

VIA EMAIL

September 21, 2014

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

Re: SB 743 Proposed CEQA Transportation Impact Criteria Modifications

Dear Mr. Calfee,

This letter is in response to the Preliminary Discussion Draft of Updating Transportation Impacts Analysis in the CEQA Guideline memorandum (the "Memorandum"), circulated by the State of California Governor's Office of Planning and Research on August 6, 2014, concerning the guidelines preliminarily set forward to meet the Senate Bill 743 (SB 743) requirement to update the California Environmental Quality Act (CEQA) guidelines' criteria used to establish the significance of adverse transportation and greenhouse gas emissions impacts. This letter addresses primarily Land-Use Project analyses.

Thank you and the OPR staff for your hard work on the memorandum. I agree with the stated purposes of the bill and support the updating of the CEQA Transportation criteria. As outlined below, I recommend emphasis changes in order to develop a more pragmatic set of analysis procedure and criteria. This will help agencies evaluate the actual transportation impacts of a project rather than trying to implement the generalized procedures recommended in the Memorandum's Appendices C through F.

The basic goals and philosophy of SB 743, and the proposed guidelines, is to have CEQA, , promote in-fill development through streamlining, and to have the infill development located in transit-oriented areas. I have been conducting detailed CEQA analyses for 30 year and am strongly in support of those goals and philosophy. My observation has been that CEQA analyses' reliance upon short-term traffic generation and localized assignment procedures have been primary factors leading to our current traffic jams and greenhouse gas emissions. Net VMT or Gross VMT compared to regional average VMT (VMT impact) will be a much better measure of a project's impact on regional transportation. VMT impacts will better address the associated issues, including greenhouse gas emissions. I also concur with using the available information, when possible, and having a standardized approach so that projects of all sizes and types are evaluated on a common basis.

Issues

The approach outlined in Appendices C through F of the guidelines has a reliance on the direct use of model output, but regional models do not currently provide the data needed to accurately evaluate an individual project's VMT impact. Transportation models are suited for determining the near-term consequences of overall land-use location patterns and infrastructure network VMT impacts, not for individual project VMT impacts (see Attachment A of this letter for a list of model technical deficiencies for evaluating an individual project's VMT impact). Rather, output from analyses of RTIPs/CMPs which address congestion and greenhouse gas emissions can be tailored to determine if a land-use project or infrastructure project is part of the land-use pattern or set of infrastructure improvements being relied upon. Further, near-term transportation demand impacts are only one factor in determining the long-term impacts of land-use and transportation decisions. The problems in Attachment A have been addressed in the CMPs/RTIPs, and those answers should be used for individual land-use and transportation infrastructure project analyses to the extent possible. Repeating the correction process for each project under CEQA would not only be time consuming and costly, but also lead to divergent methodologies with inconsistent answers.

It should be remembered that SB 743 was enacted to streamline the CEQA implementation for transit-oriented, in-fill projects. More of an emphasis is needed in Appendix C on how the guidelines would apply to in-fill, transit corridor individual projects (as opposed to large scale master plans). This is especially important to the transit oriented, in-fill projects that are too small in size to conduct modeling. The general language outlined in Appendix C, if refined and included, would only be appropriate for major projects adjacent to transit hubs, but not sufficient for many smaller in-fill transit corridor projects. The process would make those smaller projects' transportation analyses more complicated since, as the draft recognizes, access considerations will still need to be addressed. It further ignores the long-term consequences of all projects.

Lastly, I am concerned with the alternatives and mitigation measures in Appendix F as the decisions are local and the impacts are global. We have been working with developers for 30 years to include jobs and services in single-family residential communities. The increasing VMT indicates that stronger measures are needed. Additionally, people living and working in infill, transit-oriented developments need to be encouraged to use the alternative modes available. The main factor behind the increased VMT per capita is that car use is heavily subsidized and the demand for sprawl development is high. The alternatives and measures in Appendix F do not provide disincentives to individual's automobile usage and thereby do not address that factor. Economic measures, such as unbundling (separating parking space leases from office and residential leases) should be included in Appendix F.

