance with the restoration plan. | If applicable, an Invasive Weed Prevention and Management Program shall be developed. | During project permitting and environmental review; prior to construction activities; during construction activities. | Once prior to construction; ongoing during construction. | Project sponsor. |
| **BIO-2(f): Wetlands, Drainages and Riparian Habitat Best Management** | If applicable, ensure project plans incorporate the best | During project permitting and environmental review; | Once prior to construction; | Project sponsor. |

| | | | |
|---|---|---|---|
| **Practices During Construction.** The following best management practices shall be required for development within or adjacent to wetlands, drainages, or riparian habitat:<br>▪ Access routes, staging and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to other waters including locating access routes and ancillary construction areas outside of jurisdictional areas.<br>▪ To control sedimentation during and after project implementation, appropriate erosion control materials shall be deployed to minimize adverse effects on jurisdictional areas in the vicinity of the project.<br>▪ Project activities within the jurisdictional areas should occur during the dry season (typically between June 1 and November 1) in any given year, or as otherwise directed by the regulatory agencies.<br>▪ During construction, no litter or construction debris shall be placed within jurisdictional areas. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.<br>▪ All project-generated debris, building materials and rubbish shall be removed from jurisdictional areas and from areas where such materials could be washed into them.<br>▪ Raw cement, concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic species resulting from project-related | management practices listed in this mitigation measure. | prior to construction activities; during construction activities. | ongoing during construction. |

| | | | | |
|---|---|---|---|---|
| activities, shall be prevented from contaminating the soil and/or entering wetlands, drainages or riparian habitat.<br>▪ All refueling, maintenance and staging of equipment and vehicles shall occur at least 100 feet from bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should an accidental spill occur. | | | | |
| **BIO-3(a): Fence and Lighting Design.** All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing shall not block or impede wildlife movement through riparian or other natural habitat when feasible. Where fencing is required for public safety concerns, the fence shall be designed to permit wildlife movement by incorporating design features such as:<br>▪ A minimum 16 inches between the ground and the bottom of the fence to provide clearance for small animals;<br>▪ A minimum 12 inches between the top two wires, or top the fence with a wooden rail, mesh, or chain link instead of wire to prevent animals from becoming entangled;<br>▪ If privacy fencing is required near open space areas, openings at the bottom of the fence measure at least 16 inches in diameter shall be installed at reasonable intervals to allow wildlife movement. | Project plans for projects with fencing and lighting shall be designed to minimize impacts to wildlife. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| If fencing must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures shall be incorporated into the project design as appropriate.<br>Similarly, lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat, using low intensity lighting, and using a few lights as necessary to achieve the goals of the project. | | | | |
| **BIO-3(b): Maintain Connectivity in Drainages.** No permanent structures shall be placed within any drainage or river that would impede wildlife movement (i.e., no hardened caps or other structures in the stream channel perpendicular to stream flow be left exposed or at depth with moderate to high risk for exposure as a result of natural bed scour during high flow events and thereby potentially create impediments to passage).<br>In addition, upon completion of construction within any drainage, areas of stream channel and banks that are temporarily impacted shall be returned to pre-construction contours and in a condition that allows for unimpeded passage through the area once the work has been complete.<br>If water is to be diverted around work sites, a diversion plan shall be submitted to SBCAG, and/or local jurisdiction for review and approval prior to issuance of project construction permits/ approvals. The diversion shall be designed in a way as to not impede movement while the diversion is in place. | Ensure construction plans and building plans avoid placement of permanent structures in drainages or rivers such that wildlife movement would be impeded.<br>Ensure temporary impacts to stream channels are restored.<br>If applicable, ensure a diversion plan is provided for the project. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| **BIO-3(c): Construction Best Management Practices to Minimize Disruption to Wildlife.** The following construction Best Management Practices (BMPs) shall be incorporated into all grading and construction plans in order to minimize temporary disruption of wildlife, which could hinder wildlife movement:<br>▪ Designation of a 20 mile per hour speed limit in all construction areas.<br>▪ Daily construction work schedules shall be limited to daylight hours only.<br>▪ Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.<br>▪ All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.<br>▪ No pets are permitted on project site during construction. | Construction plans shall incorporate best management practices to minimize disruption to wildlife. | During project permitting and environmental review; prior to issuance of grading and construction permits. | Periodically during construction. | Project sponsor and onsite construction manager. |
| **BIO-ADD: Additional Biological Mitigation.** Additional biological mitigation added by the SBCAG Board at their August 19, 2021 hearing certifying this PEIR to address potential impacts to wildlife connectivity and protected species.<br>1. Lead agency shall consult with applicable counties, cities, Tribes, and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement related to local ordinances or conservation plans.<br>2. Lead agency and/or project applicant shall design projects to minimize impacts to wildlife movement and habitat connectivity and preserve | Ensure screening to determine whether the project has any potential impact to biological resources and incorporate measures listed in this mitigation measure if impacts are found and as applicable to the project. | During project permitting and environmental review; prior to issuance of grading and construction permits; prior to construction activities; and during construction activities as applicable. | As applicable to the specific mitigation. | Project sponsor. |

