The 10- and 20-second measurements are based on the delay change increment for unsignalized and signalized intersections respectively between LOS C/D cusp and the D/E cusp.

An impact to intersections will be considered significant if the project would substantially increase delays at particular study intersections, taking into consideration context and intensity. Increased intersection delays and LOS are considered substantial if, overall, they adversely affect traffic flow at study intersections, in light of the magnitude and location of the delays.

As the lead agency, Caltrans has the discretion to set standards of significance for use in an EIR. This allows the lead agency to determine significant impacts. This information was found on page 41 of the Draft Revised EIR and has been updated in the Final Revised EIR. The lead agency is responsible for determining whether an adverse environmental effect identified in an EIR should be classified as "significant" or "less than significant." (Guidelines, § 15064, subd. (b).) There is no single definition of a "significant effect," because the significance of an activity may vary with the setting. (Guidelines, § 15064, subd. (b).)"

Law Office of Marc Chytilo
Comment 1-c-ii-1
See responses to Comment 1-c-i and 1-c-ii.

Law Office of Marc Chytilo
Comment 1-c-ii-2
The purpose of Approach 2 was to identify higher-level impacts at individual intersections by considering LOS and seconds of delay at signalized and unsignalized intersections. This approach offers a consistent corridor-wide characterization of the driver's experience because it reflects whether pronounced delay is experienced at a signal or a stop sign. From the driver's perspective, waiting for a longer period of time at a signal is tolerated, whereas waiting the same length of time at a stop sign is less tolerated (HCM 2010). The HCM methodology for LOS calculations was used at each intersection. The criteria established to determine whether an intersection is impacted are shown below:

- For signalized intersections: An LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 20 seconds or more with the project.
- For unsignalized intersections: An LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 10 seconds or more with the project.

The 10- and 20-second measurements are based on the delay change increment for unsignalized and signalized intersections respectively between LOS D and E. The data used for this analysis is shown in Tables 2.1 and 2.2.

Approach 2 used HCM standards for evaluating LOS and seconds of delay in combination with an additional criteria of whether the intersection is currently signalized or not. Because this approach applies a consistent corridor-wide approach to identify pronounced changes and combines characteristics most recognized by drivers, this method was selected to identify on which intersections to focus any necessary improvements for mitigating a significant impact to intersections. It should be noted that Approach 2 was not used as a threshold of significance for CEQA determinations at individual intersections. It was used to identify individual intersections that experience substantial increases in delay, but the project's overall impact to intersections was a single significance determination based on context and intensity, as explained in the Final Revised EIR on page 19. As stated in the Revised EIR, an impact to intersections would be considered significant if the project would substantially increase delays at particular study intersections, taking into consideration context and intensity. Increased intersection delays are considered substantial if, overall, they adversely affect traffic flow at study intersections, in light of the magnitude and location of the delays.

An assessment of the 95th percentile queuing at all U.S. 101 off-ramps within the corridor was also completed. The purpose of this analysis was to identify locations where queuing associated with off-ramp intersections could back up onto the highway mainline. This information was taken from the Forecast Operations Report and is shown in Tables 2.3 and 2.4.

See response to 1-c-ii for additional information on adoption of local thresholds.

Law Office of Marc Chytilo
Comment 1-c-iii
The Final Revised EIR has been updated to correct data transfer errors. One new location, Olive Mill Road/Coast Village Road (Intersection #39), was added to the list of impacted intersections as a result of these corrections. This change from what was disclosed in the Draft Revised EIR was based on an increase in delay in the 2040 PM peak period at this intersection. The 2040 PM delay change between the Build and No-Build conditions reported at this location in the Draft Revised EIR was zero seconds. As a result of the correction of data transfer errors, the 2040 PM delay change between Build and No-Build at this location is now 11 seconds, which exceeds the impact criteria for unsignalized intersections established in Approach 2 in the Draft Revised EIR by one second.

This updated information does not change the overall analysis or conclusions presented in the Draft Revised EIR. In particular, the conclusion that the project would have a significant impact associated with a substantial increase in delays at particular study intersections has not been altered. Approach 2 was not used as a threshold of significance for CEQA determinations at individual intersections. It was used to identify individual intersections that experience substantial increases in delay, but the project's overall impact to intersections was a single significance determination based on context and intensity. As stated in the Revised EIR, an impact to intersections will be considered significant if the project would substantially increase delays at particular study intersections, taking into consideration context and intensity. Increased intersection delays are considered substantial if, overall, they adversely affect traffic flow at study intersections, in light of the magnitude and location of the delays.

In addition, the public was not deprived of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate such an effect that Caltrans has declined to implement. After assessing the updated information against the standards for recirculation found in Section 15088.5 of the CEQA Guidelines, it was determined that recirculation of the Draft Revised EIR is not required.

Law Office of Marc Chytilo
Comment 1-d
The comment discusses unbalanced traffic volumes at adjacent intersections. This is discussed in more detail in the response to Transpogroup Comment #8. While volumes at some intersections were not balanced, volumes at others identified by Transpogroup were in fact balanced. Furthermore, some locations identified by Transpogroup were less than the acceptable balance criteria of less than 15% established in the Future Intersection Turning Movement Development Process Section of the SC101 Forecast Operations Report. The Draft Revised EIR includes levels of service with balanced traffic volumes for the entire corridor, with the exception of segments where driveways to existing land uses exist which results in unbalanced traffic volumes.

Law Office of Marc Chytilo
Comment 1-e
See response to Comment 1-b-i with regard to bicycles and pedestrians.

Intersection #48 - With respect to the Milpas Southbound off-ramp intersection, Caltrans has considered a range of options to reduce delay at this location including options provided by City of Santa Barbara staff (see Chapter 4 in the Final Revised EIR). Caltrans' preferred approach for providing delay reduction while taking into account bicycle and pedestrian safety continues to be the addition of second right turn lane at the southbound off-ramp.

Caltrans Traffic Safety Branch has indicated that adding a second right-turn lane at this intersection location along with appropriate striping and signage, would both accommodate the needed capacity and provide safe passage for pedestrians. As noted in the comment, dual right turns would extend the crossing distance for pedestrians. However, two right turn lanes would result in only two potential conflict points for pedestrians as opposed to 16 conflict points at a standard two-way intersection and six conflict points for pedestrians at a standard one-way to one-way intersection. As development of improvements at this location continues, Caltrans will coordinate with City staff during the design phase to ensure bicycle and pedestrian needs are addressed.

Intersection #107 - Improvements at the Los Patos/Cabrillo intersection are proposed as part of the Cabrillo Boulevard and Union Pacific Railroad Bridge Replacement Project. The City/SBCAG project proposes to improve bicycle and pedestrian connectivity along Cabrillo Boulevard by replacing the Union Pacific Railroad structure over Cabrillo Boulevard, providing bike and pedestrian facilities on both sides of Cabrillo Boulevard and intersection improvements pedestrian at the Los Patos/Cabrillo Boulevard intersection. The Caltrans team has coordinated with City and SBCAG staff to ensure that the HOV project can be designed in a manner that provides for bicycle, pedestrian, and vehicular connectivity when the SBCAG/City improvement project is completed.

Intersection #49 - Pedestrian counts for intersection #49 were collected on April 24, 2008. After a detailed check of the Synchro models in August 2017, it was discovered that these counts were not entered into the model. The counts were subsequently entered into the model and analyzed. For the purposes of the analysis, all signal cycle lengths and phasing were held to the existing 2008 condition per the City's request. It is not clear if the City utilized the same signal timing and phasing. The 2040 HCM analysis shows that for the Build condition the intersection LOS is D and for the No-Build condition the intersection LOS is C in the AM peak. The delay increase was 18.3 seconds, which is less than the 20 seconds per the standards of significance established for signalized intersections. In the PM peak, the LOS remains at LOS E in the Build and No-Build conditions, with a decrease in delay by 6.6 seconds. Therefore, there is no significant impact. As a result, no mitigation is required for this intersection.

The analysis and results are documented in a memorandum dated August 11, 2017 included in Appendix H of the Final Revised EIR. Tables 2.1 and 2.2 in the Final Revised EIR have also been updated to reflect these corrections.

Law Office of Marc Chytilo

Comment 1-f

This comment is outside the scope of the Revised EIR. The following response is provided for clarification only.

The project's compatibility with Local Coastal Programs (LCPs) is addressed in Section 2.1.1.3 (Coastal Zone) of the 2014 Final EIR. The trial court's ruling in *Grassini et al. v. Caltrans et al.* did not fault this analysis and the issue of the project's compatibility with LCPs is beyond the scope of the Writ.

As discussed in the 2014 Final EIR, any inconsistency with Local Coastal Programs would be addressed with amendments to the applicable jurisdiction's Local Coastal Program. Inconsistencies found were related to wetland buffers in both Local Coastal Plans for the City of Carpinteria and the County of Santa Barbara. The fact that the Final Revised EIR did not address local traffic intersection thresholds called out in the circulation elements of the City of Carpinteria or the City of Santa Barbara is not a requirement, nor a reason to determine that the project is inconsistent with Local Coastal Programs.

Throughout the project development process, Caltrans seeks to abide by and be consistent with the California Coastal Act and local coastal programs. Caltrans has been engaged in a separate coordination process with individual jurisdictions in order to address these matters. A Local Coastal Program Amendment has already been approved by the City of Carpinteria and the California Coastal Commission for both the Linden Avenue and Casitas Pass

Interchange Improvements project and the South Coast 101 HOV Lanes project. The South Coast 101 HOV Lanes project will require a Coastal Development Permit from the City of Carpinteria prior to initiating construction. A Local Coastal Program Amendment is also required in the County of Santa Barbara. Coordination meetings have been underway for the past year. An application was recently submitted to the County. In addition, Coastal Development Permits will be required for the County of Santa Barbara and the City of Santa Barbara. These actions are occurring simultaneously with the necessary steps to complete the CEQA process needed for project approval.

Law Office of Marc Chytilo
Comment 1-g-i
These eight locations where proposed mitigation improvements will occur have independent utility and will have separate environmental studies and coastal permitting from the South Coast 101 HOV Lanes project. Funding will be provided by the South Coast 101 HOV Lanes project and augmented with SBCAG support.

The equitable share calculations used to determine mitigation are based on the differences between Build and No-Build conditions for trips entering the intersection. The equitable share calculations were performed based on the Caltrans *Guide for the Preparation of Traffic Impact Studies.* If the intersection is State-owned and the improvement totals less than $5,000, Caltrans will pay the full cost of the improvement. Each proposed mitigation design would reduce the amount of delay added by the project (difference between build and no-build delay in seconds).

The Final Revised EIR includes information on the level of delay reduction expected associated with the specific mitigation options presented (see Table 2.8).

Due to the possibility that Caltrans and the local agencies may not be able to successfully complete the recommended mitigation in a timely manner, or they may choose not to participate in an agreement with Caltrans, it is difficult to conclude that the overall significant impact to intersections will be reduced to less than significant. Thus, pursuant to CEQA Guidelines Section 15043, a Statement of Overriding Considerations has been prepared for this project.

Law Office of Marc Chytilo
Comment 1-g-ii
Proposed mitigation strategies are based on preliminary traffic analysis using the same volume set and traffic analysis assumption used in the Forecast Operations Report. Assessment of the design options indicated in Table 2.8 were shown to effectively reduce seconds of delay caused by the project to a level better than the No-Build condition. The mitigation assessment is included in Appendix F.

Law Office of Marc Chytilo
Comment 1-g-iii
Proposed mitigation strategies are based on a preliminary traffic analysis using the same volume set and traffic analysis assumptions from the Forecast Operations Report as well as under a similar signal control optimization and coordination strategy that maintains an acceptable intersection performance at or better than the No-Build condition. Refer to Table 2.8 for updated details relative to the mitigation plan.

Due to the possibility that Caltrans and the local agencies may not be able to successfully complete the recommended mitigation in a timely manner, or one or more of the agencies may decide not to participate in an agreement with Caltrans, it is difficult to conclude that the overall significant impact to intersections will be reduced to less than significant. Thus, pursuant to CEQA Guidelines Section 15043, a Statement of Overriding Considerations has been prepared for this project. Also see response to Comment 1-g-i.

Law Office of Marc Chytilo
Comment 1-g-iv
Potential impacts of mitigation improvements are noted in Table 2.9, the Potential Cumulative Project List. Preliminarily, the only impacts appear to be the need for acquiring right-of-way for roundabout designs and the potential

for hazardous waste issues where gas stations exist. The current design for the intersection of Los Patos/Cabrillo Boulevard avoids impacts to cultural resources. Because the proposed mitigation efforts are considered separate projects, they will each have their own separate environmental analysis to determine whether any impacts trigger the need for any minimization or mitigation measures.

Law Office of Marc Chytilo
Comment 1-h
This comment is outside the scope of the Revised EIR. See the 2014 Final EIR for information as it relates to visual resources, noise, and air quality. The new analysis for the Revised EIR does not alter the conclusions of the previous EIR with respect to the above resource categories.

Law Office of Marc Chytilo
Comment 1-h-I
This topic is outside the scope of the Revised EIR. See Air Quality and Climate Change sections of the 2014 Final EIR. The intersection analysis of this Revised EIR does not alter the analysis or conclusions therein.

Law Office of Marc Chytilo
Comment 1-h-v
The topic of Environmental Justice is outside the scope of the Revised EIR. Further, CEQA does not require an evaluation of Environmental Justice impacts.

Law Office of Marc Chytilo
Comment 1-i
The Draft Revised EIR correctly states potential impacts resulting from the project and evaluates consistency of the project with all applicable policies and standards.

With respect to the City of Santa Barbara's General Plan and zoning, the DREIR and supporting modeling analysis consider potential impacts from trips based on existing land uses allowable under adopted General Plan and implementing zoning, considering the potential for population growth consistent with these allowable land uses. The DREIR is therefore consistent with the General Plan and zoning.

With respect to SB 743, the City of Santa Barbara has not designated an infill opportunity zone under SB 743. Were the City to do so, it would simply exempt qualifying projects within the infill opportunity zone from evaluation of transportation impacts under CEQA. The designation of an infill opportunity zone would not by itself change the underlying land uses allowed by the General Plan or zoning. Therefore, SB 743 and its implementation are not at odds with the DREIR's analysis or assumptions with respect to trip generation. Fundamentally, SB 743 just changes the metric by which the potential traffic impacts of projects under CEQA will be assessed in the future. Land use decisions are still within the authority of local governments. In evaluating potential traffic impacts, the DREIR itself continues to apply the same LOS standards as the original EIR.

SBCAG adopted an updated Congestion Management Plan (CMP) in 2016 to address the new requirements of SB 743. In accord with SB 743 and the draft CEQA Guidelines implementing SB 743, the updated CMP eliminates CEQA thresholds. As noted in the comment, California law retains the use of level of service (LOS) standards for CMPs, putting the CMPs at odds with the new CEQA transportation impact metrics (e.g., vehicle miles traveled) endorsed by SB 743. Whereas SBCAG's previous CMP incorporated LOS-based CEQA thresholds, the updated CMP no longer contains CEQA thresholds, in accordance with the approach favored by the State of California Office of Planning and Research's January 2016 draft CEQA Guidelines. As a result, the Draft Revised EIR's approach is consistent with the adopted CMP, which does not impose any new or different CEQA standards.

The HOV project is included in and consistent with the region's adopted Regional Transportation Plan-Sustainable Communities Strategy (RTP-SCS). As part of the program of transportation projects in the RTP-SCS, the HOV project's potential impacts were evaluated in the Environmental Impact Report for the RTP-SCS. In an exercise of SBCAG's policy discretion, the RTP-SCS balances the region's competing transportation investment priorities

(e.g., active transportation versus automobile) and lays out a plan for how the region will address its long term transportation infrastructure needs. The DREIR evaluates the potential environmental impacts of one RTP-SCS project of particular importance to the region. It does not second-guess or re-evaluate the investment priorities and policies embraced by the RTP-SCS.

The Draft Revised EIR fully evaluates potential impacts to bike and pedestrian safety (see response to comment 1-b-i). This document lays out an integrated plan for bicycle and pedestrian infrastructure investments needed in the region and supporting policies. As discussed in more detail in response to the next comment, the DREIR is consistent with the Regional Active Transportation Plan and its policies.

Law Office of Marc Chytilo
Comment 1-j
See response to comment 1-b-i.

Goal 1 and related Policies
The HOV project by its nature is a highway project. However, its design incorporates or allows for pedestrian and bicycle elements on local streets and at key intersections where the project improvements are proposed.

The HOV project fulfills commitments to Santa Barbara County voters under Measure A and implements the policy and prioritization of the SBCAG Board with respect to discretionary funding sources, such as the STIP. It does not in any way hinder or prevent the aggressive pursuit of funding for active transportation projects through, e.g., the State's Active Transportation Program and SB 1 programs. Indeed, as demonstrated by earlier project phases, the HOV project makes significant investments in regional bike and pedestrian infrastructure and completes major segments of the Coastal Trail (e.g., Rincon trail and Santa Claus lane). The project phase evaluated by the DREIR also plans and allows for bike and pedestrian connectivity on local streets.

The Draft Revised EIR also evaluates potential congestion impacts as required by the Writ of Mandate. Through the inclusion of a HOV lane and transit investments, the project would incentivize transit use for commuting and make transit more effective.

The project is consistent with allowable land uses in the City's General Plan and zoning, and with the land use and transportation planning assumptions in the RTP-SCS.

Goal 2 and related Policies
The HOV project makes significant investments in regional bike and pedestrian infrastructure and completes major segments of the Coastal Trail (e.g., Rincon trail and Santa Claus lane). The project phase evaluated by the Draft Revised EIR also plans and allows for bike and pedestrian connectivity on local streets. By upgrading both auto and bike infrastructure and promoting transit, the project helps eliminate congestion and enhance coastal access. Water quality and runoff are beyond the scope of the writ. However, the 2014 EIR evaluates these potential impacts as well.

Caltrans recognizes that the existing 101 freeway alignment bisects some communities along its route. However, through either overcrossings or undercrossings of US 101, access exists to the coast from communities inland of US 101. Rather than worsen these existing conditions, the HOV project will include features that will enhance coastal access at undercrossings and at interchange improvements and Sheffield and Cabrillo. The HOV project does not propose to replace any existing overcrossings.

Caltrans considers pedestrian access improvements as part of their policy for complete streets when certain roadway improvements are being undertaken. In the case of the HOV project, this would occur at undercrossings where existing 101 structures are being replaced or widened or at the interchange reconstruction at Sheffield and Cabrillo. These improvements would consider accommodations for pedestrians and bicyclists as well as improvements as necessary to comply with the American Disability Act.

Caltrans' objective in developing the HOV project is to meet the purpose and need of that project and mitigate for any significant impacts that are a result of implementing the project. Caltrans understands that projects implemented in the Coastal Zone also must comply with local coastal policies under local jurisdictions and ultimately the California Coastal Act governed by the California Coastal Commission. Caltrans and its partner SBCAG are committed to making significant investments in regional bike and pedestrian infrastructure by completing gaps in the California Coastal Trail through separate projects called the Rincon Multi-Use Trail south of Carpinteria and the Santa Claus Lane Bikeway. These improvements will complete current gaps in the coastal trail and are consistent with operational improvements and other modal improvements that were identified in *101 in Motion*.

Goal 3 and related Policies

See response to Goal 2 and related policies.

Goal 4 and related Policies

See response to Goal 2 and related policies.

Law Office of Marc Chytilo

Comment 1-k

The Olive Mill and Los Patos/Cabrillo projects are included in the constrained project list of SBCAG's 2013 RTP.

Potential impacts of mitigation improvements are noted in Table 2.9, the Potential Cumulative Project List. Preliminarily, the only real impacts appear to be the need for acquiring right-of-way for roundabout designs and the potential for hazardous waste issues where gas stations exist. The potential for impacts to cultural resources at the intersection of Los Patos/Cabrillo Boulevard has been avoided with the current design. Because the proposed mitigation efforts are considered separate projects, they will each have their own separate environmental clearance processes to determine whether any impacts trigger the need for any minimization or mitigation measures.

Law Office of Marc Chytilo

Comment 1-l

See response to Comment 1-k.

Law Office of Marc Chytilo

Comment 1-m

As stated on page 19 of the Final Revised EIR, "An impact to intersections will be considered significant if the project would substantially increase delays at particular study intersections, taking into consideration context and intensity." While the freeway off-ramp queueing was identified as a key measure of effectiveness and safety in the Traffic Operations Report, the 95th percentile queues for local streets was not a stand-alone performance measure for determining CEQA significance. As a result, this analysis has not been updated or modified. The 95th percentile queuing analysis as presented in the Final Revised EIR that shows there are no off-ramps exceeding queue lengths remains valid. Note also that the 95th percentile queue is only evaluated for freeway off-ramp intersections outlined in the Forecast Operations Report.

In addition, the 95th percentile queue is defined as the queue length that has only a 5-percent probability of being exceeded during the analysis time period. It is a useful parameter for determining the maximum length of a turn pocket, but does not represent what an average driver would experience. Driver experiences would be better characterized by the mean queue length or a 50th percentile queue. Thus, a turn pocket designed to be a 50th percentile queue length is typically sufficient. Furthermore, queues are dependent upon intersection capacity and whether the intersection is or isn't close to capacity. A 50th percentile queue represents the maximum queue a driver will typically experience. For all the above reasons, queue impacts are typically not used as a relevant delay impact analysis.

Law Office of Marc Chytilo

Comment 1-n

Page 37 of the Final Revised EIR includes a discussion of cumulative project conditions. This analysis takes into account all transportation and land use

projects included in the Regional Transportation Plan and general plans prepared by local jurisdictions in the project area including the South Coast 101 HOV Lanes project.

The 101 In Motion Financing and Implementation Plan, which is provided in the 101 In Motion Final Report (SBCAG, 2006) describes phased development and implementation of rail service to serve during the peak commute hours in the 101 corridor. The 101 In Motion Final Report also describes the complexity of seeking approval from the various rail stakeholders in the region to implement this type of rail service.

SBCAG has been working with Caltrans Division of Rail, the California State Transportation Agency, Union Pacific Railroad, the Ventura County Transportation Commission, the San Luis Obispo Council of Governments, Metrolink, AMTRAK, LOSSAN (Los Angeles to San Diego) since the passage of Measure A in 2008 to deliver increased passenger rail service in the 101 corridor.

The first phase of the service is described as an initial pilot service involving two daily round trips with minimal capital acquisition. It has been discovered that the most cost effective and feasible approach has been to work with AMTRAK and LOSSAN who currently operate five daily round-trip passenger trains in the 101 corridor. Since none of these trains operate in the peak hour when commute-friendly service is in the highest demand, SBCAG, as a member of the LOSSAN Joint Powers Authority (JPA), has been working with the JPA and the California State Transportation Agency to retime one of these trains to serve during peak commute hours. The objective is to begin this service in April 2018. The retimed AMTRAK service will provide morning northbound peak hour rail service connecting stations in Camarillo, Oxnard, Ventura, Carpinteria, Santa Barbara, and Goleta. The same stations will have evening peak hour service in reverse order. The passenger price for this new service will be competitive with the Coastal Express regional transit service that currently operates in the corridor. SBCAG is working on options to develop comprehensive last-mile service connections to link passengers from train stations to work sites including bicycle rental and bicycle lockers, connecting shuttle and bus services, and transportation network company service agreements. Ridership goals for this first train are approximately 200 passengers per day.

The LOSSAN JPA is also planning to implement a sixth round trip in two to three years that could also be scheduled to serve the peak hour market between Ventura and Santa Barbara counties, which would result in two peak hour round trips in the 101 corridor. This would coincide with the start of construction of the South Coast 101 HOV project and meet the initial service levels identified in the 101 In Motion Study. Longer-term capital infrastructure projects that are also under development include the Seacliff rail siding extension project which will improve passenger rail on-time performance.

Law Office of Marc Chytilo
Comment 1-o
This comment is outside the scope of this Revised EIR. The following response is provided for clarification only.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-SCS Final EIR is available for review at:
http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

As discussed in the 2040 RTP-SCS Final EIR, the term induced travel is often misused to suggest that increases in highway capacity are directly responsible for increases in traffic, when in fact, the relationship between increases in highway capacity and traffic is very complex—involving various travel behavior responses, residential and business location decisions, and changes in regional population and economic growth. Most studies examining the issue have concluded that trips related to socioeconomic growth and trips diverted from other facilities—as opposed to induced travel—account for the majority of increased travel. Some studies have concluded that if new highway capacity does fill up, it is due not to induced travel, but rather to travelers diverting from other facilities or time periods in the short term, and to socioeconomic growth in the long term. Local data from the 2040 RTP-SCS Final EIR confirms that the majority of traffic growth in the long term is due to socioeconomic growth, regardless of roadway improvements.

Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi (2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

> Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

> Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the 2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued

by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

SB 743, signed into law on September 27, 2013, requires the California Office of Planning and Research (OPR) to propose revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts within transit priority areas. (Pub. Resources Code, § 21099, subd. (b)(1).) In developing the criteria, OPR shall recommend potential metrics to measure transportation impacts, that may include, vehicle miles traveled, among other criteria. SB 743 further provides that OPR may adopt guidelines establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas. (Pub. Resources Code, § 21099, subd. (c)(1).) The CEQA Guidelines from OPR have not been updated to address VMT implementation based on SB 743. In January, 2016, however, OPR issued revised draft proposed changes to the CEQA Guidelines, including proposed new Section 15064.3 (determining the significance of transportation impacts). (OPR, 2016.) That draft section specifically provides that the new guidelines are intended to apply prospectively and agencies have a two-year period after the expected adoption date for the provisions of the new guidelines to apply.

Law Office of Marc Chytilo

Comment 1 (page 28 of Chytilo letter)

The EIR's alternatives analysis is outside the scope of the Revised EIR. An alternative to the project design alignment of the mainline to minimize impacts to the impacted local intersections is unnecessary because it would have no effect on traffic volumes at local intersections. The proposed Build alternatives all included the addition of a third lane. For this reason, all alternatives would affect traffic volumes at local intersections in the same way. The No-Build alternative has already been analyzed.

With respect to pedestrian and bicycle safety impacts, the issue of pedestrian and bicycle safety is outside the scope of the Revised EIR. According to the California Vehicle Code (CVC 21200), bicyclists generally have the same rights and responsibilities as motor vehicle drivers. As such, bicycles are assumed to be part of the vehicle stream and are adequately served by the various types of intersections, whether signalized or unsignalized. When a bike lane or shoulder exists, it is anticipated that bikes using the bike lane will operate in tandem with the vehicle stream.

With recent adoption of policies on complete streets, bicycle and pedestrian access and safety are taken into consideration when Caltrans designs projects. When changes or upgrades to intersections are occurring with the HOV project, features to accommodate bicycles and pedestrians will be integrated into the design and constructed with the project, where appropriate.

For safety reasons, bicycles and pedestrians are prohibited from traveling on US 101 within the project limits. In areas where bicycle and pedestrian access is allowed and physical improvements are proposed as part of the South Coast 101 HOV Lanes project, bicycle and pedestrian access will be addressed in the design phase of the project, in compliance with Caltrans complete streets policy. Bicycle and pedestrian safety and accessibility will also key considerations in the design of the proposed mitigation improvements. Examples of features which will be considered in the design of all intersection modifications associated with this project include, but are not limited to: sidewalks, crosswalks, adequate shoulders to accommodate bicyclists, signs to direct bikes and pedestrians, Class II Bike Lanes, and other related Class II bikeway channelization. Bus stop and other transit accommodations will also be integrated into the design where appropriate.

Furthermore, all pedestrian facilities within the project limits that are modified as part of the project would comply with the Americans with Disabilities Act (ADA). During construction, special consideration would be given to bicycles, pedestrians, and persons with disabilities for continued access through construction areas. Any improvements considered as part of this project would be coordinated with adjacent project efforts to ensure continuity of bicycle and pedestrian facilities.

Law Office of Marc Chytilo

Comment 2

No “significant new information,” as that term is defined by CEQA, has been added to the Revised EIR. Recirculation is therefore not required.

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WHAT TRANSPORTATION CAN BE.

MEMORANDUM

Date:	January 31, 2017	**TG:**	16293.00
To:	Marc Chytilo, Law Office of Marc Chytilo (LOMC) Ana Citrin, LOMC		
From:	Ryan Snyder, Principal Meghan Macias, T.E., Transportation Planning Manager Dennis Pascua, Transportation Planning Manager		
cc:			
Subject:	Comments on Peer Review of *South Coast 101 HOV Lanes Project DREIR* dated November 2016		

Thank you for the opportunity to assist you with the following peer-review of the *South Coast 101 HOV Lanes Project DREIR dated November, 2016*. Transpo Group (Transpo) is a full service transportation consulting firm providing planning and engineering services. We have been in business for over 40 years. Our over 50 planners and engineers provide service to our clients from 4 offices in Washington and California. These review comments have been prepared by staff members with over 70 years of combined experience in Traffic Engineering, Transportation Planning and Active Transportation in Southern California.

The following memorandum provides Transpo's comments on the *South Coast 101 HOV Lanes Project, Draft Revised Environmental Impact Report* (DREIR) prepared by the State of California Department of Transportation (Caltrans) and dated November 2016. Other documents reviewed include:

- *SC101 HOV Traffic Study, Existing Conditions Operations Analysis*, prepared by Dowling Associates, Inc. and dated December 15, 2008 (amended December 9, 2011)
- *SC101 HOV Traffic Study, Forecast Operations Report, Technical Appendices*, prepared by Dowling Associates, Inc. and dated October 19, 2009 (amended December 9, 2011)
- *SC101 HOV Traffic Study, Travel Forecast Report,* prepared by Dowling Associates, Inc. and dated February 9, 2009
- *South Coast 101 Lanes Project FEIR, August 2014*
- Draft comments presented by the City of Santa Barbara and presented at the City of Santa Barbara Planning Commission meeting on January 12, 2016.

As noted above, Transpo has received and reviewed the City of Santa Barbara's draft comments to the DREIR. We concur with the City's comments, and have refrained from addressing the same issues. We have, however, relied in part of aspects of issues identified by the City as a foundation for some of the issues and impacts identified below.

Comment 1: The DREIR Fails to Assess Impacts to Bicyclists and Pedestrians

The DREIR names section 2.1.1 "Traffic and Transportation/Pedestrian and Bicycle Facilities" but there is no mention or substantive evaluation of Project impacts to bicyclists and pedestrians or any mitigation measures identified. So no further assessment has been done of the impacts of the project to bicyclists or pedestrians in the DREIR. The analysis only mentions impacts to motor vehicles in terms of Level of Service (LOS) and delay. The identified mitigation measures only address means to alleviate vehicle delay.

The FEIR summarily states: "None of the three build alternatives would permanently affect parking, bicycle, or pedestrian facilities, Including the Pacific Coast Bike Route." [Page 464]. Later on, the FEIR says "The project would facilitate pedestrian and bicycle access by ensuring all existing bicycle and pedestrian facilities are retained or replaced as needed. Building the six-lane highway would reduce through trips by vehicular traffic on the local street system by those seeking to avoid congestion on US 101. In areas where traffic trips onto the local streets are reduced, there would be added benefits for bicycle, pedestrian and local transit users that depend on the local street system for travel."

There is no mention in FEIR or DREIR of impacts to bicyclists and pedestrians from the traffic associated with the increased trips generated accessing the freeway. According to their analysis, the DREIR lists over 65 intersections where traffic would increase. Of these intersections, 11 would have an increase of over 100 peak hour trips, and as much as 546 additional trips in the AM peak hour, based on review of the deltas in project volumes from baseline volumes on pages 23-24 of RDEIR. It would increase vehicle trips at over 60 intersections in the PM peak, and over 100 new vehicles at 8 intersections.

In our professional opinion, the DREIR's conclusion that there are no project related direct, secondary (from mitigation measures) and cumulative impacts is not based on evidence provided in the FEIR or DREIR. To the contrary, we believe with considerable certainty that the Project has the potential to create significant adverse impacts to bicyclists and pedestrians throughout the Project study area and at many other locations where increased Project traffic occurs.

The basis for this conclusion is as follows:

Wherever there is an increase in traffic, this will degrade conditions for bicycling and walking. Increased traffic increases the number of motor vehicles that people on bicycles have to contend with, and pedestrians have to watch for when crossing the streets. This applies to the project's direct intersection impacts (at these 60+ intersections), to the cumulative project analysis (where the project will cause substantially increased volumes of traffic on all South Coast streets that are used for bicycling) and for the proposed mitigation measures (which may themselves increase hazards for bicyclists and pedestrians). The latter is clearly demonstrated by the proposed widening from 1 to 2 lanes at the SB-101 off-ramp at Milpas Street. This off-ramp allows right-turns only and will therefore result in drivers in two lanes of traffic looking left for gaps in southbound Milpas traffic to turn right, while pedestrians will be transiting north on the sidewalk, away from where drivers are looking.

Appendix G, XVI. d. of the CEQA Guidelines provides the following threshold for evaluation: *Would the project: … substantially increase hazards due to design features . . .or incompatible uses".*

The Projects' increased traffic volumes on surface streets that also serve as Class 2 or 3 bike facilities will increase hazards to bicyclists in the following ways:

- Greater numbers of motorists will use freeway on- and off-ramps increasing the number of conflicts between people on bicycles and those coming on and off freeway and often at high speeds
- Greater numbers of motorists will increase the odds for bicyclists being hit from behind or sideswiped as each vehicle carries some potential for these crashes
- Bicyclists using bikeways that cross the streets accessing the freeway will experience increased potential for conflicts at intersections

Pedestrians will be impacted in the following ways:

- As traffic volumes increase, the potential for pedestrians crossing the streets accessing the freeway to be hit by cars will increase. Traffic volumes play a large role in determining the devices used to make pedestrian crossings safer.
- The experience of walking along the street degrades with additional noise and air pollution from each vehicle.

Further, the analysis was only done at intersections very close to the on and off ramps. The increase in traffic would occur further up these streets as these vehicles would need to travel along local streets to get to these on and off ramps.

For all the above reasons, Transpo believes that the Project will have a significant project and cumulative impact to the safety of bicyclists and pedestrians throughout the South Coast.

Comment 2: Induced Travel

The DREIR does not addressed the well-known phenomenon of induced travel. This is a serious omission in the DREIR that allows many project impacts to remain undisclosed.

Induced Travel, or the possible increases in vehicle travel resulting from the additional lane capacity, is not mentioned or evaluated in either the FEIR or RDEIR. Induced travel, and the resulting increase in vehicle miles traveled (VMT) is such a significant issue that the California Legislature adopted SB 743, which directed the California Office of Planning and Research (OPR, the agency responsible, inter alia, for promulgating CEQA Guidelines) to adopt new thresholds for CEQA documents to use VMT growth as the metric for transportation impacts in place of LOS. VMT is judged to be a better standard for many reasons, including the conclusion that increased VMT causes significant impacts to the safety of bicyclists and pedestrians.

OPR's proposed CEQA Guidelines state that a project will have a significant impact if it would: **Substantially** induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network?