Conclusions and Recommendations

As stated above, I am very pleased with the tenor of the Memorandum. However, use of existing models as recommended in the Appendices is not feasible as the models are not suited for net VMT analysis of individual projects. I strongly recommend that the goal remains to ease CEQA analysis requirements for all transit oriented, in-fill projects. That is not accomplished by creating a process relying on complicated, but as of yet undefined, additional analyses for individual projects. The procedures set forward in the current draft guidelines would be costly and/or mislead decision makers. Therefore, I have made specific recommendations a workable set of procedures. I feel those changes would improve the Memorandum to better serve the local agencies who will implement the CEQA Guidelines.

- CEQA Appendix G should recommend further study for a new project ‘not being consistent with a larger local and State agency plans shown to reduce VMT.’ Consistency would depend upon factors beyond location such as being above a minimum density and below a parking maximum ratio. In turn, the RTIPs and CMPs need to have priorities/triggers included so that infill development of transit corridors precedes development of outlying areas. The RTIP/CMP compliance check should apply to both land-use and infrastructure improvement projects.
- If compliance with a VMT reducing RTIP/CMP/General Plan cannot be demonstrated, further analyses are needed. Use of available data should have greater emphasis in Appendices C, D and E. However, current models cannot estimate VMT impacts for divergent projects consistently (see Attachment A). Transportation models should only be used selectively after the technical issues, including those in Attachment A, have all been addressed. I would instead include encouragement for the RTIP/CMP agencies to estimate average trip lengths by traffic analysis zone (TAZ) for resident, retail employee and other categories of employees, potentially considering other easily quantifiable but salient factors. The trip length for the TAZ would then be compared to the regional average for that land-use type. This would provide local governments with guidance on the net impact of the added land-use at that location and the parameters of the project. This would require additional development of the RTIP/CMP data, but the analysis would not need to be repeated for each CEQA analysis.
- The mitigation measures of Appendix F should be updated to not only provide subsidies for use of transit (or other alternative modes), but also remove the subsidies for the use of automobiles. Changing the market by removing driving subsidies will better reduce greenhouse gas emissions than any other measure. It is recognized that no longer subsidizing tail pipe emissions, noise generation, safety hazards, water run-off, and a host

of other automobile/roadway impacts is beyond this CEQA update. However, the cost of parking should be internalized as a cost borne by people who choose to drive.

The above recommendations are to make the program both effective and workable for the range of projects that are regularly proposed -- not only major developments that can have specialized analyses, but also smaller land-use and infrastructure projects. For CEQA purposes, consistency with the regional plans is the major factor in determining if the projects will have minimal regional transportation and greenhouse gas emissions impacts.

Sincerely,

A handwritten signature in blue ink that reads "George Rhyner". The signature is written in a cursive style with a long, sweeping tail on the "n".

George Rhyner, PE
Senior Transportation Engineer
TE 2143, CE 47763

Attachment A

Direct Modeling Approach Technical Deficiencies

The following discussion is based on a review of the wide range of land-use and infrastructure improvement projects that CEQA must address. A comparison was made of the available individual project information to the needed information for the recommended modelling procedures. This review concluded that the transportation models are not designed to review the implications of the isolated land-use and infrastructure improvement projects. Rather, transportation models are designed to analyze the implications of alternative land use location patterns and sets of network infrastructure improvements. For the reasons outlined below, regional models cannot accurately predict the VMT impacts from the addition of a single land-use or infrastructure project. Instead, average values per TAZ compared to average regional values is a more reliable estimator of VMT impacts and easier to implement.