existing and functional wildlife corridors.

3. Lead agency must conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site.
4. For long linear projects with the possibility of impacting wildlife movement (e.g., road expansion), lead agency shall analyze habitat linkages/wildlife movement corridors on a broad scale to avoid critical narrow choke points that could reduce the function of recognized movement corridors.
5. Lead agency must require review of construction drawings and habitat connectivity mapping by a qualified biologist to determine the risk of habitat fragmentation.
6. For projects with impacts to habitat linkages or corridors, lead agency shall ensure adequate preservation and mitigation of habitat linkages and corridors (e.g., through mitigation banking or purchasing, maintain or restoring offsite habitat).
7. Lead agency shall design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches where applicable.
8. Lead agency shall install overpasses, underpasses, or culverts as appropriate to create wildlife crossings in cases where a roadway or other transportation project may interrupt the flow of species through their habitat. Retrofitting of existing infrastructure in project areas should also be considered for wildlife crossings for purposes of mitigation.

9. Lead agency shall install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction.
10. Where avoidance of impacts is determined by the lead agency to be infeasible, the lead agency shall design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., United States Fish and Wildlife Service and/or CDFW) and in accordance with the respective county and city general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, where applicable: Wildlife movement buffer zones, appropriately spaced breaks in center barriers, culverts, construction of wildlife crossings such as freeway under- or overpasses, other comparable measures.
11. Lead agency shall implement berms and sound/sight barriers at all designated wildlife crossings where feasible to encourage wildlife to utilize crossings. Sound and lighting should also be minimized in developed areas, particularly those that are adjacent to or go through natural habitats.
12. Lead agency shall reduce lighting impacts on sensitive species through implementation of mitigation measures where feasible including, but not limited to:

- Use high pressure sodium and/or cut-off fixtures instead of typical mercury vapor fixtures for outdoor lighting;
- Design exterior lighting to confine illumination to the project site;
- Provide structural and/or vegetative screening from light-sensitive uses;
- Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces;
- Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.
- Minimize lighting at night.

13. Lead agency shall reduce noise impacts to sensitive species through implementation of the following mitigation measures where feasible including, but not limited to:

- Install temporary noise barriers during construction.
- Include permanent noise barriers and sound-attenuating features as part of the project design. Barriers could be in the form of outdoor barriers, sound walls, buildings, or earth berms to attenuate noise at adjacent sensitive uses.
- Ensure that construction equipment is properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds silencers, wraps). All intake and

| | | | | |
|---|---|---|---|---|
| exhaust ports on power equipment shall be muffled or shielded.<br>▪ Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction to avoid noise associated with compressed air exhaust from pneumatically powered tools.<br>▪ Using rubberized asphalt or "quiet pavement" to reduce road noise for new roadway segments, roadways in which widening or other modifications require re-pavement, or normal reconstruction of roadways where re-pavement is planned.<br>▪ Use equipment and trucks with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible) for project construction.<br>▪ Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. | | | | |
| **Cultural Resources** | | | | |
| **CR-1: Historical Resources Impact Minimization.** Prior to individual project permit issuance, the implementing agency of a Connected 2050 project involving earth disturbance or construction of permanent above ground structures or roadways shall prepare a map defining the impact zone. This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help | Project plans shall include required components to limit impacts to cultural resources. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| in determining whether known historical resources are located within the impact zone. If a structure greater than 45 years in age is within the identified impact zone, a survey and evaluation of the structure(s) to determine their eligibility for recognition under State, federal, or local historic preservation criteria shall be conducted. The evaluation shall be prepared by an architectural historian, or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation shall comply with CEQA Guidelines section 15064.5(b). Study recommendations shall be implemented, which may include, but would not be limited to, the following:<br>▪ Realign or redesign projects to avoid impacts on known historic resources where possible.<br>▪ If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring and Reconstructing Historic Buildings.<br>▪ Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources. | | | | |
| **CR-2: Archaeological Resources Impact Minimization.** Before construction activities, implementing agencies shall | Ensure a record search is completed. | During project permitting and environmental review; prior to construction | Ongoing throughout construction. | Project sponsor. |