The addition of the new freeway lane will induce travel. Where capacity expands, more people are drawn to use it. The California Governor's Office of Planning and Research *Preliminary Evaluation of Alternative Methods of Transportation Analysis* states that:

> *"Meanwhile, adding motor vehicle capacity may induce vehicle travel, which negatively affects the environment and human health. It also negatively impacts other modes of transportation, lengthening pedestrian crossing distances, adding delay and risk to pedestrian travel, displacing bicycle and dedicated transit facilities, and adding delay and risk to those modes of travel."*

The document cites the following research Duranton, Gilles, and Matthew A. Turner. 2011. "The Fundamental Law of Road Congestion: Evidence from US Cities." American Economic Review, 101(6): 2616-52.

The OPR proposed guidelines, mandated by SB 743 to address this concern, explain:

> Building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the

future, typically induces additional vehicle travel. For the types of projects indicated previously as likely to lead to additional vehicle travel, an estimate should be made of the change in VMT resulting from the project.

For projects that increase roadway capacity, lead agencies can evaluate the potential induced VMT by applying the results of existing studies that examine the magnitude of the increase of VMT resulting from a given increase in lane miles. These studies estimate the percent change in VMT for every percent change in miles to the roadway system ("elasticity") (see U.C. Davis, Institute for Transportation Studies, "Increasing Highway Capacity Unlikely to Relieve Traffic Congestion," (October 2015); Boarnet and Handy, "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions," California Air Resources Board Policy Brief, September 30, 2014). Given that lead agencies have discretion in choosing their methodology, and the studies on induced travel reveal a range of elasticities, lead agencies may appropriately apply professional judgment in studying the effect of a particular project. The most recent major study (Duranton and Turner, 2011), estimates an elasticity of 1.0, meaning that every percent change in lane miles results in a 1 percent increase in VMT.

The logic that bicyclists and pedestrians will benefit as traffic on local roadways is reduced doesn't stand to reason. As this new HOV lane will induce travel, the estimates in the FEIR and DREIR underestimate the impacts to the intersections analyzed. And again, not just at these intersections, but along the streets feeding the on and off-ramps.

Comment 3: Mitigation Measures for Impacts to Bike and Ped Systems are omitted, but needed to mitigate impact

As increases in traffic volumes on streets leading to freeway on-ramps and intersections will degrade the safety of bicyclists and pedestrians, it makes sense that mitigation measures address these streets in the form of new or improved bikeways, sidewalks, and pedestrian crossings. As part of this effort, mitigation should be developed to offset these impacts. Each of the impacted intersections needs analysis improving the bicycling and walking conditions, as well as each of the streets. The intersection analysis should produce new devices and measures to including those such as, but not limited to:

- High-visibility crosswalks
- Advance stop/yield lines
- Signs
- Modified traffic signals
- Crossing islands

- Curb extensions
- Reduced curb return
- Traffic calming

The analysis should prepare plans for mitigating impacts to streets that will experience additional traffic by looking at such improvements as, but not limited to:

- Adding bike lanes
- Widening existing bike lanes
- Colored bike lanes, or coloring existing bike lanes
- Adding painted buffers to bike lanes
- Protected bike lanes
- Signs
- Shared lane markings
- Traffic calming
- Wider or improved sidewalks

Comment 4: Acceptable Level of Service

The Draft Revised EIR (DREIR) establishes significance criteria for signalized and unsignalized intersections that are unique to this project and that are inconsistent with thresholds adopted by local agencies throughout the study area. Furthermore, the thresholds created for this analysis are incompatible with the measures of effectiveness established in the Caltrans Traffic Study Guidelines and other Caltrans projects in Southern California.

The thresholds utilized in the DREIR are as noted below:

- *For signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 20 seconds or more with project.*
- *For unsignalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 10 seconds or more with project.*

The criteria is inconsistent with the goal stated in Caltrans' own *Guide for the Preparation of Traffic Impact Studies* which states "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities…", but does not provide a standard for the increase in delay. Furthermore, when the incremental criteria of 20 seconds for signalized intersections or 10 seconds for unsignalized intersections is compared to the LOS criteria in Tables 1 and 2 below, it indicates that a project-related increase of almost one whole level of service would be acceptable.

Table 1. Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	≤10	Free Flow
B	>10 – 20	Stable Flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F[1]	>80	Forced flow (congested and queues fail to clear)

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.
1. If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

Table 2. Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)
A	0 – 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F[1]	>50

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.
1. If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.

To allow an increase of almost one whole level of service is inconsistent with the acceptable increases in LOS established by the adopted thresholds of the City and County of Santa Barbara as well as the City of Carpinteria. The highest allowable increase by these agencies to the volume to capacity ratio for an intersection operating at LOS D is 0.02. An increase of 0.1 would represent one

level of service. Therefore, the adopted local thresholds consider an increase of more than 20 percent of one level of service to be a significant impact. To allow a 20 second increase for signalized intersections or a 10 second increase for unsignalized intersections allows a much larger addition of traffic volume than would be considered acceptable to the local agencies affected by the project.

It should also be noted that the criteria used to determine project impacts at intersections is not consistent with other studies prepared by Caltrans in Santa Barbara County and throughout Southern California. For example:

- The Final Traffic Analysis Report for the US 101/Linden Avenue and US 101/Casitas Pass Road Interchange Improvement Project considers *ANY* increase in LOS to be significant, when the intersection is already operating at LOS D or worse under no-project conditions.
- The Northwest 138 Corridor Improvement Project consider a worsening from LOS D to LOS E or worse, or *ANY* worsening of operations at LOS E or F to be a significant impact.
- The Transportation Technical Report for the SR-710 North project considers an increase of 5 seconds or more when the baseline is LOS E, or 2 seconds or more when the baseline is LOS F to be a significant project impact.
- The evaluation of project impacts for the Lost Hills Road/US-101 Overcrossing Replacement and Interchange Modification Project was prepared consistent with the LOS goals provided in Caltrans *Guide for the Preparation of Traffic Impact Studies* (LOS at the transition of LOS C and LOS D).

Transpo Group believes that the threshold employed in the DREIR is highly unusual and deviates substantially from Caltrans normal procedures and practices. In other highway projects, including those cited above, any increase in LOS was considered significant when a facility was operating at LOS E or F. It must be justified why an increase of 20 seconds is an appropriate significance threshold when it is inconsistent with adopted local agency significance criteria, as well as with previous project analyses prepared by Caltrans. Because the 20-second threshold allows approximately one level of service increase, impacts that would be identified using local agency thresholds or thresholds applied in other Caltrans documents are not identified. The use of this inappropriate threshold results in the DREIR understating the number and severity of project impacts.

Comment 5: Caltrans' Threshold of Significance vs. Local Governments Threshold of Significance

Appendix D of the DREIR states that "During preparation of the Forecast Operations Report, Caltrans agreed to incorporate local thresholds into the analysis of the intersections located within the traffic study area. This was done

as a courtesy for informational purposes only." As noted in the previous comment, the thresholds employed by Caltrans for the purposes of identifying significant project impacts are inconsistent with adopted local and regional significance thresholds, and with thresholds used in previous analysis of Caltrans projects in Santa Barbara County. Appendix D provides the analysis of local agency intersections using local agency thresholds and is based on the previous SC101 HOV Traffic Study – Forecast Operations Report, which concludes that nine intersections would be impacted by the project in the year 2020 and fifteen intersections would be impacted by the project in the year 2040. Mitigation is not proposed for most of these impacts because the analysis of local agency-controlled intersections was prepared using local-agency adopted methods and criteria "as a courtesy for informational purposes only."

Section 15064.7 of the CEQA Guidelines states "Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects." The local agencies have adopted methodologies and thresholds for use in the determination of the significance of traffic impact, yet Caltrans has chosen to ignore these methodologies, stating that they are "best suited for transportation planning uses such as preparation of Traffic Impact Studies for proposed developments." There is no evidence provided to substantiate the claim that local agency methodologies and thresholds should not be used to evaluate the proposed project and that the delay-based threshold employed by Caltrans is more appropriate. As noted in *Mejia v. City of Los Angeles*, "*A threshold of significance is not conclusive, however, and does not relieve a public agency of the duty to consider the evidence under the fair argument standard.*" Additionally, this decision notes that "*A public agency cannot apply a threshold of significance or regulatory standard in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.*"

Since the threshold used in the DREIR is not consistent with the thresholds adopted by at least three local agencies affected by the project study area, there must be substantial evidence provided to establish that the threshold is supported by substantial evidence. In fact, no evidence is provided to substantiate why the adopted local agency thresholds should not apply to the project analysis. The statement that local thresholds are "best suited for transportation planning uses such as preparation of Traffic Impact Studies for proposed developments" does provide any evidence that increases in traffic volume on local streets would be insignificant. Furthermore, the summary provided in Appendix D shows that in fact there are fifteen intersections that would experience a significant increase in traffic as a result of the project and potentially fifteen significant unmitigated project impacts Because the local thresholds are based on an increase in the volume to capacity ratio, a significant impact based on local agency standards would represent a significant increase in traffic volume, which not only affects vehicular traffic, but also introduces hazards to safety for bicyclists and pedestrians. The

document essentially ignores not only significant impacts to vehicles, but provides no evaluation of safety concerns for bicyclists and pedestrians affected by the project.

In fact, Caltrans own annotated outline to be used in the preparation of an EIR/EA states:

> "*The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.*"
> (http://www.dot.ca.gov/ser/downloads/templates/ao/eir_ea_ao.docx)

While this project is not a federal-aid highway project, Caltrans still bears responsibility to ensure the safe accommodation of pedestrians and bicyclists during the development and operation of the project.

Further, the currently pending revised CEQA Transportation Thresholds, while not applicable, offer relevant guidance to Caltrans' responsibilities:

"*To the extent that a lead agencies address safety in a CEQA analysis, the focus must be on protecting people. Thus, for example, lead agencies might analyze how a . . . transportation infrastructure project that increases traffic speeds may burden its travel-shed with additional, undue risk. These risks might be mitigated by, for example, (1) reducing motor vehicle travel speeds, (2) increasing driver attention, (3) protecting vulnerable road users (e.g. providing a protected, Class IV bicycle path and/or shortening pedestrian crossing distances and providing pedestrian refuges and bulb- outs), or (4) reducing VMT by providing VMT mitigation. Mitigation should avoid creating additional risk to vulnerable road users and it should not reduce active transportation mode accessibility or connectivity.*"

Page 43-44, 1/20/16 OPR Revised Proposal on updates to CEQA Guidelines Evaluating Transportation Impacts in CEQA also provide numerous Examples and Mischaracterizations of Detriments to Overall Safety. The following could apply to the project:

- *An increase in VMT. More vehicle travel exposes motorists and other road users to more crash risk.*

- *An increase in pedestrian wait times. Many studies have found that pedestrian wait times play a role in crashes. Long wait times increase the risk some pedestrians will cross against a signal, creating a vulnerable road user collision risk (FHWA-RD-03-042, 2004)*
- *Addition or widening of on- and off-ramps where they meet surface roadways that increases pedestrian crossing distances or times, increase pedestrian wait times, or lead to a prohibition of pedestrian crossing*
- *Addition or widening of off-ramps in a manner that leads to higher speeds on surface streets*
- *Multiple turn lanes at an intersection (e.g. a double left or double right turn lane)*

Because the document essentially ignores intersection impacts based on local agency thresholds, numerous impacts to delay and safety are not disclosed or mitigated. Furthermore, possible impacts to the safety of pedestrians and bicyclists on local roadways are not evaluated and could be significantly affected by the construction and operation of the project.

Comment 6: Assumption of Four Passenger Rail Trips Per Day Underestimates Traffic Volumes

The SC101 HOV Traffic Study Travel Forecast Report[1] indicates that the forecasting for the SC101 HOV project included the assumption that passenger rail service would be improved to provide four additional inter-city passenger-rail trips to meet commuter needs. This planned rail service is a component of the adopted improvement plan included in the 101 In-Motion Study (SBCAG, July 2006). The Travel Forecast Report notes that only $43.0 million of the total $225 million expenditure required to implement the passenger rail service was currently programmed at the time the Travel Forecast Report was prepared in 2009. Since that time, the circumstances surrounding the proposed rail service has changed and now only one train per day in each direction is planned[2] (instead of the two trains per day assumed in the Travel Forecast Report). Inclusion of four passenger rail trips per day in the baseline analysis would result in lower traffic volumes than with only two rail trips per day. Traffic volume forecasts that assume four passenger rail trips per day would underestimate the amount of vehicle traffic utilizing the study area roadways and intersections in the baseline scenario. Because the total funding required to implement the passenger rail project has not been identified, and because the passenger rail service has been reduced from four daily trips to two, the modeling should be based on a more realistic assessment of baseline traffic volumes assuming only two passenger rail trips per day.

[1] *SC101 HOV Traffic Study Travel Forecast Report*, Dowling Associates, Inc., February 2009

[2] SBCAG Hearings, March 19, 2015 (Item 8) and March 17, 2016 (Item 7), incorporated by reference.

Comment 7: Queuing on to Local Streets

Tables 2.3 and 2.4 in the RDEIR identify the 95th percentile queues on the freeway ramps to determine whether forecast queues would affect the freeway mainline. The queuing analysis should also determine whether increased delay caused by the project would increase queuing on the arterial street approaches at the freeway ramps. Small increases in queuing could impact traffic operations on adjacent streets, especially where the US-101 Ramp is in close proximity to adjacent intersections, such as at the Bailard Avenue, Padaro Lane, San Ysidro Road/Eucalyptus Lane, and Olive Mill Road interchanges.

For the 2040 Build PM peak hour condition, some examples of potentially impacted streets by vehicular queues extending beyond their storage lanes' capacity are:

- US-101 northbound ramps/Castillo Street: westbound left turn lane on Castillo Street where the forecast 95th percentile (design) queue is 256 feet, and the physical storage capacity of the lane is 130 feet. This is a queue of 126 feet (or approximately six cars) beyond the storage capacity.
- US-101 southbound ramps/Carrillo Street: northbound right turn lane on Carrillo Street with a 95th percentile queue of 339 feet, and a storage capacity of 130 feet. This is a queue of 209 feet (approximately 10 cars) beyond the storage capacity.
- Las Positas Road/Calle Real: southbound right turn lane on Las Positas Road with a 95th percentile queue of 235 feet, and a storage capacity of 150 feet. This is a queue of 85 feet (approximately four cars) beyond the storage capacity.
- Las Positas road/US-101 southbound ramps: southbound left turn lane on Las Positas Road with a 95th percentile queue of 306 feet, and a storage capacity of 110 feet. This is a queue of 196 feet (approximately nine cars) beyond the storage capacity.

These extended queues outside of the physical capacities of their storage lanes would negatively impact the operations of the other movements of the surface streets (such as Castillo Street, Carrillo Street, and Las Positas Road as shown above), and at the same time also impede pedestrian and bicycle movements attempting to cross the ramp approaches. The RDEIR fails to include a discussion of the potential impacts to vehicles, pedestrians, and bicyclists that may be impeded on the surface streets as a result of the 95th percentile (design) queues extending beyond their physical storage lengths. The Synchro analyses worksheets (while flawed in themselves, see Comment 8 below) provides the queuing information for all movements, however, only the vehicular queues affecting the freeway mainline lanes were addressed in the RDEIR.

Comment 8: Inaccurate Forecast Traffic Volumes at Freeway Interchanges

The level of service (LOS) methodology used in the DREIR is not a valid methodology per Caltrans. In addition, a spot-check of some of the forecast (modeled) 2040 Build scenario traffic volumes at some of the freeway interchanges do not balance between the closely-spaced ramp intersections. Therefore, the forecast traffic volumes and resulting LOS for the Caltrans facilities are not accurate. Furthermore, the proposed mitigation measures may not fully mitigate project impacts, and intersections that were not impacted may actually have significant impacts that were not disclosed in the DREIR.

a. The DREIR is based on an outdated analysis methodology that Caltrans's guidance says should not be used

The level of service (LOS) analysis methodology used in the traffic study of the DREIR to evaluate the freeway ramp interchanges is based on the *Highway Capacity Manual* (HCM) per Caltrans *Guide of the Preparation of Traffic Studies* (2002). The Guide requires that traffic analyses of Caltrans facilities use the most current version of HCM methodology. The current methodology is HCM 2010. The HCM intersection LOS analysis in the DREIR used the Synchro 7 LOS software to evaluate LOS. Synchro 7 is based on the former HCM 2000 methodology which has been replaced with the current HCM 2010 methodology. The LOS calculation methodology between HCM 2000 and HCM 2010 has been updated and therefore, resulting intersection LOS would be different between the two methodologies.

The methodology in HCM 2010 represents a fundamental change from that in HCM 2000. Hence, it is expected that some differences in the predicted travel speed and level of service (LOS) will occur for some facilities when using the HCM 2010 methodology (vs. HCM 2000). It should be noted that each of the methodological changes were developed through extensive research, calibrated with field data, validated, and reviewed by many transportation professionals.

The updated traffic study should have included the re-evaluation of all Caltrans facilities in the HCM 2010 methodology which is contained in Synchro 8 and Synchro 9. Therefore, the LOS results presented in the RDEIR for the Caltrans facilities analyzed in Synchro 7 (HCM 2000) are invalid, and the mitigation measures provided my not fully mitigate project impacts. Also, intersections that were not found to be impacted may be significantly impacted under the Synchro 8 or 9 versions which employ the current HCM 2010 methodology.

b. Traffic volumes are unbalanced, rendering the data set analyzed for the modeled future conditions as questionable and inaccurate, leading to potentially unmitigated significant impacts imposed by the project

Per a review of the LOS worksheets provided in the appendix of the DREIR, a spot check of nine freeway interchanges (and their associated ramp intersections with local roadways) spread throughout the study area indicated unbalanced peak

hour traffic volumes (i.e., the volumes between two intersections do not equally flow from one point to the other) on the street segments between the freeway ramp terminals for three of those nine spot checked interchanges. The "conservation of traffic flow" between the closely-spaced ramp intersection has been compromised rendering the forecast peak hour traffic volumes as inaccurate. These street segments had unbalanced volumes ranging from 46 peak hour trips to 314 peak hour trips between the ramp intersections. Table 3 (attached) provides a summary of those interchange locations. These unbalanced volumes either add or remove peak hour trips from an intersection without explanation, nor are there driveways leading to land uses in between the intersections that would generate volumes.

With unbalanced traffic volumes, forecast volumes at each of the lanes of the affected approaches may either be grossly under- or overestimated leading to inaccurate traffic volume forecasts and resulting intersection LOS and vehicular queuing. Therefore, the LOS results (both HCM and ICU) and queuing results are not valid due to inaccurate traffic volume forecasting. With inaccurate LOS results, the proposed mitigation measures may also be invalid, and furthermore, other intersections, not previously disclosed with significant project impacts, may actually be significantly impacted.

Comment 9: No Analysis of Pedestrian and Bicycle Volumes at Freeway Interchanges

While it appears that some pedestrian volumes were input into the HCM (Synchro 7) analyses, a majority of the freeway interchanges did not show any pedestrian/bicycle volume inputs in their HCM analysis. The raw traffic count volumes were not provided for review, so we could not confirm whether pedestrian/bicycle volumes were collected at the study area intersections. In the Synchro 7 worksheets, if a pedestrian volume is shown in the worksheet, then it was assumed that pedestrians were counted at that intersection. When no pedestrian volume is shown in the worksheet, then no pedestrian volumes were entered (analyzed). When no pedestrians are entered in the HCM analysis, then the minimum "green times" do not account for the time needed for pedestrians to cross the street, and therefore favor the clearing of vehicles through the cycle, not the pedestrians. Therefore, the resulting LOS would be unrealistically good if pedestrians weren't accounted for at an intersection. Table 3 (attached) provides a summary of the pedestrians analyzed at the nine spot checked freeway interchanges for the 2040 Build condition. Of those nine interchanges, seven of them had intersections where no pedestrian traffic was input and analyzed.

Furthermore, review of the pedestrian volume inputs in the 2040 scenario show that some of those (nine) interchanges had a lower pedestrian volume than in the existing (2008) condition. With a span of 30+ years between the existing condition and the 2040 Build condition, pedestrian and bicycle volumes should have increased, and properly analyzed in the traffic study.

In conclusion, the DREIR includes analysis of an extensive study area however it is Transpo's opinion that the document does not properly analyze project impacts and fails to disclose impacts to bicyclists, pedestrians and local intersections. Additionally, the effects of the project on VMT, induced travel, and potential impacts to safety are not evaluated or acknowledged in the DREIR. The thresholds utilized to identify project impacts are arbitrary and do not reflect Caltrans' own performance criteria, are incompatible with local agency thresholds within the study area, and are inconsistent with thresholds utilized by Caltrans on other roadway projects in southern California. Finally, Transpo believes that there are serious deficiencies in the technical analysis including the lack of queuing evaluation on local roadways at the freeway ramps and potentially inaccurate forecast volumes at freeway interchanges. These are serious deficiencies and must be remedied in order for the DREIR to provide an accurate disclosure of potential project impacts.

Attachments:

- Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA
- Relevant pages from Caltrans EIR/EA Annotated Outline (full version can be found at http://www.dot.ca.gov/ser/downloads/templates/ao/eir_ea_ao.docx)

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Table 3. Spot Check of Vehicle and Pedestrian Volumes Input in Synchro for Analysis Scenario 2040 Build w Ex Signal - PM Peak

Intersection Number	Intersection Name	Traffic Control	Volumes Balanced?	Volume Difference & Approach	Pedestrian Volume Input?	Number of Pedestrians in 2040	Number of Existing Pedestrians	Difference
22	Padaro Ln/101 NB Ramps	two-way stop	yes	--	yes	3 - WBT, 3 - SBT	3 - WBT, 2 - SBT	+1 - SBT
23	Padaro Ln/Via Real	one-way stop		--	no	--	--	--
24	Padaro Ln/101 SB Ramps	two-way stop		--	yes	4 - EBT, 3 - WBT	4 - WBT	+4 - EBT, -1 - WBT
29	Evans Ave/Ortega Hill Rd	all-way stop	yes	--	no	--	--	--
31	Evans Ave/101 SB Ramps	two-way stop		--	yes	2 - EBT, 8 - WBT	2 - EBT, 2 - WBT, 1 - NBT	+6 - WBT, -1 NBT
39	Olive Mill Rd/101 NB Off-Ramp	all-way stop	yes	--	no	--	--	--
40	Olive Mill Rd/101 SB On-Ramp	all-way stop		--	no	--	--	--
47	Carpinteria St/101 NB Ramps	roundabout	yes	--	no	--	--	--
48	Milpas St/101 SB Off-Ramp	signalized		volumes also travel to/from Cacique Street in between	yes	8 - EBR, 20 - NBL	11 - EBR, 30 - NBL	-3 - EBR, -10 - NBL
49	Milpas St/101 SB On-Ramp	signalized			no	--	--	--
55	Castillo St/101 NB On-Ramp	signalized	yes	--	no	--	--	--
57	Castillo St/101 SB Ramps	signalized		--	no	--	--	--
63	Mission St/101 NB Ramps	signalized	yes	--	yes	19 - EBL, 9 - EBR	17 - EBL, 10 - EBR	+2 - EBL, -1 - EBR
64	Mission St/101 SB Ramps	signalized		--	yes	1 - WBR, 12 - NBL 47 - NBR, 12 - SBR	6 - NBL 47 - NBR	+1 - WBR, +6 - NBL, +12 - SBR
84	Patterson Ave/101 NB Ramps	signalized	no	-314 north leg departure compared to approach of south leg of #88	yes	2 - NBR, 2 - SBL, 5 - SBR	4 - NBR, 4 - SBL, 4 - SBR	+2 - NBR, -2 - SBL, -2 - SBR
85	Patterson Ave/101 SB Ramps	signalized		--	yes	5 - NBL, 2 - NBR, 5 - SBR	4 - NBL, 4 - NBR, 4 - SBR	+1 - NBL, -2 - NBR, -1 - SBR
86	Patterson Ave/Calle Real	signalized		-248 south leg departure compared to approach of north leg of #84	no	--	--	--
87	Fairview Rd/101 NB Ramps	signalized	no	+88 north leg departure compared to approach of south leg of #88	no	--	--	--
88	Fairview Rd/Calle Real	signalized		-161 south leg departure compared to approach of north leg of #87	no	--	--	--
89	Fairview Rd/101 SB Ramps	signalized		--	no	--	--	--
93	Glen Annie Rd/101 NB Ramps-Calle Real	signalized	no	-92 south leg departure compared to approach of north leg of #95	no	--	--	--
94	Glen Annie Rd/Del Norte Dr	one-way stop		+46 south leg approach compared to departure of north leg of #93	no	--	--	--
95	Glen Annie Rd/101 SB Ramps	signalized		+97 south leg departure compared to approach of south leg of #93	no	--	--	--

Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA

Implementing Senate Bill 743 (Steinberg, 2013)

January 20, 2016

I. Explanation of Revised Updates to the CEQA Guidelines Implementing Senate Bill 743

A. Background

Senate Bill 743 mandates a change in the way that public agencies evaluate transportation impacts of projects under the California Environmental Quality Act. Legislative findings in that bill plainly state that California's foundational environmental law can no longer treat vibrant communities, transit and active transportation options as adverse environmental outcomes. On the contrary, aspects of project location and design that influence travel choices, and thereby improve or degrade our air quality, safety, and health, must be considered.

The Legislature mandated that these changes occur in the Guidelines that implement CEQA for several reasons. For one, as administrative regulations, updates to the CEQA Guidelines are vetted publicly and thoroughly. The Office of Planning and Research began to engage the public in the development of these recommendations as soon as Governor Brown signed Senate Bill 743 into law. Moreover, the development of these recommendations has been iterative, giving experts, the public and affected entities many opportunities to weigh-in. This revised draft of the Guidelines is the latest iteration. Further, as implementation is monitored, and methodologies improve, the Guidelines can be updated as needed.

Once finally adopted, these Guidelines should result in a better, more transparent evaluation of project impacts, and better environmental outcomes. Procedurally, traffic studies that accompany in-depth environmental review will now typically take days rather than weeks to prepare. Because models to estimate vehicle miles traveled are publicly available, decision-makers and the public will be better able to engage in the review process. Substantively, a focus on vehicle miles traveled will facilitate the production of badly-needed housing in urban locations. It will also facilitate transit projects and better uses of existing infrastructure as well as bicycle and pedestrian improvements. As a result, people will have better transportation options. It also means that CEQA will no longer mandate roadways that focus on automobiles to the exclusion of every other transportation option. It will no longer mandate excessive, and expensive, roadway capacity.

As indicated above, this revised draft is the product of many months of intensive engagement with the public, public agencies, environmental organizations, development advocates, industry experts, and many others. Because the changes from the preliminary discussion draft are meaningful and substantive, OPR again invites public review and comment on this proposal.

This document contains an explanation of how the proposal has changed from the preliminary discussion draft. It also briefly explains how the proposal changed in response to specific public input. Finally, this document includes the revised draft of proposed new section 15064.3 as well as a draft Technical Advisory that more thoroughly describes recommended methodologies.

B. Explanation of What Changed from, and What Remains the Same as, the Preliminary Discussion Draft

Many of the basics of the proposal will look familiar. OPR continues to recommend vehicle miles traveled as the most appropriate measure of project transportation impacts. Further, this proposal continues to recommend that development proposed near transit, as well as roadway rehabilitation, transit, bicycle and pedestrian projects, should be considered to have a less than significant transportation impact. Moreover, OPR continues to recommend application of that measure across the state. Finally, OPR continues to recommend that implementation be phased in over time.

Reviewers will also see several improvements on the preliminary discussion draft. First, much of the detail that OPR originally proposed to include in the new Guidelines section has been moved to a new draft Technical Advisory (see Section III of this document). Doing so will make more clear what in the proposal is a requirement versus a recommendation. Second, the recommended thresholds of significance have been refined to both better align with the state's climate policies and recognize the tremendous diversity of California's communities. Further, the threshold recommendations are accompanied by better access to relevant data (such as outputs from the Caltrans' Statewide Travel Demand Model). Third, OPR now recommends that the new procedures remain optional for a two-year period. This opt-in period will enable those agencies that are ready to make the switch from level of service to vehicle miles traveled to do so, but gives time to other agencies that have indicated that they need more time to become acquainted with the new procedures.

C. How the Revised Draft Responds to Public Input

OPR received nearly 200 comment letters on the preliminary discussion draft. The following contains excerpts from those comments representing some of the major themes in the input that OPR received. Following each excerpt is a brief explanation of how OPR responded to the comment in the revised draft.

1. "We applaud the State of California and [OPR] for taking this transformative step forward..."

OPR agrees that the outcome of these changes may be transformative. The degree to which consideration of a project's vehicle miles traveled leads to healthier air and better transportation choices will depend on the choices of individual lead agencies. Those agencies will need to find that project changes, such as increasing transportation options and mix of uses, are feasible. We are more likely to see improved outcomes if these changes in CEQA are coupled with changes in local land use policies, such as reduced parking mandates, greater emphasis on transit, and more walkable community design.

2. "We applaud the selection of Vehicle Miles Traveled (VMT) as the primary metric for evaluating transportation impacts under CEQA. VMT is not only a better measure of environmental impacts than LOS; it is also more equitable."

OPR agrees that vehicle miles traveled is the most appropriate measure to replace level of service. As explained in detail in the Preliminary Evaluation of Alternatives, and in the Preliminary Discussion Draft, vehicle miles traveled directly relates to emissions of air pollutants, including greenhouse gases, energy usage, and demand on infrastructure, as well as indirectly to many other impacts including public health, water usage, water quality and land consumption. Some comments expressed desire to maintain the status quo, and disagreement with the policy of analyzing vehicle miles traveled. However, none of the comments offered any evidence that vehicle miles traveled is not a measure of environmental impact. Moreover, none of the comments produced any credible evidence that level of service is a better measure of environmental impact, or would better promote the statutory goals set forth in CEQA. For these reasons, OPR continues to recommend vehicle miles traveled the primary measure of transportation impacts.

3. "... concerned that regional average VMT does not account for the diversity of communities within the various regions."

While OPR finds that vehicle miles traveled is the best measure of transportation impact in all locations, some variation in *thresholds* may be appropriate in different parts of regions and the state. (See State CEQA Guidelines § 15064(b)("...the significance of an activity may vary with the setting").) Therefore, OPR's revised threshold recommendations provide that outside of central urban locations, reference to a city's average, or within unincorporated county areas, the average of the cities in the county, may be appropriate.

4. "*Unlike activity based models used by some of the larger MPOs*, average VMT by land use type is not readily available from the typical 4-step travel demand model...."

OPR acknowledges the concern expressed in some comments regarding data availability. The adequacy of any analysis "is to be reviewed in the light of what is reasonably feasible." (State CEQA Guidelines § 15151.) Even outside of the large metropolitan planning organizations, statewide data on vehicle miles traveled are available. For example, the California Statewide Travel Demand Model provides data on vehicle miles traveled throughout the state which can be used both for setting thresholds and for estimating VMT resulting from a proposed project.

5. "... a threshold based on any average inherently encourages only marginal improvement.... [W]e recommend that the threshold of significance be based on the SB 375 regional targets."

OPR agrees. The numeric threshold recommendations in the draft Technical Advisory therefore recommends that, in many cases, a project will have a less than significant transportation impact if it

performs at least fifteen percent better than existing averages for the region or city. Fifteen percent is roughly consistent with the reduction targets set for the larger metropolitan planning organizations pursuant to SB 375. The greenhouse gas emissions reductions called for in AB 32 and Executive Orders B-30-15 (forty percent reduction by 2030) and S-3-05 (eighty percent reduction by 2050), which reflect scientific consensus on the magnitude of emissions reductions needed to avoid the worst effects of climate change, require that new development perform significantly better than average. Thus, OPR's revised threshold recommendation better reflects the greenhouse gas reduction goal set forth in SB 743, SB 375, AB 32 and other related climate goals.

6. The presumption [that projects near transit would have a less than significant impact] "would result in missed opportunities to include trip reduction measures where they are needed."

OPR disagrees that recommending a presumption of less than significant impacts for development projects located near transit would prevent local governments from requiring trip reduction in project design. First, local governments may condition project approvals pursuant to their police powers. (Pub. Resources Code § 21099(b)(4).) Thus, even if a project would have a less than significant impact under CEQA, cities and counties may condition project approvals based on local policy. Second, the recommended presumption may be rebutted. A lead agency may find that details about the project or its specific location indicate that the project may cause a significant transportation impact, despite being near transit, and thereby require trip reduction measures. Third, SB 743 specified that lead agencies may find use more stringent thresholds. (Pub. Resources Code § 21099(e).) OPR notes, however, that transit-oriented development itself is a key strategy for reducing VMT, and thereby reducing environmental impacts and developing healthy, walkable communities.

7. "...transit proximity is not an adequate indicator of VMT.... [W]e recommend adding one simple indicator...: the project's parking ratio."

OPR agrees that excess parking may indicate higher vehicle miles traveled. OPR has, therefore, included parking among several factors that might lead an agency to determine that the presumption of less than significant impacts does not apply to a particular project.

8. "For some large roadway projects, analysis of induced demand may be appropriate." But there should be reasonable limits.

OPR agrees. Academic research shows us that adding new roadway capacity increases vehicle miles traveled. Not every transportation improvement will induce travel, however. The recommendations in the draft Technical Advisory clarify that certain transportation projects are not likely to induce significant new travel. Those projects include, among others, installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, or emergency breakdown lanes, new local or collector streets, conversion of general purpose lanes (including ramps) to managed lanes or transit lanes, etc.

9. "The factors affecting transportation safety are numerous and nuanced, and thus not well suited for enumeration within the CEQA Guidelines."

OPR agrees. While safety is a proper consideration under CEQA, the precise nature of that analysis is best left to individual lead agencies to account for project-specific and location-specific factors. OPR has removed the safety provisions from the proposed new section 15064.3. Instead, OPR describes potential considerations for lead agencies in the draft Technical Advisory.

10. "The inclusion of an explicit list [of mitigation measures and alternatives] creates the presumption that each of the measures listed should be analyzed for any project with a potentially significant impact."

OPR disagrees that a suggested list of mitigation measures and alternatives creates any presumption regarding the feasibility of any particular project. Nevertheless, moving the suggested mitigation measures and alternatives to the draft Technical Advisory will accomplish several goals. First, it continues to provide helpful information to lead agencies. Second, it reduces the size and increases the clarity of the regulatory text. Third, the list may be updated more frequently as the practice evolves. Because those goals can be accomplished in a technical advisory, OPR no longer proposes changes to Appendix F of the CEQA Guidelines at this time.

11. "A minimum of two years worth of time should be allowed between incorporation by local agencies in transit priority areas and implementation statewide."

OPR agrees that many lead agencies could benefit from additional time to implement the new rules. Indeed, OPR has seen significant strides in practitioners' understanding of vehicle miles traveled, and how best to study and mitigate it, in the time since OPR released the preliminary discussion draft. Recognizing that some agencies are ready to begin implementation immediately, the revised draft provides that analysis of vehicle miles traveled will be voluntary for two years following adoption of the new Guidelines. During that time, OPR will monitor implementation and may evaluate whether any updates to the Guidelines or Technical Advisory are needed.