There are numerous technical problems with directly applying models to individual land-use projects and infrastructure improvements. The following is a list of readily apparent problems:

- Each trip type has a different range of trip lengths, and applying a single average comparing against all types of trips will be misleading for each project. Therefore, the trip length needs to be compared against the average for that specific land use type, which will be a weighted value of the trip types, with that weighting varying by land-use type.
- Models input data consists of broad socio-economic parameters, such as combining all retail employees into a single category. The modeling procedures treat a convenience store employee and outlet furniture mall employee the same, although ITE Trip Generation shows that their trip generation impacts are very different. Further, the market areas used for the various types of store and practical reality indicates that the customer trip lengths are very different, as is the percentage of automobile trips. Medical offices and general offices have very different interactions with the surrounding uses and the environment, but the professional employees in either are treated as the same socio-economic parameter by transportation models. CEQA needs to address the specifics of a project, rather than combining the uses into the socio economic parameter categories suitable for a regional transportation model.
- Models estimate generation from each TAZ in terms of trip ends, a pair of which are linked to form a trip. For V/C analyses, that was acceptable as nearly all trip ends at a project site will result in a trip passing through the project study area. However, when you are examining VMT impact the distinction between trips and trip ends is vitally important. Each trip associated with a trip end can have a very different length and thereby VMT implication.

- The distinction between trips and trip ends becomes even more important when you consider that one end for each trip is a production and the other must be an attraction. Therefore the model must balance the productions and attractions. Trip balancing treats home based work productions added by residential development very differently than the home based attractions added by offices. Therefore, models cannot determine the VMT impacts of all types of projects using the same methods.
- The transit system is constantly evolving. For instance, the extension of the EXPO light rail line to Santa Monica by Metro is under construction. Are only operating facilities to be considered or are under construction facilities to be added? Bus lines have been quickly added in Southern California in response to land-use shifts. Are those facilities with funding also to be added? Do you use the existing or future conditions model transit network? For consistency sake, a single answer of using the mode split estimated by the future year model is needed and inherent in the recommended VMT by land use type for each zone table.
- Traffic improvements have both near-term and long-term implications in terms of induced trips. Near-term induced automobile trips occur mainly from mode shifts. It has been argued that mode shifts impacts are off-set by reduced idling times and acceleration/decelerations. However, long-term induced automobile trips from an expansion of automobile-centric land-use patterns and increased automobile ownership result in increased emissions and a return to congested conditions. Transportation models consider only limited “induced trips” due to near-term mode shifts and trip rerouting. If done correctly, RTIP/CMP development considers inducted land-use pattern changes.
- New project specific VMT models will require rigorous review if used to estimate VMT impacts. There are numerous assumptions beyond the above in the regional models, all of which should be checked by someone understanding the implications. Most jurisdictions do not have such a staff person, nor could small projects afford the cost associated with the modelling and review of persons who did.

All of the above have a myriad of technical solutions, but those solutions rely on assumptions and considerations. The concern is that individual projects and/or jurisdictions will choose different easy solutions, which will cause the results to be misleading. Worse yet, they will follow the current guidelines verbatim and ignore the above technical considerations altogether. Not adjusting for this type of considerations would render the net VMT impact calculations meaningless. Therefore, direct use of modeling for individual projects should only be done when necessary and then by consistently adjusting for all technical model deficiencies.

As an alternative, RTIP/CMP models can be used to estimate the average trip length for trips produced by and attracted to a traffic analysis zone (TAZ), with those lengths compared to the regional averages. Formulating the trip length for each zone would require a skim path analysis of the TAZ-to-TAZ lengths with weighted sum based on the origin/destination matrix and

generation parameters. The trip generation parameters for each TAZ would need to be carefully determined based on land-uses type and resulting trips by purpose. Adjustment factors, such as for land-use density, may also need to be developed. Doing so once for the region is more accurate and cost efficient than doing so independently for each CEQA analysis. Further, that will ensure that the individual project (TAZ) and regional average values are based on the same analysis technique.