WESTERN DISTRICT

INSTITUTE OF TRANSPORTATION ENGINEERS

PRELIMINARY DRAFT – FOR DISCUSSION PURPOSES ONLY

February 29, 2016

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

Re: Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA – Implementing Senate Bill 743 (Steinberg 2013)

Dear Mr. Calfee:

Thank you for the opportunity to provide comments and suggestions regarding your efforts to amend CEQA (California Environmental Quality Act) Guidelines, as required by Senate Bill 743 (SB 743). This letter specifically responds to the report titled "Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA – Implementing Senate Bill 743 (Steinberg 2013)" written by the Office of Planning and Research (OPR) dated January 20, 2016 (hereafter called the "Revised Proposal").

We represent over 2,000 California members of the Institute of Transportation Engineers (ITE), an international society of transportation engineers and planners. These members prepare transportation analysis for environmental documents under CEQA, and in some cases the National Environmental Policy Act (NEPA), and we understand the purpose of these analyses to identify potential environmental impacts.

This is our third comment letter to OPR since the SB 743 process started in the fall of 2013. In addition to seeking written comments, we appreciate OPR's spirit of openness and cooperation throughout this process. OPR staff have spoken at numerous ITE events and OPR has conducted numerous individual conversations with ITE members.

We believe that the implementation of SB 743 will involve significant challenges and we look forward to OPR's continued cooperation during the implementation process.

Our purpose in writing this letter is to provide recommendations for revisions to the Revised SB 743 Guidelines in order to achieve a more successful implementation of SB 743. Included are overall comments as well as detailed comments relating to specific aspects of the Revised Proposal.

OVERALL COMMENTS

The revised proposal represents a step forward since it addresses many (but not all) of the concerns raised after preparation of the draft guidelines in August 2014. The Revised Proposal provides for a two-year opt in period which will be helpful in reducing the disruption that is expected to be caused by the transition to a very different way of evaluating the transportation impacts of projects under CEQA. Many aspects of the Revised Proposal reflect consideration of important details not considered in previous draft guidelines. Our comments, as described below, are designed to assist OPR in continuing to make improvements while working toward a final set of SB 743 guidelines.

DETAILED COMMENTS

Our additional comments are as follows:

1. Page 1, Second Paragraph: The comment that the guidelines can be updated as needed is very welcome as experience in conducting CEQA transportation analyses after the incorporation of SB 743 may lead to a need for adjustments.

2. Page 1, Third Paragraph: The statement that traffic studies "will now typically take days rather than weeks to prepare" is questionable, given the uncertainty in how lead agencies will respond to the implementation of SB 743. We would recommend saying that this is OPR's expectation.

3. Page 2, Second Paragraph: This paragraph provides the first of many references to the Caltrans Statewide Travel Demand Model. The first two case studies shown at the end of the Revised Proposal also rely heavily on data from this model. ITE agrees that the Statewide Travel Demand Model can be a useful tool in VMT analyses, particularly in cases where local models are not may not be available or appropriate for use on a particular project. However, this model is not easily available to most transportation analysts and it is not practical to run the model for most projects. Therefore, what is needed are tables, figures, and or a database that allow analysts to determine average vehicle trip lengths for residential and office land uses by travel analysis zone and by region for the entire state. In the case of residential land uses, this information is needed by City also. We would request OPR's assistance in making sure that this information can be made available to analysts who conduct CEQA transportation analyses for land development projects.

4. Page 3, Item 3 and Page 23, Third Paragraph: For residential developments in unincorporated areas, VMT impacts should be determined using a threshold that is 15% below the average of all the unincorporated areas in the county (in addition to the regional average), not the incorporated cities. It is not a fair or reasonable for unincorporated/rural areas to compared to more densely developed incorporated areas.