D. Next Steps

OPR invites public review and comment on the revised draft Guidelines and draft Technical Advisory. Input may be submitted electronically to **CEQA.Guidelines@resources.ca.gov**. While electronic submission is preferred, suggestions may also be mailed or hand delivered to:

Christopher Calfee, Senior Counsel
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

Please submit all suggestions before **February 29, 2016** at **5:00p.m.** Once the comment period closes, OPR will review all written input and may revise the proposal as appropriate. Next, OPR will submit the draft to the Natural Resources Agency, which will then commence a formal rulemaking process. Once the Natural Resources Agency adopts the changes, they will undergo review by the Office of Administrative Law.

E. Tips for Providing Effective Input

OPR would like to encourage robust engagement in this update process. We expect that participants will bring a variety of perspectives. While opposing views may be strongly held, discourse can and should proceed in a civil and professional manner. To maximize the value of your input, please consider the following:

- In your comment(s), please clearly identify the specific issues on which you are commenting. If you are commenting on a particular word, phrase, or sentence, please provide the page number and paragraph citation.
- Explain why you agree or disagree with OPR's proposed changes. Where you disagree with a particular portion of the proposal, please suggest alternative language.
- Describe any assumptions and support assertions with legal authority and factual information, including any technical information and/or data. Where possible, provide specific examples to illustrate your concerns.
- When possible, consider trade-offs and potentially opposing views.
- Focus comments on the issues that are covered within the scope of the proposed changes. Avoid addressing rules or policies other than those contained in this proposal.
- Consider quality over quantity. One well-supported comment may be more influential than one hundred form letters.
- Please submit any comments within the timeframe provided.

II. *Revised* Proposed Changes to the CEQA Guidelines

Section II of this document includes proposed additions to the CEQA Guidelines, which are found in Title 14 of the California Code of Regulations. Note, these additions, must undergo a formal administrative rulemaking process, and once adopted by the Natural Resources Agency, be reviewed by the Office of Administrative Law.

***Proposed* New Section 15064.3. Determining the Significance of Transportation Impacts**

(a) Purpose.

Section 15064 contains general rules governing the analysis, and the determination of significance of, environmental effects. Specific considerations involving transportation impacts are described in this section. Generally, vehicle miles traveled is the most appropriate measure of a project's potential transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel and the safety of all travelers. A project's effect on automobile delay does not constitute a significant environmental impact.

(b) Criteria for Analyzing Transportation Impacts.

Lead agencies may use thresholds of significance for vehicle miles traveled recommended by other public agencies or experts provided the threshold is supported by substantial evidence.

(1) Vehicle Miles Traveled and Land Use Projects. A development project that results in vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, development projects that locate within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor may be presumed to cause a less than significant transportation impact. Similarly, development projects that decrease vehicle miles traveled in the project area compared to existing conditions may be considered to have a less than significant transportation impact.

(2) Induced Vehicle Travel and Transportation Projects. Additional lane miles may induce automobile travel, and vehicle miles traveled, compared to existing conditions. Transportation projects that reduce, or have no impact on, vehicle miles traveled may be presumed to cause a less than significant transportation impact. To the extent that the potential for induced travel has already been adequately analyzed at a programmatic level, a lead agency may incorporate that analysis by reference.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations (such as homes, employment and services), area demographics, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. The lead agency's evaluation of the vehicle miles traveled associated with a project is subject to a rule of reason. A lead agency should not confine its evaluation to its own political boundary.

A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

(c) Applicability.

The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately provided that it updates its own procedures pursuant to section 15022 to conform to the provisions of this section. After [two years from expected adoption date], the provisions of this section shall apply statewide.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Sections 21099 and 21100, Public Resources Code; *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal. App. 4th 173.

Proposed Changes to Existing Appendix G

XVI. TRANSPORTATION~~/TRAFFIC~~ -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with a~~n applicable~~ plan, ordinance or policy ~~establishing measures of effectiveness for the~~ addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes and pedestrian paths (except for automobile level of service)? ~~, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit~~?	☐	☐	☐	☐
b) ~~Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county~~	☐	☐	☐	☐

~~congestion management agency for designated roads or highways?~~ Cause substantial additional vehicle miles traveled (per capita, per service population, or other appropriate efficiency measure)?

c) ~~Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks~~?

Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network? ~~increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)~~?

d) Result in inadequate emergency access?

~~f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?~~

III. Technical Advisory on Evaluating Transportation Impacts in CEQA

Section III of this document includes a draft Technical Advisory which contains OPR's technical recommendations and best practices regarding the evaluation of transportation impacts under CEQA. Unlike the provisions in Section II of this document, the Technical Advisory is not regulatory in nature. The purpose of this document is simply to provide advice and recommendations, which lead agencies may use in their discretion. Notably, OPR may update this document as frequently as needed reflect advances in practice and methodologies.

January 20, 2016

Technical Advisory on Evaluating Transportation Impacts in CEQA

Implementing Senate Bill 743 (Steinberg, 2013)

January 2016

January 20, 2016

Contents

A. Introduction

This technical advisory is one in a series of advisories provided by the Governor's Office of Planning and Research (OPR) as a service to professional planners, land use officials and CEQA practitioners. OPR issues technical guidance from time to time on issues that broadly affect the practice of land use planning and the California Environmental Quality Act (CEQA). Senate Bill 743 (Steinberg, 2013) required changes to the Guidelines Implementing the California Environmental Quality Act (CEQA Guidelines) regarding the analysis of transportation impacts. Those proposed changes identify vehicle miles traveled as the most appropriate metric to evaluate a project's transportation impacts. Those proposed changes also provide that the analysis of certain transportation projects must address the potential for induced travel. Once the Natural Resources Agency adopts these changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, will no longer constitute a significant environmental effect under CEQA.

This advisory contains technical recommendations regarding thresholds of significance, safety, and mitigation measures. OPR will continue to monitor implementation of these new provisions and may update or supplement this advisory from time to time in response to new information and advancements in modeling and methods.

B. Technical Considerations in Assessing Vehicle Miles Traveled

Many practitioners are familiar with accounting for vehicle miles traveled (VMT) in connection with long range planning, or as part of the analysis of a project's greenhouse gas emissions or energy impacts. While auto-mobility (often expressed as "level of service") may continue to be a measure for planning purposes, Senate Bill 743 directs a different measure for evaluation of environmental impacts under CEQA. This document provides technical background information on how to assess VMT as part of a transportation impacts analysis under CEQA.[1]

1. Considerations about what VMT to count

Consistent with the obligation to make a good faith effort to disclose the environmental consequences of a project, lead agencies have discretion to choose the most appropriate methodology to evaluate project impacts.[2] A lead agency can evaluate a project's effect on VMT in numerous ways. The purpose of this document is to provide technical considerations in determining which methodology may be most useful for various project types.

[1] Additionally, Caltrans is in the process of completing a comprehensive multimodal Transportation Analysis Guide and Transportation Impact Study Guide (TAG-TISG), in collaboration with OPR and a variety of external partners, industry stakeholders, and analysis experts.

[2] The California Supreme Court has explained that when an agency has prepared an environmental impact report:

> [T]he issue is not whether the [lead agency's] studies are irrefutable or whether they could have been better. The relevant issue is only whether the studies are sufficiently credible to be considered as part of the total evidence that supports the [lead agency's] finding[.]

(*Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal.3d 376, 409; see also *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App.4th 357, 372.)

Background on Estimating Vehicle Miles Traveled

Before discussing specific methodological recommendations, this section provides a brief overview of modeling and counting VMT including some key terminology, starting with an example to illustrate some methods of estimating vehicle miles traveled.

Example

Consider the following hypothetical travel day (all by automobile):

1. Residence to Coffee Shop
2. Coffee Shop to Work
3. Work to Sandwich Shop
4. Sandwich Shop to Work
5. Work to Residence
6. Residence to Store
7. Store to Residence

Trip-based assessment of a project's effect on travel behavior counts VMT from individual trips to and from the project. It is the most basic, and traditionally most common, method of counting VMT. A trip-based VMT assessment of the residence in the above example would consider segments 1, 5, 6 and 7. For residential projects, the sum of home-based trips is called *home-based* VMT.

A *tour-based* assessment counts the entire home-back-to-home tour that includes the project. A tour-based VMT assessment of the residence in the above example would consider segments 1, 2, 3, 4, and 5 in one tour, and 6 and 7 in a second tour. A tour-based assessment of the workplace would include segments 1, 2, 3, 4, and 5. Together, all tours comprise *household* VMT.

Both trip- and tour-based assessments can be used as measures of transportation efficiency, using denominators such as per capita, per employee, or per person-trip.

Trip- and Tour-based Assessment of VMT

As illustrated above, a tour-based assessment of VMT is a more complete characterization of a project's effect on VMT. In many cases, a project affects travel behavior beyond the first destination. The location and characteristics of the home and workplace will often be the main drivers of VMT. For example, a residential or office development located near high quality transit will likely lead to some commute trips utilizing transit, affecting mode choice on the rest of the tour.

Characteristics of an office project can also affect an employee's VMT even beyond the work tour. For example, a workplace located at the urban periphery, far from transit, can cause an employee to need to own a car, which in turn affects the entirety of an employee's travel behavior and VMT. For this reason, when estimating the effect of an office development on VMT, it may be appropriate to consider

total employee VMT if data and tools, such as tour-based models, are available. This is consistent with CEQA's requirement to evaluate both direct and *indirect* effects of a project. (See CEQA Guidelines § 15064(d)(2).)

Assessing Change in Total VMT

A third method, estimating the *change in total VMT* with and without the project, can evaluate whether a project is likely to divert existing trips, and what the effect of those diversions will be on total VMT. This method answers the question, "What is the net effect of the project on area VMT?" As an illustration, assessing the total change in VMT for a grocery store built in a food desert that diverts trips from more distant stores could reveal a net VMT reduction. The analysis should address the full area over which the project affects travel behavior, even if the effect on travel behavior crosses political boundaries.

Using Models to Estimate VMT

Travel demand models, sketch models, spreadsheet models, research, and data can all be used to calculate and estimate VMT (see Appendix F of the preliminary discussion draft.) To the extent possible, lead agencies should choose models that have sensitivity to features of the project that affect VMT. Those tools and resources can also assist in establishing thresholds of significance and estimating VMT reduction attributable to mitigation measures and project alternatives. When using models and tools for those various purposes, agencies should use comparable data and methods, in order to set up an "apples-to-apples" comparison between thresholds, VMT estimates, and mitigation VMT estimates.

Models can work together. For example, agencies can use travel demand models or survey data to estimate existing trip lengths and input those into sketch models such as CalEEMod to achieve more accurate results. Whenever possible, agencies should input localized trip lengths into a sketch model to tailor the analysis to the project location. However, in doing so, agencies should be careful to avoid double counting if the sketch model includes other inputs or toggles that are proxies for trip length (e.g. distance to city center). Generally, if an agency changes any sketch model defaults, it should record and report those changes for transparency of analysis. Again, trip length data should come from the same source as data used to calculate thresholds, to be sure of an "apples-to-apples" comparison.

Additional background information regarding travel demand models is available in the California Transportation Commission's "2010 Regional Transportation Plan Guidelines," beginning at page 35.

2. Recommendations Regarding Methodology

Proposed Section 15064.3 explains that a "lead agency may use models to estimate a project's vehicle miles traveled...." CEQA generally defers to lead agencies on the choice of methodology to analyze impacts. This section provides suggestions to lead agencies regarding methodologies to analyze vehicle miles traveled associated with a project.

Residential and Office Projects. A tour-based analysis is usually the best way to analyze VMT associated with residential and office projects. Where tour-based models are employed for office project analyses, because workplace location influences overall travel, either employee work tour VMT or VMT from all employee tours may be attributed to the employment center (and the same should be used to set the significance threshold). For this reason, screening maps (discussed in more detail below) using tour-based regional travel demand models can be used where they are available. Where tour-based tools or data are not available for all components of an analysis, an assessment of trip VMT can serve as a reasonable proxy. For example, where research-based evidence on the efficacy of mitigation measures is available for trip-based, then estimating the threshold, analyzing unmitigated project VMT, and mitigation would all need to be undertaken using a trip-based methods, for an apples-to-apples comparison. In this case, home based trips can be the focus for analysis of residential projects; home-based work trips can be the focus of the analysis for office projects.

For office projects that feature a customer component, such as a government office that serves the public, a lead agency can analyze the customer VMT component of the project using the methodology for retail development (see below).

Models and methodologies used to calculate thresholds, estimate project VMT, and estimate VMT reduction due to mitigation should be comparable. For example:

- A tour-based estimate of project VMT should be compared to a tour-based threshold, or a trip-based estimate to a trip-based VMT threshold.
- Where a travel demand model is used to estimate thresholds, the same model should also be used to estimate trip lengths as part of estimating project VMT
- Where only trip-based estimates of VMT reduction from mitigation are available, a trip-based threshold should be used

Retail Projects. Lead agencies should usually analyze the effects of a retail project by assessing the change in total VMT, because a retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.

Considerations for All Projects. Lead agencies should not truncate any VMT analysis because of political or other boundaries. CEQA requires environmental analyses to reflect a "good faith effort at full disclosure." (CEQA Guidelines § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Analyses should also consider both short- and long-term effects on VMT.

C. General Principles to Guide Consideration of VMT Thresholds

The CEQA Guidelines set forth the general rule for determining significance:

> The determination of whether a project may have a significant effect on the environment calls for **careful judgment** on the part of the public agency involved, **based to the extent possible on scientific and factual data**. An ironclad definition of significant effect is not always possible because **the significance of an activity may vary with the setting**. For example, an activity which may not be significant in an urban area may be significant in a rural area.

(CEQA Guidelines § 15064(b) (emphasis added).) SB 743 directs OPR to establish specific "criteria for determining the significance of transportation impacts of projects[.]" (Pub. Resources Code § 21099(b)(1).)

As noted above, CEQA Guidelines Section 15064(b) confirms that context matters in a CEQA analysis. Further, lead agencies have discretion in the precise methodology to analyze an impact. (*See Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 409 ("the issue is not whether the studies are irrefutable or whether they could have been better" ... rather, the "relevant issue is only whether the studies are sufficiently credible to be considered" as part of the lead agency's overall evaluation).) Therefore, lead agencies may perform multimodal impact analysis that incorporates those technical approaches and mitigation strategies that are best suited to the unique land use/transportation circumstances and specific facility types they are evaluating. For example, pedestrian safety need not be addressed on the mainline portion of a limited access freeway that prohibits pedestrian travel. Likewise, where multimodal transportation is to be expected, analysis might address safety from a variety of perspectives.

To assist in the determination of significance, many lead agencies rely on "thresholds of significance." The CEQA Guidelines define a "threshold of significance" to mean "an identifiable **quantitative, qualitative or performance level** of a particular environmental effect, non-compliance with which means the effect will ***normally*** be determined to be significant by the agency and compliance with which means the effect ***normally*** will be determined to be less than significant." (CEQA Guidelines § 15064.7(a) (emphasis added).) Agencies may adopt their own, or rely on thresholds recommended by other agencies, "provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." (*Id.* at subd. (c).) Substantial evidence means "**enough relevant information** and reasonable inferences from this information that a fair argument can be made **to support a conclusion**, *even though other conclusions might also be reached.*" (*Id.* at § 15384 (emphasis added).)

Thresholds of significance are not a safe harbor under CEQA; rather, they are a starting point for analysis:

> [T]hresholds cannot be used to determine automatically whether a given effect will or will not be significant. Instead, thresholds of significance can be used only as a measure of whether a certain environmental effect "will normally be determined to be significant" or "normally will be determined to be less than significant" by the agency. ... In each instance, notwithstanding compliance with a pertinent threshold of significance,

> the agency must still consider any fair argument that a certain environmental effect may be significant.

(*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1108-1109.)

Finally, just as the determination of significance is ultimately a "judgment call," the analysis leading to that determination need not be perfect. The CEQA Guidelines describe the standard for adequacy of environmental analyses:

> 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.

(CEQA Guidelines § 15151 (emphasis added).)

These general principles guide OPR's recommendations regarding thresholds of significance for vehicle miles traveled set forth below.

D. Recommendations Regarding Significance Thresholds

Section 21099 of the Public Resources Code states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of greenhouse gas emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses.

Various state policies establish quantitative greenhouse gas emissions reduction targets. For example:

- Assembly Bill 32 requires statewide greenhouse gas reductions to 1990 levels by 2020, and continued reductions beyond 2020.
- Pursuant to Senate Bill 375, the California Air Resources Board establishes greenhouse gas reduction targets for metropolitan planning organizations to achieve based on land use patterns and transportation systems specified in Regional Transportation Plans and Sustainable Community Strategies. Targets for the largest metropolitan planning organizations range from 13% to 16% reduction by 2035.
- Executive Order B-30-15 sets a GHG emissions reduction target of 40 percent below 1990 levels by 2030.
- Executive Order S-3-05 sets a GHG emissions reduction target of 80 percent below 1990 levels by 2050.
- Executive Order B-16-12 specifies a GHG emissions reduction target of 80 percent below 1990 levels by 2050 specifically for transportation.

- Senate Bill 391 requires the California Transportation Plan support 80 percent reduction in GHGs below 1990 levels by 2050.

Considering these various targets, the California Supreme Court observed:

> Meeting our statewide reduction goals does not preclude all new development. Rather, the Scoping Plan ... assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians.

(*Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 2015 Cal. LEXIS 9478.) Indeed, the Court noted that when a lead agency uses consistency with climate goals as a way to determine significance, particularly for long-term projects, the lead agency must consider the project's effect on meeting long-term reduction goals. (*Ibid.*)

The targets described above indicate that we need substantial reductions in existing VMT to curb greenhouse gases, and other pollutants. Those targets do not translate directly into VMT thresholds for individual projects for numerous reasons, however, including the following:

- Some, though not all, of the emissions reductions needed to achieve those targets will be accomplished by other measures, including increased vehicle efficiency and decreased fuel carbon content. The California Air Resources Board's updated Scoping Plan explains: "Achieving California's long-term criteria pollutant and GHG emissions goals will require four strategies to be employed: (1) improve vehicle efficiency and develop zero emission technologies, (2) reduce the carbon content of fuels and provide market support to get these lower-carbon fuels into the marketplace, (3) *plan and build communities to reduce vehicular GHG emissions and provide more transportation options*, and (4) *improve the efficiency and throughput of existing transportation systems*." (California Air Resources Board, Scoping Plan, at p. 46 (emphasis added).) In other words, vehicle efficiency and better fuels are necessary, but insufficient, to address the greenhouse gas emissions from the transportation system. Land use patterns and transportation options must also change.

- New projects alone will not sufficiently reduce VMT to achieve those targets, nor are they expected to be the sole source of VMT reduction.

- Interactions between land use projects, and also between land use and transportation projects, existing and future, together affect VMT.

- Some projects will exhibit significant and unavoidable (above threshold) VMT impacts, while others will exhibit below-threshold VMT.

- Because regional location is the most important determinant of VMT, in some cases, streamlining CEQA review of projects in travel efficient locations may be the most effective means of reducing VMT.

- When assessing climate impacts of land use projects, use of an efficiency metric (e.g., per capita, per employee) may provide a better measure of impact than an absolute numeric threshold. (*Center for Biological Diversity*, *supra*.)

"Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects." (CEQA Guidelines § 15064.7(a).) Further, "a lead agency may consider thresholds of significance ... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence." (Id. at subd. (c).) Public Resources Code section 21099 directs OPR to provide guidance on determining the significance of transportation impacts.

To that end, OPR finds, absent any more project-specific information to the contrary, that per capita or per employee VMT fifteen percent below that of existing development may be a reasonable threshold, for the reasons described below. (Note: Lead agencies may apply more stringent thresholds at their discretion (Section 21099).)

First, as described above, Section 21099 states that the criteria for determining significance must "promote the reduction in greenhouse gas emissions." SB 743 also states the Legislature's intent that the analysis of transportation in CEQA better promotes the state's goals of reducing greenhouse gas emissions. It cites in particular the reduction goals in the Global Warming Solutions Act and the Sustainable Communities and Climate Protection Act, both of which call for substantial reductions. As indicated above, the California Air Resources Board established long-term reduction targets for the largest regions in the state that ranged from 13 to 16 percent.

Second, Caltrans has developed a statewide VMT reduction target in its Strategic Management Plan. Specifically, it calls for a 15 percent reduction in per capita VMT, compared to 2010 levels, by 2020.

Third, fifteen percent reductions in VMT are typically achievable at the project level in a variety of place types. (Quantifying Greenhouse Gas Measures, p. 55 CAPCOA, 2010).

Fourth, the *First Update to the AB 32 Scoping Plan* states, "Recognizing the important role local governments play in the successful implementation of AB 32, the initial Scoping Plan called for local governments to set municipal and communitywide GHG reduction targets of 15 percent below then-current levels by 2020, to coincide with the statewide limit" (p. 113).

Achieving 15 percent lower per capita or per employee VMT than existing development is, therefore, both reasonably ambitious and generally achievable. The following pages describe a series of screening thresholds below which a detailed analysis may be not be required. Next, this advisory describes numeric thresholds recommended for various project types. Finally, this advisory describes analysis for certain unique circumstances.

1. Screening Thresholds

Screening Threshold for Small Projects

Many local agencies, including congestion management agencies, have developed screening thresholds (e.g., 100 vehicle trips per day) to indicate when detailed analysis is needed to determine consistency with the congestion management program. Projects that generate few trips will also generally tend to

generate low vehicle miles traveled. Absent substantial evidence indicating that a project would generate a potentially significant level of vehicle miles traveled, projects that generate fewer trips than the threshold for studying consistency with a congestion management program, or 100 vehicle trips per day, generally may be assumed to cause a less than significant transportation impact.

Map-Based Screening for Residential and Office Projects

Residential and office projects that locate in areas with low-VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Therefore, lead agencies can use maps illustrating areas that exhibit below threshold VMT (see recommendations below) to screen out residential and office projects which may not require a detailed VMT analysis. A travel demand model or survey data can provide the existing household or work tour (or home-based or home-based-work) VMT that would be illustrated on such a map. (*See illustration of home-based VMT in the Butte region.*) Note that screening maps illustrating per household VMT (for residential projects) and per employee VMT (for office projects) will typically show below-threshold VMT for these land uses exists over different geographies. For projects that include both residential and office components, lead agencies may use each map as a screen for the respective portion of the project.

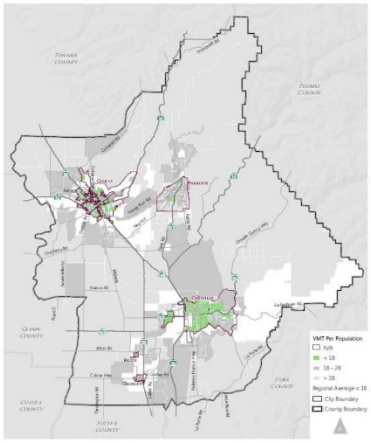


Figure x-x.
Home-Based (HBW & HBO) VMT Produced per Population

FEHR PEERS

Presumption of Less Than Significant Impact Near Transit Stations

Lead agencies generally should presume that residential, retail, and office projects, as well as mixed use projects which are a mix of these uses, proposed within ½ mile of an existing major transit stop[3] or an existing stop along a high quality transit corridor[4] will have a less than significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (only for jurisdictions specifying a parking minimum)
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization)

If these exceptions to the presumption might apply, the lead agency should conduct a detailed VMT analysis to determine whether the project would exceed VMT thresholds (see below).

2. Recommended Numeric Thresholds for Residential, Office and Retail Projects

Recommended threshold for residential projects: A project exceeding *both*

- Existing *city* household VMT per capita minus 15 percent *and*
- Existing *regional* household VMT per capita minus 15 percent

may indicate a significant transportation impact

Residential development that would generate vehicle travel less than *both* a level of 15 percent below city-wide VMT per capita[5] *and* a level of 15 percent below regional[6] VMT per capita may indicate a less

[3] Pub. Resources Code § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods").
[4] Pub. Resources Code § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours").
[5] Note, use of an efficiency metric (e.g., per capita) is particularly appropriate when assessing VMT of certain land use projects such as residential and office buildings. (*Center for Biological Diversity*, *supra* ("a significance criterion

than significant transportation impact. (In other words, a project that generates greater than 85 percent of regional per capita VMT, but less than 85 percent of city-wide per capita VMT, would still be considered to have a less than significant transportation impact.) Residential development in unincorporated county areas generating VMT that exceeds 15 percent below VMT per capita in the aggregate of all incorporated jurisdictions in that county, *and* exceeds 15 percent below regional VMT per capita, may indicate a significant transportation impact. These thresholds can be applied to both household (tour-based) VMT and home-based (i.e. trip-based) VMT assessments.

Recommended threshold for office projects: A project exceeding a level of 15 percent below existing *regional VMT per employee* may indicate a significant transportation impact.

Office projects that would generate vehicle travel exceeding 15 percent below existing VMT per employee for the region may indicate a significant transportation impact. In cases where the region is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography, such as the county. Tour-based analysis of office project VMT, for example development of a tour-based screening map, typically should consider either total employee VMT or employee work tour VMT. Where tour-based information is unavailable for threshold determination, project assessment, or assessment of mitigation, home-based work trip VMT may be used throughout the analysis to maintain and "apples-to-apples" comparison.

Recommended threshold for retail projects: A net increase in total VMT may indicate a significant transportation impact

Because new retail development typically redistributes shopping trips rather than creating new trips,[7] estimating the total change in VMT (i.e. the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts.

By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Lead agencies generally, therefore, may presume such development creates a less than significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, might tend to have a significant impact. Where such development decreases VMT, lead agencies may consider it to have a less than significant impact.

framed in terms of efficiency is superior to a simple numerical threshold because CEQA is not intended as a population control measure").)

[6] As used in these recommendations, the term "regional" refers to the metropolitan planning organization or regional transportation planning agency boundaries within which the project would be located.

[7] Lovejoy et al. 2012.

Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-specific information, such as market studies or economic impacts analyses that might bear on customers' travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local serving. Generally, however, development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT.

Mixed Use Projects

Lead agencies can evaluate each component of a mixed-use project independently, and apply the significance threshold for each project type included (e.g. residential and retail). In the analysis of each use, a project may take credit for internal capture.

Other Project Types

Residential, office and retail projects tend to have the greatest influence on VMT, and so OPR recommends the quantified thresholds described above for analysis and mitigation. Lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types. In developing thresholds for other project types, or thresholds different from those recommended here, lead agencies should consider the purposes described in section 21099 of the Public Resources Code, in addition to more general rules in the CEQA Guidelines on the development of thresholds of significance.

Strategies that decrease local VMT but increase total VMT, for example strategies that forego development in one location and lead to it being built in a less travel efficient location, should be avoided.

RTP-SCS Consistency (All Land Use Projects)

Proposals for development outside of areas contemplated for development in a Sustainable Communities Strategy (SCS) may be less travel efficient than most development with the SCS. Further, Section 15125(d) of the CEQA Guidelines provides that lead agencies should analyze impacts resulting from inconsistencies with regional plans. For this reason, development in a location where the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) does not specify any development may indicate a significant impact on transportation.

3. Recommendations Regarding Land Use Plans

As with projects, agencies should analyze VMT outcomes of land use plans over the full area that the plan may substantively affect travel patterns, including beyond the boundary of the plan or jurisdiction geography. Analysis of specific plans may employ the same thresholds described above for projects. The following guidance for significance thresholds applies to General Plans, Area Plans, and Community Plans.

A land use plan may have a significant impact on transportation if it is not consistent with the relevant RTP/SCS. For this purpose, consistency with the SCS means all of the following must be true:

- Development specified in the plan is also specified in the SCS (i.e. the plan does not specify developing in outlying areas specified as open space in the SCS)
- Taken as a whole, development specified in the plan leads to VMT that is equal to or less than the VMT per capita and VMT per employee specified in the SCS

Thresholds for plans in non-MPO areas should be determined on a case-by-case basis.

4. Recommendations Regarding Regional Transportation Plans and Sustainable Communities Strategies

VMT outcomes of RTP/SCSs should be examined over the full area they substantively affect travel patterns, including outside the boundary of the plan geography.

An RTP/SCS achieving per capita VMT reductions sufficient to achieve SB 375 target GHG emissions reduction may constitute a less than significant transportation impact. In non-MPO counties, which do not receive GHG targets under SB 375, an RTP which achieves a reduction in per capita VMT may constitute a less than significant transportation impact.

5. Other Considerations

More Stringent Thresholds at Lead Agency Discretion

Public Resources Code section 21099 provides that a lead agency may adopt thresholds that are more protective of the environment than those that OPR recommends. Note that in some cases, streamlining projects in VMT-efficient locations may lead to larger VMT reductions than requiring VMT mitigation, by facilitating and thus increasing the share of location-efficient development.

Rural Projects Outside MPOs

In rural areas of non-MPO counties (i.e. areas not near established or incorporated cities or towns), fewer options may be available for reducing VMT, and significance thresholds may be best determined on a case-by-case basis. Note, however, that clustered small towns and small town main streets may have substantial VMT benefits compared to isolated rural development, similar on a percent per capita

reduction basis as transit oriented development described above. Therefore, evaluating per capita VMT is still recommended.

Impacts to Transit

Because criteria for determining the significance of transportation impacts must promote "the development of multimodal transportation networks," lead agencies should consider project impacts to transit systems and bicycle and pedestrian networks. For example, a project that blocks access to a transit stop or blocks a transit route itself may interfere with transit functions. Lead agencies should consult with transit agencies as early as possible in the development process, particularly for projects that locate within one half mile of transit stops.

When evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition of new users as an adverse impact. Any travel-efficient infill development is likely to add riders to transit systems, potentially slowing transit vehicle mobility, but also potentially improving overall destination proximity. Meanwhile, such development improves regional vehicle flow generally by loading less vehicle travel onto the regional network than if that development was to occur elsewhere.

Increased demand throughout a region may, however, cause a cumulative impact by requiring new or additional transit infrastructure. Such impacts may be best addressed through a fee program that fairly allocates the cost of improvements not just to projects that happen to locate near transit, but rather across a region to all projects that impose burdens on the entire transportation system.

E. Recommendations for Considering Transportation Project VMT Effects

A transportation project changes travel patterns and affects VMT. For example, a project that facilitates active transportation can cause mode shift away from automobile use, resulting in a reduction in VMT. Meanwhile, a roadway project can facilitate automobile travel, leading to more VMT. While CEQA does not require perfection in impact measurement, it is important to make a reasonably accurate estimate of effects on VMT from transportation projects in order to make reasonably accurate estimates of GHGs and other impacts associated with VMT.

Projects that would likely lead to an increase in VMT, and therefore should undergo analysis (including for purposes of accurately estimating GHG and other impacts that are affected by VMT), generally include:

- Addition of through lanes on existing or new highways, including general purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges

Projects that would not likely lead to a substantial or measureable increase in VMT, and therefore should not require analysis, generally include:

- Rehabilitation, maintenance, replacement and repair projects designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts, tunnels, transit systems, and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle lanes
- Roadway shoulder enhancements to provide "breakdown space," otherwise improve safety or provide bicycle access
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Conversion of existing general purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially decrease impedance to use
- Reduction in number of through lanes, e.g. a "road diet"
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g. HOV, HOT, or trucks) from general vehicles
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Traffic metering systems
- Timing of signals to optimize vehicle, bicycle or pedestrian flow
- Installation of roundabouts
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase (e.g., encourage carpooling, fund transit enhancements like bus rapid transit or passenger rail in the tolled corridor)
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes
- Removal of off-street parking spaces
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs).
- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Any lane addition under 0.3 miles in length, including addition of any auxiliary lane less than 0.3 miles in length

Causes of Induced VMT. Induced VMT occurs where roadway capacity is expanded in a congested area, leading to an initial appreciable reduction in travel time. With lower travel times, the modified facility becomes more attractive to travelers, resulting in the following trip-making changes, which have implications for total VMT:

- **Longer trips.** The ability to travel a long distance in a shorter time increases the attractiveness of destinations that are further away, increasing trip length and VMT.
- **Changes in mode choice.** When transportation investments are devoted to reducing automobile travel time, travelers tend to shift toward automobile use from other modes, which increases VMT.
- **Route changes.** Faster travel times on a route attract more drivers to that route from other routes, which can increase or decrease VMT depending on whether it shortens or lengthens trips.
- **Newly generated trips.** Increasing travel speeds can induce additional trips, which increases VMT. For example, an individual who previously telecommuted or purchased goods on the internet might choose to accomplish those ends via automobile trips as a result of increased speeds.
- **Land Use Changes.** Faster travel times along a corridor lead to land development further along that corridor; that development generates and attracts longer trips, which increases VMT. Over several years, this component of induced VMT can be substantial, e.g. approximately half of the total effect on VMT.

These effects operate over different time scales. For example, changes in mode choice might occur immediately, while land use changes typically take a few years or longer. CEQA requires analysis to address both short term and long term effects.

Applying tolls to additional capacity will generally reduce the amount of additional VMT that results from adding that capacity. This is because tolls, like congestion, act as an "impedance factor" for traffic volumes in the lane. Because of the impedance effect, tolling can also be used to maintain free flow in a lane and keep it from becoming congested, resulting in the counterintuitive effect of impedance increasing flow. Studies have shown that *net* benefit from tolling improving vehicle flow can be greater than the sum of the tolls collected, leaving the tolls funds themselves as additional benefit that might be invested in transportation options.

Evidence of Induced VMT. A large number of peer reviewed studies have demonstrated a causal link between highway capacity increases and VMT increases. Of these, approximately twenty provide a quantitative estimate of the magnitude of the induced VMT phenomenon; of those, nearly all find substantial induced VMT.

Most of these studies express the amount of induced VMT as an "elasticity," which is a multiplier that describes the additional VMT resulting from an additional lane mile of roadway capacity added. For example, an elasticity of 0.8 would signify a 0.8 percent increase in VMT for every 1.0 percent increase

in lane miles. Many distinguish "short run elasticity" (increase in vehicle travel in the first few years) from "long run elasticity" (increase in vehicle travel beyond the first few years). Long run elasticity is typically larger than short run elasticity, because as time passes, more of the components of induced VMT materialize. Generally, short run elasticity can be thought of as excluding the effects of land use change, while long run elasticity includes them. Most studies find a long run elasticity between 0.6 and just over 1.0 (California Air Resources Board *DRAFT Policy Brief on Highway Capacity and Induced Travel*, p. 2.), meaning that for every increase in capacity of one lane-mile there is a concomitant increase in VMT of 0.6 to 1.0 lane miles. The most recent major study (Duranton and Turner, 2011) reveals an elasticity of VMT by lanes miles of 1.03; in other words, each lane mile built resulted in 1.03 additional miles of vehicle travel. (An elasticity greater than 1.0 can occur because new lanes leverage travel behavior beyond just the project location.) In CEQA analysis, the long-run elasticity should be used, as it captures the full effect of the project rather than just the early-stage effect.

Quantifying Induced VMT Using Models. Lead agencies can use the methodology provided below for most projects that increase roadway capacity. However, where a roadway capacity project may exhibit an unusual characteristic or be set in an unusual context, a travel demand model and other tools may be used to estimate VMT resulting from the project. If such analysis indicates a change in VMT per change in lane miles that is outside the range found in literature, reasons for the discrepancy should be discussed in the CEQA document.