| | | |
|---|---|---|
| retain a qualified archaeologist to conduct a record search at the Central Coast Information Center to determine whether the project area has been previously surveyed and whether resources were identified. When recommended by the Information Center, implementing agencies shall retain a qualified archaeologist to conduct archaeological surveys before construction activities. Implementing agencies shall follow recommendations identified in the survey, which may include, but would not be limited to: subsurface testing, designing and implementing a Worker Environmental Awareness Program (WEAP), construction monitoring by a qualified archaeologist, or avoidance of sites and preservation in place. Recommended mitigation measures will be consistent with CEQA Guidelines Section 15126.4(b)(3) recommendations.<br>In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earthmoving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. If the find is a prehistoric archaeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, a testing plan shall be prepared and implemented. If the find is determined to be significant by the | If applicable, ensure archaeological surveys are conducted. Implement recommendations identified in the survey.<br>Project construction plans shall include required components to stop work if archaeological resources are uncovered.<br>Place conditions of approval on project to ensure that work is halted if resources are uncovered until the procedures described in this mitigation measure have been completed. | activities; during construction activities. |

| | | | | |
|---|---|---|---|---|
| qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the implementing agency to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics and other factors, shall recommend additional measures such as the preparation and implementation of a data recovery plan. All cultural resources work shall follow accepted professional standards in recording any find including submittal of standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area.<br>Implementing agencies shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect archaeological resources. | | | | |
| **Geology and Soils** | | | | |
| **GEO-1(a): Geotechnical Analysis.** If a Connected 2050 project is located in an area of moderate to high liquefaction, lateral spreading and/or subsidence potential or in underground areas located in an area of high groundwater potential, the implementing agency shall ensure that these structures are designed based upon site specific geology, soils and earthquake engineering studies conducted by a qualified geotechnical expert. Projects shall follow the recommendations of these studies. Possible design measures include, but would not be limited to: deep foundations, removal of liquefiable materials and dewatering. | Place conditions of approval on the project, when applicable, to ensure structures are designed based upon site specific geology, soils, and earthquake engineering studies. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| **GEO-1(b): Hillside Stability Evaluation.** If a Connected 2050 project requires cut slopes over 15 feet in height, located on slopes exceeding 20 percent grade, or is located in areas of bedded or jointed bedrock, the implementing agency shall ensure that hillside stability evaluations and/or specific slope stabilization studies are conducted by a qualified geotechnical expert. Projects shall follow the recommendations of these studies. Possible stabilization methods include buttresses, retaining walls and soldier piles. | Place conditions of approval on the project, when applicable, to ensure that Hillside Stability Evaluations and/or specific slope stabilization studies are conducted, and if applicable, stabilization methods are included. | During project permitting and environmental review. | Once. | Project sponsor. |
| **GEO-1(c): Site Specific Geotechnical Evaluation.** If a Connected 2050 project is located in an area of highly expansive soils, the implementing agency shall ensure that a site-specific geotechnical investigation is conducted. The investigation shall identify hazardous conditions and recommend appropriate design factors to minimize hazards. Such measures could include concrete slabs on grade with increased steel reinforcement, removal of highly expansive material and replacement with non-expansive import fill material, or chemical treatment with hydrated lime to reduce the expansion characteristics of the soils. | Place conditions of approval on the project, when applicable, to ensure that site-specific geotechnical investigation is conducted. | During project permitting and environmental review. | Once. | Project sponsor. |
| **GEO-3: Paleontological Resources Impact Minimization.** Prior to any ground disturbance, the implementing agency of a Connected 2050 project involving ground disturbing activities (including grading, trenching, foundation work and other excavations) within intact (previously-undisturbed) deposits shall retain a qualified paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology (SVP) standards for Qualified Professional Paleontologist | Qualified paleontologist shall conduct a PRA meeting the requirements of this mitigation measure.<br>If applicable, place conditions of approval on the project to require implementation of the measures to avoid and minimize impacts in areas found to have a high sensitivity for | During project permitting and environmental review. | Once during individual environment-al review; monitor as needed during construction. | Project sponsor. |