5. Page 8, Item 7: Is there a way to re-word this without use of a double negative?

6. Page 8, XVI a): Add to the beginning of the question the following wording "Increase the potential for injuries or fatalities due to a…"

7. Page 8, (c) Applicability: The two-year period from adoption to implementation statewide is appropriate and should be retained. In order to achieve as smooth an implementation process as possible, lead agencies will need time to review their current laws and policies, conduct relevant studies, and implement new laws and policies that are consistent with the implementation of SB 743.

8. Page 18, Recommendations Regarding Significance Thresholds: Clarification should be given as to whether the baseline/existing conditions should be the average VMT at a fixed point in time. If the goal is to reduce VMT by 15% from today's existing conditions, then the baseline should not need to be re-established at the beginning of project analysis as practice currently dictates for evaluation of LOS impacts.

9. Page 21, First Paragraph: While it is useful to provide a minimum threshold in the SB 743 guidelines, there are many agencies that use higher thresholds for screening projects. For example, the Orange County CMP uses a threshold of 1,600-2,400 daily trips, San Bernardino County uses 250 peak hour trips, and San Diego CMP uses 2,400 daily trips or 200 peak hour trips. It should be noted that the threshold of 100 daily trips could require a project as small as ten dwelling units to conduct a full Environmental Impact Report if a significant VMT impact is determined.

10. Page 23, Office Projects: Office projects that improve jobs/housing ratio balance may act to reduce VMT if they provide jobs for local residences that would otherwise commute long distances. This effect should be taken into account when evaluating the VMT impacts of office projects.

11. Page 24, First Paragraph: For retail developments, assessing the total change in VMT would require use of a model to determine the existing VMT for the project area. This may place a significant burden on projects just above the recommended screening threshold of 50,000 square feet.

12. Page 24, Other Project Types, Second Paragraph: We would recommend deletion of this paragraph. A project either generates VMT or it doesn't. The concept of local VMT does not make sense.

13. Page 25, Rural Areas Outside MPOs: This heading should be changed to "Rural Areas". The important consideration is an area's status with regard to reducing VMT, not whether it happens to fall within an MPO or not. Similarly, the first sentence should be changed to read "In rural areas (i.e. areas not near established or incorporated cities or towns)". The definition of rural in relevant transportation engineering publications may be helpful. For example, the 2010 Highway Capacity Manual defines rural as "an area with widely scattered development and a low density of housing and employment".

14. Pages 28 to 30, Induced Demand: Many ITE members disagree with the concept of incorporating induced demand into the analysis of transportation impacts of roadway projects. While it is recognized that new roadways or capacity-increasing projects can increase the desirability of development in areas served by the roadway in question, many of us would prefer to attribute any increases in VMT with the development rather than the roadway. To the extent that induced demand is included in the guidelines, we have comments on how this issue should be analyzed.

15. Pages 38 to 30, Induced Demand: For most roadway projects, simple sketch planning tools will be the appropriate method to estimate induced demand. For example, page 29 of the Revised Proposal, first paragraph, refers to a range of elasticities for VMT from 0.6 to 1.0 (i.e. a 0.6 to 1.0 percent increase in VMT for every 1.0 percent increase in lane miles). The Roadway Capacity Expansion Project case study uses the midpoint of this range (0.8) and that would be a reasonable choice for most roadway projects. In addition, we would recommend that OPR include the checklist described below to allow analysts to screen out projects that would not be appropriate for induced demand analysis.

16. Pages 28 to 30, Induced Demand: Induced demand is only relevant if traffic congestion is a factor and if the geographic area served by the new or expanded roadway is appropriate for development. ITE recommends adding a checklist to the Revised Proposal that lead agencies would review prior to conducting an induced demand analysis. The check list items include:

(1) Are there alternative competing modes in the project corridor, and are travel times competitive with the existing/proposed auto travel times?
(2) Is the economy of the area expected to grow significantly in the next 20 years?
(3) Does the present zoning near the project allow for additional development?
(4) Is there significant congestion on the highway now?
(5) Are parcels suitably sized to provide for new development along the project corridor (i.e., no extensive assembly of parcels required for increased development)?