Proper use of a travel demand model will yield a reasonable estimate of short run induced VMT, generally including the following components:

- Trip length (generally increases VMT)
- Mode shift (generally shifts from other modes towards automobile use, increasing VMT)
- Route changes (can act to increase or decrease VMT)
- Newly generated trips (generally increases VMT) (Note that not all travel demand models have sensitivity to this factor, so an off-model estimate may be necessary if this effect could be expected to be substantial.)

However, estimating long run induced VMT also requires an estimate of effects of the project on land use. This component of the analysis is important because it has the potential to be a large component of the effect. Options for estimating and incorporating the VMT effects that precipitate from land use changes resulting from the project include:

1. *Employ a land use model, running it iteratively with a travel demand model.* A land use model (such as a PECAS model) can be used to estimate the effects of a roadway capacity increase, and the traffic patterns that result from the land use change can be fed back into the travel demand model.
2. *Employ an expert panel.* In place of a model, an expert panel can estimate land use development resulting from the project. Once developed, the estimates of land use changes can then be analyzed by the travel demand model to assess VMT effects. (See, e.g., *Conservation Law Found. v. FHA* (2007) 630 F. Supp. 2d 183.)

3. *Acknowledge omission of land use in VMT analysis, and adjust results to align with the empirical research.* The travel demand model analysis can be performed without an estimate of land use changes, and then the results can be compared to empirical studies of induced VMT found in the types of studies described above. If the modeled elasticity falls outside of that range, then the VMT estimate can be adjusted to fall within the range, or an explanation can be provided describing why the project would be expected to induce a different amount of VMT than a typical project. (For an example of an EIR that includes a number of these elements, see *Interstate 5 Bus/Carpool Lanes Project Final EIR, pp. 2-52 to 2-56.*)

In all cases, any limitation or known lack of sensitivity in the analysis that might cause substantial errors in the VMT estimate, e.g. model insensitivity to one of the components of induced VMT described above, should be disclosed and characterized, and a description should be provided on how it could influence the analysis results. A discussion of the potential error or bias should be carried also into analyses that rely on the VMT analysis, such as greenhouse gas emissions, air quality, and noise.

1. Recommended Significance Threshold for Transportation Projects

As explained above, Public Resources Code section 21099 directs OPR to recommend criteria for evaluating transportation impacts that promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. These criteria would apply to all project types. This section of the technical advisory addresses criteria appropriate for transportation projects.

Transportation, including upstream (e.g. refinery) emissions, accounts for over half of California's greenhouse gas emissions. Achieving California's emissions reduction goals (described above) will, therefore, require steep reductions in emissions from the transportation sector. For example, the California Air Resources Board describes a scenario achieving the reduction goals set forth in Executive Order B-30-15 from the transportation sector in a fact sheet, *Cutting Petroleum Use in Half by 2030.* In sum, achieving those goals will require improving vehicle efficiency, reducing fuel carbon content, and improving travel efficiency (i.e. reducing VMT). Even with steep improvements in vehicle efficiency, a significant shift to zero emissions vehicles and sharp reductions in the carbon content of fuels, total statewide VMT could increase no more than 4 percent over 2014 levels.

Assuming, based on that information, that statewide VMT can increase up to 4 percent without obstructing California's long-term emissions reduction goals, we can determine a total increment of allowable increased VMT.

Therefore:

4% x [2014 statewide total VMT] = [Total Allowable VMT Increment]

This VMT increment can be divided among transportation projects expected to be completed by 2030 in order to determine a project-level VMT threshold:

[Total Allowable VMT Increment] / [Number of projects through 2030] = [Project VMT Threshold]

A project that leads to an addition of more VMT than the Project VMT Threshold may indicate a significant impact on VMT.

Following is an initial estimate of a recommended Transportation Project VMT Threshold:

California Statewide VMT (2014)	185,320,000,000 VMT/year
Allowable increase by 2030 (4 percent)	7,412,800,000 VMT/year
Estimated total transportation projects in California, expected completion date 2015-2030	3,572 Projects[8]
Fair share VMT per transportation project	2,075,220 VMT/year

2. Estimating VMT Impacts from Transportation Projects

CEQA requires analysis of a project's potential growth-inducing impacts. (Public Resources Code § 21100(b)(5); State CEQA Guidelines, § 15126.2(d).) Many agencies are familiar with the analysis of growth inducing impacts associated with water, sewer and other infrastructure. This technical advisory addresses growth that may be expected from roadway expansion projects.

Because a roadway expansion project can induce substantial VMT, incorporating estimates of induced VMT is critical to calculating both transportation and other impacts of these projects. Induced VMT also has the potential to reduce or eliminate congestion relief benefits, and an accurate estimate of it is needed to accurately weigh costs and benefits of a highway capacity expansion project.

VMT effects should be estimated using the *change in total VMT* method (as described in the previous section *Technical Considerations in Assessing Vehicle Miles Traveled/Considerations in what VMT to count*). This means that an assessment of total VMT without the project, and an assessment with the project, should be made; the difference between the two is the amount of VMT attributable to the project. The assessment should cover the full area in which driving patterns are expected to change; as with other types of projects, VMT estimation should not be truncated at a modeling or political boundary for convenience of analysis when travel behavior is substantially affected beyond that boundary.

[8] This preliminary estimate is based on a population-based extrapolation of SCAG's project list (SCAG's project list contains 1728 projects expected to be completed 2015-2030, and the SCAG region contains 48.4 percent of the population.) Agencies with more complete or specific data may use that data.

Transit and Active Transportation Projects

Transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less than significant impact on transportation. This presumption may apply to all passenger rail projects, bus and bus rapid transit projects, and bicycle and pedestrian infrastructure projects. Streamlining transit and active transportation projects aligns with each of the three statutory goals by reducing GHG emissions, increasing multimodal transportation networks, and facilitating mixed use development.

Roadway Projects

Reducing roadway capacity (i.e. a "road diet") will generally reduce VMT and therefore is presumed to cause a less than significant impact on transportation.

Building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, typically induces additional vehicle travel. For the types of projects indicated previously as likely to lead to additional vehicle travel, an estimate should be made of the change in VMT resulting from the project.

For projects that increase roadway capacity, lead agencies can evaluate the potential induced VMT by applying the results of existing studies that examine the magnitude of the increase of VMT resulting from a given increase in lane miles. These studies estimate the percent change in VMT for every percent change in miles to the roadway system ("elasticity") (see U.C. Davis, Institute for Transportation Studies, "Increasing Highway Capacity Unlikely to Relieve Traffic Congestion," (October 2015); Boarnet and Handy, "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions," California Air Resources Board Policy Brief, September 30, 2014). Given that lead agencies have discretion in choosing their methodology, and the studies on induced travel reveal a range of elasticities, lead agencies may appropriately apply professional judgment in studying the effect of a particular project. The most recent major study (Duranton and Turner, 2011), estimates an elasticity of 1.0, meaning that every percent change in lane miles results in a 1 percent increase in VMT.

To estimate VMT impacts from roadway expansion projects:

1. Determine the total lane-miles over an area that fully captures travel behavior changes resulting from the project (e.g. generally the region; for projects affecting interregional travel, all affected regions)
2. Determine the percent change in total lane miles that will result from the project
3. Determine the total existing VMT over that same area
4. Multiply the percent increase in lane miles by the existing VMT, and then by the elasticity from the induced travel literature:

[% increase in lane miles] x [existing VMT] x [elasticity] = [VMT resulting from the project]

Because the research providing these elasticity estimates was undertaken in congested urban regions, this method should be applied only within MPOs; it would not be suitable for rural (non-MPO) locations in the state.

Certain roadway capacity projects might be expected to induce greater or lesser VMT than typical projects; some will even reduce VMT. For example, adding an extra lane to an especially critical and congested link (e.g. the San Francisco Bay Bridge) may leverage VMT growth far beyond that link, increasing VMT to a greater degree. On the other hand, adding a link that greatly improves connectivity (i.e. provides drivers a shorter route in exchange for a longer one) may in select cases reduce total VMT. Such projects may require more detailed analysis using models, and execution of this analysis requires a more nuanced understanding of the factors involved in induced VMT.

This section assists lead agencies in determining the significance of VMT impacts by referencing statewide goals established to achieve the greenhouse gas emissions reduction scientists say is needed to avert global environmental catastrophe. The method for determining the significance of transportation projects described in this section could also be applied at a programmatic level in a regional planning process. In that case, lead agencies could tier from that analysis to streamline later analysis at the project level. (See State CEQA Guidelines Section 15168.) For example, the total expected statewide increase in VMT that would allow for attainment of statewide greenhouse gas emissions reductions could be divided between regions by population to determine a regional-level "threshold." That program-level analysis of VMT would include effects of the program and its constituent projects on land use patterns, and the VMT that results from those land use effects. In determining whether a program-level document adequately analyzes potential induced demand, lead agencies should note that analyses that assume a fixed land use pattern, and which does not vary in response to the provision of roadway capacity, do not fully account for induced VMT from a project or program of roadway capacity expansion. On the other hand, where the analysis accounts for land use investment and development pattern changes that react in a reasonable manner to changes in

accessibility created by transportation infrastructure investments (whether at the project or program level), the resulting changes in VMT might provide an appropriate basis for tiering.

Mitigation and alternatives.

Induced VMT has the potential to reduce or eliminate congestion relief benefits, increase VMT, and increase other environmental impacts that result from vehicle travel. If those effects are significant, the lead agency will need to consider mitigation or alternatives. In the context of increased travel induced by capacity increases, appropriate mitigation and alternatives that a lead agency might consider include the following:

- Tolling new lanes to encourage carpools and fund transit improvements
- Converting existing general purpose lanes to HOV or HOT lanes
- Implementing or funding travel demand management offsite
- Implementing Intelligent Transportation Systems (ITS) strategies to improve passenger throughput on existing lanes

Tolling and other management strategies can have the additional benefit of preventing congestion and maintaining free-flow conditions, conferring substantial benefits to road users as discussed above.

F. Analyzing Safety Impacts Related to Transportation

Public Resources Code section 21099 suggests that while automobile delay is not an environmental impact, lead agencies may still evaluate project impacts related to safety. The CEQA Guidelines currently suggest that lead agencies examine projects' potential to "[s]ubstantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)".

As with any other potential impact, CEQA requires lead agencies to make a judgment call "based to the extent possible on scientific and factual data." (State CEQA Guidelines § 15064(b).) Also like any other potential impact, "the significance of an activity may vary with the setting." (Ibid.) Lead agencies must base their evaluations of safety on objective facts, and not personal or subjective fears. The purpose of this section is to review some relevant considerations in evaluating potential transportation-related safety impacts.

Transportation by its nature involves some degree of collision risk. Every project will affect transportation patterns, and as a result may involve some redistribution of that risk.

Lead agencies may consider whether a project may cause substantially unsafe conditions for various roadway users. This section is not intended to provide a comprehensive list of potential transportation safety risks, but rather guidance on how to approach safety analysis given numerous potential risks.

Generally:

- Safety analysis in CEQA should focus on risk of fatality or injury, rather than property damage.
- Lead agencies should focus on concerns that affect many people, not just an individual.

- The potential safety concern must relate to actual project conditions, and not stem solely from subjective fears of an individual.
- Safety analysis in CEQA should focus on undue risks that can be reduced without adding other risks, particularly without increasing risk to vulnerable road users. (State CEQA Guidelines § 15126.2(a)(1)(D).) Safety analysis and mitigation under CEQA should not undermine overall public health, e.g. by reducing the physical activity benefits of active transportation.
- In analyzing safety, lead agencies should note that automobile delay in not an indication of environmental impact. (Pub. Resources Code § 21099(b)(2).)

In the past, transportation safety has focused on streamlining automobile flow and accommodating driver error, sometimes confounding motor vehicle mobility and speed with transportation system safety. An updated and more holistic approach has developed over the past decade, however. This updated approach focuses on three overlapping strategies:

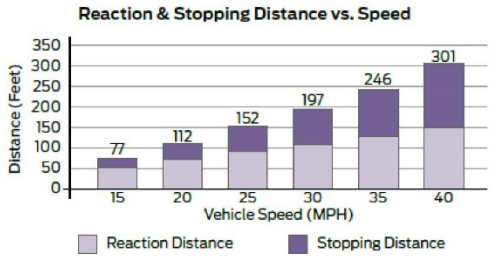
- Reduce speed and increase driver attention
- Protect vulnerable road users
- Reduce overall VMT and sprawl (see Ewing et al. (2003) below for definition of "sprawl")

Newer design guidance builds on more recent research on transportation safety and articulates this updated approach. For example, the NACTO guidelines (which have been endorsed by Caltrans, as well as the cities of Davis, Oakland, San Francisco, San Diego, and San Mateo) state:

> "Conventional street design is founded in highway design principles that favor wide, straight, flat and open roads with clear zones that forgive and account for inevitable driver error. This is defined as "passive" design. In recent years a new paradigm has emerged for urban streets called proactive design. A proactive approach uses design elements to affect behavior and to lower speeds. Embracing proactive design may be the single most consequential intervention in reducing pedestrian injury and fatality. Since human error is inevitable, reducing the consequences of any given error or lapse of attention is critical. Cities around the country that have implemented measures to reduce and stabilize speed have shown a reduction in serious injuries and deaths for everyone on the road, from drivers to passengers to pedestrians."

Reducing Speed and Increasing Driver Attention

Vehicle speed plays a fundamental role in transportation safety. The NACTO Urban Street Design Guide, reports: "Vehicle speed plays a critical role in the cause and severity of crashes." Two charts from those guidelines below show risk associated with motor vehicle speeds.



Source: NACTO Urban Street Design Guide Overview

Higher speeds increase both the likelihood and severity of collisions. (Elvik (2005).) According to Elvik:

- "Speed is likely to be the single most important determinant of the number of traffic fatalities."
- "...[S]peed has a major impact on the number of accidents and the severity of injuries and that the relationship between speed and road safety is causal, not just statistical."
- "Changes in speed are found to have a strong relationship to changes in the number of accidents or the severity of injuries."
- "The relationship between speed and road safety is robust and satisfies all criteria of causality commonly applied in evaluation research."

Regardless of posted speed limits, designing roads to accommodate higher speeds safely actually leads to higher speeds. Except on limited access highways (i.e. freeways), widening and straightening roads does not increase safety. "Wider and straighter roadways lead motorists to travel at higher speeds, thus offsetting any safety benefits associated with increased sight distances." (Dumbaugh et al., 2009, citing Aschenbrenner & Biehl, 1994; Wilde, 1994).

Dumbaugh et al. (2009) breaks the problem down into its constituent parts, (1) crash incidence and (2) crash severity:

> "The safety problem with urban arterials can best be understood as a product of systematic design error. Widening and straightening these roadways to increase sight distances also has the effect of enabling higher operating speeds, which in turn increase stopping sight distance, or the distance a vehicle travels from the time when a driver initially observes a hazard, to the time when he or she can bring the vehicle to a complete stop. Higher stopping sight distances pose little problem when vehicles are traveling at relatively uniform speeds and have few reasons for braking. When these operating conditions can be met, as they are on grade-separated freeways, higher operating speeds have little or no effect on crash incidence.
>
> "But these operating conditions typically cannot be met on urban surface streets, where pedestrians, bicyclists, and crossing vehicles are all embedded in the traffic mix. Avoiding crashes under these conditions often requires motorists to bring their vehicles to a quick stop, which higher operating speeds and stopping sight distances make more difficult (Dumbaugh, 2005b; 2006...). The result is a systematic pattern of error in which drivers are unable to adequately respond to others entering the roadway, leading to increased crash incidence."

Dumbaugh et al. also points out that speed reduction requires design features and/or commercial vibrancy and activity that provide cues to motorists to slow their vehicle's speed, rather than simply a slower posted speed limit:

> "...placing commercial uses on arterial thoroughfares created a pedestrian safety problem... In practice, the solution to this problem in the United States has been to continue to locate such uses on arterial thoroughfares, but to reduce posted speed limits. In the absence of aggressive police enforcement, however, such practices have been uniformly unsuccessful at reducing vehicle operating speeds (Armour, 1986; Beenstock, Gafni, & Goldin, 2001; Zaal, 1994). The principal alternative, adopted by European designers, is to design urban surface streets to reduce vehicle speeds to safe levels.
>
> "We found pedestrian-scaled retail (the type of retail that was abandoned during the postwar period) to be associated with reductions in all types of crashes, and at significant levels for both total and injurious crashes. This is consistent with recent research on the subject, which finds that the pedestrian-scaled nature of these environments communicate to motorists that greater caution is warranted, leading to increased driver vigilance, lower operating speeds, and thus a better preparedness to respond to potential crash hazards that may emerge. The effective result is a reduction in crash incidence (Dumbaugh, 2005a; 2005b; 2006b; Garder, 2004; Naderi, 2003; Ossenbruggen, Pendharkar & Ivan, 2001)." (Dumbaugh et al. 2009, p. 323)

Dumbaugh et al. concludes that, except for limited-access freeways, reducing speeds is essential for safety, and also helps create livability:

> "In areas where pedestrian activity is present or expected, or where eliminating a roadway's access function [to businesses, residences, jobs, etc.] is either undesirable or inappropriate, the primary alternative to access management is to reduce operating speeds to levels that are compatible with the street's access-related functions (see Figure 8). This approach, sometimes referred to as the livable street approach, incorporates design features that encourage lower operating speeds, such as making buildings front on the street, incorporating aesthetic street lighting or landscaping along the roadside, enhancing the visual quality of pavement and signage, and adopting traffic calming or intersection control measures. In short, livable streets

> emphasize access over mobility. When compared to conventional arterial treatments, livable streets report roughly 35–40% fewer crashes per mile traveled, and completely eliminate traffic-related fatalities (Dumbaugh, 2005a; Naderi, 2003)." (Dumbaugh, 2009, p. 325)

Providing greater clear space around a roadway, e.g. wider shoulders or clearing trees, can lead to degraded driver attention, in addition to higher speeds. "In dense urban areas, less-"forgiving" design treatments—such as narrow lanes, traffic-calming measures, and street trees close to the roadway—appear to enhance a roadway's safety performance when compared to more conventional roadway designs. The reason for this apparent anomaly may be that less-forgiving designs provide drivers with clear information on safe and appropriate operating speeds" (Ewing and Dumbaugh, 2009). Greater accommodation of driver error especially increases risk to vulnerable road users such as pedestrians and cyclists.

Lane width has a particularly discernable impact on safety. The traditional approach to sizing lanes opts for wider lanes to accommodate driver error and to attempt to increase throughput. However, research reveals that wider lanes hinder both of these objectives. Karim (2015) examined the relationship between lane width and crash rates. A number of findings were corroborated across cities:

- Wider lanes (over 10.8 to 11.2 feet) are associated with 33% higher impact speeds and higher crash rates.
- Both narrow (less than 9.2 feet) and wide (over 10.2 to 10.5 feet) lanes have proven to increase crash risks, with equal magnitude. Wider lanes (wider than 10.8 feet) adversely affect overall side-impact collisions.
- The overall capacity of narrower lanes is higher.
- For large vehicles, no difference on safety and carrying capacity is observed between narrower and wider lanes.
- Pedestrian volumes decline as lanes widen.
- Intersections with narrower lanes provide the highest capacity for bicycles.

The study finds that driver behavior is impacted by the street environment, and narrower lanes in urban areas result in less aggressive driving and more ability to slow or stop a vehicle over a short distance to avoid collision. It also points out that co-benefits of narrower lanes include utilization of space to provide an enhanced public realm, including cycling facilities and wider sidewalks, or to save money on the asphalt not used by motorists. (Karim, 2015)

Yeo et al (2014) summarizes past studies that show both reducing intersection density and widening traffic lanes to worsen safety:

> "Wider traffic lanes turn out to be the reason for a higher risk of fatal crashes (Noland and Oh 2004), whereas a street with a narrower curb-to-curb distance is relatively safe (Gattis and Watts 1999). Areas with a high level of intersection density also tend to have fewer fatal crashes (Ladron de Gue- vara et al. 2004). According to Ewing and Dumbaugh (2009), the aforementioned road designs and street patterns create a less forgiving environment for drivers and thus help decrease traffic speed." (Yeo et al., 2014, p. 402)

Numerous studies found that narrowing lanes from today's standard practice would improve safety. However, one multi-state study found three specific circumstances where narrower lanes did not increase safety in all states studied, but only some of them. The following is provided as a caveat:

> "The research found three situations in which the observed lane width effect was inconsistent—increasing crash frequency with decreasing lane width in one state and the opposite effect in another state. These three situations are:
>
> - lane widths of 10 feet or less on four-lane undivided arterials.
> - lane widths of 9 feet or less on four-lane divided arterials.
> - lane width of 10 feet or less on approaches to four-leg STOP-controlled arterial intersections.
>
> "Because of the inconsistent findings mentioned above, it should not be inferred that the use of narrower lane must be avoided in these situations. Rather, it is recommended that narrower lane widths be used cautiously in these situations unless local experience indicates otherwise." (Potts, et al. 2007)

Protecting Vulnerable Road Users

To the extent that a lead agencies address safety in a CEQA analysis, the focus must be on protecting people. Thus, for example, lead agencies might analyze how a land use project or transportation infrastructure project that increases traffic speeds may burden its travel-shed with additional, undue risk. These risks might be mitigated by, for example, (1) reducing motor vehicle travel speeds, (2) increasing driver attention, (3) protecting vulnerable road users (e.g. providing a protected, Class IV bicycle path and/or shortening pedestrian crossing distances and providing pedestrian refuges and bulb-outs), or (4) reducing VMT by providing VMT mitigation. Mitigation should avoid creating additional risk to vulnerable road users and it should not reduce active transportation mode accessibility or connectivity.

Generally speaking, the safety of vulnerable road users (e.g. pedestrians and bicyclists) should be given relatively more attention, due to their vastly increased risk of serious injury and fatality. Also, policy and planning priorities to encourage multimodal and low-carbon travel, and improving safety is a key step in increasing use of those modes. Where there are safety tradeoffs, therefore, it is important to prioritize protection of vulnerable road users. Impacts to potential vulnerable road users should be considered whether or not specific facilities for those users are present.

Active transportation has substantial health benefits, so restricting pedestrian or bicycle access and connectivity in order to reduce collision risk may worsen overall health outcomes. And, any decision about whether to apply a safety measure that restricts access by pedestrians and cyclists should consider (1) the reduction in walking and biking that will result, and the resulting reduction in "safety in numbers" as well as overall health, and (2) the risk created by pedestrians or cyclists subverting the design purpose for convenience (e.g. crossing a street where prohibited) that might lead to additional safety risk.

Reducing overall VMT and Sprawl

Higher total amounts of motor vehicle travel creates higher crash exposure. Reducing vehicle miles traveled reduces collision exposure and improves safety (Dumbaugh and Rae, 2009, p. 325; Ewing, Scheiber, and Zegeer, 2003). As a result, infill development, which exhibits low VMT, itself provides safety benefits by reducing motor vehicle collision exposure, lowering speeds, and increasing pedestrian and cyclist volumes leading to "safety in numbers" (in addition to improving overall health broadly and substantially).

The fundamental relationship between VMT and safety is summarized by Yeo et al. (2014):

> "Multiple traffic safety studies showed that higher VMT was positively associated with the occurrence of traffic crashes or fatalities (e.g., Ewing et al. 2002, 2003; NHTSA 2011). The causal relationship between the mileage of total vehicle trips and crash occurrences can be explained by probability. With higher VMT, it is more likely that more crashes will occur (Jang et al. 2012)."

Sprawl-style development has also been shown to lead to elevated crash risk. The cause lies both in higher VMT levels and in design variables which influence speed and driver behavior (Yeo 2014). Ewing et al. (2003) points out that "[s]uburban and outlying intersections have been significantly overrepresented in pedestrian crashes compared with more urban areas, after control for exposure and other location factors."

More generally, Ewing et al. (2003) reveals that sprawl development (measured by (1) lowness of density, (2) lack of mixing of uses, (3) absence of thriving activity centers such as strong downtowns or suburban town centers, and (4) largeness of block sizes and poorness of street connectivity) leads to elevated transportation risk levels:

> "Our study indicates that sprawl is a significant risk factor for traffic fatalities, especially for pedestrians. The recognition of this relationship is key; traffic safety can be added to the other health risks associated with urban sprawl—namely, physical inactivity and air and water pollution.
>
> "...Sprawling areas tend to have wide, long streets that encourage excessive speed. A pedestrian struck by a motor vehicle traveling at 40 mph has an 85% chance of being killed, compared with a 45% chance of death at 30 mph and a 5% chance at 20 mph. Thus, developing land in a more compact manner may reduce pedestrian deaths, provided that the street network is designed for lower-speed travel."

Ewing et al. (2003) further demonstrates that, on the whole, counties characterized by the most sprawling land use patterns exhibit substantially higher crash risk (between four and five times the all-mode fatality rate) compared to the most compact counties:

TABLE 2—US Counties With Highest and Lowest Sprawl Index Values

	County	Metropolitan Area	Sprawl Index[a]	All-Mode Traffic Fatality Rate (per 100 000)
1	New York County, NY	New York	352.07	4.42
2	Kings County, NY	New York	263.65	4.46
3	Bronx County, NY	New York	250.72	4.20
4	Queens County, NY	New York	218.90	4.58
5	San Francisco County, Calif	San Francisco	209.27	6.31
6	Hudson County, NJ	Jersey City	190.06	5.91
7	Philadelphia County, Pa	Philadelphia	187.78	8.04
8	Suffolk County, Mass	Boston–Lawrence–Salem	179.37	4.49
9	Richmond County, NY	New York	162.89	5.63
10	Baltimore City, Md	Baltimore	162.76	7.68
439	Stokes County, NC	Greensboro–Winston-Salem–High Point	71.26	15.66
440	Miami County, Kans	Kansas City	71.03	38.80
441	Davie County, NC	Greensboro–Winston-Salem–High Point	70.99	25.84
442	Isanti County, Minn	Minneapolis-St Paul	70.12	12.78
443	Walton County, Ga	Atlanta	69.61	19.77
444	Yadkin County, NC	Greensboro–Winston-Salem–High Point	69.17	38.52
445	Goochland County, Va	Richmond–Petersburg	67.59	35.58
446	Fulton County, Ohio	Toledo	66.83	38.02
447	Clinton County, Mich	Lansing–East Lansing	66.63	16.99
448	Geauga County, Ohio	Cleveland	63.12	20.90

[a]Higher values of the index indicate more compact urban form; lower values indicate more sprawling urban form.

Source: Ewing et al., 2003

Beyond crash incidence rates and severity, delay in receiving medical care after a crash contributes to worse health outcomes from transportation safety in sprawling neighborhoods. Traditional impact analysis focuses on congestion as an inhibitor to emergency responses times. However, research shows that emergency response suffers more from greater distances to destinations found in sprawling areas than from congestion in compact and congested areas:

> "Emergency medical service (EMS) delay is another possible mediator that could help explain the direct non-VMT-involved sprawl effect on traffic fatalities. Urban sprawl increases EMS waiting time, and delay in ambulance arrival can increase the severity of traffic-related injuries (Trowbridge et al. 2009). 'For every 10% increase in population density'...the models estimated by Lambert and Meyer (2006, 2008) predict 'a 10.4% decrease in EMS run time' in the Southeastern United States and nationwide 'an average 0.61 percent decrease in average EMS run time.'" (Yeo et. al, 2014)

Collectively, research points to an approach on safety that aligns well with other state priorities and laws (e.g. infill priority, greenhouse gas reduction), as well as with the visions of many local jurisdictions for their own growth. Compact infill development, in addition to providing livable and vibrant neighborhoods, walkable communities, environmental benefits, land conservation, fiscal benefit and cost reduction for citizens, also improves traffic safety:

> "Our study, which addresses the built environment in a more comprehensive manner [than past studies], found population density to be associated with significantly fewer total and injurious crashes. ...Individuals living in higher density environments drive less (Ewing & Cervero, 2001), thus reducing their overall exposure to crashes. When these reductions in VMT are aggregated across a larger population, they can potentially add up to notable reductions in population-level crash incidence." (Dumbaugh and Rae, 2009)

> "[Our] research findings suggest that enhancing traffic safety by reducing fatalities can be achieved by fighting against urban sprawl and promoting smart growth countermeasures. It will be important to revive city centers, to increase density, and to provide for mixed land uses. Urban design solutions that can enhance walkability at the meso- and microlevels may help reduce traffic fatalities." (Yeo et. al, 2014)

Attribution of Safety Impacts

Some safety impacts result from the effects of many past projects accumulated over time. An infill project, for example, may add an additional vehicle to a queue in a turn pocket or on a ramp causing it to extend into mainline traffic. Such an impact is the cumulative effect of many projects. (In any case, vehicle queueing resulting from a particular project frequently cannot be estimated accurately, especially where traffic is affected by many factors. Typical modeling error on traffic volumes at an intersection can reach 40 percent, and microsimulation performed to estimate queue lengths introduce further error. Other factors affect travel demand (e.g. the economy, the price of gasoline). Therefore, it is frequently impossible to meaningfully predict whether the direct effect of a development in an infill area will be the cause of a vehicle queue extending onto a highway mainline.)

Meanwhile, if a development generates or attracts such large amounts of automobile travel that it contributes a substantial portion of the traffic that leads to a queue onto the mainline, attributing that proportion of the associated risk to that project would be appropriate. This might be particularly so on the urban periphery where that traffic would be easily attributable to the project.

Addressing Tradeoffs and Finding Win-Win Safety Improvements

Traditional solutions for safety risks sometimes create other safety risks, impact human health in other ways, and sometimes are at cross purposes with other state and community interests such infill priority, greenhouse gas reduction, cost reduction, or access to destinations. When addressing safety impacts, a jurisdiction should frame and address those risks in a manner that helps forward the community's overall goals, while improving safety. Some modern approaches to reducing safety risk, developed over the past decade or two based on research, allow all safety to be improved while meeting these other goals. Here are three examples:

(1) A queue extending out of a turn pocket or off ramp can increase the risk of rear-end collisions. However, addressing that risk by adding additional vehicle capacity such as a second lane will lead to additional risk for pedestrian crossing. Addressing that risk by adding extra green time in the traffic signal timing will lead to shorter pedestrian crossing times and/or additional pedestrian wait time. Addressing these secondary risks by prohibiting pedestrian crossing will reduce connectivity of the pedestrian network, leading to reduced pedestrian mode share, which will increase risk by decreasing "safety in numbers" benefits and impact the health benefits associated with active mode travel. Meanwhile, improving safety with street design features that lower travel speeds to reduce crash incidence and severity can improve walkability.

(2) Surface roadway lanes can be redesigned from traditional 12.0 foot widths to with 9.2 to 10.8 foot widths with little or no down-side. Such a narrowing of lanes maintains motor vehicle capacity, increases bicycle capacity, maintains large vehicle capacity and safety, improves pedestrian crossings safety and comfort, increases pedestrian volumes, improves driver attention, decreases crash rates, decreases crash severity, reduces construction costs, reduces maintenance costs, reduces impermeable surface area, reduces construction and maintenance air quality and GHG emissions, and reduces space consumption. (Karim, 2015).

(3) Improving safety by adding signage and pavement markings that help reduce speeds and increase pedestrian visibility can have an array of benefits, including:
- Decrease in crash incidence for all users, including vulnerable road users
- Decrease in crash severity for all users, including vulnerable road users
- Increase safety and comfort for pedestrians and cyclists, resulting in increased walking and biking mode share, in turn increasing safety in numbers effects for vulnerable road users and improving public health both via improved safety and increased physical activity.

While reductions in automobile speed may initially increase auto mode travel times, improving conditions for pedestrians and cyclists can lead to finer grain land use development over time, and ultimately improve destination proximity and overall access to destinations.

Examples and Mischaracterizations of Detriments to Overall Safety

The following are examples of possible detriments to overall safety if not mitigated:

- An increase in VMT. More vehicle travel exposes motorists and other road users to more crash risk.
- An increase in pedestrian wait times. Many studies have found that pedestrian wait times play a role in crashes. Long wait times increase the risk some pedestrians will cross against a signal, creating a vulnerable road user collision risk (FHWA-RD-03-042, 2004)
- Site design elements that would create hazardous conditions for vulnerable road users

- Substantially increasing motor vehicle speeds, or increasing them to greater than 25 miles per hour where vulnerable road users are present without providing proper infrastructure for vulnerable road users (e.g. Class IV bikeways for cyclists)
- Substantially increasing intersection pedestrian crossing distances, e.g. for addition of a through or turn lane
- Signal lengths of greater than 90 seconds, which may lead to people crossing on a red signal with a gap in the vehicle platoons
- Increase in curb radius
- Installation of large curb radii, promoting higher speed motor vehicle turning movements, particularly endangering pedestrians and cyclists
- Addition or widening of on- and off-ramps where they meet surface roadways that increases pedestrian crossing distances or times, increase pedestrian wait times, or lead to a prohibition of pedestrian crossing
- Addition or widening of off-ramps in a manner that leads to higher speeds on surface streets
- Excessively large clearance zones along shoulders
- Wider than needed travel lanes (e.g. wider than 10.8 feet on surface streets)
- Multiple turn lanes at an intersection (e.g. a double left or double right turn lane)
- Placement of driveways in locations which will lead to highly elevated collision risk
- Excessively large driveways across sidewalks
- Substantially increased distances between pedestrian and bicycle crossings
- Roadway design speed (regardless of posted speed limit) that leads to actual speeds that are unsafe for cyclists and pedestrians

Safety issues can be mischaracterized with overly narrow perspective or traditional design guidance that has not been updated to reflect research. The following are examples of mischaracterizations of safety issues.

- Avoidance of installation of corner or mid-block crossings to avoid additional pedestrian traffic and conflict with vehicles (reduces pedestrian mode share, undoing safety in numbers)
- Avoidance of narrow (e.g. 10 foot) travel lanes on surface roadways (see discussion above)
- Avoidance of implementing sidewalk bulbs, widened sidewalks, parklets, or other curb extensions or removal of on-street parking for fear of exposing vulnerable users to vehicular traffic (these features slow traffic and improve walkability as discussed above)
- Addressing off-ramp queuing by limiting stop control on an exit ramp (this can lead to vehicles flowing unimpeded and at high speeds onto a local street, increasing risk for all road users).
- Avoidance of protected bicycle facilities adjacent to transit boarding islands to avoid conflicts between transit users and cyclists (this is safe with good design)
- Maintaining or providing parking spaces out of concern that road rage could result from traffic congestion or circling for parking as an outcome of the removal of on- or off-street parking spaces (adding parking increases VMT and overall crash exposure)

Examples of Potential Transportation Safety Mitigation Measures

- Intersection improvements
  - Visibility improvement
  - Shortening corner radii
  - Pedestrian safety islands
  - Accounting for pedestrian desire lines
- Signal changes
  - Reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal
  - Providing a leading pedestrian interval
  - Provide a "scramble" signal phase where appropriate
- Roadway improvements
  - Add curb extensions or bulb-outs
  - Add bicycle facilities (On higher speed roads, add protected bicycle facilities)
  - Reduce travel lane width below 10.8 feet (but not below 9.2 feet)
  - Add traffic calming measures
  - Add landscaping features
- Network improvements
  - Provide shorter blocks
  - Provide mid-block crossings
- Reduce VMT
  - Increase density and/or diversity of land uses
  - Provide travel demand management measures
  - Provide transit
  - Provide pedestrian facilities
  - Provide bicycle facilities

G. Mitigation and Alternatives

When a lead agency identifies a significant impact, it must consider mitigation measures that would reduce that impact. The selection of particular mitigation measures, however, is always left to the discretion of the lead agency. Further, OPR expects that agencies will continue to innovate and find new ways to reduce vehicular travel. Several potential mitigation measures and alternatives to reduce vehicle miles traveled are described below. Notably, the suggested mitigation measures and alternatives were largely drawn from the California Air Pollution Control Officers Association's guide on Quantifying Greenhouse Gas Mitigation Measures. That guide relied on peer-reviewed research on the effects of various mitigation measures, and provides substantial evidence that the identified measures are likely to lead to quantifiable reductions in vehicle miles traveled.