(SVP 2010), to conduct a Paleontological Resources Assessment (PRA). The PRA shall determine the age and paleontological sensitivity of geologic formations underlying the proposed disturbance area, consistent with SVP Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010) guidelines for categorizing paleontological sensitivity of geologic units within a project area. If underlying formations are found to have a high potential (sensitivity) for paleontological resources, the following measures shall apply:

- Paleontological Mitigation and Monitoring Program. A qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity. This program shall outline the procedures for construction staff Worker Environmental Awareness Program (WEAP) training, paleontological monitoring extent and duration (i.e., in what locations and at what depths paleontological monitoring shall be required), salvage and preparation of fossils, the final mitigation and monitoring report and paleontological staff qualifications.
- Paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of ground disturbance activity greater than two feet below existing grade, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.

paleontological resources, as described in this mitigation measure.

- Paleontological Monitoring. Ground disturbing activity with the potential to disturbed geologic units with high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor. Should no fossils be observed during the first 50 percent of such excavations, paleontological monitoring could be reduced to weekly spot-checking under the discretion of the qualified paleontologist. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources.
- Salvage of Fossils. If fossils are discovered, the implementing agency shall be notified immediately, and the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist should have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.
- Preparation and Curation of Recovered Fossils. Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a

| | | | | |
|---|---|---|---|---|
| permanent paleontological collection, along with all pertinent field notes, photos, data and maps.<br>▪ Final Paleontological Mitigation and Monitoring Report. Upon completion of ground disturbing activity (and curation of fossils if necessary) the qualified paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated. The report shall be submitted to the sponsor agency. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository. | | | | |
| **Greenhouse Gas Emissions** | | | | |
| **GHG-1: Construction GHG Reduction Measures.** The implementing agency shall incorporate the most recent GHG reduction measures and/or technologies for reducing diesel particulate and $NO_X$ emissions measures for off-road construction vehicles during construction. The measures shall be noted on all construction plans and the implementing agency shall perform periodic site inspections. Current GHG-reducing measures include the following:<br>▪ Use of diesel construction equipment meeting CARB's Tier 4 certified engines wherever feasible for off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. Where the use of Tier 4 engines is not feasible, Tier 3 certified engines shall | Construction plans shall ensure that that construction equipment is subject to the CARB Regulation for In-use Off-road Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards; or at least Tier 2 standards and/or ensure other reduction measures as listed in the measure are applied, as applicable; and perform periodic site inspections. | During project permitting and environmental review. | Once during project plan review; periodically during construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| be used; where the use of Tier 3 engines are not feasible, Tier 2 certified engines shall be used;<br>▪ Use of on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;<br>▪ All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit;<br>▪ Use of electric powered equipment in place of diesel-powered equipment when feasible;<br>▪ Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and<br>▪ Use of alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel-powered equipment for 15 percent of the fleet;<br>▪ Use of materials sourced from local suppliers; and<br>▪ Recycling of at least 75 percent of construction waste materials. | | | | |
| **GHG-3: Transportation-Related GHG Reduction Measures.** The implementing agency shall incorporate the most recent GHG reduction measures and/or technologies for reducing VMT and associated transportation-related GHG emissions. The measures shall be incorporated into construction plans, as appropriate, and the implementing agency shall verify implementation when | Construction plans shall ensure that reduction measures as listed in the measure are applied, as applicable; and perform periodic site inspections. | During project permitting and environmental review. | Once during project plan review; once prior to issuance of an occupancy permit. | Project sponsor. |

practicable. Current GHG-reducing measures include the following:

- Installation of electric vehicle charging stations beyond those required by State and local codes
- Utilization of electric vehicles and/or alternatively-fueled vehicles in company fleet
- Provision of dedicated parking for carpools, vanpool, and clean air vehicles
- Provision of vanpool and/or shuttle service for employees
- Implementation of reduced parking minimum requirements
- Implementation of maximum parking limits
- Provision of bicycle parking facilities beyond those required by State and local codes
- Provision of a bicycle-share program
- Expansion of bicycle routes/lanes along the project site frontage
- Provision of new or improved transit amenities (e.g., covered turnouts, bicycle racks, covered benches, signage, lighting) if project site is located along an existing transit route
- Expansion of existing transit routes
- Provision of transit subsidies
- Expansion of sidewalk infrastructure along the project site frontage
- Provision of safe, pedestrian-friendly, and interconnected sidewalks and streetscapes
- Provision of employee lockers and showers
- Provision of on-site services that reduce the need for off-site travel (e.g., childcare facilities, automatic