(6) Are topography, land ownership, governmental services, absence of ground contamination, and other factors conducive to new development?
(7) Is there community support for new development?
(8) Is the project on the fringe, or just beyond, the existing urban area?
(9) Is the project likely to generate significant travel time reductions (greater than 5 minutes during peak hours)?

If most of the answers to these questions are "no," there is probably not a significant amount of induced demand likely in the long term.

17. Page 28 Evidence of Induced VMT, First Sentence: At the end of the sentence add "in congested areas". A statement should also be included saying that the addition of lanes for safety or other reasons in uncongested areas will generally not lead to induced VMT.

18. Page 27, Fifth Bullet: Change the last part of this bullet to read "provided that the project includes appropriate facilities for pedestrians, cyclists, and, if applicable, transit". A small roadway project would generally generate an insignificant amount of VMT because it is small, regardless of whether it can or cannot substantially improve conditions for pedestrians, cyclists, and transit. Such projects should include appropriate facilities for all modes or travel without the burden of requiring to demonstrate a substantial improvement.

19. Page 29, First Paragraph: This paragraph includes a statement that "(An elasticity greater than 1.0 can occur because new lanes leverage travel behavior beyond just the project location.") Could you explain this statement? What precisely does "leverage" mean? It seems that an elasticity of greater than 1.0 implies that adding capacity will worsen congestion in the long run, and thus is counter-productive. Conversely, it implies that congestion could be *reduced* by closing lane-miles of existing highways. In other words, it violates the fundamental economic law of demand, which states that prices (travel time can be considered a price proxy) move in opposite directions from demand. The implication seems to be that OPR is claiming demand for travel is what is called a "Giffen good," which has rarely, if ever, been observed in real life. It seems more likely that the author of this statement is confusing a shift *along* a demand curve, to a shift *of the demand curve itself*, which is a different matter. One way to solve this problem would be to simply delete the wording in quotes and let individual analysts look into the relevant research to determine how it could be applied to individual projects.

20. Page 28, First paragraph: We would like OPR as well as other readers of this letter to be aware of some of the shortcomings of the Duranton and Turner research cited in this paragraph:

(1) The authors (Duranton & Turner) focus mostly on interstate highways. We question some of the transferability of results to other types of streets (it seems to me adding a lane to an arterial might have different impacts than adding a lane to an interstate). In California in particular, we have a fairly large system of non-interstate freeways (in 2013, FHWA *Highway Statistics* said 54% of the urban freeway+expressway mileage in California was non-interstate).
(2) Despite some efforts to control for it, we think the authors are still confusing correlation with causation (does capacity induce VMT? or does VMT induce areas to provide capacity?).
(3) The authors state unequivocally that, "...we find no evidence that the provision of public transportation affects VKT [VMT]." (page 2618). Doesn't that negate some of the suggested mitigations OPR lists later?
(4) In their conclusion, Duranton and Turner note with 'surprise' that National Personal Travel Survey (NPTS) data show a decline in driving distances per person, per household, and per vehicle between 1995 and 2001 (page 2647). This despite the fact that lane-miles of interstate supplied increased in this period, which would seem to negate the other conclusions of the paper.

The full citation of this paper should be included in the SB 743 guidelines. It is shown here for reference: Duranton, Gilles and Matthew A. Turner. "The Fundamental Law of Road Congestion: Evidence from US Cities." American Economic Review 101 (October 2011), pages 2616-2652. www.aeaweb.org/articles.php?doi=10.1257/aer.101.6.2616

21. Page 30, Recommended Significance Threshold for Transportation Projects: This section provides a much-needed VMT significance threshold for transportation projects. It should be noted that while 2,075,220 is a comparatively large number compared to most numbers used in day-to-day discussions, it is really quite small when translated into its relation to roadway facilities. Assuming 365 days in a year and an equal distribution of VMT over the days, this is only 5,685 VMT per day. A roadway that is one mile in length that carries over 5,685 vehicles per day would exceed this threshold. Using this threshold, all but the smallest roadway improvement projects would exceed the threshold requiring the identification of a significant VMT and a need to consider mitigation. Any efforts to reduce or eliminate this threshold should be resisted.