Potential measures to reduce vehicle miles traveled include, but are not limited to:

- Improve or increasing access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Incorporate neighborhood electric vehicle network.
- Orient the project toward transit, bicycle and pedestrian facilities.

- Improve pedestrian or bicycle networks, or transit service.
- Provide traffic calming.
- Provide bicycle parking.
- Limit or eliminating parking supply.
- Unbundle parking costs.
- Provide parking or roadway pricing or cash-out programs.
- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Provide transit passes.

Examples of project alternatives that may reduce vehicle miles traveled include, but are not limited to:

- Locate the project in an area of the region that already exhibits low vehicle miles traveled.
- Locate the project near transit.
- Increase project density.
- Increase the mix of uses within the project, or within the project's surroundings.
- Increase connectivity and/or intersection density on the project site.
- Deploy management (e.g. pricing, vehicle occupancy requirements) on roadways or roadway lanes.

IV. Case Studies

The following case studies provide sample applications of the *Draft Technical Advisory on Evaluating Transportation Impacts in CEQA* ("Draft Technical Advisory").

The first is a mixed use residential and retail development in the City of Sacramento (Sacramento County). This case study employs the Greenhouse Gas Quantification Methodology (GGQM) developed by the Strategic Growth Council for the Affordable Housing and Sustainable Communities program (AHSC). To provide a more fine-grained analysis, we replace CalEEMod's regional average default trip length estimates with data taken from the California Statewide Travel Demand Model (CSTDM). We use CSTDM home-based travel VMT output data for the region as a whole to calculate a significance threshold using the methodology recommended in the Draft Technical Advisory.

The second is an office development in a suburban area in the City of Mission Viejo (Orange County). This case study uses CSTDM home-based-work trip length data to estimate VMT of office uses in that location and to estimate the significance threshold, and the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* to quantify the VMT reduction of a set of mitigation measures.

The first and second case studies employ the CSTDM to estimate trip lengths and project VMT, and to help determine thresholds. In many cases, this methodology will be sufficient to adequately analyze a project's vehicle miles traveled. However, where a lead agency desires a more rigorous analysis, it might choose to use a regional travel demand model where available. Regional travel demand are typically better calibrated and validated for local conditions and so may provide more precise estimates of vehicle miles traveled.

The third is a hypothetical typical highway expansion project in an outlying area in the Kern Council of Governments region. This case study uses Caltrans Performance Measurement System (PeMS) lane mile and VMT data, and elasticity estimates from academic literature, to assess additional VMT caused by the addition of lane miles to the highway network.

Note, these case studies provide merely examples of how various projects may be analyzed. Proposed new Section 15064.3(b)(4) leaves to lead agencies the precise choice of methodology:

> A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Thus, other models may appropriately be used to analyze vehicle miles traveled.

Mixed Use Project (Residential + Retail): Stockton and T

This case study provides an example of a VMT estimate for a mixed use (residential-retail) project. This case study is located in the City of Sacramento, Sacramento County, California.

Basic Project Characteristics

The proposed project is located at the corner of Stockton Boulevard and T Street—an inner-ring suburb near transit. It consists of 214 multifamily rental dwelling units and 6000 square feet retail in a 5 story building, as well as 24 single family dwelling owner-occupied units.

Analysis overview

Analyses for residential and retail portions of the development are conducted separately and results are compared to their respective recommended thresholds. For residential component, the AHSC GGQM is employed, with one enhancement: data recently made available from the California Statewide Travel Demand Model (CSTDM) are used to improve the accuracy of trip length estimates.

Note that a residential project that is located within ½ mile of transit is presumed to have a less than significant transportation impact. The project is located 0.27 miles from transit, and would therefore be presumed to have a less than significant transportation impact.

Further, the Draft Technical Advisory recommends that a residential project proposed in a location where existing development exhibits below-threshold VMT be presumed to have less than significant transportation impact. According to the CSTDM, the project is located in a Traffic Analysis Zone exhibiting 12.1 total VMT/cap and 8.4 Home Based VMT/capita. By comparison, the SACOG region as a whole exhibits an average 16.7 total VMT/capita and 12.8 Home Based VMT per capita. The Draft Technical Advisory's recommended threshold of fifteen percent below the regional average thus is 14.2 total VMT/capita and 10.88 Home Based VMT/per capita. Therefore, a screening map made using either total VMT/capita or Home Based VMT/capita would show the project to be in a below-threshold TAZ, and therefore may be presumed to lead to a less than significant transportation impact.

While the residential component of the project would be determined to have a less than significant impact on transportation by each of these two screening criteria, this case study nevertheless estimates VMT for the residential portion of the project in order to provide a demonstration of the methodology described in the Draft Technical Advisory.

The retail component consists solely of locally-serving retail, and therefore may be presumed to have a less than significant VMT impact. A lead agency that nevertheless chooses to estimate the retail component's vehicle miles traveled may conduct a travel demand model run. (CalEEMod is able to make a trip-based estimate of VMT from the retail portion of the project, but the Draft Technical Advisory cautions against using a trip-based methodology for retail uses, because it fails to account for the rerouting of trips from existing retail, and therefore falsely represents all trip-based VMT attracted to the project as new VMT.)

Estimate of Residential Project Component VMT

The following section provides a step-by-step description for using the AHSC GGQM to estimate project VMT. The AHSC GGQM employs the California Emissions Estimator Model (CalEEMod), a free and downloadable trip-based sketch model, substituting some off-model calculations where research and technical updates have not yet been incorporated into the model itself. We recommend obtaining a copy of the AHSC GGQM and referring to it alongside this description.

CalEEMod inputs on Project Characteristics and Land Use screens

On the CalEEMod Project Characteristics screen:

- Select "County" and enter "Sacramento"
- Set Land Use Setting to "Urban"
- Set operational year to 2016

CalEEMod Land Use Screen:

- Residential – Apartments Mid-Rise – 214 Units
- Residential – Single Family Housing – 24 Units
- Retail – Strip Mall – 6,000 square feet

Notes: The retail component is entered into CalEEMod solely so CalEEMod can estimate internal capture of the residential component trip-making activity by the retail contained within the project. We ignore CalEEMod's trip-based VMT estimate for the retail component itself, for the reasons described above.

Mitigation: CalEEMod Land Use and Site Enhancements and Commute Pages (Mitigation tab), and prescribed off-model methods

CalEEMod requires the project setting to be selected from a menu on the Land Use and Site Enhancements Screen. Per the GGQM, for this project, Urban Center is selected from the menu.

Increase Density (LUT-1):

Per AHSC GGQM, this calculation is undertaken outside CalEEMod.

Increase Density (LUT-1)		
Project density	48.6	du/ac
% Density increase	539%	
% VMT reduction	37.8%	
% VMT reduction taken	**30.0%**	

Increase Diversity:

The project contains retail development, so the Increase Diversity checkbox is checked in CalEEMod.

Improve Walkability Design (LUT-9):

Per the AHSC GGQM, this calculation is undertaken outside CalEEMod.

Improve Walkability Design (LUT-9)		
Intersections per sq. mi.	141.4	intersections/sq. mi.
%VMT reduction	35.1%	
%VMT reduction taken	**21.3%**	

Improve Destination Accessibility (LUT-4):

Rather than use CalEEMod or the AHSC GGQM to adjust for regional location (i.e. "distance to Downtown/Jobs Center), trip lengths from the California Statewide Travel Demand Model are inputted into CalEEMod.

Increase Transit Accessibility (LUT-5):

Inputted distance to nearest transit station, 0.27 mi, into CalEEMod.

Integrate Below Market Rate Housing (LUT-6)

The project does not contain below market rate housing, so this items is left unchecked in CalEEMod.

Improve Pedestrian Network (SDT-1)

The project includes new sidewalks along its borders, so the item is checked in CalEEMod, and "project site" is selected from the menu.

Provide Traffic Calming Measures (SDT-2)

The project does not provide traffic calming measures, so the item is left unchecked and the menus are left blank.

Implement NEV Network (SDT-3)

The project does not implement an NEV network, so the item is left unchecked and the input field is left at 0.

Limit Parking Supply (PDT-1)
The project is not parked below zoning, so the item is left unchecked and the input field is left at 0.

Unbundle Parking Costs (PDT-2)

Parking costs are not unbundled, so the item is left unchecked and the input field is left at 0.

On-Street Market Pricing (PDT-3)

On street parking is by neighborhood parking permit, not priced, so the item is left unchecked and the input field is left at 0.

Provide BRT System (TST-1)

The project does not provide a BRT system, so the item is left unchecked and the input field is left at 0.

Expand Transit Network (TST-3)

The project does not expand transit the transit network, so the item is left unchecked and the input field is left at 0.

Increase Transit Frequency (TST-4)

The project does not increase transit frequency, so the item is left unchecked, the level of implementation is left blank, and the input field is left at 0.

Commute Mitigation

The project provides no commute reduction programs, so all fields on this page are left blank (at their default values).

CalEEMOD output

Per the AHSC GGQM, CalEEMod output data on VMT are recorded:

From "4.2 Trip Summary Information"	Annual VMT	
Land Use	Unmitigated	Mitigated
Apartments Mid Rise	2,673,841	1,917,994
Single Family Housing	433,117	310,682
Total	3,106,958	2,228,677

Addition of mitigation accounted for off-model

Per the AHSC GGQM, off model calculations, detailed above, are incorporated and an estimate of project VMT is made (in this case, capped at the maximum for a project in this location type):

Sum of additional % VMT Reductions	51.3%	
Additional VMT Reductions	1,593,869	VMT/year
Total Annual VMT Reductions	2,472,151	VMT/year
Percent VMT Reduction	79.6%	
Maximum Reduction for Urban Center (Compact Infill) Project Setting	40%	
Project VMT Reduction	40%	
Project VMT	1,864,175	VMT/year

Project per-capita VMT

CalEEMod estimates residential project population on the Land Use screen. For the Stockton and T project, it estimates a residential population of 635 persons.

Project Residential Population	635	persons
VMT/cap	*2,936*	*VMT/pers-yr*

Recommended Threshold

The CSTDM estimates Home Based VMT per capita in the SACOG region to be 12.8 VMT/cap per day. Applying an annualization factor of [Annual VMT] = [Daily VMT] * 365, annual per capita VMT is estimated at 4,672 VMT/cap per year. The threshold recommended by the Draft Technical Advisory is fifteen percent below regional VMT/cap, in this case 3,971 VMT/cap per year.

Daily VMT per capita	12.8	VMT/pers-day
Annual VMT per capita	4,672	VMT/pers-yr
Recommended threshold	3,971	VMT/pers-yr

Significance Determination

The project, factoring in mitigation (using the AHSC GGQM) and regional location (by employing the CSTDM trip lengths) would be expected to generate 2936 VMT/person-year. The threshold recommendation is 3971 VMT/person-year. The residential component of the Stockton and T project will generate VMT at rates well below the recommended threshold. This result is unsurprising for a centrally-located infill project near transit.

As discussed above, the retail portion of the project is locally-serving, and is therefore presumed to have a less than significant transportation impact. As a result, the project has a less than significant impact on transportation.

Office Project: Mission Viejo Medical Center

This case study provides an example of a VMT estimate for an office project. This Case Study is located in Mission Viejo, Orange County, California.

Basic Project Characteristics

The proposed project is located west of Medical Center Road, between Crown Valley Parkway and Marguerite Parkway. It is an office building consisting of 110,000 square feet of office space.

Analysis overview

An estimate of base (unmitigated) project VMT is made using data from the California Statewide Travel Demand Model (CSTDM). The threshold is also estimated using the CSTDM. Mitigation measures are quantified with substantial evidence from *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association (CAPCOA)).

VMT Quantification and Significance Determination

The CSTDM estimates average commute VMT for existing office uses in the vicinity of the project (specifically, within the Traffic Analysis Zone (TAZ) which encompasses the project) as 15.3 VMT/employee.

Meanwhile, the CSTDM estimates VMT/employee in the SCAG region as a whole to be 15.9 VMT/employee. Applying the threshold recommended by the Draft Technical Advisory, 15 percent below regional overall commute VMT/employee, the significance threshold would be 13.5 VMT/employee. Without any mitigation, therefore, this project could trigger a significant impact. To reduce its impact to below the recommended significance threshold, the project would need to reduce commute VMT to below 13.5 VMT per employee (in other words, reduce its VMT by 12.9 percent).

To mitigate VMT to less than significant levels, the project could implement a Trip Reduction Program. For example, the program could implement the following commute VMT reduction strategies to bring VMT below the threshold:

Mitigation Measure	*Percent Reduction*	*Substantial Evidence*
Implementation a 9/80 workweek for 10 percent of employees	0.7%	CAPCOA TRT-6
Provide a transit subsidy to all employees of 1.49/day	7.3%	CAPCOA TRT-4
Implement car sharing program	0.4%	CAPCOA TRT-9
Provide an employee vanpool program	2%	CAPCOA TRT-11
Implement a $6 daily employee parking charge	6.8%	CAPCOA TRT-14
Total	17.2%	

Source: Quantifying Greenhouse Gas Mitigation Measures, CAPCOA

According to the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures*, a Commute Trip Reduction Program can reduce VMT by up to 21 percent. The 12.9 percent reduction required is therefore achievable using proven mitigation for which substantial evidence exists. The mix of strategies listed above would be expected to reduce VMT by 17.2 percent. As mitigation measures, these measures would be identified in the project's mitigation monitoring and reporting program.

Roadway Capacity Expansion Project: Addition of 2.2 Lane Miles

This case study provides an example of a VMT estimate for a roadway expansion project. This case study estimates the VMT impact of a hypothetical project that adds 2.2 lane-miles to a highway in the Kern Council of Governments region.

Analysis

Research on VMT effects of lane mile additions can be used to estimate the VMT effects of proposed roadway expansions, as described in the Draft Technical Advisory:

Elasticity = [% Change in VMT] / [% Change in Lane Miles]

or

VMT Impact = [% Change in Lane-Miles] * [baseline VMT on those lane-mi] * [elasticity]

Lane mile and VMT data are available from the Caltrans Performance Measurement System (PEMS):

PEMS Data (2013)	Interstate		Principal Arterial - Other Freeways and Expressways	
	Existing Lane-Miles	VMT (millions)	Existing Lane-Miles	VMT (millions)
KernCOG	385.22	1,288.79	285.25	1,045.15

In order to best align this analysis with the academic research from which the elasticities are taken, this case study focuses on interstate highways, freeways, and expressways. Lane miles and VMT from these facilities are aggregated from the raw data, and VMT is calculated using the formula above:

Interstate, Principal Arterial (Freeways and Expressways only)			
Lane Miles	VMT (millions)	%chg in LM	Induced VMT/year
670.47	2,333.94	0.328%	7,658,312

The most recent major study on induced travel, Duranton and Turner (2011), reveals an elasticity of VMT by lane miles of 1.03.

The percent change in lane miles is calculated by dividing project lane miles (2.2 miles) by the total lane miles of the applicable functional classes (670.47 miles) to yield a percent change in lane miles (0.328 percent). This is multiplied by the baseline VMT on those facilities (2,333,940,000 VMT) and an elasticity from the academic studies (1.0) to yield the total induced travel: 7,658,312 VMT/year.

Significance Determination

The Draft Technical Advisory provides a methodology for calculating a VMT threshold. Making use of draft data from the California Air Resources Board and an estimate of the number of transportation projects statewide through 2015, the Draft Technical Advisory recommends a transportation project threshold of 2,075,220 VMT/year. The project is estimated to induce 7,658,312 miles/year, a significant amount of VMT.

As mitigation, the project could administer a toll on the new and/or existing lane miles sufficient to reduce VMT to below-threshold levels, or manage new and/or existing lane miles (e.g. with an HOV requirement) to similarly reduce VMT. Alternately or in conjunction, travel demand management measures such as providing transit or active transportation service or facilities, providing park and ride facilities, or providing a vanpool program could be employed to similarly reduce VMT.

Environmental Impact Report/Environmental Assessment Annotated Outline

Text color key:	*Black = required headings*	*Blue = instructions/guidance to be deleted*	*Red = boilerplate text*
Underlined text:	*Internet or Intranet Web links*	*Purple = sample text*	*Orange = special attention*
			Green=Local Assistance guidance

Also include positive impacts, such as improvements to access for emergency services. Scoping the project with the locals can be very helpful.

Avoidance, Minimization, and/or Mitigation Measures

1. Include a brief statement of any avoidance, minimization, or mitigation measures that will be included. One example would be the relocation of a power line to avoid affecting power service. Describe coordination efforts that will be needed to carry out the measures. If utility relocations are proposed, then describe (either in this section or in the appropriate resource sections) the impacts that would be caused by relocating the utilities and the proposed measures to lessen those impacts.

Additional Guidance

- Memorandum Regarding PUC General Order 131-D, Relocation of 50kV or Higher Power Lines

TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

This section discusses the project's impacts on traffic and circulation, both during construction (construction impacts) and after completion of the project (long-term or operational impacts). Note: Recreational trails, such as equestrian trails, are covered under the Parks and Recreation section of the document.

Regulatory Setting

Include the following two paragraphs if the project proposes or has impacts on pedestrian or bicycle facilities:

The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

Transpogroup
Comment 1
The issue of pedestrian and bicycle safety is outside the scope of the Revised EIR.

The Project Traffic Committee included representatives of local agencies located within the project limits. The local jurisdictions provided their own list of intersections to collect pedestrian count information, which typically included intersections where pedestrians are known to frequent. The pedestrian counts at the selected intersections were incorporated into the signal timing and entered into the intersection analysis models. Pedestrian data was also collected at un-signalized intersections and entered into the analysis model. The intersection capacity was then adjusted accordingly to handle pedestrian results and was calculated as part of the delay factor.

According to the California Vehicle Code (CVC 21200), bicyclists generally have the same rights and responsibilities as motor vehicle drivers. As such, bicycles are assumed to be part of the vehicle stream and are adequately served by the various types of intersections, whether signalized or unsignalized. When a bike lane or shoulder exists, it is anticipated that bikes using the bike lane will operate in tandem with the vehicle stream.

With recent adoption of policies on complete streets, bicycle and pedestrian access and safety are taken into consideration when Caltrans designs projects. When changes or upgrades to intersections are occurring with the HOV project, features to accommodate bicycles and pedestrians will be integrated into the design and constructed with the project, where appropriate.

For safety reasons, bicycles and pedestrians are prohibited from traveling on US 101 within the project limits. In areas where bicycle and pedestrian access is allowed and physical improvements are proposed as part of the South Coast 101 HOV Lanes project, bicycle and pedestrian access will be addressed in the design phase of the project, in compliance with Caltrans complete streets policy. Bicycle and pedestrian safety and accessibility will also key considerations in the design of the proposed mitigation improvements.

Examples of features which will be considered in the design of all intersection modifications associated with this project include, but are not limited to: sidewalks, crosswalks, adequate shoulders to accommodate bicyclists, signs to direct bikes and pedestrians, Class II Bike Lanes, and other related Class II bikeway channelization. Bus stop and other transit accommodations will also be integrated into the design where appropriate.

Furthermore, all pedestrian facilities within the project limits that are modified as part of the project would comply with the Americans with Disabilities Act (ADA). During construction, special consideration would be given to bicycles, pedestrians, and persons with disabilities for continued access through construction areas. Any improvements considered as part of this project would be coordinated with adjacent project efforts to ensure continuity of bicycle and pedestrian facilities.

Transpogroup
Comment 2
This comment is outside the scope of the Revised EIR. The following response is provided for clarification only.

SB 743, signed into law on September 27, 2013, requires the California Office of Planning and Research (OPR) to propose revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts within transit priority areas. (Pub. Resources Code, § 21099, subd. (b)(1).) In developing the criteria, OPR shall recommend potential metrics to measure transportation impacts, that may include, vehicle miles traveled, among other criteria. SB 743 further provides that OPR may adopt guidelines establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas. (Pub. Resources Code, § 21099, subd. (c)(1).) The CEQA Guidelines from OPR have not been updated to address VMT implementation based on SB 743. In January, 2016, however, OPR issued revised draft proposed changes to the CEQA Guidelines, including proposed new Section 15064.3 (determining the significance of transportation impacts). (OPR, 2016.) That draft section specifically provides that the new guidelines are intended to apply prospectively and agencies have a two-year

period after the expected adoption date for the provisions of the new guidelines to apply.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-SCS Final EIR is available for review at: http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

As discussed in the 2040 RTP-SCS Final EIR, the term induced travel is often misused to suggest that increases in highway capacity are directly responsible for increases in traffic, when in fact, the relationship between increases in highway capacity and traffic is very complex—involving various travel behavior responses, residential and business location decisions, and changes in regional population and economic growth. Most studies examining the issue have concluded that trips related to socioeconomic growth and trips diverted from other facilities—as opposed to induced travel—account for the majority of increased travel. Some studies have concluded that if new highway capacity does fill up, it is due not to induced travel, but rather to travelers diverting from other facilities or time periods in the short term, and to socioeconomic growth in the long term. Local data from the 2040 RTP-SCS Final EIR confirms that the majority of traffic growth in the long term is due to socioeconomic growth, regardless of roadway improvements.

Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi (2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

> Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange

> improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

> Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the 2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

Transpogroup
Comment 3

See response to Transpogroup Comment 1

Transpogroup
Comment 4

The Caltrans *Guide for the Preparation of Traffic Impact Studies* was designed as guidelines to help the Caltrans Intergovernmental Review (IGR) Department assess local development impacts to State facilities. The *Guide* states that "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS." Caltrans has never established statewide standards of significance for traffic impacts and none exist in the *Guide*. However, an approach was formulated in response to the Writ to identify impacts at individual intersections by considering LOS and seconds of delay at signalized and un-signalized intersections. This approach offers a consistent corridor-wide characterization of the driver's experience based on the full HCM methodology because it reflects whether pronounced delay is experienced at a signal or a stop sign. From the driver's perspective, waiting for a longer period of time at a signal is tolerated, whereas waiting the same length of time at a stop sign is less tolerable (HCM 2010).

The criteria established to determine whether an intersection is impacted are shown below:

- For signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 20 seconds or more with project.
- For un-signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 10 seconds or more with project.

The 10- and 20-second measurements are based on the delay change increment for unsignalized and signalized intersections respectively between LOS C/D cusp to D/E cusp.

As the lead agency, Caltrans has the discretion to set standards of significance for use in an EIR. This allows the lead agency to determine significant impacts. This information was found on page 41 of the Draft Revised EIR and has been updated in the Final Revised EIR on page 43. The lead agency is responsible for determining whether an adverse environmental effect identified in an EIR should be classified as "significant" or "less than significant." (Guidelines, § 15064, subd. (b).) There is no single definition of a "significant effect," because the significance of an activity may vary with the setting. (Guidelines, § 15064, subd. (b).)"

Transpogroup
Comment 5
See response to Transpogroup Comment 4

Transpogroup
Comment 6
The 101 In Motion Financing and Implementation Plan, which is provided in the 101 In Motion Final Report (SBCAG, 2006) describes phased development and implementation of rail service to serve during the peak commute hours in the 101 corridor. The 101 In Motion Final Report also describes the complexity of seeking approval from the various rail stakeholders in the region to implement this type of rail service.

SBCAG has been working with Caltrans Division of Rail, the California State Transportation Agency, Union Pacific Railroad, the Ventura County Transportation Commission, the San Luis Obispo Council of Governments, Metrolink, AMTRAK, LOSSAN (Los Angeles to San Diego) since the passage of Measure A in 2008 to deliver increased passenger rail service in the 101 corridor.

The first phase of the service is described as an initial pilot service involving two daily round trips with minimal capital acquisition. It has been discovered that the most cost effective and feasible approach has been to work with AMTRAK and LOSSAN who currently operate five daily round-trip passenger trains in the 101 corridor. Since none of these trains operate in the peak hour when commute-friendly service is in the highest demand, SBCAG, as a member of the LOSSAN Joint Powers Authority (JPA), has been working with the JPA and the California State Transportation Agency to retime one of these trains to serve during peak commute hours. The objective is to begin this service in April 2018. The retimed AMTRAK service will provide morning northbound peak hour rail service connecting stations in Camarillo, Oxnard, Ventura, Carpinteria, Santa Barbara, and Goleta. The same stations will have evening peak hour service in reverse order. The passenger price for this new service will be competitive with the Coastal Express regional transit service that currently operates in the corridor. SBCAG is working on options to develop comprehensive last-mile service connections to link passengers from train stations to work sites including bicycle rental and bicycle lockers, connecting shuttle and bus services, and transportation network company service agreements. Ridership goals for this first train are approximately 200 passengers per day.

The LOSSAN JPA is also planning to implement a sixth round trip in two to three years that could also be scheduled to serve the peak hour market between Ventura and Santa Barbara counties, which would result in two peak hour round trips in the 101 corridor. This would coincide with the start of construction of the South Coast 101 HOV project and meet the initial service levels identified in the 101 In Motion Study. Longer-term capital infrastructure projects that are also under development include the Seacliff rail siding extension project which will improve passenger rail on-time performance.

Transpogroup
Comment 7
The scope for evaluating intersections in the 2008 Traffic Studies included all ramp intersections throughout the study area and one node beyond, which was a local intersection. These criteria were agreed upon by all partnering agencies prior to completing the traffic counts.

As stated on page 19 of the Final Revised EIR, “An impact to intersections will be considered significant if the project would substantially increase delays at particular study intersections, taking into consideration context and intensity.” While the freeway off-ramp queueing was identified as a key measure of effectiveness and safety in the Traffic Operations Report, the 95th percentile queues for local streets was not a stand-alone performance measure for determining CEQA significance. As a result, this analysis has not been updated or modified. The 95th percentile queuing analysis as presented in the Final Revised EIR that shows there are no off-ramps exceeding queue lengths remains valid. Note also that the 95th percentile queue is only evaluated for freeway off-ramp intersections outlined in the Forecast Operations Report.

In addition, the 95th percentile queue is defined to be the queue length that only has a 5-percent probability of being exceeded during the analysis time period. It is a useful parameter for determining the maximum length of turn pockets, but does not represent what an average driver would experience. Driver experiences are better characterized by the mean queue length or a 50th percentile queue. As such, turn pockets designed to be a 50th percentile queue length are typically sufficient. Furthermore, queues are dependent upon intersection capacity and whether the intersection is or isn't close to capacity. A 50th percentile queue represents the maximum queue a driver will typically experience. For all the above reasons, queue impacts are not used as a relevant delay impact analysis.

Transpogroup
Comment 8
A comparison of the referenced summary of street segments that were spot checked and found to have unbalanced volumes (Table 3) against Figure 38 – 2040 Build AM/PM Peak Hour Turning Movements of the SC101 HOV Traffic Study Forecast Operations Report, shows that all three segments mentioned, have perfect balance. The northbound approach at the intersection of Fairview Avenue and Calle Real (#88) shows a difference of 1.82%. The volumes at this intersection are well within the acceptable balance criteria of less than 15% established in the Future Intersection Turning Movement Development Process Section of the SC101 Forecast Operations Report.

Volume data used for Synchro Analysis (2040 Build of the SC101 HOV Traffic Study – Forecast Operations Report Technical Appendices) at intersections #84, #85, #86, #87, #88, #89, and #93 was adjusted for right turns on red (ROR) by subtracting the ROR volumes shown in Figure 39 from the total right turning volumes shown for each leg of the above intersections shown in Figure 38.

The traffic data collected for U.S. Highway 101 was collected primarily from 2008 to 2011, as noted in the comment. However, in accordance with the Caltrans *Guide for the Preparation of Traffic Impact Studies*, an existing traffic study "requires updating when the amount or character of traffic is significantly different from an earlier study." In order to determine whether the traffic amounts or character changed for the project, a forecast validation was conducted. This information is documented in the April 21, 2017 Caltrans Forecast Validation memorandum, included in Appendix H of the Final Revised EIR. The memorandum validates the forecasted growth used for the project's Forecast Operations Report. The latest counts for actual traffic volumes were taken from five existing physical count stations located within the limits of the 27.5 mile study corridor. These counts were collected and compared to the projected 2015/2016 AADT count (based on the forecasted growth rate). The table and trend graphs presented in the memo show that the forecast projection falls between -2.99% to +8.09% of the actual station counts. The Draft Revised EIR includes levels of service with balanced traffic volumes for the entire corridor, with the exception of segments where driveways to existing land uses exist which results in unbalanced traffic volumes**.**

Therefore, it is appropriate to conclude that the amount or character of traffic is consistent with the earlier study. Thus, traffic volumes in the corridor can be expected to grow as forecasted, and the traffic forecast analysis continues to be valid.

Transpogroup
Comment 9
See response to Transpogroup Comment 1

The Project Traffic Committee identified all of the intersections to be studied. This committee included local jurisdictions within the project limits. The local jurisdictions provided their own list of intersections to collect pedestrian count information, which typically included intersections where pedestrians are known to frequent, and analyzed as part of the signal timing. Pedestrian counts were collected from these intersections and entered into the intersection analysis models. Pedestrian data was also collected at un-signalized intersections and entered into the analysis model. The intersection capacity was then adjusted accordingly to handle pedestrian results and was calculated as part of the delay factor.

The intersections identified in this comment as having no pedestrian counts were investigated by Caltrans Traffic Operations. Of these, intersection #49 was the only intersection identified by the Project Traffic Committee as a location to collect pedestrian counts. After a detailed check of the Synchro models, it was discovered that although pedestrian counts were collected at this intersection they were not entered into the model. The counts were then entered into the model and analyzed. The results show no change in AM or PM Peak Hour LOS from what was reported in the Draft Revised EIR for both 2020 and 2040 conditions. There are minimal changes in delay for AM and PM over what was reported in the Draft Revised EIR for both 2020 and 2040 conditions. The analysis and results are documented in a memorandum dated August 11, 2017 included in Appendix H of the Final Revised EIR. Tables 2.1 and 2.2 in the Final Revised EIR have also been updated to reflect these corrections.

COAST
COALITION FOR SUSTAINABLE TRANSPORTATION

P.O. Box 2495
Santa Barbara, CA 93120
805.875.3562
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January 30. 2017

Jason Wilkinson, Senior Environmental Planner
Caltrans District 5 Project Management
50 South Higuera
San Luis Obispo, CA 93401

Comments on the South Coast Hwy 101 Project Draft Revised EIR

Dear Mr. Wilkinson:

COAST is a 501(c)3 non-profit organization that promotes the creation of safe, multi-modal transportation options in Santa Barbara County. COAST has been a proponent of the "lane and a train" consensus solution for the South Coast 101 corridor since its inception. In 2006 and 2008, we formed and led the Coalition for a Fair Measure A, an alliance of over twenty environmental and community groups supporting the Measure A expenditure plan.

We realize that delays in realizing the final phases of the Hwy 101 construction project will be costly to commuters and taxpayers. However, the CEQA laws were created to protect the health and safety of those same commuters and taxpayers, and the Draft Revised EIR for the project does not appear to satisfy the CEQA requirements.

As COAST is a leading proponent of pedestrian and bicyclist safety in the region, we are particularly concerned about the proposed "mitigation" for the Milpas St. off-ramps and the Cabrillo/Los Patos intersection. Those intersections are in areas with high pedestrian and bicycle usage, and, as SB City staff has stated in its draft comments, Caltrans has not put forward a safe and effective proposal for mitigating the traffic impacts at those intersections, nor has it offered or identified funding for any mitigation projects at those intersections. It is critical that designs for projects that are effective and safe for all road users (including pedestrians), as well as a way of funding those projects, be included in the main project and the final revised EIR. Otherwise, cutting corners now may create a tragedy waiting to happen in the future. 1

It is also worth pointing out that the modeling analysis for the EIR presumes that an effective commuter rail system will be in place by the time the highway construction is completed, and that almost 20% of the congestion relief provided by the "lane and a train" package will come from the train. In that sense, the commuter rail can be viewed as a pre-assumed mitigation for traffic impacts of the highway expansion. However, SBCAG has made very little headway negotiating with Union Pacific for the right-of-way to operate commuter rail service—even for a single retimed Amtrak train, which is less than the level of rail service assumed in the EIR analysis. We realize that Caltrans is not the responsible agency for providing the commuter rail service, but Caltrans is a key agency for providing rail service in the state, and any influence it can bring to bear on enabling commuter rail service in the South Coast would be beneficial to commuters and to the traffic situation in the 101corridor. The rail option is also one of the most effective ways of reducing VMT in the corridor, which 2

should be a key consideration in the Revised EIR, according to the new SB743 CEQA procedures. We request that an analysis of VMT effects be added to the revised EIR, including an analysis of the additional VMT that would occur if SBCAG is not able to put a commuter rail system into operation. 3

Finally, COAST is concerned with several of the other omissions and discrepancies that SB City staff have pointed out in their draft comments and recent presentations. We request that those issues be addressed in the final revised EIR as well. 4

Sincerely,

Eva Inbar, President, COAST Board of Directors

COAST
Comment 1

With respect to the Los Patos/Cabrillo intersection, improvements are being studied by the City of Santa Barbara in coordination with SBCAG and Caltrans as part of the Union Pacific Railroad Bridge Replacement Project. The City/SBCAG project proposes to improve bicycle and pedestrian connectivity along Cabrillo Boulevard by replacing the Union Pacific Railroad structure over Cabrillo Boulevard, providing bike and pedestrian facilities on both sides of Cabrillo Boulevard and intersection improvements pedestrian at the Los Patos/Cabrillo Boulevard intersection. The Caltrans team has coordinated with City and SBCAG staff to ensure that the HOV project can be designed in a manner that provides for bicycle, pedestrian, and vehicular connectivity when the SBCAG/City improvement project is completed. A single-lane roundabout is currently the preferred approach for improving bicycle and pedestrian connectivity while also providing operational benefits for vehicles at this intersection.

Since the Los Patos/Cabrillo intersection has been identified as having impacts, Caltrans has proposed to provide as mitigation a equitable-share contribution for the improvement of the Los Patos/Cabrillo intersection. This can be used to help fund the larger Union Pacific Railroad Replacement Project, which includes improvements at Los Patos/Cabrillo intersection, and aims to improve bicycle and pedestrian travel along Cabrillo. Intersection improvements to address impacts at this location, however, could occur with the Union Pacific Railroad Bridge Replacement Project or independent of that project.