| | | | | |
|---|---|---|---|---|
| teller machines, postal machines, food services)<br>▪ Provision of alternative work schedule options, such as telework or reduced schedule (e.g., 9/80 or 10/40 schedules), for employees<br>▪ Implementation of transportation demand management programs to educate and incentivize residents and/or employees to use transit, smart commute, and alternative transportation options | | | | |
| **Hydrology and Water Quality** | | | | |
| **HYD-2(a): Construction Dust Suppression Water Supply.** All Connected 2050 projects, where feasible, reclaimed and/or recycled water shall be used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. | Where economically feasible, reclaimed and/or desalinated water shall be used for dust suppression during construction activities.<br>Ensure this mitigation measure is included on project construction plans. | During project permitting and environmental review. | Once prior to issuance of construction permit; periodically during construction. | Project sponsor. |
| **HYD-2(b): Landscape Watering.** In jurisdictions that do not already have an appropriate local regulatory program related to landscape watering, Connected 2050 projects that include landscaping shall be designed with drought tolerant plants and drip irrigation. When feasible, native plant species shall be used. In addition, landscaping associated with proposed improvements shall be maintained using reclaimed and/or desalinated water when feasible. | Low water use landscaping (i.e., drought tolerant plants and drip irrigation) shall be installed. | During project permitting and environmental review. | Once | Project sponsor. |
| **HYD-2(c): Porous Pavement.** In jurisdictions that do not already have an appropriate local regulatory program related to porous pavement, the sponsor of a Connected 2050 project that involves streetscaping, parking, transit and land use improvements shall ensure that | Use porous pavement materials where feasible. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| porous pavement materials are utilized, where feasible, to allow for groundwater percolation. | | | | |
| **HYD-2(d): Water Infrastructure Improvements.** The sponsor of Connected 2050 projects that would require potable water service shall coordinate with water supply system operators to ensure that the existing water supply systems have the capacity to handle the increase. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility should be provided by the implementing agency. | Provide infrastructure improvements for the appropriate public service or utility as needed. | During project permitting and environmental review. | Once. | Project sponsor. |
| **HYD-2(e): Bioswale Installation.** The sponsor of a Connected 2050 project, such as new roads or roadway extensions, that would substantially increase impervious surfaces shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality if not already required by the appropriate jurisdictions local regulatory programs. | Use bioswales to facilitate groundwater recharge where feasible. | During project permitting and environmental review. | Once. | Project sponsor. |
| **Land Use and Planning** | | | | |
| **LU-3: Agricultural Resource Impact Avoidance and Minimization.** Implementing agencies shall implement measures, where feasible based on project-and site-specific considerations that include, but are not limited to those identified below.<br>▪ Require project relocation or corridor realignment, where feasible, to avoid Important Farmland, agriculturally-zoned land and/or land under Williamson Act contract;<br>▪ Compensatory mitigation at a minimum 1:1 (impacted : replaced) | Ensure that project-specific environmental reviews consider and implement the measures identified in the mitigation measure that reduce or avoid impacts to agricultural lands. | During individual environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| acreage ratio with Important Farmland of equivalent or better quality, where feasible;<br>▪ Require acquisition of conservation easements on land at least equal in quality and size as mitigation for the loss of Important Farmland; and/or<br>▪ Institute new protection of farmland in the project area or elsewhere through the use of long-term restrictions on use, such as 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.) or 10-year, annually renewed, Williamson Act contracts (Government Code Section 51200 et seq.). | | | | |
| **Noise** | | | | |
| **N-1: Construction Noise and Vibration Reduction.**<br>a. Compliance with local Construction Noise and Vibration Regulations. Project sponsors of Connected 2050 projects shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites without pile driving, appropriate measures shall be implemented to ensure consistency with local noise ordinance requirements relating to construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary walls and noise barriers to block and deflect noise.<br>b. Pile Driving. For any project within 3,200 feet of sensitive receptors that requires pilings, the project sponsor shall require caisson drilling or sonic | Ensure that equipment and trucks used for project construction utilize the best available noise and vibration control techniques. | During project permitting and environmental review. | Regular inspection | Project sponsor; and onsite construction manager. |

pile driving as opposed to pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.

c. Construction Equipment Noise and Vibration Control. Project sponsors shall ensure that equipment and trucks used for project construction utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).

d. Impact Equipment Noise Control. Project sponsors shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.

e. Construction Activity Timing Restrictions. The following timing restrictions shall apply to Connected 2050 activates creating noise levels at or above 65 dBA at a nearby dwelling unit, except where timing restrictions are already established in local codes

or policies. Construction activities shall be limited to:

