

A-2 CALTRANS

Comment Letter A-2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

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Making Conservation
a California Way of Life.

April 12, 2018

11-SD-125

PM 5.10

Otay Ranch Village 14 and Planning Areas 16 & 19

DEIR/TIS

SCH# 2016121042

Mr. Gregory Mattson, Principal Planner
County of San Diego Planning and Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123

Dear Mr. Mattson:

Thank you for including the California Department of Transportation (Caltrans) in the Draft Environmental Impact Report (DEIR) Traffic Impact Study (TIS) (SCH# 2016121042) for review of the proposed Otay Ranch Village 14 and Planning Areas 16 & 19 in the Otay Ranch General Development Plan/Otay Subregional Plan. The project is located on Proctor Valley Road, east of State Route 125 (SR-125) and west of State Route 94 (SR-94). The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Caltrans has the following comments:

Traffic Impact Study

1. The project trip distributions on SR-125 between Mt. Miguel Road and State Route 54 (SR-54) are 13% for existing, 12% for 2025 condition, and 10% for 2030 condition. The decreasing trip distribution using this segment of SR-125 in the future seems unreasonable. Please provide justification or revise the distributions.
2. Please provide backup data for the information provided in Table 3.4 "Freeway/State Highway Segment Level of Service (LOS) Results – Existing Conditions."
3. The Synchro files do not match the City of Chula Vista signal timing sheets for the following SR-125 intersections and need to be revised:
 - SR-125 and San Miguel Ranch Road
 - SR-125 and East H Street/Proctor Valley Road
 - SR-125 and Otay Lakes Road

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4. The "Caltrans Guide for the Preparation of Traffic Impact Studies" states "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities." The guide also states "If an existing State highway facility is operating at less than the appropriate target LOS, the existing measures of effectiveness (MOE) should be maintained." Appendix "C", Page 3 of the guide clearly shows the transition line above LOS D. According to the Caltrans standards LOS "D" is not an acceptable LOS, any volume added to a facility currently operating at LOS "D" is considered a significant impact. The following freeway segments are considered to be significantly impacted from the project:
 - SR-125, from SR-94 junction to Jamacha Road: Existing + Project, Year 2025, Year 2030, Year 2030 + Development of State Preserve.
 - SR-125, from Jamacha Road to Paradise Valley Road, Year 2025, Year 2030, Year 2030 + Development of State Preserve.
 - SR-125, from Paradise Valley Road to SR-54 junction, Year 2025, Year 2030, Year 2030 + Development of State Preserve.
 - SR-125, from Otay Valley Road to Lone Star Road, Year 2030, Year 2030 + Development of State Preserve.
 - SR-125, from Lone Star Road to Otay Mesa Road, Year 2030, Year 2030 + Development of State Preserve.
5. Mitigation needs to be proposed accordingly for the impacts identified in the above comments.
6. Section 2.3, Page 12: This TIS is using 2000 Highway Capacity Manual (HCM) and should be using 2010 HCM. In addition, if your Synchro Analysis software is using 2010 HCM then it should reflect on TIS report and tables.
7. Sections 2.3 through 2.5, Page 12: Include Caltrans methodology for location within our right of way.
 - a. Per GUIDE FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES 2002: "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. If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained."
 - i. For example: If existing delay for signalized intersection is 36 sec/veh (LOS "D") and the existing + project delays shows a 49 sec/veh delay (LOS "D"), then mitigation is required to bring delay back to 36 sec/veh.
8. Section 2.5, Page 15; Table 2.7 should be used only for Basic Freeway Segment at 65 mi/hr but not for SR-94 Highway or any other Caltrans Highway segment, Per GUIDE FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES 2002, Appendix "C."

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- a. Include table for two-lane highway per Per GUIDE FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES 2002, Appendix "C."
 - b. Section 2.8, Determination of Significance Impacts: This section should include Caltrans' criteria or MOE for intersections and segments within Caltrans Right-of-Way (R/W), per GUIDE FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES 2002, Appendix "C".
9. Figure 3-4, Roadway Traffic Volumes – Existing Condition: I-805 Average Daily Trip (ADT) are low. Please update all ADT volumes and resubmit.
- a. The 207,000 ADT should be increased to 230,000 per Caltrans 2016 Published traffic volumes.
 - b. The 192,000 should be increased to 212,000 per Caltrans 2016 Published traffic volumes.
10. Table 3-1, Peak Hour Volumes (PHV) and LOS results for existing condition: The SB I-805 intersections LOS and delays show a LOS of "A" for both am/pm PHV. Per field observations and Synchro file, it should be LOS "C" and delay of 23.4 seconds (am) and LOS "F" and delay of 160.6 seconds (pm). See comment #11.