With respect to the Milpas Southbound off-ramp intersection, Caltrans has considered a range of options to reduce delay at this location including options provided by City of Santa Barbara staff (see Chapter 4 in the Final Revised EIR). Caltrans' preferred approach for providing delay reduction while taking into account bicycle and pedestrian safety continues to be the addition of second right turn lane at the southbound off-ramp. As development of improvements at this location continues, Caltrans will coordinate with City staff to ensure bicycle and pedestrian needs are addressed.

Finally, the South Coast 101 HOV Lanes project will replace or improve bicycle and pedestrian facilities that exist within the State Highway right-of-way at this interchange. All pedestrian facilities within the project limits that are modified as part of the project would comply with the Americans with Disabilities Act (ADA). During construction, consideration would be given to bicycles, pedestrians, and persons with disabilities for continued access through construction areas. Any improvements considered as part of this project would be coordinated with adjacent project efforts to ensure continuity of bicycle and pedestrian facilities with adjacent City of Santa Barbara/SBCAG project efforts for bicycle and pedestrian facility improvements along Cabrillo Boulevard.

COAST
Comment 2

The traffic analysis in the South Coast 101 HOV Project technical studies demonstrates that addition of the proposed HOV lanes in the ten-mile corridor provides the congestion relief required to meet the project purpose and need. The other highway improvements previously completed or underway, coupled with other modal improvements, such as demand management and commute-friendly passenger rail service will satisfy the long-term congestion relief goals in the corridor. New passenger rail service as a part of the long term congestion relief strategy, as well as other modal improvements in the corridor, are not required mitigation measures for construction congestion from the HOV project. Since all existing lanes of the 101 freeway will continue to operate during construction of the 101 HOV Project, congestion will not increase as a result of project construction. Construction has already been completed on eight miles of the 101 freeway widening and the experience from this construction demonstrates that congestion, which is already substantial during peak travel times, does not increase during construction.

COAST

Comment 3

This comment is outside the scope of the Revised EIR. The following response is provided for clarification only.

SB 743, signed into law on September 27, 2013, requires the California Office of Planning and Research (OPR) to propose revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts within transit priority areas (Pub. Resources Code, § 21099, subd. (b)(1).). In developing the criteria, OPR shall recommend potential metrics to measure transportation impacts, that may include, vehicle miles traveled, among other criteria. SB 743 further provides that OPR may adopt guidelines establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas. (Pub. Resources Code, § 21099, subd. (c)(1).) The CEQA Guidelines from OPR have not been updated to address VMT implementation based on SB 743. In January, 2016, however, OPR issued revised draft proposed changes to the CEQA Guidelines, including proposed new Section 15064.3 (determining the significance of transportation impacts). (OPR, 2016.) That draft section specifically provides that the new guidelines are intended to apply prospectively and agencies have a two-year period after the expected adoption date for the provisions of the new guidelines to apply.

COAST

Comment 4

The Final Revised EIR has been updated to correct data transfer errors. Any text changes made between the Draft and Final Revised EIR will be denoted by a solid vertical line on the right side of the page indicating updated or new information. Changes to data in tables are indicated by blue shading in the cell that has been updated.

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Public Individuals

From: Randall Badat [mailto:Rbadat@cox.net]
Sent: Tuesday, January 24, 2017 5:40 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Cc: execdirector@montecitoassociation.org
Subject: South Coast 101 HOV Project Draft Revised Environmental Impact Report

Jason,

As homeowners for more than twenty years in the Montecito Hedge Row, my wife and I would like to draw attention to what we believe is a serious error in the draft document. We refer to Page 45, Table 2.8, Item 37- SB off-ramp & San Ysidro/Eucalyptus Ln. The language pertaining to the two intersections at the north and south sides of the freeway at this location is alarmingly vague and fails to elaborate on and specify exactly what problems currently exist and what measures will be taken to mediate. Further, it fails to project the future impact this project will have on these two intersections. 1

We know that mediation is part of the plan for the S. Jameson/Eucalyptus southbound exit, However we are hearing of proposed roundabouts on both sides of the freeway, which many of us in the immediate area are opposed to without an in depth study and outreach. Certainly the south bound 101 exit which already backs up well onto the freeway during peak hour demands immediate attention and remedy. The same is not true for the northbound side which exits onto N. Jameson at San Ysidro. Any congestion at this location is a product of local traffic (primarily school pickup and drop-offs on San Ysidro) rather than that resulting from traffic exiting or entering the freeway. The few exceptions occur when peak traffic or holiday weekend traffic diverts onto N. Jameson to escape freeway backup. These instances should be remedied by the freeway widening and should not be an issue once the 101 project is completed. Therefore we object to any proposed mitigation at the N. Jameson/San Isidro location until further investigation is conducted and local residents have been fully consulted, informed and are in agreement that whatever mitigations are proposed are in the best interest of the community. 2

Respectfully,

Randall & Shelley Badat
124 Miramar Ave.

Badat, Randall and Shelley
Comment 1

Since the San Ysidro southbound interchange was identified as having traffic impacts, Caltrans is coordinating with the County on a preferred design approach for improvements. In January 2017, the County completed a Phase 1 Intersection Control Evaluation (ICE) study to evaluate options for improving operations at the San Ysidro interchange. Caltrans was involved in the development and approval of this study. Subsequently, the City of Santa Barbara, County of Santa Barbara, and SBCAG entered into a memorandum of understanding (MOU) to outline responsibilities and funding expectations for completing project studies at the San Ysidro interchange as well as the Olive Mill Road/ Coast Village Road intersection. A request for proposals to consultants to complete respective project studies was released by the County and City in May 2017.

Badat, Randall and Shelley
Comment 2

As noted in Comment 1 above, County-led consultant studies will evaluate project implications for providing long-term operations at the San Ysidro interchange, which includes intersections on both the North Jameson and South Jameson sides of U.S. 101. Either as part of these studies, or following the completion of the studies, the County would include hearings with the Montecito Planning Commission and/or County Planning Commission prior to approving a project at this location. Additional public meetings may be held at the County's discretion.

From: Nancy Black [mailto:nancy@mercurypress.com]
Sent: Monday, January 30, 2017 2:52 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Comments to DREIR, South Coast 101 Widening Project

Jason Wilkinson, Sr. Environmental Planner
Caltrans District 5 Project Management
50 South Higuera
San Luis Obispo, California 93401

Dear Mr. Wilkinson:

Please accept these comments to the South Coast 101 Widening Project DREIR. I've been a Santa Barbara resident since 1984. I've raised my family here. This project will impact us for over a decade into the future. It's wise to consider well, especially regarding the funding of mitigation. If we spend all our road-fixing funds for the next decade on expanding the freeway, how will we fix the impacts to city streets and traffic that will certainly increase with a decade of road work? 1

The DREIR contains serious omissions and errors that make informed public comment impossible. The DREIR must be revised and recirculated for public comment. 2

The DREIR failed to properly classify the changes from the project to each impacted intersection addressed in the DREIR. I cannot tell how the intersections that I use regularly will be impacted. 3

The DREIR ignored the effect of the project and increased on-street traffic during peak periods on the safety of pedestrians and bike riders. Expanding off-ramp lanes, increasing the amount of traffic exiting the freeway onto surface streets, and not providing enhanced bike and pedestrian facilities substantially increases the risks for non-vehicle travelers on the South Coast. This is a significant impact that should be recognized and avoided or mitigated. 4

The DREIR failed to apply the CEQA Traffic Thresholds used in the County and each City. Caltrans failed to explain how the threshold they used was superior to the City and County thresholds, which are more stringent. I do not understand how applying weaker CEQA thresholds can result in a complete disclosure of the project's environmental impacts. 5

The DREIR should fully define each mitigation measure it expects will reduce project impacts, and examine the impacts from the mitigation measure. All mitigation measures must be funded, especially when that mitigation measure responds to increased public safety hazards. 6

The DREIR's cumulative impact assessment must include all projects along the 101 corridor, include the predicted growth from each end of the corridor and from within, and recognize induced travel as a major project impact. 7

To fulfill CEQA's purposes, the public should be given a complete Project Description, all potentially significant impacts should be clearly identified, and a robust alternatives analysis performed, before identifying and ensuring the adoption of feasible mitigation measures.

This is a very significant project for the South Coast. The impacts will be felt daily and for a decade or longer. Please get the CEQA analysis right, to inform decision-makers and the public.

Thank you,

Black, Nancy
Comment 1

Funds that are used to fix roads in our region come from a number of sources: federal, state, regional, and local. Funds for maintenance of state highways are also separate from funds for local roads. Measure A provides both funding to the South Coast 101 HOV Lanes project ($140 million, 2010 dollars), but also provides funding to North County and South Coast sub regions at $455 million (2010 dollars). Within each of these subregional programs, local agencies receive funds through a formula basis that can be used for making roadway improvements

Black, Nancy
Comment 2

The Final Revised EIR has been updated to correct data transfer errors. One new location, Olive Mill Road/Coast Village Road, was added to the list of impacted intersections as a result of these corrections. This updated information does not change the overall analysis or conclusions presented in the Draft Revised EIR. In particular, the updated analysis does not alter conclusion of the Revised Draft EIR that the project would result in a significant impact related to substantial increases in delays at intersections. In addition, the public was not deprived of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate such an effect that Caltrans has declined to implement. After assessing the updated information based on the standards for recirculation found in Section 15088.5 of the CEQA Guidelines, it was determined that recirculation of the Draft Revised EIR is not required.

Any text changes made between the Draft and Final Revised EIR is denoted by a solid vertical line on the right side of the page indicating updated or new information. Changes to data in tables are indicated by blue shading in the cell that has been updated.

Black, Nancy
Comment 3
Table 2.8 contains the specific intersections determined to have substantial delays.

Black, Nancy
Comment 4
The issue of pedestrian and bicycle safety is outside the scope of the Revised EIR.

According to the California Vehicle Code (CVC 21200), bicyclists generally have the same rights and responsibilities as motor vehicle drivers. As such, bicycles are assumed to be part of the vehicle stream and are adequately served by the various types of intersections, whether signalized or unsignalized. When a bike lane or shoulder exists, it is anticipated that bikes using the bike lane will operate in tandem with the vehicle stream.

With recent adoption of policies on complete streets, bicycle and pedestrian access and safety are taken into consideration when Caltrans designs projects. When changes or upgrades to intersections are occurring with the HOV project, features to accommodate bicycles and pedestrians will be integrated into the design and constructed with the project, where appropriate.

For safety reasons, bicycles and pedestrians are prohibited from traveling on US 101 within the project limits. In areas where bicycle and pedestrian access is allowed and physical improvements are proposed as part of the South Coast 101 HOV Lanes project, bicycle and pedestrian access will be addressed in the design phase of the project, in compliance with Caltrans complete streets policy. Bicycle and pedestrian safety and accessibility will also key considerations in the design of the proposed mitigation improvements. Examples of features which will be considered in the design of all intersection modifications associated with this project include, but are not limited to: sidewalks, crosswalks, adequate shoulders to accommodate bicyclists, signs to direct bikes and pedestrians, Class II Bike Lanes, and other related Class II bikeway channelization. Bus stop and other transit accommodations will also be integrated into the design where appropriate.

Furthermore, all pedestrian facilities within the project limits that are modified as part of the project would comply with the Americans with Disabilities Act (ADA). During construction, special consideration would be given to bicycles, pedestrians, and persons with disabilities for continued access through construction areas. Any improvements considered as part of this project would be coordinated with adjacent project efforts to ensure continuity of bicycle and pedestrian facilities.

Black, Nancy
Comment 5
The Caltrans *Guide for the Preparation of Traffic Impact Studies* was designed as guidelines to help the Caltrans Intergovernmental Review (IGR) Department assess local development impacts to State facilities. The *Guide* states that “Caltrans endeavors to maintain a target LOS at the transition between LOS ‘C’ and LOS ‘D’ on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.” Caltrans has never established statewide standards of significance for traffic impacts and none exist in the *Guide*. However, an approach was formulated in response to the Writ to identify impacts at individual intersections by considering LOS and seconds of delay at signalized and un-signalized intersections. This approach offers a consistent corridor-wide characterization of the driver’s experience based on the full HCM methodology because it reflects whether pronounced delay is experienced at a signal or a stop sign. From the driver’s perspective, waiting for a longer period of time at a signal is tolerated, whereas waiting the same length of time at a stop sign is less tolerable (HCM 2010).

The criteria established to determine whether an intersection will experience substantial delays with the project are shown below:

- For signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 20 seconds or more with project.
- For un-signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 10 seconds or more with project.

The 10- and 20-second measurements are based on the delay change increment for unsignalized and signalized intersections respectively between LOS C/D cusp to D/E cusp. As the lead agency, Caltrans has the discretion to set standards of significance for use in an EIR. This allows the lead agency to determine whether a project will result in a significant impact. This information was found on page 41 of the Draft Revised EIR and was updated in the Final Revised EIR on page 43. The lead agency is responsible for determining whether an adverse environmental effect identified in an EIR should be classified as "significant" or "less than significant." (Guidelines, § 15064, subd. (b).) There is no single definition of a "significant effect," because the significance of an activity may vary with the setting. (Guidelines, § 15064, subd. (b).)"

Black, Nancy
Comment 6

Table 2.8 in the Final Revised EIR shows the proposed mitigation plan and Caltrans' equitable share contributions for each of the eight identified intersections where substantial delays will occur with the project. These locations where proposed mitigation improvements will occur have independent utility and will require separate environmental studies and coastal permitting.

The equitable share calculations used to determine mitigation are based on the differences between Build and No-Build conditions for trips entering the intersection. The equitable share calculations were performed based on the Caltrans *Guide for the Preparation of Traffic Impact Studies.* If the intersection is State-owned and the improvement totals less than $5,000, Caltrans will pay the full cost of the improvement. Each proposed mitigation design would reduce the amount of delay added by the project (difference between Build and No-Build delay in seconds).

The Final Revised EIR includes information on the level of delay reduction expected associated with the specific mitigation options presented (see Table 2.8).

Black, Nancy
Comment 7

Page 36 of the Final Revised EIR includes a discussion of cumulative project conditions. This analysis takes into account all transportation and land use projects included in the Regional Transportation Plan and general plans prepared by local jurisdictions in the project area including the South Coast 101 HOV Lanes project.

This topic of induced travel is outside the scope of this Revised EIR. The following response is provided for clarification only.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-

SCS Final EIR is available for review at:
http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

As discussed in the 2040 RTP-SCS Final EIR, the term induced travel is often misused to suggest that increases in highway capacity are directly responsible for increases in traffic, when in fact, the relationship between increases in highway capacity and traffic is very complex—involving various travel behavior responses, residential and business location decisions, and changes in regional population and economic growth. Most studies examining the issue have concluded that trips related to socioeconomic growth and trips diverted from other facilities—as opposed to induced travel—account for the majority of increased travel. Some studies have concluded that if new highway capacity does fill up, it is due not to induced travel, but rather to travelers diverting from other facilities or time periods in the short term, and to socioeconomic growth in the long term. Local data from the 2040 RTP-SCS Final EIR confirms that the majority of traffic growth in the long term is due to socioeconomic growth, regardless of roadway improvements.

Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi (2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

> Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

> Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the

2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

Pamela Boehr
115 San Ysidro Road
Santa Barbara, CA 93108
Phone: (805) 969-4572
Email: antiquepam@aol.com

21 January 2017

Dear Mr. Wilkinson:

The South Coast 101 HOV Lane Project Draft Revised Environmental Impact Report is inadequate because mitigation for San Ysidro Road page 45, #37 is not fully explained or mitigated. It needs an EIR and may have CEQA violations. 1

Sincerely,

Pamela Boehr

Boehr, Pamela

Comment 1

The southbound off-ramp and San Ysidro/Eucalyptus Lane intersection (#37) was identified as one of the eight intersections that will experience substantial delays with the project. As a result, Caltrans has been coordinating with the County on a preferred design approach for improvements. In January 2017, the County completed a Phase 1 Intersection Control Evaluation (ICE) study to evaluate options for improving operations at the San Ysidro interchange. Caltrans was involved in the development and approval of this study. Subsequently, the City of Santa Barbara, County of Santa Barbara, and SBCAG entered into a memorandum of understanding (MOU) to outline responsibilities and funding expectations for completing project studies at the San Ysidro interchange as well as the Olive Mill Road/Coast Village Road intersection. Two options are being considered at this time. One would install four-way stop control, while the other would install a four-lane stop control at the southbound off-ramp and San Ysidro/Eucalyptus intersection and a single lane roundabout at the northbound ramp/N. Jameson/San Ysidro intersection.

Prior to commencing project construction within the County of Santa Barbara, Caltrans shall make all reasonable efforts to enter into a cooperative agreement or other type of binding agreement with the County of Santa Barbara setting forth a schedule and responsibilities for the funding and construction of improvements to the southbound off-ramp and San Ysidro/Eucalyptus Lane Intersection. The improvements identified in the agreement shall ensure levels of service at the intersection do not exceed 2040 No-Build conditions at the intersection as set forth in the South Coast 101 HOV Lanes Project Draft Revised EIR and supporting technical studies.

From: Candice [mailto:cbuergey@gmail.com]
Sent: Monday, December 19, 2016 10:10 AM
To: Eades, Scott@DOT <scott.eades@dot.ca.gov>
Subject: 101 project

Good morning Scott,

I hope you are enjoying the Holiday season. I think the last time we were in contact your daughter was just born, she is probably about five and I'm sure a wonderful addition to your family and life.

Sorry, I was unable to attend the December 15th 2016 meeting regarding the 101 and the Roundabouts at San Ysidro Road and Olive Mill. The holidays are a hard time to attend meetings for many people, I was out of town.

Thank you for responding to these questions so I can catch up with Caltrans/Roundabout Projects.

1. Where can get a copy or read Caltrans finish document?

See web links above. The document is also available in local libraries, including the Montecito Branch Library.

2. What is the estimated start date/end date for Caltrans project thru Montecito?

This will be driven by construction sequencing and funding. We expect the project will be constructed in individual segments. With respect to construction sequencing, a final decision on the order and timing for this work has not been made. If the project were to begin in Carpinteria with individual segments constructed from south to north, it will likely be several years before construction would begin in Montecito.

3. Is the Caltrans Project completely funded?

No. The pre-construction phases are fully funded with a mix of state, federal, and local sources. SBCAG has approximately $140 million in Measure A funding dedicated to the HOV project. The remaining funds are expected to come from a mix of state and federal funding sources.

4. I was told there is a Law suit against Caltrans, how does this affect the project time line?

Yes, as noted above. Work to address the lawsuit will be completed in the summer of 2017 and permitting coordination with local jurisdiction staff can begin shortly after. Assuming no additional suits are filed against the project, the lawsuits will likely ultimately have little influence on the overall schedule.

5. Are you go to do another presentation on January 12th for Caltrans and the Two Roundabouts, if so where is that going to take place?

I believe the City of Santa Barbara is scheduling a Planning Commission meeting that may occur on January 12th and the Draft Revised EIR may be discussed at that meeting. This is a City sponsored meeting.

6. What is the deadline to respond to Caltrans? Can I sent it to you or there a different contact person?

Noted above.

7. Will Caltrans be involved in designing, funding and building the Roundabout at San Ysidro and Olive Mill?

In January 2014, the SBCAG Board directed SBCAG staff to work alongside the City and County to help move forward improvements at these two respective locations. The City is in the lead for improvements at Olive Mill / Coast Village Road and the County is taking the lead considering improvements at the San Ysidro interchange. These are separate efforts. Both efforts are very early in the project development process and much more work, and community coordination, is ahead. Caltrans intends to coordinate with the County and City staff on a preferred approach for improvements at these locations.

8. I found this San Ysidro Roundabout web page on line. Is this the current project that was introduced on December 15th 2016 or is there another updated version that also includes Olive Mill Roundabout? If there is an updated version, is it available to see on line or be mailed to me?
http://www.montecitoassociation.org/sites/default/files/community/issues/DRAFT%20San%20Ysidro-101%20Concepts%2011-13-14.pdf

This appears to be a presentation provided by County staff and/or their consultant. Caltrans was not involved in the development of this presentation and did not attend the meeting.

9. Is there an estimated start date for the San Ysidro Roundabout and Olive Mill Roundabout?

Full funding for these improvements has not been identified and no specific project has been approved at either location. I am not aware of a project timeline for either of these locations.

10. Are the two Roundabout projects funded? Are they being funded by Caltrans or Measure A or both?

Please see above.

11. What is the status of the sound wall for our Historic neighborhood? I was told that we were illegible but it looks like the sound wall stops at Miramar Ave. Marcia Vierra said our neighborhood was going to be reevaluated because not all houses and cottages were counted. I would like to know how the tennis courts on Old Coast C+Village Road Sound Wall got approved? The tennis courts are only occupy a few hours during the day?

See above.

———

Scott, Thank you for your time.
Please keep all of us informed of all upcoming meeting with all agency and Association regarding these issues.

I'm looking forward from hearing from you.
Best regards.
Candice Buergey
805-969-1807

From: Eades, Scott@DOT
Sent: Wednesday, December 21, 2016 4:29 PM
To: 'Candice' <cbuergey@gmail.com>
Subject: RE: 101 project

Hi Candice –

Happy Holidays to you as well!

I've provided brief answers to your questions below in green text.

The recently released Draft Revised EIR is focused specifically on local intersection analysis and does not provide new content related to soundwalls. This document was released on December 2, 2016 in response a lawsuit filed after the August 2014 Fina Environmental Document was approved. The document is posted at: http://dot.ca.gov/dist05/projects/sb_101hov/index.html

If you wish to provide comments on the Draft Revised EIR document, they can be submitted to Jason Wilkinson by email at: Jason.wilkinson@dot.ca.gov or by mail at:

Caltrans, Attn: Jason Wilkinson
50 Higuera Street
San Luis Obispo, CA 93401

Comments on the Draft Revised EIR are being accepted until January 31, 2016.

With respect to soundwalls along North Jamison near your property, all proposed project features remain consistent with what shown in the August 2014 Final Environmental Document. In this area, a soundwall is proposed on the State highway right of way between 101 and North Jamison which will extend from approximately Hixon Road to San Ysidro Rd. A map showing the proposed soundwall can be found in appendix L of the Final EIR. This specific area is shown on Sheet L-12 (pdf page 12) in the link below:

http://dot.ca.gov/dist05/projects/sb_101hov/final/alt1.pdf

Also, here is a link to the entire August 2014 Final EIR:

http://dot.ca.gov/dist05/projects/sb_101hov/reports.html

I will follow up with a phone call to provide additional background information as needed.

- Scott

Scott Eades
Caltrans, District 5 – Project Management
(805) 549-3144

1

Buergey, Candice

Responses to comments were addressed by Scott Eades (then Project Manager, now Corridor Manager) as shown in the email exchange.

From: Christie [mailto:cdegiacomi@cox.net]
Sent: Thursday, January 26, 2017 11:57 AM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: 101 widening sb

Hello, I've been trying to follow the news about the 101 widening in Santa Barbara. I have many co-workers who live in both Carpinteria and Ventura area. They both are so frustrated beyond belief at the hold-ups for the project. This should have happened 20 years ago. The signs do say US101, not Montecito 101 or Santa Barbara 101. Please move this project along quickly. It can happen if you put your foot down and just do it. Don't worry about all these mitigations for traffic. There will always be complainers about traffic during construction, but you have to just go for it anyway. Really, what can you do about traffic during construction? Not much I'm thinking. Maybe some stop light adjustments will be needed, but those can be adjusted easily. I'm sure the people who live on Jameson are concerned about traffic on their road when construction happens, but that's life and it's only for a year or so. People are already driving on that road during heavy traffic anyway. Every time I pick up the paper the start date is moved back another year. Seriously, fix the overpasses and get going. I've never seen any project move slower than this one. Thank you, Christie DeGiacomi

DeGiacomi, Christie

The current expectation is that construction of the first segment of the project will occur in Carpinteria. Construction on this phase is scheduled to begin in mid-2019.

Construction impacts for the mainline are discussed in Section 2.1.5 of the 2014 Final EIR. Caltrans standard practice is to develop a detailed Traffic Management Plan (TMP) for each project in order to minimize construction related disruptions. Preparation of a detailed TMP occurs when a project nears the end of the design phase. For construction of the South Coast 101 HOV Lanes project, two lanes of the mainline in each direction would remain open during peak hours for travel.

Caltrans will coordinate with local jurisdiction staff during the design phase to refine methods for minimizing traffic disruption during construction of the project. Information resulting from this effort would be included in the TMP.

Comments re 101 HOV Phase 4 Revised Draft EIR

Prepared by ehGreen@west.net 805-770-3363

1. The NET statement of "**does not change the Preferred Alternative..in the 2014 FEIR**"
   a. included on Executive Summary p10 but was not seen in the body
   b. And should be highlighted for emphasis

2. Where are the **design exceptions** documented for public review (ref p6)?
   a. Failure to provide is basis for rejection of draft EIR as incomplete.
   b. Should be included for completeness and understanding of justifications

3. Mitigation Measures on p45 and p141 have curious and unsubstantiated data:
   a. Does a stop sign with overhead allocations really cost only $800?
   b. Cost column appears mixed between simple $ and Hundreds of Thousands
   c. **If cities lack necessary share of capital funds, will CalTrans provide grants?**

4. Mitigation should extend **beyond closest local intersection** because of volume growth
   a. Need to study beyond the 108 intersections defined

5. Report **offsets additional delays** for northbound AM vehicles w SB PM gains
   a. NB delays should be dealt with as "stand alone", not just Net difference
   b. Less SB backup **does not relieve effects of morning congestion**.

6. What design(s) is/was used for **Cabrillo area right hand on and off ramps**?
   a. Diagram on p104/106 hard to read for what is intended / studied
   b. Should show SB Los Patos to NB Hermosillo on full size sheets

7. Why should Santa Barbara **City bear cost of UPRR Bridge widening**?
   a. Is part of upgrade to facilities in conjunction w 101 HOV project
   b. If undone, will mess up 101 access / exits on Cabrillo

8. Copies sent to area Public Libraries did **not include varied studies in Paper format**.
   a. Particularly hard to follow if only in Electronic Format (CD and online).
   b. Even when bulky, complete paper versions should be provided to Libraries
   c. My comments are therefore limited to the 140~ page main document.

9. List of projects underway on p 61 not current
   Public Market is operating (but still has a few vacancies)
   Cottage Hospital Housing (Bella Riviera) is built out.

10. NB HOV lane should continue into Phase One for advantage for Transit

From: Howard Green [mailto:ehgreen@west.net]
Sent: Tuesday, January 24, 2017 10:31 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: 101 Draft Revised DIR

The following is a comment on the Draft Revised 101 EIR.

There is an implied presumption that Parallel Projects for locations at the Olive Mill roundabout and/or the Cabrillo Railroad Underpass will both be funded and completed in a timely manner. 11

Your report should provide effects and mitigation by DOT if the municipal efforts are not funded nor completed.

I would appreciate a printed report of your next iteration.

e Howard Green
One el Vedado Lane #24
Santa Barbara, CA 93105-3575
805-770-3363

Green, Howard
Comment 1
The referenced statement was included in Section 1.3 of the Draft Revised EIR, which is in the body of the document. A similar statement was also included in Section 1.1 of the Draft Revised EIR, also in the body of the document. In both of these statements, the phrase “does not” has been underlined in the Final Revised EIR to provide additional clarity.

Green, Howard
Comment 2
This comment is outside the scope of the Revised EIR

Caltrans is responsible for engineering decisions related to design standards and traffic safety. While the design exceptions are fully documented in the Project Report, they are not part of the CEQA process.

Green, Howard
Comment 3
Estimated costs associated with installing a stop sign are based on an assumption that Caltrans personnel would perform the work rather than hiring a contractor.

For any intersections requiring improvements that cost less than $5,000, Caltrans has agreed to pay the full cost of the improvement.

Green, Howard
Comment 4
The scope for evaluating intersections in the 2008 Traffic Studies included all ramp intersections throughout the study area and one node beyond, which was a local intersection. These criteria were agreed upon by all partnering agencies prior to completing the traffic counts.

Green, Howard
Comment 5
Since intersection delay is independent from the directional flow of traffic, the net difference is the appropriate way of assessing impacts. Please refer to Appendix I in the Final Revised EIR for Peak Hour Congestion Maps that provide a visual representation of proposed delay reduction throughout the corridor.

Green, Howard
Comment 6
The Cabrillo Boulevard/Hot Springs Road Interchange design is a standard diamond interchange. Improvements to the Cabrillo Boulevard/Hot Springs Road Interchange portion of the South Coast 101 HOV Lanes project propose to replace and reconstruct the northbound and southbound 101 bridges. The existing left-hand off-ramp for both northbound and southbound will be removed. A new southbound on- and off-ramp diamond shape configuration (Type L-1) will be constructed. A new northbound off-ramp will be constructed and the existing northbound on-ramp will be modified.

The Addendum to the July 19, 2011 Cabrillo/Hot Spring Interchange Configuration Analysis Technical Memorandum, which contains the referenced diagram, can also be found at the website below for printing larger copies of the diagrams.

Additional information on the selected F Modified configuration is provided in the August 2014 Final EIR.
http://www.dot.ca.gov/dist05/projects/sb_101hov/reports.html

Green, Howard
Comment 7
The UPRR bridge replacement is being sought and developed by the City of Santa Barbara to improve all modes of travel between U.S. 101 and Los Patos Way along Cabrillo Boulevard, with an emphasis on pedestrian and bicycle connectivity. This project has a distinct objective that is separate and mutually exclusive from the purpose and need of the South Coast 101 HOV Lanes project. Due to the close proximity of the South Coast 101 HOV Lanes project to the Cabrillo Boulevard improvements, Caltrans staff have been participating regularly in the Union Pacific Railroad Bridge Replacement Project Development Team meetings.

Improvements to the Cabrillo Boulevard/Hot Springs Road Interchange portion of the South Coast 101 HOV Lanes project propose to replace and reconstruct the northbound and southbound 101 bridges. The existing left-hand off-ramp for both northbound and southbound will be removed. A new southbound on- and off-ramp diamond shape configuration (Type L-1) will be constructed. A new northbound off-ramp will be constructed and the existing northbound on-ramp will be modified. All Cabrillo interchange improvements associated with the HOV project are independent of the proposed Union Pacific Railroad Bridge Replacement project.

Green, Howard
Comment 8
Caltrans District 5's standard practice is to have a hard copy set of the environmental document and any relevant technical studies available for review at the District Office in addition to providing hard copies of the environmental document to libraries along with CDs of any relevant technical studies. Many libraries have expressed the fact they have a shortage of available space to store multiple large technical studies that often accompany environmental documents. In the case of this particular project, the traffic studies alone were over 2,000 pages and contain many appendices.

Green, Howard
Comment 9
The list of projects included in Table 2.9, the Potential Cumulative Project List has been updated in the Final Revised EIR.

Green, Howard
Comment 10
This comment is outside the scope of the Revised EIR.

Green, Howard
Comment 11
Due to the possibility that Caltrans and the local agency may not be able to successfully complete the recommended mitigation in a timely manner, or may decide not to participate in an agreement with Caltrans, it is difficult to conclude that the overall significant impact to intersections will be reduced to less than significant. Thus, pursuant to CEQA Guidelines Section 15043, a Statement of Overriding Considerations has been prepared for this project.

However, with respect to funding for mitigation identified in the Revised EIR, the mitigation improvements will become the responsibility of the HOV project sponsors.

If impacted intersections or the Union Pacific Railroad Bridge Replacement project remain undone due to lack of funding or the ability of Caltrans and the local agency can't come to an agreement, the existing conditions and intersection configurations will remain as they are.

Valerie J. Hoffman
Ronald P. Noe
3288 Beach Club Rd.
Carpinteria, CA 93013

Scott Eades
Jason Wilkinson
Jason.wilkinson@dot.ca.gov
Caltrans, Attn: Jason Wilkinson
50 Higuera St
San Luis Obispo, CA 93401

Dear Scott and Jason,
First, Scott, thank you for taking the time to talk with me today about the noise abatement/soundwall issues regarding Beach Club Road in Carpinteria. Following are the issues that concern us here at Beach Club Road regarding the EIR.

Lack of Notice: Since we talked I have communicated with several neighbors who confirm that none of us received postcards or notices of the original EIR or an opportunity to comment or attend a public hearing. The Padaro Association does not represent Beach Club Road homeowners and does not communicate with the officers of our neighborhood association, the Serena Cove Owners Association. Notice to them does not constitute notice to us. And indeed, we didn't have appropriate notice to be heard or due process.

Error in Counts of Affected Residential Units: Here at Beach Club we definitely want and need a soundwall. The EIR confirms that noise levels are and will be excessive with the 101 widening. Moreover, this is a dense neighborhood of 27 homes, not 11 units as provided in the EIR in connection with R35 and R35A. While the few homes on the beach may not benefit at the 5dcb level from a soundwall, more than 20 homes are substantially affected by noise from the 101 and would receive that amount of benefit, and more.

Financial Feasibility: No one at Beach Club appears to have any notice of, or involvement in, the reassessment noted on the original EIR at page 387 that says, *"Following public circulation of the draft environmental document, Caltrans staff reevaluated Soundwall S281 focusing on high-density development areas located behind the wall to identify short sections that might be financially reasonable. No additional locations were found to be financially reasonable. The remaining portion of Soundwall S281 was determined to be financially reasonable as a stand-alone wall segment."* We do not understand why a soundwall to address the excessive noise at

the Beach Club area portion of the affected Receptor Group 10 was deemed not financially feasible while the easterly end was deemed financially feasible. The same building conditions exist at both ends, while the Beach Club soundwall would have been able to be shorter and cover more households per foot. This is another due process problem that stems from the failure to provide proper notice to and communication with Beach Club residents.

While we understand the current comment period is meant to address the issue of intersection congestion which arose in the course of evaluating the original EIR, the issues we at Beach Club are raising now are critical to the soundness of the EIR as a whole and must be reviewed. Absence of due process is a fundamental condition for the final approval of any document as important as this EIR. Because this EIR affects so many Beach Club residents, and their ability to enjoy their homes as well as preserve the substantial financial investment they have in their residences, it is essential that the issue of noise abatement be carefully considered for this group of residents. The failure of due process in noticing the Beach Club residents or its neighborhood association, the Serena Cove Owners Association, of the Environmental Review process must be remedied. In addition, the vague reference to financial nonfeasibility in the original EIR does not meet the standard for appropriate consideration of, or communication to, Beach Club Road residents.

We would like not to be an impediment to the process and believe we may be able to resolve this issue if Caltrans would be willing to reassess and change its soundwall determination for the Beach Club area. If you have questions you may reach me at valeriehoffman123@gmail.com. You may also wish to communicate with our Serena Cove Owners Association (SCOA) President Renny Yater or SCOA Architectural Review Committee member Margaret Baker who will be writing their own letters to you.