- Monday through Friday: 7 a.m. to 6 p.m.
- Saturday: 9 a.m. to 5 p.m.

f. Placement of Stationary Noise and Vibration Sources. Locate stationary noise sources as far from sensitive receptors as possible.

g. Physical Impacts Due to Vibration. Implementing agencies of Connected 2050 projects utilizing heavy construction equipment shall estimate vibration levels generated by construction activities and use the Caltrans vibration damage potential threshold criteria to screen for and screen out projects as to their potential to damage buildings on site or near a project. (See Table Caltrans Vibration Damage Potential Threshold Criteria, pg.4.11-14 of DPEIR for threshold criteria)

If construction equipment would generate vibration levels exceeding the threshold criteria, a structural engineer or other appropriate professional shall be retained to ensure vibration levels do not exceed the thresholds during project construction. The structural engineer shall perform the following tasks, at minimum:

- Review the project's demolition and construction plans
- Survey the project site and vulnerable buildings, including geological testing, if necessary
- Prepare and submit a report to the lead agency or other appropriate

party containing the following, at minimum:

- Any information obtained from the surveys identified above
- Any modifications to the estimated vibration thresholds based on building conditions, soil conditions and planned demolition and construction methods to ensure that vibration levels would remain below levels potentially damaging to vulnerable buildings
- Specific mitigation measures to be applied during construction to ensure vibration thresholds (or Caltrans guidelines, in lieu of specific limits) are not exceeded, including modeling to demonstrate the ability of mitigation measures to reduce vibration levels below set limits
- A monitoring plan to be implemented during demolition and construction that includes post-demolition and post-construction surveys of the vulnerable building(s) and documentation demonstrating that the mitigation measures identified in the report have been applied

Examples of mitigation that may be applied during demolition or construction include:

- Prohibiting of certain types of construction equipment
- Specifying lower-impact methods for demolition and construction, such as sawing concrete during demolition
- Phasing operations to avoid simultaneous vibration sources

- Installing vibration measure devices to guide decision-making

The implementing agency shall be responsible for implementing all the mitigation measures recommended in the report as detailed in the report's monitoring plan.

**N-2: Traffic Noise Reduction**

a. Sponsor agencies of a Connected 2050 projects shall complete detailed noise assessments for projects that may impact noise sensitive receptors using applicable guidelines (e.g., FTA Transit Noise and Vibration Impact Assessment for rail and bus projects and the Caltrans Traffic Noise Analysis Protocol for roadway projects). The project sponsor shall ensure that a noise survey is conducted that, at minimum:

- Determines existing and projected noise levels
- Determines the amount of attenuation needed to reduce potential noise impacts to applicable State and local standards
- Identifies potential alternate alignments that allow greater distance from, or greater buffering of, noise-sensitive areas
- If warranted, recommends methods for mitigating noise impacts, including:
- Appropriate setbacks
- Sound attenuating building design, including retrofit of existing structures with sound attenuating building materials
- Use of sound barriers (earthen berms, sound walls, or some combination of the two)