22. Page 34, Mitigation and alternatives, Fourth Bullet: It would be better to change this bullet to recommend implementation of ITS strategies. ITS can provide many benefits that do not need to be limited to improving passenger throughput.

23. Page 34, Analyzing Safety Impacts Related to Transportation: The first three paragraphs of this section appropriately set up the context for safety investigations under CEQA. Safety analyses are site-specific and require a considerable amount of judgment in the individual situation and setting in question. It would be desirable to also note that analysts should consider ongoing safety research to avoid problems if the material referenced in this section is superseded by future research. The information in the remainder of the section is generally factual and can be used by CEQA transportation analysts, along with additional transportation safety research, to come to conclusions regarding the safety impacts of individual projects. However, we would request that OPR consider reducing this section and deleting material that is opinion rather than factual. We offer some specific comments, as described below, to bring this section more in line with transportation safety analysis as it is used and understood in the transportation engineering profession.

24. Page 34, Analyzing Safety Impacts Related to Transportation, Fourth Paragraph: Change "roadway users" to "travelers". Change "guidance on how to approach" to "information that will be helpful in conducting".

25. Page 34, Last Bullet: This bullet should be deleted. We are not aware of any transportation safety issues that affect just one individual.

26. Page 35, Second Bullet: Change "not undermine" to "avoid undermining".

27. Page 36, Second Paragraph: Change "straightening roads does not increase safety" to "straightening roads may not increase safety".

28. Page 38, Second Paragraph: ITE recognizes the value of narrowing lane widths in certain cases to provide traffic calming and to allow roadway right-of-way to be used for non-auto uses. However, narrowing of lanes is not considered to be appropriate or safer for all roadway types or settings.

29. Page 38, Second Paragraph: Change "wider lanes hinder" to "wider lanes may hinder".

30. Page 39, Protecting Vulnerable Road Users, First Paragraph, Last Sentence: Change "should not reduce active transportation" to "avoid reducing active transportation".

31. Page 42, Attribution of Safety Impacts: This section should be deleted. Its main point appears to be that safety impacts should be attributed to the projects that caused them. This seems to be obvious and does not need to be re-stated. The information provided regarding modeling errors in traffic volumes is not supported and is not helpful.

32. Page 43, Item (2): "Surface roadway lanes can be redesigned from traditional 12.0 foot widths to with [sic] 9.2 to 10.8 foot widths…" Could OPR provide a source for this statement? "Karim (2015)" is cited at the end of the paragraph, but no further information on this reference is provided for this article. Although there have seen studies indicating that narrower lanes (typically 10-11 feet) have minimal impacts on safety, it would be useful to have this citation for lane widths under 10 feet. California law currently allows vehicles to be 8.5 feet wide, exclusive of mirrors. Mirrors may project out another foot on each side, so inclusive of mirrors, a truck or bus perfectly centered in its lane may be 10.5 feet wide including mirrors. Also, it should be noted that most experts believe that these narrower lane widths should be used only on streets with a speed limit of no more than 40 or 45 mph.

33. Page 44, Third Bullet: Change "Signal lengths of greater than 90 seconds" to "Inappropriately long signal cycle lengths".

34. Page 44, First Paragraph, Second Sentence: Change "examples of mischaracterization" to "examples of possible mischaracterization" in order to be consistent with the text prior to the list of possible detriments to safety.