Thank you for your consideration,

Valerie J. Hoffman

Ron Noe

Valerie J. Hoffman
Ronald P. Noe
3288 Beach Club Rd.
Carpinteria, CA 93013

January 31, 2017

Scott Eades
Jason Wilkinson
Jason.wilkinson@dot.ca.gov
Caltrans, Attn: Jason Wilkinson
50 Higuera St
San Luis Obispo, CA 93401

This letter supplements my letter of yesterday January 20, 2017 regarding the 101 Highway Widening/Soundwall EIR.

After what I thought was an extremely pleasant telephone conversation with Scott Eades yesterday late afternoon, I was very disturbed to learn that contrary to what Scott told me, the current comment period that ends today is not limited to comments that relate to intersection congestion. I now understand the judge's order in the current litigation includes a requirement that Caltrans address all cumulative traffic issues, not just the issues related to the intersections. Scott had told me that the issues I was concerned about, namely the noise issues and the EIR's inaccurate evaluation of density regarding the number of homes affected on Beach Club Road, were not going to be reviewed by anyone at this point. He said we were too late to have these issues addressed; that there had been a lawsuit that Caltrans had won regarding the soundwall at Fernauld Point and another lawsuit that was being wrapped up and that nothing could be done about the Beach Club Road issues at this time. He told me that our neighborhood association, the Padaro Association, had been notified years ago of the opportunity to comment. I told him that the Padaro Association is not the neighborhood association for Beach Club and that our association (the Serena Cove Owners Association) had never been contacted. He said he was not aware of that. He told me that there might be some opportunity for our neighbors to have our issues reviewed in about 2 years when a Coastal Development Permit is applied for and the County of Santa Barbara is involved but until then there is really nothing we could do.

While I submitted some short comments nevertheless, Scott led me to believe that it was useless to contact my other Beach Club neighbors so that they could submit comments by today's date as well. As it was, his representation caused me to contact only 2 of the 26 Beach Club homes other than my own. I was able to contact Margaret Baker who is active in our neighborhood association, the Serena Cove Owners Association. And she was able to contact Reynolds Yater, the President of our neighborhood association. We still believe we have not had an opportunity to have our issues addressed, or an opportunity to effectively have our Beach Club neighbors be heard.

Margaret Baker has attempted to have some communication with Jason Wilkinson today, forwarding a letter that she was submitting on behalf of Beach Club Road's neighborhood association's President Reynolds Yater that requested a review of the Beach Club situation. Jason, in writing informed Mrs. Baker that "At this time we are only accepting comments on the Draft Revised EIR that pertain to the study intersections and related cumulative impacts and so your comment and my response will not be included in the Final Revised EIR." Accordingly, Jason refused to make Mr. Yater's letter or his communication with Mrs. Baker a part of the record. We believe this is an inappropriate refusal to consider our comments in light of the Judge's Order to consider cumulative traffic impacts. We believe our concerns are with respect to traffic impacts as they involve traffic noise and pollution and related issues, as well as due process rights. I am attaching the email that Jason sent to Mrs. Baker.

CEQA Review Standard: I understand that there is a standard for additional review under CEQA that involves demonstrating that there are changed circumstances. There is a new significant impact and substantially worsened environmental impact in the Padaro/Beach Club area by the 101 Widening.

The recent drought has caused a substantial sound and pollution buffer that we used to have disappear. Many of the large trees have died between Padaro and the 101, at and around Beach Club. The effect of the drought with the tree death reached a new level in late 2016 with trees dying in record numbers. Indeed another large dead tree just fell across Padaro a few weeks ago. Those dead trees and heavy brush have been removed and consequently the noise and particulates and debris and pollution from the 101 is flowing towards Beach Club without buffer creating a health hazard as well as noise and other pollution. We used not to be able to actually see the 101 from Beach Club, now it is very evident and fully visible. While tree and foliage cover is not a perfect soundwall, it did act as a buffer and it is now gone. The large trees we have lost will not be replaced by the railroad who owns the property between Padaro and the 101 and we have no right to plant on their land. Consequently, the Beach Club neighborhood of 27 homes will suffer a substantial environmental impact.

Other changed circumstances are the increase in traffic caused by more commuters coming from Ventura and other points south as a result of all the increased residential housing that has recently been completed for residential living in Carpinteria, Ventura and points south. Indeed, more housing is being developed in Ventura and this will continue to aggravate the noise and traffic congestion caused by the increasing number of commuters. Since the sound study in the EIR was completed in 2009, the noise levels have increased dramatically, well above the levels permitted. A new sound study should be conducted to judge the seriously increased noise level.

The EIR's discussion of why soundwall S281 should not cover R34 and 35 in Receptor Group 10 is not adequate. The EIR reasoning for declining to build a soundwall for Receptor Group 9 (not RG 10 which is the Beach Club area) describes financial reasons for not building it, stating that the overlapping wall of S257 and S281 were too expensive. However, that overlap of S257 and S281 was at the extreme easterly end of Padaro, not towards the westerly end where Beach Club's 27 homes are located and is therefore not relevant to why Beach Club could not be shielded.

The EIR also describes the "stopping sight distance" safety issue that prevents building the center of S281. That also does not relate to Beach Club because Beach Club is not at the center

of the Receptor Group; it is at a straightaway in the 101, at the far westerly end of the Receptor Group 10 at R 35A and R35. . The center of the Receptor Group 10 is at R 32 where there is a curve in the 101. But even this position by Caltrans is not consistent with what they have proposed at other curves in the highway. For example, there is an inside curved soundwall that is proposed for just west of the Bailard exchange that has even more curve to it, that is just as much a safety issue but yet in the EIR there is no mention of a safety issue there relating to stopping sight distance. This inconsistency demonstrates that the rationale used to decline to build a soundwall near Beach Club is inadequate.

As noted in my letter to you yesterday, we would like not to be an impediment to the process and believe we may be able to resolve this issue if Caltrans would be willing to reassess and change its soundwall determination for the Beach Club area. If you have questions you may reach me at valeriehoffman123@gmail.com.

Thank you for your consideration,

Valerie J. Hoffman

Ron Noe

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From: **Valerie Hoffman** valeriehoffman123@gmail.com
Subject: **Fwd: CalTrans, Jason Wilkinson**
Date: **Jan 31, 2017, 5:33:12 PM**
To: **Hoffman, Valerie** VHoffman@seyfarth.com

Begin forwarded message:

From: "Wilkinson, Jason J@DOT" <jason.wilkinson@dot.ca.gov>
Date: January 31, 2017 at 3:14:54 PM PST
To: Margaret Baker <mbaker1234@icloud.com>
Subject: RE: CalTrans, Jason Wilkinson

Hello Margaret,

At this time we are only accepting comments on the Draft Revised EIR that pertain to the study intersections and related cumulative impacts and so your comment and my response will not be included in the Final Revised EIR. However, I can still provide some information regarding the portion of the soundwall that was proposed but not recommended for construction in your area. I took the response below from the Final Environmental Document (August 2014) regarding the soundwall that was proposed to provide abatement for homes along Padaro Lane. Our conclusion on the portion of soundwall S281 was that it was is not recommended for near Beach Club Drive for construction because it was not financially reasonable.

"Only a portion of Soundwall S281 could be proposed for construction due to the center portion of the wall being dropped for safety reasons when it was determined it would have blocked "stopping sight distance" for traffic. The remaining eastern portion of S281was determined to be financially reasonable as a stand-alone wall segment and is recommended for construction. This portion of Soundwall S281 together with S257 was evaluated as a two-wall system to determine if S257 could be constructed. However, Soundwall S257 as an independent wall was found not to be financially reasonable and therefore was not recommended for construction. This is mostly due to the additional costs associated with acoustically "overlapping" the two walls coupled with the less dense development at the southern end of Padaro Lane. ***See Volume I, Section 2.2.7, for more information on Soundwalls S281 and S257.***"

In regards to public noticing for the Traffic focused Draft Revised EIR, we had newspaper ads go out in a couple of newspapers (NewsPress and Montecito Journal) notifying the public the document was available for comment and indicating when the public comment period would end.

If you have questions please let me know.

Regards,
Jason Wilkinson
Senior Environmental Planner
Caltrans District 5, SLO
(805) 542-4663

-----Original Message-----
From: Margaret Baker [mailto:mbaker1234@icloud.com]
Sent: Tuesday, January 31, 2017 1:30 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Cc: theboardingcompany@hotmail.com
Subject: CalTrans, Jason Wilkinson

Reynolds Yater, 3221 Beach Club Rd., Carpinteria, CA 93013

Scott Eades
Jason Wilkinson
Jason.wilkinson@dot.ca.gov
CalTrans, Attn: Jason Wilkinson
50 Higuera Street
San Louis Obispo, CA

Dear Sirs:
I am the President of the Serena Cove Owners Association whose members include the homes accessed by Beach Club Road in Carpinteria. This month I became aware for the first time of an Environmental Impact Report which finds unacceptable noise levels for the Beach Club Road area and provides for a soundwall for the eastern end of Padaro Lane but does not shield Beach Club from noise. I have never received notice of the EIR, the public hearings or comment period regarding it, either as Present of our Association or as an individual living on Beach Club Road. I never received postcards or mailings of any type regarding this and certainly would have been actively involved to represent homeowners if I had been notified. We certainly want and need a wall to lessen the excessive noise from 101; most of our neighborhood of 27 homes has excessive noise levels now. The noise will be much worse when the highway is widened. I also wanted to say that although I now understand you may have communicated with The Padaro Association, that Association did not communicate with me or the other officers of the Serena Cove Owners Association and it does not represent our Beach Club Neighborhood. Because of this, the Beach Club Road community has been denied a proper opportunity to voice its concerns.

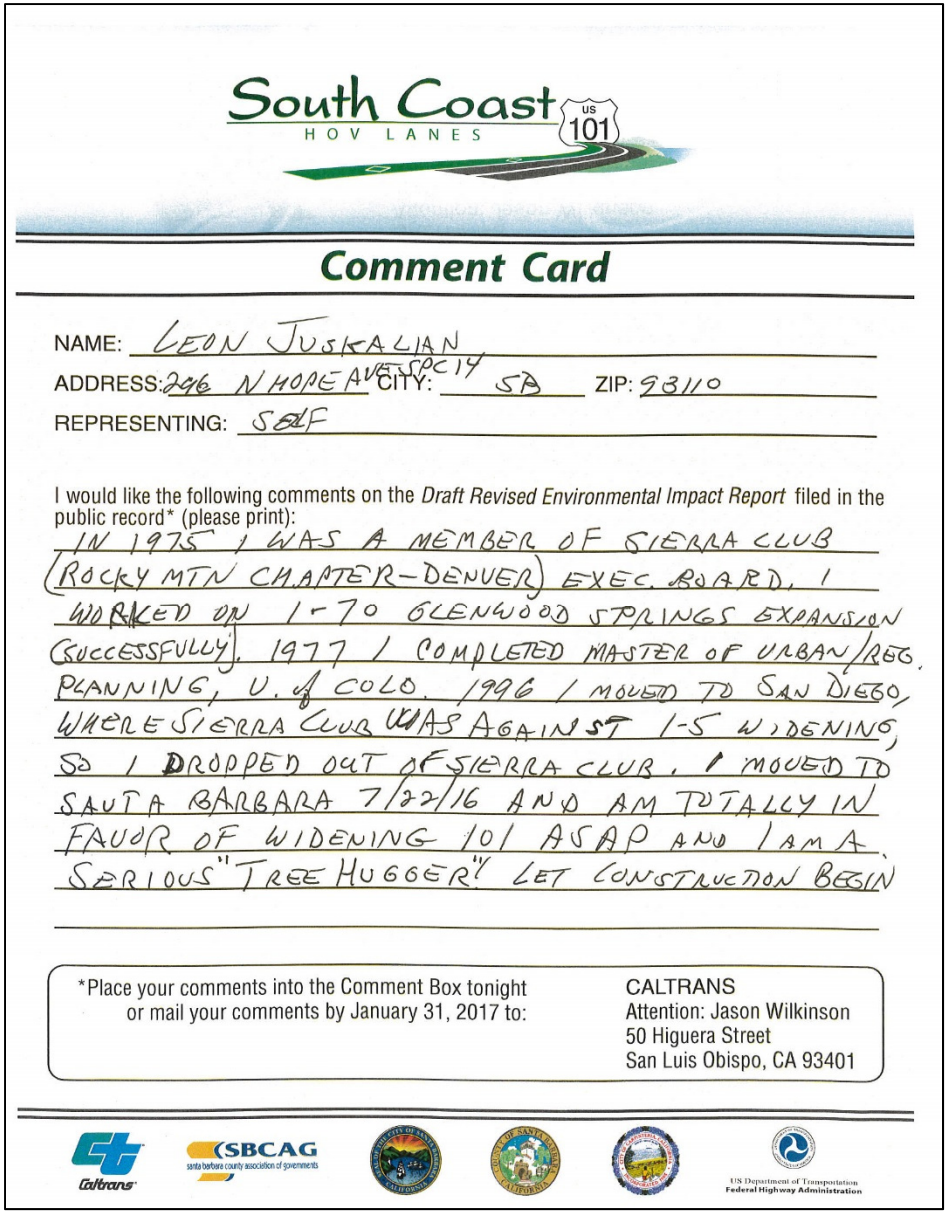
Please provide the Serena Cove Owners Association due process and a proper opportunity to all with CalTrans about the feasibility of placing a soundwall that will abate the noise at Beach Club Road. If you would like to contact me, I can be reached at the above address or at 805 684 5956.

Sincerely Reynolds Yater

Sent from my iPhone

Hoffman, Valerie

Topics raised in the letter and attached emails are outside the scope of the Revised EIR. A response to the email was provided by Jason Wilkinson, Senior Environmental Planner.



South Coast HOV LANES US 101

Comment Card

NAME: LEON JUSKALIAN

ADDRESS: 296 N HOPE AVE SPC 14 CITY: SB ZIP: 93110

REPRESENTING: SELF

I would like the following comments on the *Draft Revised Environmental Impact Report* filed in the public record* (please print):

IN 1975 I WAS A MEMBER OF SIERRA CLUB (ROCKY MTN CHAPTER-DENVER) EXEC. BOARD. I WORKED ON I-70 GLENWOOD SPRINGS EXPANSION SUCCESSFULLY. 1977 I COMPLETED MASTER OF URBAN/REG. PLANNING, U. of COLO. 1996 I MOVED TO SAN DIEGO, WHERE SIERRA CLUB WAS AGAINST I-5 WIDENING, SO I DROPPED OUT OF SIERRA CLUB. I MOVED TO SANTA BARBARA 7/22/16 AND AM TOTALLY IN FAVOR OF WIDENING 101 ASAP AND I AM A SERIOUS "TREE HUGGER!" LET CONSTRUCTION BEGIN

*Place your comments into the Comment Box tonight or mail your comments by January 31, 2017 to:

CALTRANS
Attention: Jason Wilkinson
50 Higuera Street
San Luis Obispo, CA 93401

Caltrans SBCAG santa barbara county association of governments US Department of Transportation Federal Highway Administration

Juskalian, Leon

Thank you for your support of the project. The current expectation is that construction of the first segment of the project will occur in Carpinteria. Construction on this phase is scheduled to begin in mid-2019.

From: Ariana Katovich [mailto:arianais@gmail.com]
Sent: Monday, January 30, 2017 1:56 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Comments to DREIR, South Coast 101 Widening Project

Jason Wilkinson, Sr. Environmental Planner
Caltrans District 5 Project Management
50 South Higuera
San Luis Obispo, California 93401

Dear Mr. Wilkinson:

Please accept these comments to the South Coast 101 Widening Project DREIR.

The DREIR contains serious omissions and errors that make informed public comment impossible. The DREIR must be revised and recirculated for public comment. 1

Adequately mitigate the Project's impacts

The EIR does not show that the proposed mitigation measures will effectively reduce impacts, or evaluate whether they may cause additional impacts. This analysis must occur in a revised EIR. 2

Because the EIR does not identify significant impacts to pedestrian and bicycle safety, it also fails to mitigate these impacts. The EIR must be revised to recognize and fully mitigate significant pedestrian and bicycle safety impacts. 3

Caltrans proposes to fund only a tiny fraction of the cost of the required improvements to local intersections. To ensure that required mitigation is in place before the Project is constructed, Caltrans must commit to funding a much higher levels of funding.
The "mitigation strategy" is not fully identified in the EIR, but is improperly deferred to "further coordination with the local jurisdictions". Specific information about infrastructure improvements must be circulated to the public to review in a revised EIR. 4

The DREIR failed to properly classify the changes from the project to each impacted intersection addressed in the DREIR. I cannot tell how the intersections that I use regularly will be impacted. 5

The DREIR ignored the effect of the project and increased on-street traffic during peak periods on the safety of pedestrians and bike riders. Expanding off-ramp lanes, increasing the amount of traffic exiting the freeway onto surface streets, and not providing enhanced bike and pedestrian facilities substantially increases the risks for non-vehicle travelers on the South Coast. This is a significant impact that should be recognized and avoided or mitigated. 6

The DREIR failed to apply the CEQA Traffic Thresholds used in the County and each City. Caltrans failed to explain how the threshold they used was superior to the City and County thresholds, which are more stringent. I do not understand how applying weaker CEQA thresholds can result in a complete disclosure of the project's environmental impacts. 7

The DREIR should fully define each mitigation measure it expects will reduce project impacts, and examine the impacts from the mitigation measure. All mitigation measures must be funded, especially when that mitigation measure responds to increased public safety hazards. 8

The DREIR's cumulative impact assessment must include all projects along the 101 corridor, include the predicted growth from each end of the corridor and from within, and recognize induced travel as a major project impact. 9

To fulfill CEQA's purposes, the public should be given a complete Project Description, all potentially significant impacts should be clearly identified, and a robust alternatives analysis performed, before identifying and ensuring the adoption of feasible mitigation measures.

This is a very significant project for the South Coast. The impacts will be felt daily and for a decade or longer. Please get the CEQA analysis right, to inform decision-makers and the public.

Thank you,

Ariana Katovich

Katovich, Ariana
Comment 1
The Final Revised EIR has been updated to correct data transfer errors. One new location, Olive Mill Road/Coast Village Road, was added to the list of impacted intersections as a result of these corrections. This updated information does not substantially affect the overall analysis or conclusions presented in the Draft Revised EIR. In particular, the updates do not alter the conclusion of the Draft Revised EIR that the project would result in a significant impact related to substantial delays at intersections. In addition, the public was not deprived of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate such an effect that Caltrans has declined to implement. After assessing the updated information based on the standards for recirculation found in Section 15088.5 of the CEQA Guidelines, it was determined that recirculation of the Draft Revised EIR is not required.

Any text revisions made between the Draft and Final Revised EIR will be denoted by a solid vertical line on the right side of the page indicating updated or new information. Revisions to any traffic data in tables will be indicated by blue shading in the cell that has been updated.

Katovich, Ariana
Comment 2
Table 2.8 in the Final Revised EIR shows mitigation options and Caltrans' equitable share contributions for each of the eight impacted intersections. These eight locations where proposed mitigation improvements will occur have independent utility and will have separate environmental studies and coastal permitting.

The equitable share calculations used for mitigation are based on the differences between Build and No-Build conditions for trips entering the intersection. The equitable share calculations were performed based on the Caltrans *Guide for the Preparation of Traffic Impact Studies.* If the intersection is State-owned and the improvement totals less than $5,000, Caltrans will pay the full cost of the improvement. Each proposed mitigation design would reduce the amount of delay added by the project (difference between Build and No-Build delay in seconds).

The Final Revised EIR includes information on the level of delay reduction expected associated with the specific mitigation options presented (see Table 2.8).

Katovich, Ariana
Comment 3
The issue of pedestrian and bicycle safety is outside the scope of the Revised EIR.

According to the California Vehicle Code (CVC 21200), bicyclists generally have the same rights and responsibilities as motor vehicle drivers. As such, bicycles are assumed to be part of the vehicle stream and are adequately served by the various types of intersections, whether signalized or unsignalized. When a bike lane or shoulder exists, it is anticipated that bikes using the bike lane will operate in tandem with the vehicle stream.

With recent adoption of policies on complete streets, bicycle and pedestrian access and safety are taken into consideration when Caltrans designs projects. When changes or upgrades to intersections are occurring with the HOV project, features to accommodate bicycles and pedestrians will be integrated into the design and constructed with the project, where appropriate.

For safety reasons, bicycles and pedestrians are prohibited from traveling on US 101 within the project limits. In areas where bicycle and pedestrian access is allowed and physical improvements are proposed as part of the South Coast 101 HOV Lanes project, bicycle and pedestrian access will be addressed in the design phase of the project, in compliance with Caltrans complete streets policy. Bicycle and pedestrian safety and accessibility will also key considerations in the design of the proposed mitigation improvements. Examples of features which will be considered in the design of all intersection modifications associated with this project include, but are not limited to: sidewalks, crosswalks, adequate shoulders to accommodate bicyclists, signs to

direct bikes and pedestrians, Class II Bike Lanes, and other related Class II bikeway channelization. Bus stop and other transit accommodations will also be integrated into the design where appropriate.

Furthermore, all pedestrian facilities within the project limits that are modified as part of the project would comply with the Americans with Disabilities Act (ADA). During construction, special consideration would be given to bicycles, pedestrians, and persons with disabilities for continued access through construction areas. Any improvements considered as part of this project would be coordinated with adjacent project efforts to ensure continuity of bicycle and pedestrian facilities.

Katovich, Ariana
Comment 4
See response to Comment 2.

Katovich, Ariana
Comment 5
See Response to Comment 3.

Katovich, Ariana
Comment 6
See response to Comment 3.

Katovich, Ariana
Comment 7
The Caltrans *Guide for the Preparation of Traffic Impact Studies* was designed as guidelines to help the Caltrans Intergovernmental Review (IGR) Department assess local development impacts to State facilities. The *Guide* states that "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS." Caltrans has never established statewide standards of significance for traffic impacts and none exist in the *Guide*. However, an approach was formulated in response to the Writ to identify impacts at individual intersections by considering LOS and seconds of delay at signalized and un-signalized intersections. This approach offers a consistent corridor-wide characterization of the driver's experience based on the full HCM methodology because it reflects whether pronounced delay is experienced at a signal or a stop sign. From the driver's perspective, waiting for a longer period of time at a signal is tolerated, whereas waiting the same length of time at a stop sign is less tolerable (HCM 2010).

The criteria established to determine whether an intersection will experience substantial delays with the project are shown below:

- For signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 20 seconds or more with project.
- For un-signalized intersections: A LOS grade decrease to LOS D or lower with morning or afternoon peak hour delay increased by 10 seconds or more with project.

The 10- and 20-second measurements are based on the delay change increment for unsignalized and signalized intersections respectively between LOS C/D cusp to D/E cusp.

As the lead agency, Caltrans has the discretion to set standards of significance for use in an EIR. This allows the lead agency to determine significant impacts. This information was found on page 41 of the Draft Revised EIR and has been updated in the Final Revised EIR on page 43. The lead agency is responsible for determining whether an adverse environmental effect identified in an EIR should be classified as "significant" or "less than significant." (Guidelines, § 15064, subd. (b).) There is no single definition of a "significant effect," because the significance of an activity may vary with the setting. (Guidelines, § 15064, subd. (b).)"

Katovich, Ariana
Comment 8
See response to Comment 2.

Katovich, Ariana
Comment 9
Page 36 of the Final Revised EIR includes a discussion of cumulative project conditions. This analysis takes into account all transportation and land use projects included in the Regional Transportation Plan and general plans prepared by local jurisdictions in the project area including the South Coast 101 HOV Lanes project.

The topic of induced travel is outside the scope of this Revised EIR. The following response is provided for clarification only.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-SCS Final EIR is available for review at:
http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

As discussed in the 2040 RTP-SCS Final EIR, the term induced travel is often misused to suggest that increases in highway capacity are directly responsible for increases in traffic, when in fact, the relationship between increases in highway capacity and traffic is very complex—involving various travel behavior responses, residential and business location decisions, and changes in regional population and economic growth. Most studies examining the issue have concluded that trips related to socioeconomic growth and trips diverted from other facilities—as opposed to induced travel—account for the majority of increased travel. Some studies have concluded that if new highway capacity does fill up, it is due not to induced travel, but rather to travelers diverting from other facilities or time periods in the short term, and to socioeconomic growth in the long term. Local data from the 2040 RTP-SCS Final EIR confirms that the majority of traffic growth in the long term is due to socioeconomic growth, regardless of roadway improvements.

Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi (2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

> Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

> Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the 2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

From: Art Ludwig/ Oasis [mailto:oasis@oasisdesign.net]
Sent: Tuesday, January 31, 2017 5:36 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: EIR for widening highway 101 between Santa Barbara and Ventura needs a lot more work

Dear Caltrans:

Please provide an EIR that provides all the information necessary for an informed decision and effective mitigation of the 101 widening through Santa Barbara. The vast majority of the public has no idea of the extent of the negative effects from this project. They should be properly informed so they are not shocked when congestion is worse on some parts of the freeway.

The EIR that Judge Anderle pronounced to be woefully inadequate, still is.
The point of the EIR is to inform elected officials, staff and citizens so there is less surprise about effects and mitigation can be planned effectively. We need honest modeling to understand how congestion would move from the sparsely inhabited coast to the city streets, and how this could be mitigated. Specifically, we ask that you address these points:

Run the model and report the results without the unlikely 36% traffic diversion to unfunded alternatives—You cannot both disavow *any* responsibility for funding or implementing freeway diversion and count *all* of the projected 36% diversion from freeway volumes. 1

Run honest modelling and report the results *without* the unfunded expansion of several intersections the city has informed you will be impacted more than the EIR indicates— Construction needed in the city to unblock increased freeway traffic at the first lights after off ramps would cost the city $45 million dollars. Caltrans is offering to pay 1% of this. Considering that the city is years and millions behind on maintaining the roads we already have, the traffic modelling cannot assume that these projects will be in place to get cars off the freeway and into town. 2

Include credible assumptions about induced demand —Induced demand, the undoing of many widening projects, and the reason that the methodology used in the EIR has been abandoned by the state—is drastically underestimated. It is uncontroverted - eliminating the congestion on 101 will induce additional traffic in that stretch, and 10 years after widening, congestion on the widened section will be worse than it is today. 3

Run modelling and report the results showing the amount and location of increased city congestion *after* the first lights —The amount and location of increased city congestion **after** the first intersection from the freeway and how to mitigate this new congestion are not addressed in the EIR at all. What happens when the perfect storm of impacts below hits city streets? 4
1) 36% more traffic than modeled (until train is in place, which with pockets emptied by the lane, may be never)
2) Real induced demand much more than with outmoded modeling
3) City street capacity lower due to slower speeds on less maintained surfaces from diversion of maintenance funding to highway widening
4) Shift from bicycling and walking to cars, driven by increased danger on the streets
With the current EIR, we don't have an answer to any one of these factors, let alone all of them together, even though all of them together is quite likely to occur.

Include health impacts—This project will move congestion from a very sparsely populate area to a much more densely populated one. It will also increase surface street congestion, and reduce healthy exercise from biking and walking. What are the health impacts? 5

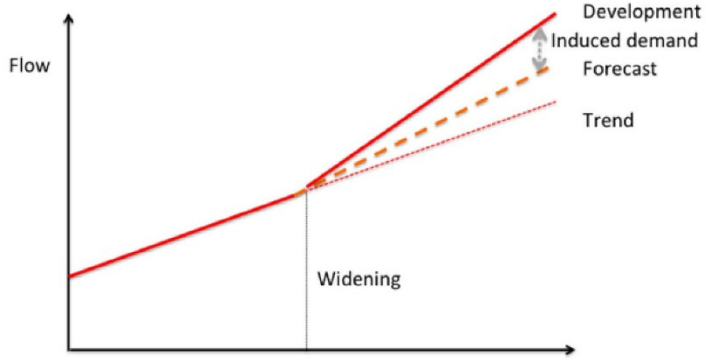
Include credible assessment of climate safety impacts—Climate safety is so much more acute a concern since this project was started just ten years ago that it constitutes a *previously recognized impact that is significantly worse based on new developments* that should be your top factor going foward for this and all other projects. The current assessment is a cursory guess at best. 6

See how this project looks using the new preferred evaluation metric, VMT—This project was evaluated using a yardstick since discarded by the State as inadequate-LOS**.** The new yardstick may not be completely codified, but you could at least apply it to the extent possible. it would be a far better distinction to be the one of the first projects shown to provide no benefit using VMT than one of the last approved based on LOS and built to no benefit. 7

The resulting revised EIR should be recirculated—to give the public a chance to participate. The most pertinent question today for the majority of people who will pay for and be impacted by this is: "will this project reduce or increase suffering from traffic?" This can only be answered with an honest and complete EIR. 8
Thank you,

Art Ludwig

References-induced demand

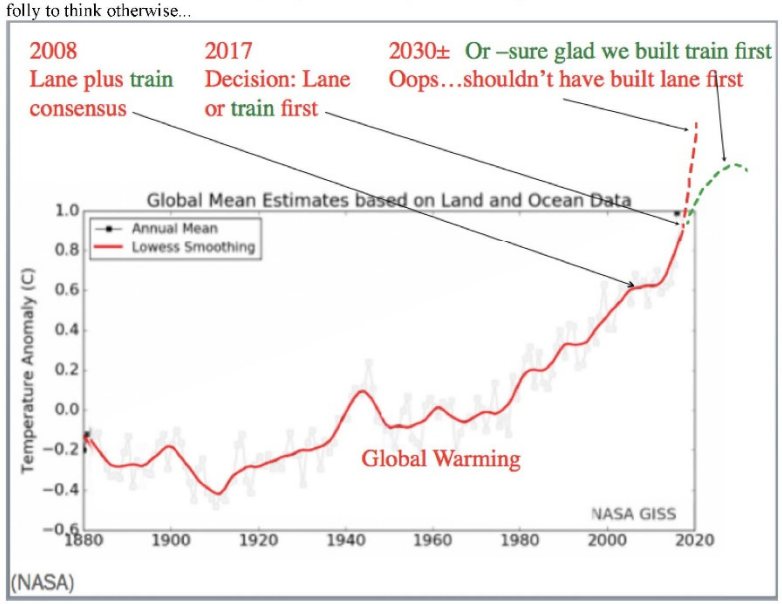


Climate safety

should arguably outweigh every other consideration in our decision making process henceforth…

CO2 concentration are climbing precipitously….

…and have apparently has hit an tipping point where impacts are really kicking in. Look how much temps have gone up since the 2008 consensus-- climate hazard is a *previously recognized impact that is significantly worse based on new developments;* there is significantly less uncertainty that this is an issue requiring an immediate, decisive change of course. It would be folly to think otherwise...



Ludwig, Art

Comment 1

The project traffic studies, as well as local experience, demonstrate that growing congested conditions on U.S. 101 are resulting in diversion of through trips onto the local parallel streets in this corridor. This diversion of trips to avoid congestion on the mainline will continue to worsen until the new HOV lanes are constructed. Over the long-term, the project will reduce mainline congestion during peak periods. Please refer to Appendix I in the Final Revised EIR for Peak Hour Congestion Maps that provide a visual representation of proposed delay reduction throughout the corridor.

The project traffic studies take into account expected and financially constrained transportation improvements which are planned within this corridor. This includes planned commuter friendly rail service in the corridor, consistent with the 101 In Motion consensus recommendations. Page 57 of the Final Revised EIR includes a discussion of cumulative project conditions. This analysis takes into account all transportation and land use projects included in the Regional Transportation Plan and general plans prepared by local jurisdictions in the project area including the South Coast 101 HOV Lanes project.

The 101 in Motion Implementation Plan, which is included in the 101 In Motion Final Study (SBCAG, 2006) describes phased development and implementation of rail service to serve during the peak commute hours in the 101 corridor. The 101 in Motion Final Study also describes the complexity of seeking approval from the various rail stakeholders in the region to implement this type of rail service.

SBCAG has been working with Caltrans Division of Rail, the California State Transportation Agency, Union Pacific Railroad, the Ventura County Transportation Commission, the San Luis Obispo Council of Governments, Metrolink, AMTRAK and LOSSAN (Los Angeles to San Diego) since the passage of Measure A in 2008 to deliver increased passenger rail service in the 101 corridor.

The first phase of the service is described as an initial pilot service involving two daily round trips with minimal capital acquisition. It has been discovered that the most cost effective and feasible approach has been to work with AMTRAK and LOSSAN who currently operate five daily round-trip passenger trains in the 101 corridor. Since, none of these trains operates in the peak hour when commute friendly service is in highest demand, SBCAG, as a member of the LOSSAN Joint Powers Authority (JPA), has been working with the JPA and the California State Transportation Agency to retime one of these trains to serve during peak commute hours. The objective is to begin this service in April 2018. The retimed AMTRAK service will provide morning northbound peak hour rail service connecting stations in Camarillo, Oxnard, Ventura, Carpinteria, Santa Barbara and Goleta. The same stations will have evening peak hour service in reverse order. The passenger price for this new service will be competitive with the Coastal Express regional transit service that currently operates in the corridor. SBCAG is working on options to develop comprehensive last-mile service connections to link passengers from train stations to work sites including bicycle rental and bicycle lockers, connecting shuttle and bus services, and transportation network company service agreements. Ridership goals for this first train are approximately 200 passengers per day.

The LOSSAN JPA is also planning to implement a sixth round trip in the next 2-3 years that could also be scheduled to serve the peak hour market between Ventura and Santa Barbara counties, which would result in two peak hour round trips in the 101 corridor. This would coincide with start of construction with the Highway 101 HOV project and meet the initial service levels identified in the 101 in Motion Study. Longer term capital infrastructure projects that are also under development include the Seacliff rail siding extension project which will improve passenger rail on-time performance.

Passenger rail service expectations identified through the SBCAG 101 In Motion Study are still appropriate as a long term goal for passenger rail in this corridor.

Ludwig, Art
Comment 2

Refer to updates to both Table 2.8 and page 45 in the body of the Final Revised EIR that discusses Avoidance, Minimization, and/or Mitigation Measures. Caltrans intends to work diligently with each local jurisdiction to see that all identified mitigation measures are fully implemented.

Due to the possibility that Caltrans and the local jurisdictions may not be able to successfully complete the recommended mitigation in a timely manner, or if one of the cities or county decides not to participate in an agreement with Caltrans, it is difficult to conclude that the overall significant impact to intersections will be reduced to less than significant. Thus, pursuant to CEQA Guidelines Section 15043, a Statement of Overriding Considerations has been prepared for this project.

With respect to funding for mitigation identified in the Revised EIR, the mitigation improvements will become the responsibility of the HOV project sponsors.

Ludwig, Art
Comment 3

This topic is outside the scope of the Revised EIR. The following response is provided for clarification only.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-SCS Final EIR is available for review at: http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

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Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi (2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

> Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

> Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the

preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the 2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

Ludwig, Art
Comment 4
Refer to response to comment 3

Ludwig, Art
Comment 5
This comment is outside the scope of the Revised EIR.

Ludwig, Art
Comment 6
This comment is outside the scope of the Revised EIR. Refer to the Air Quality and Climate Change sections of the 2014 EIR.

Ludwig, Art
Comment 7
This topic is outside the scope of the Revised EIR.

