

From: [Dalene Whitlock](#)
To: [Ayers, Dana](#)
Subject: Comments on the General Plan Circulation Element
Date: Monday, April 30, 2018 1:06:43 PM

Having prepared many traffic studies for projects in the County of Napa, we have encountered numerous situations where a left-turn lane is warranted based on the policy as contained in the County's Road and Street Standards, but would not be warranted using criterion applied by every other jurisdiction where we prepare analyses, including Caltrans. The current policy is based on the daily volumes on the roadways from which access is obtained and the driveway or minor street, with no reference to the direction of traffic on either facility. Many times, we have had a situation where all or nearly all the traffic entering a driveway is coming from the direction that results in a right turn into the driveway, but when this directionality is not taken into account, the turn lane is warranted despite the fact that it will rarely be used, resulting in excess pavement and negative environmental impacts without an associated traffic operation or safety benefit.

I urge the Board of Supervisors to direct staff to update this policy to be more consistent with industry standards, and specifically, to take the directionality of traffic into consideration.

Thank you.

Dalene Whitlock

Dalene J. Whitlock
PE, PTOE Principal



Office 707.542.9500 Mobile 707.486.5792
490 Mendocino Avenue, Suite 201 Santa Rosa, CA 95401
www.w-trans.com

From: [CTG](#)
To: [Ayers, Dana](#)
Subject: Comments on the Draft Traffic Impact Study Guidelines
Date: Friday, April 27, 2018 4:54:39 PM
Attachments: [Transportation Impact Study Guidelines.pdf](#)

Hi Dana:

I have reviewed both the Draft Circulation Element and the Draft Traffic Impact Study Guidelines and have attached a few comments on the second document. Having worked in the County for more than 40 years and having completed more than 80 winery or airport area studies for the County, I thought it would be helpful to ask some questions and provide some input to make the guidelines a little more user friendly and to make life easier for the traffic engineers needing to follow the guidelines and County staff needing to review the findings. My comments just pertain to the Traffic Study Guidelines.

Thank you.

Mark Crane, P.E./T.E.

Fellow Institute of Transportation Engineers

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Mark Crane, P.E.
Crane Transportation Group
2621 E. Windrim Court
Elk Grove, CA 95758
916.647.3406 phone
916.647.3408 fax
cranetransgroup@gmail.com

DRAFT TRANSPORTATION IMPACT STUDY GUIDELINES COUNTY OF NAPA

COMMENTS & QUESTIONS

1. The new direction in days and seasons to be analyzed for traffic studies is for Tuesday/Wednesday/Thursday evaluation for spring and fall conditions (excluding harvest). Does this mean that past direction from Public Works over the past 20+ years for winery reports to study Friday/Saturday conditions during harvest should now be eliminated? Midweek volumes in May will definitely be lower than Friday volumes in September.
2. Will there be a need to seasonally adjust traffic counts to reflect a particular spring/fall (non-harvest) month of the year so there will be consistency between traffic studies? If so, what month and what seasonal adjustment factors should be used (Caltrans PeMS historical counts for SR 29)? If seasonal adjustments are requested, one set of conversion factors should be developed for consistency.
3. Trip generation projections for winery project will need to depend upon County supplied traffic studies for similar projects. However, it will be very difficult to draw accurate comparisons given the differences in visitation requests and production levels of the different wineries. A lot of data interpretation will be needed which will use time and budget.
4. Procedures for determining trip generation for winery projects sound good for a university class, but there is a reality of the time and cost for the proposed determination process. Cost of traffic studies will go up significantly with these new procedures. What is the difference in using an applicant's best estimate of numbers and schedules and visitation numbers versus trying to compare a new project versus a shotgun survey of other winery projects that may or may not be applicable?
5. Providing input for all listed traffic study work tasks will significantly increase the cost of doing traffic studies. Will the County traffic engineer provide a checklist of the items required for each project so as to eliminate the production of a lot of unneeded data?
6. Why is the middle of a weekend afternoon not listed as a critical analysis period (1:00-4:00 PM)? This is the period of peak winery visitation and peak ambient volumes in a lot of locations. The weekend study times listed are not always critical – in particular, the noon hours rarely have peak ambient traffic or peak winery visitation.
7. The County needs to specify which of the NVTAs traffic model runs should be used for evaluation purposes. This will provide consistency between studies. If the model runs to be used change, the County needs to inform the traffic engineers regularly doing projects in the County of these changes.