NODE SETTINGS		NODE SETTINGS	
Node #	8	Node #	8
Zone	V14	Zone	V14
X East (ft)	8780	X East (ft)	8780
Y North (ft)	-4056	Y North (ft)	-4056
Z Elevation (ft)	0	Z Elevation (ft)	0
Description		Description	
Control Type	Actd-Unctrl	Control Type	Actd-Unctrl
Cycle Length (s)	72.3	Cycle Length (s)	72.3
Lock Timing	<input type="checkbox"/>	Lock Timing	<input type="checkbox"/>
Optimize Cycle Length	Optimize	Optimize Cycle Length	Optimize
Optimize Splits	Optimize	Optimize Splits	Optimize
Actuated Cycle(s)	68.1	Actuated Cycle(s)	72.3
Natural Cycle(s)	80.0	Natural Cycle(s)	140.0
Max v/c Ratio	0.95	Max v/c Ratio	1.46
Intersection Delay (s)	23.4	Intersection Delay (s)	160.6
Intersection LOS	C	Intersection LOS	F
ICU	0.65	ICU	0.99
ICU LOS	C	ICU LOS	F
Offset (s)	—	Offset (s)	—
Referenced to	—	Referenced to	—
Reference Phase	—	Reference Phase	—
Master Intersection	—	Master Intersection	—
Yield Point	—	Yield Point	—
Mandatory Stop On Yellow	<input type="checkbox"/>	Mandatory Stop On Yellow	<input type="checkbox"/>

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11. Table 3-1, Peak Hour Volumes (PHV) and LOS results for existing condition: The NB I-805 intersections LOS and Delays shows a LOS of A/B for am/pm. Per field observations and Synchro file it should be LOS "B" and delay of 13.2 seconds (am) and LOS "D" and delay of 41.2 seconds (pm).

NODE SETTINGS		NODE SETTINGS	
Node #	8	Node #	9
Zone:	V14	Zone:	V14
X East (ft):	9431	X East (ft):	9431
Y North (ft):	-3815	Y North (ft):	-3815
Z Elevation (ft):	0	Z Elevation (ft):	0
Description		Description	
Control Type	Actd-Unctrl	Control Type	Actd-Unctrl
Cycle Length (s):	65.0	Cycle Length (s):	65.0
Lock Timings:	<input type="checkbox"/>	Lock Timings:	<input type="checkbox"/>
Optimize Cycle Length:	Optimize	Optimize Cycle Length:	Optimize
Optimize Splits:	Optimize	Optimize Splits:	Optimize
Actuated Cycle(s):	57.5	Actuated Cycle(s):	60.5
Natural Cycle(s):	50.0	Natural Cycle(s):	75.0
Max v/c Ratio:	0.68	Max v/c Ratio:	1.09
Intersection Delay (s):	13.2	Intersection Delay (s):	41.2
Intersection LOS:	B	Intersection LOS:	D
ICU:	0.56	ICU:	0.78
ICU LOS:	B	ICU LOS:	D
Offset (s):	—	Offset (s):	—
Referenced to:	—	Referenced to:	—
Reference Phase:	—	Reference Phase:	—
Master Intersection:	—	Master Intersection:	—
Yield Point:	—	Yield Point:	—
Mandatory Stop On Yellow:	<input type="checkbox"/>	Mandatory Stop On Yellow:	<input type="checkbox"/>

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12. Figures 7-1 through 7-3: All Project Traffic Distribution show a higher or same distribution percentage on SR-125 than the distribution on I-805. The distribution on I-805 should be double or higher than SR-125 per current traffic trend. The toll on SR-125 is a major factor for most motorist (especially college students on limited income) who bypass SR-125 and use I-805 to Olympic Parkway.

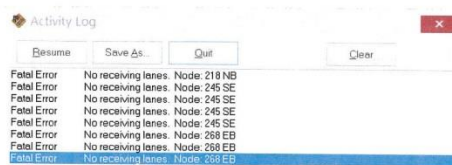
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Synchro File Comments:

13. Fatal errors appear when trying to view simulation and get exit ramp queue reports. Please fix fatal errors and resubmit for review.



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14. The synchro model needs to match existing conditions. The intersection distance on H street between the SB I-805 ramps and NB I-805 ramps is 694 feet per the Synchro model, when it is approximately 975 feet per Google earth. This might not give you an accurate analysis.

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15. Intersection 8, H Street/I-805 SB Ramps: The modeling shows the double right-turn from SB I-805 to eastbound H street as a protected turn type, which causes the ramp to queue up in Synchro. Please change to Permissive to follow the current existing condition.

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Utilities

It is understood that no new utility crossings on State Facilities will occur as a result of this project. However, if any work is performed within Caltrans' Right-of-Way (R/W), an encroachment permit will be required.

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Mitigation

Caltrans endeavors that any direct and cumulative impacts to the State Highway System be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

Caltrans supports the concept of "fair-share contributions" for transportation related projects which may include future freeway operational improvements, managed lanes, ramp improvements, signal improvements, bus on shoulders, and/or other transportation related measures to mitigate for the significant impacts that this TIS has identified. This TIS should

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include a list of proposed potential mitigation measures or multi-modal strategies for significant impacts identified on State facilities.

Mitigation identified in the traffic study, subsequent environmental documents, and mitigation monitoring reports, should be coordinated with Caltrans to identify and implement the appropriate mitigation. This includes the actual implementation and collection of any "fair share" monies, as well as the appropriate timing of the mitigation. Mitigation improvements should be compatible with Caltrans concepts.

If you have any questions, please contact Mark McCumsey at (619) 688-6802 or by email at mark.mccumsey@dot.ca.gov

Sincerely,



DAMON DAVIS, Acting Branch Chief
Local Development and Intergovernmental Review Branch

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