| | | | | |
|---|---|---|---|---|
| b. Where new or expanded roadways or transit are found to expose receptors to noise exceeding normally acceptable levels, the individual project lead agency shall implement techniques as recommended in the project-specific noise assessments. The preferred methods for mitigating noise impacts will be the use of appropriate setbacks and sound attenuating building design, including retrofit of existing structures with sound attenuating building materials where feasible. In instances where use of these techniques is not feasible, the use of sound barriers (earthen berms, sound walls, or some combination of the two) will be considered. Long expanses of walls or fences should be interrupted with offsets and provided with accents to prevent monotony. Landscape pockets and pedestrian access through walls should be provided. Whenever possible, a combination of elements should be used, including open grade paving, solid fences, walls, and landscaped berms. Determination of appropriate noise attenuation measures will be assessed on a case-by-case basis during a project's individual environmental review pursuant to the regulations of the applicable lead agency. | | | | |
| **N-3: Vibration Mitigation for Transportation Projects.** Implementing agencies of Connected 2050 projects shall comply with all applicable local vibration and groundborne noise standards, or in the absence of such local standards, comply with guidance provided by the FTA in Transit Noise and Vibration Impact | Comply with all applicable local and/or FTA vibration and groundborne noise standards | During project permitting and environmental review. | Ongoing during project operation. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| Assessment (FTA 2018) to assess impacts to buildings and sensitive receptors and reduce vibration and groundborne noise. FTA recommended thresholds shall be used except in areas where local standards for groundborne noise and vibration have been established. Methods that can be implemented to reduce vibration and groundborne noise impacts include, but are not limited to:<br>▪ Bus and Truck Traffic<br>▫ Constructing of noise barriers<br>▫ Use noise reducing tires and wheel construction on bus wheels<br>▫ Use vehicle skirts (i.e., a partial enclosure around each wheel with absorptive treatment) on freight vehicle wheels | | | | |
| **N-4: Noise Mitigation for Land Uses.** If a Connected 2050 land use project is located in an area with exterior ambient noise levels above local noise standards, the implementing agency shall ensure that a noise study is conducted to determine the existing exterior noise levels in the vicinity of the project. If the project would be impacted by ambient noise levels, feasible attenuation measures shall be used to reduce operational noise to meet acceptable standards. In addition, noise insulation techniques shall be utilized to reduce indoor noise levels to thresholds set in applicable State and/or local standards. Such measures may include, but are not limited to: dual-paned windows, solid core exterior doors with perimeter weather stripping, air conditioning system so that windows and doors may remain closed, and situating exterior doors away from roads. The noise study and determination of appropriate | When applicable, conduct a noise study to determine feasible attenuation measures needed to reduce noise impacts to a level below local standards. | During project permitting and environmental review. | Once. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| mitigation measures shall be completed during the project's individual environmental review. | | | | |
| **Transportation** | | | | |
| **T-2(a): Strategies to reduce VMT from future land use development.** Implementing agencies shall require implementation of VMT reduction strategies through transportation demand management (TDM) programs, impact fee programs, mitigation banks or exchange programs, in-lieu fee programs, and other land use project conditions that reduce VMT. Programs shall be designed to reduce VMT from existing land uses, where feasible, and from new discretionary residential or employment land use projects. The design of programs and project-specific mitigation shall focus on VMT reduction strategies that increase travel choices and improve the comfort and convenience of sharing rides in private vehicles, using public transit, biking, or walking. Modifications may include but are not limited to:<br>▪ Provide car-sharing, vanpool, bike sharing, and ride-sharing programs<br>▪ Implement or provide access to commute reduction programs<br>▪ Provide a bus rapid transit system<br>▪ Improve pedestrian or bicycle networks, or transit service<br>▪ Provide transit passes<br>▪ Encourage tele-commute programs<br>▪ Incorporate affordable housing into the project<br>▪ Increase density<br>▪ Increase mixed uses within the project area<br>▪ Incorporate improved pedestrian connections within the project/neighborhood | Where applicable, implement VMT reduction strategies through the TDM programs. | During preparation of subsequent RTP-SCS updates. | Project initiation/application and Ongoing during project operation. | SBCAG |

| | | | | |
|---|---|---|---|---|
| ▪ Incentivize development in low VMT communities<br>▪ Incentivize housing near commercial and offices<br>▪ Increase access to goods and services, such as groceries, schools, and daycare<br>▪ Incorporate neighborhood electric vehicle network<br>▪ Orient the project toward transit, bicycle, and pedestrian facilities<br>▪ Provide traffic calming<br>▪ Provide bicycle parking<br>▪ Limit parking<br>▪ Separate out parking costs<br>▪ Provide parking cash-out programs | | | | |
| **T-2(b): Strategies to reduce VMT from planned transportation projects.** Roadway capacity expansion projects shall include demand management and transportation systems management and operations (TSMO) including the implementation of complementary facilities that expand travel options for transit, rideshare, biking, and walking. Options could include, but are not limited to:<br>▪ Tolling new lanes to encourage carpools and fund transit improvements<br>▪ Converting existing general-purpose lanes to HOV or HOT lanes<br>▪ Implementing Intelligent Transportation Systems strategies to improve passenger throughput on existing lanes | Implement TSMO's for roadway capacity expansion projects and include implementation of complementary facilities that expand travel options for transit, rideshare, biking, and walking. | During project permitting and environmental review. | Once | SBCAG |
| **Tribal Cultural Resources** | | | | |
| **TCR-1: Tribal Cultural Resources Impact Minimization.** Implementing agencies shall comply with AB 52, which requires formal tribal consultation. If the implementing agency, through consultation with identified tribes through | Ensure compliance with AB 52; and when applicable, implement measures identified in this mitigation measure | During project permitting and environmental review.<br>Additional measures listed should be implemented | Ongoing throughout project construction | Project sponsor |