8. Access to NVTAs traffic model calibration run and future projections for use in County traffic studies should be free. Direction needs to be provided by the County whether model future projections should be used as presented, or whether the difference method using the calibration and future runs should be used.
9. Are County or Caltrans analysis procedures and significance criteria to be used for state highway evaluation? If they are now different, why don't the County and Caltrans confer now and agree on one uniform set of criteria? Caltrans will usually go along with what the local jurisdiction wants. This needs to be done ASAP.
10. Are the County left turn warrant criteria to be applied along state highways?
11. How many years of collision data need to be reviewed? Is this needed for every study?
12. Ninety-nine percent of all County intersections to be evaluated are unsignalized. Yet, there is very little direction or mention of their operation in the guidelines (only in the Fehr & Peers significance criteria memo attached).
13. What are LOS minimum acceptable standards for collector roads
14. Is the 2010 HCM preferred for LOS evaluation rather than the Version 6 from 2017?
15. Please define locally valid travel demand models (page 25) and give examples.
16. Intersection traffic control – for unsignalized intersections – No guidance is provided if an intersection already meets signal warrant criteria.
17. Which signal warrant criteria are to be used? Peak hour volume/peak hour delay/both?
18. Some potential mitigation measures are missing for unsignalized intersections operating unacceptably (such as adding an additional lane on the stop sign controlled approach or providing a median refuge area for left turns from a side street).
19. Are ADT counts and projections needed for every study and for every analysis scenario? How are ADT volumes to be evaluated?
20. The **County Trip Generation Worksheet** has serious problems – in particular the daily to peak hour conversion percentages don't make any sense (especially the one for Saturday that shows 57 percent of all daily traffic happening in one hour between 3:00 and 4:00 PM). No winery would schedule 57 percent of guests in one hour, nor do they get 57 percent of visitation in one hour. Also, for a weekday with 38 percent of daily traffic happening in one hour is not realistic. Finally, Caltrans historical counts on SR 29 don't back up peaking factors on the form. The entire form needs a common sense review and major update.

21. **April 20, 2018 memo by Fehr & Peers re Guidelines for Application of Updated General Plan Circulation Polices on Significance Criteria Related to Vehicle LOS** is a good start. Recommendations to improve are:

- Provide more input/examples for side street stop sign controlled intersections.
- Be clear whether signal warrant evaluation is or is not to be considered a separate significant impact evaluation. If yes, set forth the Existing, Near Term horizon and Cumulative criteria for locations already exceeding warrant criteria. This would pertain to virtually every major unsignalized intersection along SR 29 and Silverado Trail south of St. Helena.
- Make it clear that Existing + Project and Near Term + Project evaluation are by the same criteria and that cumulative criteria only apply to General Plan buildout projections.
- Specify which signal warrant criteria are to be used – peak hour?
- Unsignalized intersection evaluation needs more clarity – are LOS results for side street stop sign controlled intersections just for the entire intersection, or just for the stop sign controlled approach?
- If LOS E or F is acceptable (per the General Plan EIR) along segments of SR 29, SR 12-121, and segments of Silverado Trail, does this also mean that all intersections within these segments are allowed to operate at these same LOS E or F standards? If so, for those segments with allowable LOS F operation, how can there be any significant impacts?

22. **General Comment.** The purpose of traffic evaluations that consider both Existing and General Plan horizon conditions has wandered off a commonsense path over the years. Full operations analysis of Existing and Near Term horizon projections (with and without the project) is totally appropriate as there is good certainty of the traffic volumes being evaluated. However, for the General Plan horizon (2040), a planning level analysis makes much more sense given the speculative nature of projections from any traffic model. Model results depend upon accurate calibration (which are considered acceptable if they are within 5 to 20 percent +/- of the real world volumes – depending upon the type of road), reliable land use projections for Napa and adjacent counties (which did not happen in the last General Plan model) and knowledge of the local circulation system and traffic flows (which was not apparent with the results form the last General Plan model). Projections for Napa County also need to take into account capacity controlling locations on roadways providing access from adjacent counties – which they won't.

Given that 2040 traffic growth projections from any model will probably be +/- 10 to 20 percent high or low, a planning level rather than detailed operations analysis is most appropriate. The suggestion that different potential methods to determine future traffic should be utilized depending upon the project and location will create an academic exercise, but to what end?

Pick one methodology, use it everywhere (for simplicity of use by the traffic engineers conducting the studies and evaluation by County staff) and use a planning level evaluation (such as the one in the last General Plan for roadway operation by the Florida Department of Highways – who is light years ahead of Caltrans in evaluation of circulation systems – my opinion).

Thank you for considering my input.