35. Page 47, Case Studies: The three case studies shown in this section are helpful. It is noted that two of the case studies recommend consideration of mitigation measures that are not considered practical given current technical, political, and economic factors. The Mission Viejo Medical Center recommends a $6 per day parking charge, which is considered to be infeasible in an area where similar developments offer employee parking for free. The Kern County Roadway Expansion Project recommends consideration of tolls and other strategies. Toll roadways have been implemented in only a few highly urbanized areas of California and only on freeway-type facilities. It is highly unlikely that a toll strategy could be successful in Kern County or other similar areas of the state. We believe that these two case studies illustrate some of the difficulties in implementing SB 743. While some projects may be able to be designed to avoid VMT impacts or may be able to provide off-site mitigation, there will be large numbers of projects that will be unable to mitigate their VMT impacts and will need to seek a statement of overriding considerations if they are to move forward. This comment is not intended to argue against the implementation of SB 743, but rather to help manage expectations about the ability to fully mitigate the VMT impacts of projects.

36. Page 47, Case Studies: ITE would be interested in a case study that would respond to the example described in Additional Comment 6 from our November 21, 2014 comment letter on the August 2014 draft guidelines.

37. Page 47, Case Studies: It would be helpful to add a case study for a special event facility such as an arena, stadium or similar use.

38. Page 48, Mixed Use Project Case Study: It is unclear how the calculations were made outside of CalEEMod. This case study would be improved if further clarification could be provided.

39. Page 55, Roadway Capacity Expansion Project Case Study: ITE has some comments and questions regarding this case study.

"Lane mile and VMT data are available from the Caltrans Performance Measurement System (PeMS):" We searched the PeMS website on 2/5/16 and were unable to locate either the lane miles or VMT noted for the Kern COG. Could OPR provide the exact web page URL for this information? We are aware that PeMS requires creating a user account, but again, were unable to locate or match this information, even after logging in.

The calculation of the percentage change in lane miles (0.328%) is not, strictly speaking, correct. Nearly every economics text recommends the use of an arc elasticity that considers the average value of the independent variable (in this case, lane miles), not the starting value. Otherwise, a 2.2 lane mile increase and a 2.2 lane-miles decrease give you different answer. This problem increases as the magnitude of the change increases. A simple example may illustrate this point: going from 50 to 75 is a 50% increase, but a change from 75 to 50 is a 33.3% decrease, even though both involve a change of 25).

The correct arc calculation should be (using LM to stand for lane-miles):

$$\frac{\text{Project added lane-miles}}{(\text{"Before project" LM} + \text{"After project" LM}) / 2}$$

While the difference is minimal for such the example small change in lane miles (a third of a percent), it is more important with larger changes in lane miles. We recommend that OPR use the formula use in virtually all economic texts.

Several transportation publications explain this difference and the correct calculation of an elasticity. For example, see Donald R. Rothblatt and Steven B. Colman, "Impacts on Ridership of Bus Fare Changes in Small to Medium Urban Transit Systems," San Jose State University Institute for Metropolitan Studies, September 1997, especially pages 2 thru 8. Also, Richard H. Pratt, "Traveler Response to Transportation System Changes," available online at http://onlinepubs.trb.org/Onlinepubs/tcrp/tcrp_webdoc_12.pdf, especially "Appendix A-Elasticity Discussion and Formulae" and pages 1-13 thru pages 1-16 (first chapter of document).

This letter was prepared by the California SB 743 Task Force, a task force appointed by the Western District of the Institute of Transportation Engineers. The Western District oversees the thirteen Western states, including California. Within California, the Institute of Transportation Engineers is represented by seven sections throughout the state. The Officers representing the seven California ITE Sections have supported the task force in preparing this letter and their names and contact information are shown below.

Future correspondence should be directed to Erik Ruehr, Chair of the California SB 743 Task Force, who can represent the California ITE Section Presidents for correspondence purposes. Contact information is shown below:

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Thank you again for the opportunity to be involved in this discussion. We look forward to working with you in the months ahead.

Respectfully yours,

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