| | | | |
|---|---|---|---|
| | | the AB 52 process, determines that a project may cause a substantial adverse change to a tribal cultural resource, they shall implement mitigation measures identified in the consultation process required under PRC Section 21080.3.2, or shall implement the following measures where feasible to avoid or minimize the project-specific significant adverse impacts:<br>▪ Avoidance and preservation of the resources in place, including, but not limited to: planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.<br>▪ Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:<br>▫ Protecting the cultural character and integrity of the resource<br>▫ Protecting the traditional use of the resource<br>▫ Protecting the confidentiality of the resource<br>▪ Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.<br>▪ Native American monitoring by the appropriate tribe for all projects in areas identified as sensitive for potential tribal cultural resources and/or in the vicinity (within 100 feet) of known tribal cultural resources. | prior to and during construction | |

| | | | | |
|---|---|---|---|---|
| ▪ If potential tribal cultural resources are encountered during ground-disturbing activities; work in the immediate area must halt and the appropriate tribal representative(s), the implementing agency, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find and determine the proper course of action. | | | | |
| **Wildfire** | | | | |
| **WF-1(a): Wildfire Risk Reduction.** If an individual transportation or land use project included in Connected 2050 is located within or less than 2 miles from an SRA or very high fire hazard severity zones, the implementing agency shall require appropriate mitigation to reduce the risk. Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to:<br>▪ Require the use of fire-resistant vegetation native to Santa Barbara County and/or the local microclimate of the project site and discourage the use of fire-prone species especially nonnative, invasive species.<br>▪ Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. The local fire protection agency may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase of the project. | Where applicable, place conditions of approval on project requiring incorporation of recommendations to reduce the potential for fires specified in this mitigation measure, or other measures at least equally effective. | During project permitting and environmental review. | Once during project-level environmental review; periodically during construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| ▪ Prohibit certain project construction activities with potential to ignite wildfires during red-flag warnings issued by the National Weather Service for the project site location. Example activities that should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.<br>▪ Require fire extinguishers to be onsite during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. | | | | |
| **WF-1(b): Fire Protection Plan.** Individual transportation or land use projects included in Connected 2050 shall prepare a Fire Protection Plan that meets SBCFD requirements. The plan shall contain (but not be limited to) the following provisions:<br>▪ All construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.<br>▪ A fire watch with appropriate firefighting equipment shall be available at the Project site at all times when welding activities are taking place. Welding shall not occur when sustained winds exceed that set forth by the SBCFD unless a SBCFD-approved windshield is on site.<br>▪ A vegetation management plan shall be prepared to address vegetation clearance around all WTGs and a regularly scheduled brush clearance of vegetation on and adjacent to all access roads, power lines, and other facilities. | Where applicable, implement a Fire Protection Plan that meets SBCFD requirements and include the provisions specified in this mitigation measure, or other measures at least equally effective. | During project permitting and environmental review. | Once during project-level environment-al review; periodically during construction. | Project sponsor. |

| | | | | |
|---|---|---|---|---|
| ▪ Operational fire water tanks shall be installed prior to construction.<br>▪ Provisions for fire/emergency services access if roadway blockage occurs due to large loads during construction and operation.<br>▪ Cleared, maintained parking areas shall be designated; no parking shall be allowed in non-designated areas.<br>▪ The need for and/or use of dedicated repeaters for emergency services.<br>▪ Appropriate Hot work permits (such as cutting and welding permits) shall be obtained from the jurisdictional fire agency.<br>▪ Compliance with California PRC 4291, 4442, and 4443. | | | | |
| **WF-1(c): Smoking and Open Fires.** Smoking and open fires shall be prohibited at individual transportation or land use projects sites included in Connected 2050 during construction and operations. A copy of the notification to all contractors regarding prohibiting smoking and burning shall be provided to the County. | Prohibit smoking on all Connected 2050 project construction sites and include notice to all contractors of the no-smoking and burning policy to the County. | During project construction | Ongoing through-out project construction | Project sponsor. |
| **WF-1(d): Red Flag Warning.** Individual transportation or land use projects included in Connected 2050 shall participate in the Red Flag Warning program with local fire agencies and the National Weather Service. The Applicant shall stop work during Red Flag conditions to reduce the risk of wildlife ignition. | Where applicable, implement Red Flag Warning programs with local fire agencies and the National Weather Service. Require stop work during Reg Flag conditions. | During project construction | Ongoing through-out project construction | Project sponsor. |