SB 743, signed into law on September 27, 2013, requires the California Office of Planning and Research (OPR) to propose revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts within transit priority areas. (Pub. Resources Code, § 21099, subd. (b)(1).) In developing the criteria, OPR shall recommend potential metrics to measure transportation impacts, that may include, vehicle miles traveled, among other criteria. SB 743 further provides that OPR may adopt guidelines establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas. (Pub. Resources Code, § 21099, subd. (c)(1).) The CEQA Guidelines from OPR have not been updated to address VMT implementation based on SB 743. In January, 2016, however, OPR issued revised draft proposed changes to the CEQA Guidelines, including proposed new Section 15064.3 (determining the significance of transportation impacts). (OPR, 2016.) That draft section specifically provides that the new guidelines are intended to apply prospectively and agencies have a two-year period after the expected adoption date for the provisions of the new guidelines to apply.

Ludwig, Art
Comment 8
The traffic analysis in the 101 HOV Project technical studies demonstrate that the addition of the proposed HOV lanes in the ten-mile corridor provides the congestion relief required to meet the project purpose and need. Furthermore, the traffic analysis shows that the proposed project will improve most of the intersections in the corridor with the exception of the noted intersections that will experience substantial delays with the project. Table 2.8 contains the mitigation plan that lists these noted intersections.

From: Jeff [mailto:Jeff@valuepricedmeds.com]
Sent: Thursday, January 19, 2017 4:05 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Draft Revised Environmental Impact Report

Hello Jason,

Subject :
South Coast 101 HOV Lanes Project
Santa Barbara County
05-SB-101-PM 1.4 to 12.3
05-0N700
Project ID# 0500000225
SCH # 2009051018
Draft Revised Environmental Impact Report

Where in the Draft Revised Environmental Impact Report is the revised table that replaces Table 2.51 2040 Cumulative-plus Traffic Conditions? I see it is crossed out. 1

If the replacement is not there, why not?

Regards,

Jeff Mikeska

Santa Barbara

2

Mikeska, Jeff

Comment 1

Table 2.51 from the 2014 Final EIR was replaced with Table 2.7 in the Draft Revised EIR. The following text has been added to page 68 of the Final Revised EIR for clarity: "Table 2.51 is no longer valid and is shown below with a strikethrough. This table has been replaced with Table 2.7 in the Final Revised EIR."

From: Megan Miley [mailto:meganmiley@gmail.com]
Sent: Friday, December 16, 2016 9:52 AM
To: Eades, Scott@DOT <scott.eades@dot.ca.gov>
Subject: hwy 101 widening project

Hello Scott,

I apologize for reaching out to you somewhat late and uninformed. I have not followed the project or read the documents. I am curious, however, after a trip to the Pacific Northwest this summer, whether flexible lanes were considered as an alternative -- lanes that would be available to northbound traffic in the morning and southbound traffic in the evening. I know the daily switch can be complicated, costly and perhaps a safety hazard, but it seems to work effectively in other areas. It also seems that this would provide more capacity than single lanes in each direction.

If there is an analysis of this in previous documents, could you point me to where I could find them? If not, should there be?

Thank you,
Megan Miley

From: Eades, Scott@DOT
Sent: Monday, December 19, 2016 2:37 PM
To: 'Megan Miley' <meganmiley@gmail.com>
Subject: RE: hwy 101 widening project

Hi Megan -

This is a good question. The potential for adding a single reversible HOV lane (where a single added lane is switch daily to accommodate peak directional flows) was studied early in the 101 In Motion process.

This scenario was studied in "package 4". An evaluation of package 4 is shown on page 40 of the 101 In Motion report and identifies the following drawbacks (among others):
• Requires replacement of all bridges due to interference of center supports
• Predominantly operates during the peak periods, thus would not provide congestion relief in non-peak commute hours without additional operational costs
• Has entry and exit points only at each end and at one intermediate point so that it would mostly serve Ventura County commuters and through traffic
• Adds operating costs to set-up and take down safety barriers at each end when traffic direction is changed
• Adds to the length of time required for emergency vehicles and tow trucks to reach an accident location
• Offers no capital cost savings over other alternative packages that add highway capacity

A copy of the 101 In Motion Final Report can be found on the SBCAG website at this link:
http://www.sbcag.org/uploads/2/4/5/4/24540302/101_in_motion_final_report.pdf

I hope this is helpful. Please let me know if you have any further questions.

- Scott

Scott Eades
Caltrans, District 5 - Project Management
(805) 549-3144

Miley, Megan
Responses to comments were addressed by Scott Eades (then Project Manager, now Corridor Manager) as shown in the included email exchange.

-----Original Message-----
From: thorn robertson [mailto:thornr@cox.net]
Sent: Monday, January 30, 2017 5:41 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Draft EIR

Dear Mr. Wilkinson,

While not perfect, the 101 HOV project draft EIR is adequate and I support the certification without further delay. Massive congestion already exists on Coast Village Road and neighboring streets since the closure of the southbound on-ramp at the Cabrillo/Hot Springs interchange. Unfortunately, these conditions will not improve until the new southbound on-ramp specified in the approved HOV project is opened. Any unnecessary delays of the HOV project are unacceptable to those of us who live and work in the Coast Village Road area. 1

Sincerely,

Thorn Robertson
1265 Spring Road
Santa Barbara, CA 93108

Robertson, Thorn

Comment 1

The Olive Mill Road/Coast Village Road intersection has now been identified as a mitigation location with a recommendation to provide an equitable-share contribution to the City. Refer to Table 2.8 and Chapter 4 of the Final Revised EIR for more details. If the City is able to advance this project, it could be constructed prior to the completion of the South Coast 101 HOV Lanes project improvements in the City of Santa Barbara.

From: Maya Shoemaker [mailto:myaya.shoemaker@gmail.com]
Sent: Monday, January 30, 2017 6:36 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Don't Widen 101!

Dear Caltrans:

Please provide an EIR that provides all the information necessary for an informed decision and effective mitigation of the 101 widening through Santa Barbara. The vast majority of the public has no idea of the extent of the negative effects from this project. They should be properly informed so they are not shocked when congestion is worse on some parts of the freeway.

The EIR that Judge Anderle pronounced to be woefully inadequate, still is.

The point of the EIR is to inform elected officials, staff and citizens so there is less surprise about effects and mitigation can be planned effectively. We need honest modelling to understand how congestion would move from the sparsely inhabited coast to the city streets, and how this could be mitigated. Specifically, we ask that you address these points:

- **Run the model and report the results without the unlikely 36% traffic diversion to unfunded alternatives**—You cannot both disavow *any* responsibility for funding or implementing freeway diversion and count *all* of the projected 36% diversion from freeway volumes. 1
- **Run honest modelling and report the results *without* the unfunded expansion of several intersections the city has informed you will be impacted more than the EIR indicates—** Construction needed in the city to unblock increased freeway traffic at the first lights after off ramps would cost the city $45 million dollars. Caltrans is offering to pay 1% of this. Considering that the city is years and millions behind on maintaining the roads we already have, the traffic modelling cannot assume that these projects will be in place to get cars off the freeway and into town. 2
- **Include credible assumptions about induced demand** —Induced demand, the undoing of many widening projects, and the reason that the methodology used in the EIR has been abandoned by the state—is drastically underestimated. It is uncontroverted - eliminating the congestion on 101 will induce additional traffic in that stretch, and 10 years after widening, congestion on the widened section will be worse than it is today. 3
- **Run modelling and report the results showing the amount and location of increased city congestion *after* the first lights** —The amount and location of increased city congestion **after** the first intersection from the freeway and how to mitigate this new congestion are not addressed in the EIR at all. What happens when the perfect storm of impacts below hits city streets? 4

1) 36% more traffic than modeled (until train is in place, which with pockets emptied by the lane, may be never)
2) Real induced demand much more than with outmoded modeling
3) City street capacity lower due to slower speeds on less maintained surfaces from diversion of maintenance funding to highway widening
4) Shift from bicycling and walking to cars, driven by increased danger on the streets

With the current EIR, we don't have an answer to any one of these factors, let alone all of them together, even though all of them together is quite likely to occur.

- **Include health impacts**—This project will move congestion from a very sparsely populate area to a much more densely populated one. It will also increase surface street congestion, and reduce healthy exercise from biking and walking. What are the health impacts? 5
- **Include credible assessment of climate safety impacts**—Climate safety is so much more acute a concern since this project was started just ten years ago that it constitutes a *previously recognized impact that is significantly worse based on new developments* that should be your top factor going foward for this and all other projects. The current assessment is a cursory guess at best. 6
- **See how this project looks using the new preferred evaluation metric, VMT**—This project was evaluated using a yardstick since discarded by the State as inadequate-LOS. The new yardstick may not be completely codified, but you could at least apply it to the extent possible. it would be a far better distinction to be the one of the first projects shown to provide no benefit using VMT than one of the last approved based on LOS and built to no benefit. 7
- **The resulting revised EIR should be recirculated**—to give the public a chance to participate. 8

The most pertinent question today for the majority of people who will pay for and be impacted by this is: "will this project reduce or increase suffering from traffic?" This can only be answered with an honest and complete EIR.

Thank you,

Maya Shoemaker

Shoemaker, Maya

Comment 1

The project traffic studies, as well as local experience, demonstrate that growing congested conditions on U.S. 101 are resulting in diversion of through trips onto the local parallel streets in this corridor. This diversion of trips to avoid congestion on the mainline will continue to worsen until the new HOV lanes are constructed. Over the long-term, the project will reduce mainline congestion during peak periods. Please refer to Appendix I in the Final Revised EIR for Peak Hour Congestion Maps that provide a visual representation of proposed delay reduction throughout the corridor.

The project traffic studies take into account expected and financially constrained transportation improvements which are planned within this corridor. This includes planned commuter friendly rail service in the corridor, consistent with the 101 In Motion consensus recommendations. Page 57 of the Final Revised EIR includes a discussion of cumulative project conditions. This analysis takes into account all transportation and land use projects included in the Regional Transportation Plan and general plans prepared by local jurisdictions in the project area including the South Coast 101 HOV Lanes project.

The 101 In Motion Financing and Implementation Plan, which is provided in the 101 In Motion Final Report (SBCAG, 2006) describes phased development and implementation of rail service to serve during the peak commute hours in the 101 corridor. The 101 In Motion Final Report also describes the complexity of seeking approval from the various rail stakeholders in the region to implement this type of rail service.

SBCAG has been working with Caltrans Division of Rail, the California State Transportation Agency, Union Pacific Railroad, the Ventura County Transportation Commission, the San Luis Obispo Council of Governments, Metrolink, AMTRAK, LOSSAN (Los Angeles to San Diego) since the passage of Measure A in 2008 to deliver increased passenger rail service in the 101 corridor.

The first phase of the service is described as an initial pilot service involving two daily round trips with minimal capital acquisition. It has been discovered that the most cost effective and feasible approach has been to work with AMTRAK and LOSSAN who currently operate five daily round-trip passenger trains in the 101 corridor. Since none of these trains operate in the peak hour when commute-friendly service is in the highest demand, SBCAG, as a member of the LOSSAN Joint Powers Authority (JPA), has been working with the JPA and the California State Transportation Agency to retime one of these trains to serve during peak commute hours. The objective is to begin this service in April 2018. The retimed AMTRAK service will provide morning northbound peak hour rail service connecting stations in Camarillo, Oxnard, Ventura, Carpinteria, Santa Barbara, and Goleta. The same stations will have evening peak hour service in reverse order. The passenger price for this new service will be competitive with the Coastal Express regional transit service that currently operates in the corridor. SBCAG is working on options to develop comprehensive last-mile service connections to link passengers from train stations to work sites including bicycle rental and bicycle lockers, connecting shuttle and bus services, and transportation network company service agreements. Ridership goals for this first train are approximately 200 passengers per day.

The LOSSAN JPA is also planning to implement a sixth round trip in two to three years that could also be scheduled to serve the peak hour market between Ventura and Santa Barbara counties, which would result in two peak hour round trips in the 101 corridor. This would coincide with the start of construction of the South Coast 101 HOV project and meet the initial service levels identified in the 101 In Motion Study. Longer-term capital infrastructure projects that are also under development include the Seacliff rail siding extension project which will improve passenger rail on-time performance. Passenger rail service expectations identified through the SBCAG 101 In Motion Study are still appropriate as a long term goal for passenger rail in this corridor.

Shoemaker, Maya
Comment 2
Refer to updates to both Table 2.8 and page 45 in the body of the Final Revised EIR that discusses Avoidance, Minimization, and/or Mitigation Measures. Caltrans intends to work diligently with each local jurisdiction to see that all identified mitigation measures are fully implemented.

Due to the possibility that Caltrans and the local jurisdictions may not be able to successfully complete the recommended mitigation in a timely manner, or if one of the cities or county decides not to participate in an agreement with Caltrans, it is difficult to conclude that the overall significant impact to intersections will be reduced to less than significant. Thus, pursuant to CEQA Guidelines Section 15043, a Statement of Overriding Considerations has been prepared for this project.

With respect to funding for mitigation identified in the Revised EIR, the mitigation improvements will become the responsibility of the HOV project sponsors.

Shoemaker, Maya
Comment 3
This topic is outside the scope of the Revised EIR. The following response is provided for clarification only.

As defined in the 2040 RTP-SCS Final EIR (SBCAG, 2013), induced travel is "vehicle activity resulting from new trip generation as a response to new highway capacity." The theory behind induced travel and increased travel demand is that increased highway capacity (i.e., a new or widened roadway) reduces the "cost" of travel (i.e., travel time), thereby increasing the demand for travel. Induced travel, however, is only one potential component of increased travel demand. Travelers may respond to reduced travel time in several different ways: route diversion, mode change, destination change, schedule change, trip consolidation, and possibly new trips.

SBCAG provided a thorough survey of literature evaluating the complex relationship between roadway capacity and travel in Section 4.12.2.d of the Final EIR for the 2040 RTP-SCS (pages 4.12-23 to 4.12-29). Pursuant to 15150 of the CEQA Guidelines, that portion of the 2040 RTP-SCS Final EIR is incorporated by reference into this response to comments. The 2040 RTP-SCS Final EIR is available for review at: http://www.sbcag.org/uploads/2/4/5/4/24540302/finaleir_2040rtp-scs.pdf

As discussed in the 2040 RTP-SCS Final EIR, the term induced travel is often misused to suggest that increases in highway capacity are directly responsible for increases in traffic, when in fact, the relationship between increases in highway capacity and traffic is very complex—involving various travel behavior responses, residential and business location decisions, and changes in regional population and economic growth. Most studies examining the issue have concluded that trips related to socioeconomic growth and trips diverted from other facilities—as opposed to induced travel—account for the majority of increased travel. Some studies have concluded that if new highway capacity does fill up, it is due not to induced travel, but rather to travelers diverting from other facilities or time periods in the short term, and to socioeconomic growth in the long term. Local data from the 2040 RTP-SCS Final EIR confirms that the majority of traffic growth in the long term is due to socioeconomic growth, regardless of roadway improvements.

Another complication in drawing conclusions from the literature is that many studies have not differentiated between the impacts of new roads versus widened roads and roads in urban/developed areas versus roads in rural/undeveloped areas. (SBCAG, 2013). As summarized in the 2040 RTP-SCS Final EIR:

> Schiffer et al. (2003) found in their literature review that "induced travel effects for constructing new roadways versus widening existing roadways were not definitive" and "urban versus rural differences in induced travel are unknown" (p. 5). Those who have specifically studied the differentiations have confirmed that they are important. The results of a study by Parthasarathi, Levinson, & Karamalaputi

(2002) "indicate that larger stable jurisdictions do not produce a change in VKT [vehicle kilometers traveled], while growing MCDs [Minor Civil Divisions] do" (p. 1345). The same study highlights "the importance of separating new construction from the expansion of existing links" (Summary). The authors found that most previous studies had not made the differentiation between new roads and widened roads, and, not surprisingly, their results showed that any impacts from widening would likely be less than any impacts from new roads. Studies cited in SBCAG (2002) conclude that "highway capacity additions for which some researchers claimed to experience an induced effect generally…were new facilities which traversed undeveloped areas vs. widening facilities within already urbanized areas."

Further:

Local empirical and modeled data suggest that any increases in travel demand (e.g., on U.S. 101) in Santa Barbara County will be due to trip diversions (e.g., from local arterials) rather than from new trips possibly induced by increased roadway capacity (e.g., a widened U.S. 101). Attachment F to the South Coast Highway 101 Deficiency Plan (SBCAG, 2002) examines data collected from two local roadway improvements—a freeway widening and a freeway interchange improvement. The data indicate that after the projects were completed, although increased traffic was observed, the increase could be attributed to trips diverted back to the project areas from parallel arterials or adjacent interchanges.

As concluded in the 2040 RTP-SCS Final EIR:

Travel demand in Santa Barbara County may increase in the future, but local data indicate demand will be driven primarily by socio-economic growth. If any induced travel does occur, it will likely be insignificant. Improvements in the 2040 RTP-SCS make it speculative to quantify exact induced travel increases. However, based on the preceding analysis, there would not be a significant impact on infrastructure, services or congestion relating to induced travel.

Here too, although there is uncertainty regarding the relationship between increasing highway capacity and the generation of new vehicle trips, based on the information available, including the literature discussed by SBCAG in the 2040 RTP-SCS Final EIR, it is reasonably anticipated that the impact of induced travel would be less than significant. Further, consistent with the Writ issued by the Santa Barbara Superior Court, the Revised EIR for the South Coast 101 HOV Lane Project addresses intersection impacts, and there are not sufficient data or models available to accurately predict impacts of induced travel, if any, on specific intersections.

Shoemaker, Maya
Comment 4
Refer to response to Comment 3

Shoemaker, Maya
Comment 5
This comment is outside the scope of the Revised EIR

Shoemaker, Maya
Comment 6
This comment is outside the scope of the Revised EIR. Refer to the Air Quality and Climate Change sections of the 2014 FEIR.

Shoemaker, Maya
Comment 7
This comment is outside the scope of the Revised EIR. SB 743, signed into law on September 27, 2013, requires the California Office of Planning and Research (OPR) to propose revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts within transit priority areas. (Pub. Resources Code, § 21099, subd. (b)(1).) In developing the criteria, OPR shall recommend potential metrics to measure transportation impacts, that may include, vehicle miles traveled, among other

criteria. SB 743 further provides that OPR may adopt guidelines establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas. (Pub. Resources Code, § 21099, subd. (c)(1).) The CEQA Guidelines from OPR have not been updated to address VMT implementation based on SB 743. In January, 2016, however, OPR issued revised draft proposed changes to the CEQA Guidelines, including proposed new Section 15064.3 (determining the significance of transportation impacts). (OPR, 2016.) That draft section specifically provides that the new guidelines are intended to apply prospectively and agencies have a two-year period after the expected adoption date for the provisions of the new guidelines to apply.

Shoemaker, Maya

Comment 8

The traffic analysis in the 101 HOV Project technical studies demonstrate that the addition of the proposed HOV lanes in the ten-mile corridor provides the congestion relief required to meet the project purpose and need. Furthermore, the traffic analysis shows that the proposed project will improve most of the intersections in the corridor with the exception of the noted intersections that will experience substantial delays with the project. Table 2.8 contains the mitigation plan that lists these noted intersections.

The Final Revised EIR has been updated to correct data transfer errors. As a result of these corrections, one new location, Olive Mill Road/Coast Village Road, was added to the list of intersections that will experience substantial delays with the project. This updated information does not substantially affect the overall analysis or conclusions presented in the Draft Revised EIR. In addition, the public was not deprived of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate such an effect that Caltrans has declined to implement. After assessing the updated information based on the standards for recirculation found in Section 15088.5 of the CEQA Guidelines, it was determined that recirculation of the Draft Revised EIR is not required.

From: Eric Skaar [mailto:eskaar1@yahoo.com]
Sent: Friday, December 16, 2016 2:03 PM
To: Eades, Scott@DOT <scott.eades@dot.ca.gov>
Subject: South Coast 101 HOV Lanes Project

Good afternoon,

We have read the documentation regarding the 101 HOV lanes project and we could not find a definitive answer on whether there will be a sound wall installed in front of the Serena Park neighborhood next the polo grounds. Traffic noise has been increasing ever since the original project to widen the freeway began and with the removal of the vegetation in front of the neighborhood the sound levels have increased. In addition there is nothing protecting drivers on Via Real in the event of a freeway accident that could send a car onto via real.

I look forward to you reply,
Sincerely,
Eric Skaar and Alison Grube

From: Eades, Scott@DOT
To: "Eric Skaar"
Cc: Wilkinson, Jason J@DOT
Subject: RE: South Coast 101 HOV Lanes Project
Date: Monday, December 19, 2016 2:20:00 PM

Hi Eric –

The recently released Draft Revised EIR (posted at: http://dot.ca.gov/dist05/projects/sb_101hov/index.html)is focused specifically on local intersection analysis and does not provide new content related to features in the Serena Park area. If you wish to provide comments specifically related to the Draft Revised EIR document, they can be submitted to Jason Wilkinson by email at: Jason.wilkinson@dot.ca.gov or by mail at:

Caltrans, Attn: Jason Wilkinson
50 Higuera Street
San Luis Obispo, CA 93401

Comments on the Draft Revised EIR are being accepted until January 31, 2016.

With respect to the Serena Park area, all proposed project features remain consistent with what shown in the August 2014 Final Environmental Document. In this area, a soundwall on the inland side of the freeway will extend from the existing Serena Park soundwall to just beyond (or east of) Garrapato Creek. A map showing the proposed soundwall can be found in appendix L of the Final EIR. This specific area is shown on Sheet L-7 (pdf page 7) in the link below.:

http://dot.ca.gov/dist05/projects/sb_101hov/final/alt1.pdf

Also, here is a link to the entire August 2014 Final EIR:

http://dot.ca.gov/dist05/projects/sb_101hov/reports.html

I hope this is helpful. Please feel free to send comments on the Draft Revised EIR to Jason Wilkinson or let Jason or I know if you have any general questions.

- Scott

Scott Eades
Caltrans, District 5 – Project Management
(805) 549-3144

Skaar, Eric

Responses to comments were addressed by Scott Eades (then Project Manager, now 101 Corridor Manager) as shown in the included email exchanges.

From: Mus8515839@aol.com [mailto:Mus8515839@aol.com]
Sent: Tuesday, December 06, 2016 7:41 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Re: 101

6 Dec 2016

Dear Planners:

If the plan goes forward so that traffic on Coast Village Road will no longer be problematic a roundabout at Coast Village and Olive Mill Roads will probably be unnecessary.

Both Olive Mill Road and San Ysidro Road are major thoroughfares for emergency vehicles. I am thinking of the high speed responses which must come from the Montecito Fire Department. To place roundabouts at those intersections could result in response vehicles being put at high risk. 1

Monte Smith

Smith, Monte

Comment 1

The Olive Mill Road/Coast Village Road intersection has now been identified as a mitigation location with a recommendation to provide a fair-share contribution to the City. The existing five-legged intersection is stop controlled on a number of legs and does not operate efficiently, due to the existing geometry and control, particularly during peak hours. The City has initiated a project to begin environmental studies and preliminary engineering to make improvements at this location. The City is looking to implement a roundabout that would improve operations. If the City is able to advance this project, it could be constructed independent of the HOV project and prior to completion of the HOV Lanes segment in the City of Santa Barbara.

The Southbound off-ramp and San Ysidro/Eucalyptus Lane intersection (#37) was identified as one of the eight intersections that will experience substantial delays with the project. Caltrans is coordinating with the County on a preferred design approach for improvements. In January 2017, the County completed a phase 1 Intersection Control Evaluation (ICE) study to evaluate options for improving operations at the San Ysidro interchange. Caltrans was involved in the development and approval of this study. Subsequently, the City of Santa Barbara, County of Santa Barbara, and SBCAG entered into a memorandum of understanding (MOU) to outline responsibilities and funding expectations for completing project studies at the San Ysidro interchange as well as the Olive Mill Road/Coast Village Road intersection. A request for proposals to consultants to complete respective project studies was released by the County and City in May 2017.

From: Ted Simmons [mailto:tedsimmonssb@gmail.com]
Sent: Tuesday, January 24, 2017 2:47 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Proposed roundabout

Hi Jason, I'm Ted Simmons, past Montecito Association Vice President, current Montecito Hedrow Protective Association President and 17 year hedgerow homeowner and I am writing in protest of any sort of roundabout at the San Ysidro and N. Jameson intersection.

This is a completely unnecessary project that is being promoted by a subcommittee of the Montecito Association with no notice to the public and as with last years' fight over the Fire Station on San Ysidro, no input from the neighborhood that will be so gravely affected. Not only are these amateur traffic engineers possibly violating the Brown Act, none of the members actually live in the hedgerow area.

I assume the biggest concern traffic-wise is the backup that occurs weekdays after 3PM when the elementary school lets out. At worst this is a 15 minute event, five days a week, nine months a year. Locals are used to it and there are clear alternatives to the San Ysidro route. The other issue is the maximum ten car deep backup that occurs on North Jameson when northbound 101 is clogged. Again, this is an occasional five minute problem that will be alleviated when the 101 widening is completed. 1

The mantra of the Montecito Association, founded in 1947, is to preserve the rural nature of Montecito, hence no streetlights, sidewalks, signage, street lighting, etc. A roundabout capable of handling a 40 foot tractor trailer with the associated vapor lights on all night hardly complies with the Montecito Community Plan with the Montecito Association strives to uphold. This will forever ruin the rural feel of the defacto entrance to Montecito and will forever affect the view of the night sky by the neighborhood. As the topic becomes more widely known in the neighborhood as my neighbors and myself will be doing I expect there will be strong opposition to this proposal in the future.

Thanks for your time reading this and feel free to contact me any time.

Ted Simmons
REALTOR ®
BRE 018996642
805 969 7902 Direct
805 689 6991 Cell
tedsimmonsrealestate.com

"Local knowledge , earned"

Simmons, Ted

Comment 1

Since the San Ysidro southbound interchange was identified as having traffic impacts, Caltrans is coordinating with the County on a preferred design approach for improvements. In January 2017, the County completed a phase 1 Intersection Control Evaluation (ICE) study to evaluate options for improving operations at the San Ysidro interchange. A draft version was made public, but a finalized version has not yet been released to the public. Caltrans was involved in the development and approval of this study. Subsequently, the City of Santa Barbara, County of Santa Barbara, and SBCAG entered into a memorandum of understanding (MOU) to outline responsibilities and funding expectations for completing project studies at the San Ysidro interchange as well as the Olive Mill Road/ Coast Village Road intersection. A request for proposals to consultants to complete respective project studies was released by the County and City in May 2017.

From: Blair & Heidi Whitney [mailto:whitney@silcom.com]
Sent: Tuesday, January 03, 2017 8:50 PM
To: Wilkinson, Jason J@DOT <jason.wilkinson@dot.ca.gov>
Subject: Draft Revised Environmental Impact Report on South Coast 101 HOV Lanes Project

Dear Jason Wilkinson,
I am writing to you in regards to the Draft Revised Environmental Impact Report on South Coast 101 HOV Lanes Project.

I find it hard to believe that your traffic analysis for traffic intersection impacts did not find that some mitigation would be needed to address the added congestion at 101 & Olive Mill Road on and off ramps. This intersection, which also is at the end of Coast Village Road, is already heavily impacted by 101 commuters who try to bypass the crowded lanes of 101 and try to drive on the nearest 101 surface street, which is through this intersection. It is clear that a roundabout is needed at this intersection to deal with the added congestion caused by the 101 traffic. 1

Sincerely,
Blair Whitney
PO Box 5732
Santa Barbara, CA 93150

Whitney, Blair and Heidi

Comment 1

The Olive Mill Road/Coast Village Road intersection has now been identified as one of the eight intersections that will experience substantial delays with the project. The mitigation plan shown in Table 2.8 and Appendix F includes the details for providing an equitable share contribution to the City of Santa Barbara for mitigation. The existing five-legged intersection is stop controlled on a number of legs and does not operate efficiently, due to the existing geometry and control, particularly during peak hours. The City of Santa Barbara has initiated a project to begin environmental studies and preliminary engineering to make improvements at this location. The City of Santa Barbara is looking to implement a roundabout that would improve traffic operations. If they are able to advance this project, it could be constructed independent of the HOV project and prior to completion of the HOV Lanes segment in the City of Santa Barbara.

Court Reporter Transcript of Comments

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CALIFORNIA DEPARTMENT OF TRANSPORTATION

SOUTH COAST 101 LANES PROJECT

OPEN FORUM

PUBLIC HEARING

AND PUBLIC COMMENTS

HELD AT THE

CHASE PALM PARK CENTER

236 E. CABRILLO BOULEVARD

SANTA BARBARA, CALIFORNIA

THURSDAY, DECEMBER 15, 2016

5:30 P.M. - 7:30 P.M.

REPORTED BY: JERI CAIN, CSR NO. 2460, RMR-CCRR-CRR

File No. 215210

CALIFORNIA DEPARTMENT OF TRANSPORTATION

SOUTH COAST 101 LANES PROJECT

OPEN FORUM

PUBLIC HEARING

AND PUBLIC COMMENTS

HELD AT THE

CHASE PALM PARK CENTER

236 E. CABRILLO BOULEVARD

SANTA BARBARA, CALIFORNIA

THURSDAY, DECEMBER 15, 2016

5:30 P.M. - 7:30 P.M.

REPORTED BY: JERI CAIN, CSR NO. 2460, RMR-CCRR-CRR

File No. 215210

THE OPEN FORUM PUBLIC HEARING was held at the Chase Palm Park Center, 236 E. Cabrillo Boulevard, Santa Barbara, California, 93101, on Thursday, December 15, 2016, commencing at 5:30 p.m. The Certified Shorthand Reporter onsite was Jeri Cain, CSR #2460, RMR-CCRR-CRR.

-o0o-

I N D E X

CALTRANS MEETING ORGANIZERS:

PAMELA WEAVER-LAWLESS AND JESSICA BIRE

CALTRANS:

SCOTT EADES, CALTRANS CORRIDOR MANAGER

LINDSAY LEICHTFUSS, ENVIRONMENTAL PLANNER

JASON WILKINSON, ENVIRONMENTAL DESIGNER

DAVID EMERSON, PROJECT MANAGER

PUBLIC COMMENTS BY:

SHELLEY BADAT

TOM BECKER, CARS ARE BASIC

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(Comment at 5:58 p.m.)

SHELLEY BADAT: Basically it's about -- I mean, it's not going to be on this meeting, but there's going to be roundabouts, supposedly, as one of the options for the freeway widening so I wanted to state that I think a roundabout will not eliminate the problems, and there are other ways to deal with getting traffic moving. And the intersection I'm discussing is the San Ysidro and Jameson intersection. And I think a lot of the problem comes from the schools letting out at the same time, and people coming to work, and that -- I think all that can be mitigated in a much easier, less expensive way, plus I don't think the neighborhood should sustain the amount of lighting and signage that goes on these roundabouts; that we have basically daylight all the time. People have said that. When they put the roundabout up on Hermosillo, they don't see the night sky anymore. There's 20 lights there. They're placed all around and every which way. 1

And my next thing is, reopen the southbound freeway ramp that comes off of Cabrillo which they closed -- they closed to traffic going south. They did it years ago. So it causes a terrible, terrible backup 2

on Coast Village Road. It's just -- you can't even go on Coast Village Road anymore at the 5 o'clock hour. It's really bad. Thank you.

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MR. EADES: We're going to go ahead and start the presentation in just a minute or two. Thank you for coming out on a very rainy evening.

(Presentation given.)

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(Comment at 7:06 p.m.)

MR. BECKER: It has been suggested many times as a mitigation that City and County government employees who are employed in South Santa Barbara County be required not to drive automobiles during peak rush hour and to find alternative modes of transportation to get to work. That idea has been suggested many times at SBCAG, it's been suggested at the City of Santa Barbara council meetings, it's been suggested at Board of Supervisors meetings, and the suggestion has been roundly rejected by our elected officials and by government employees who had that idea proposed to them.

And if the County and City of Santa Barbara required, as a condition of employment, that their

employees be forbidden from driving motor vehicles during peak rush hours, it would be absolutely unnecessary to even put in a third lane to deal with commuter traffic Monday through Friday, although it wouldn't mitigate the problem of Sunday afternoon traffic going southbound, but it would certainly mitigate the problem of commuter traffic Monday through Friday.

And that has been actually stated by Jim Kemp that it would actually -- if that requirement was put on employees, it would actually fix the problem of the commuter congestion on 101 in the morning and in the afternoon.

So my question is, you know, why hasn't this been even looked at as a mitigation to this project? They are looking at mitigations that are going to require construction and tearing up intersections, but yet, they haven't looked at the mitigation of -- perhaps the easiest mitigation is just tell government employees, "You can't drive a car during peak hours. You have to get another form of transportation to get to and from work." And the only exception I would make would be for emergency service personnel such as police

and fire, but I would require police and fire personnel to actually live in the city that they are employed in so if there's an emergency, and they need to be called in, they don't have to drive in all the way from Ventura. They are a two minute- or three-minute drive away.

As I said, I do not understand -- I'm with Cars Are Basic. I do not understand why no one has required this of the City government to even at least look at the idea and how the prohibition on government employees driving during peak hours, how that would even be impacted or how that would impact travel. It's a good idea. Thank you very much.

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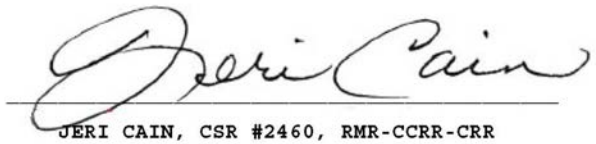
I, JERI CAIN, Certified Shorthand Reporter, RMR-CCRR-CRR, holding California License No. 2460, do hereby certify:

The public comments were reported by me by the use of computer shorthand at the time and place herein stated and thereafter transcribed by me.

In compliance with Section 8016 of the Business and professions Code, I certify under penalty of perjury that I am a Certified Shorthand Reporter with California State License No. 2460 in full force and effect.

WITNESS my signature this 3rd day of January 2017.



JERI CAIN, CSR #2460, RMR-CCRR-CRR

Badat, Shelley

Comments 1 and 2

Since the Southbound off-ramp and San Ysidro/Eucalyptus Lane intersection (#37) was identified as one of the eight intersections that will experience substantial delays with the project, Caltrans is coordinating with the County on a preferred design approach for improvements. In January 2017, the County completed a Phase 1 Intersection Control Evaluation (ICE) study to evaluate options for improving operations at the San Ysidro interchange. Caltrans was involved in the development and approval of this study. Subsequently, the City of Santa Barbara, County of Santa Barbara, and SBCAG entered into a memorandum of understanding (MOU) to outline responsibilities and funding expectations for completing project studies at the #37 intersection as well as the Olive Mill Road/Coast Village Road intersection. A request for proposals to consultants to complete respective project studies was released by the County and City in May 2017.

Becker, Tom

This topic is outside the scope of the Revised EIR. Regulating government employees to restrict driving to off-peak periods is not feasible. Caltrans does not have authority to alter the work schedules of other state or local agencies. Doing so could disrupt functioning operations of those agencies.