NELSON
NYGAARD

MEMORANDUM

To: Office of Planning and Research, CEQA.Guidelines@ceres.ca.gov

From: Jeffrey Tumlin

Date: November 18, 2014

Subject: Comments on the 8/6/14 "Updating Transportation Impacts Analysis" Draft

I am pleased to offer the following comments on OPR's August 6, 2014 "Updating Transportation Impacts Analysis in the CEQA Guidelines" discussion draft.

Nelson\Nygaard is a national, San Francisco-based transportation planning consulting firm, with over 120 employees and a 25 year history as an industry leader. We have conducted innumerable transportation analyses under CEQA, and we firmly support SB 743's efforts to correct the significant unintended negative consequences of conventional CEQA transportation analysis. For more background on the firm, see www.nelsonnygaard.com.

INTRODUCTION

Before thinking about how to reform CEQA, it's important to consider the good intentions behind and poor results of current practice. CEQA's current approach to transportation focuses on the seconds of delay that cars experience as a result of peak hour congestion at intersections at and near proposed development projects. Projects that cause an exceedance in a "Level of Service" threshold must attempt to mitigate their traffic impacts. While the current approach sounds reasonable, it creates major problems:

- **Only the last one in pays.** As development progresses in a community, the first projects do not have to mitigate their traffic. Only later projects that trip a specific threshold must mitigate.
- **Isolated projects are favored**. As a result of the previous point, projects in isolated, greenfield locations where there is not *current* traffic do well under CEQA because they can avoid tripping thresholds. Throughout California, however, most urban transit centers and mixed-use main streets have some existing traffic congestion. So even transit-oriented, pedestrian-friendly projects that generate relatively few vehicle trips are seen as having significant negative traffic impacts under CEQA, because most inevitably trip a threshold.
- **Regional traffic is worsened to improve local traffic**. CEQA transportation analyses consider local impacts, not regional impacts. As CEQA favors greenfield projects that generate relatively more and longer vehicle trips, and disfavors transit-oriented infill projects that generate relatively fewer and shorter auto trips, CEQA unintentionally exacerbates regional traffic problems in the hopes of alleviating congestion at a few local intersections.

- **Mitigation worsens the problem it seeks to solve**. Transportation analyses often require the project applicant to assume the worst-reasonable-case level of traffic generation in order to be "conservative," typically by using the Institute of Traffic Engineers' *Trip Generation* manual. If the project is found to trip a LOS threshold, it is typically then expected to widen roads and intersections to bring them back to an "acceptable" level. The roadway widening, however, creates two effects: 1) It makes it that much more difficult to walk, bicycle, or use transit, by increasing pedestrian crossing distances, increasing traffic levels, and increasing traffic speeds, and 2) it makes it that much easier to drive, particularly if the roadway is widened to accommodate the worst case level of trip generation, rather than a likely level. Wider, faster roads result in *induced demand*, resulting in more driving than the project would have generated without the mitigation. This additional driving results in greater regional traffic congestion, along with greater pollutant and CO_2 emissions. Our near-sighted efforts to mitigate local congestion problems under CEQA are exacerbating overall congestion.
- **Mitigations contradict our CO_2 reduction goals**. While the required transportation analysis in CEQA seeks to mitigate congestion by *accommodating more* traffic, the air quality and CO_2 analyses require that we *reduce* rates of driving. The result is air quality and transportation sections that contradict each other. Instead, we should seek to address regional traffic congestion by reducing vehicle trip generation rates and per capita VMT. By reducing traffic rather than accommodating it, the transportation analysis and air quality analyses can be mutually supportive.

Since CEQA was adopted, we have learned that we cannot build our way out of congestion. Instead, we need to work together so that all Californians can enjoy meaningful alternatives to being trapped in our cars for all our various travel needs. SB 743 helps make sure that CEQA supports less automobile dependency and makes sure that all development projects contribute meaningfully to our state's efforts to reduce pollution and increase economic opportunity and social equity.

As it stands, CEQA epitomizes the law of unintended consequences. As we seek to reform it, it is important not to create new problems. A core reason we keep failing with CEQA is that we ask it to do too much. CEQA is simply a legal disclosure tool. As a tool to promote good, inclusive planning, however, it largely fails. Instead of forcing our useful legal disclosure tool to achieve goals it cannot, we should explore more useful approaches. We address alternative, non-CEQA strategies at the end of this document.

CRITERIA AND THRESHOLDS

We firmly support the use of per capita VMT as the basis for new CEQA transportation analysis criteria. At a high level, per capita VMT is effective for the following reasons:

- It eliminates contradictions between the transportation analysis and air quality analysis. In order to mitigate a VMT problem, a project could no longer move to a more isolated location, or shrink itself to clear a threshold. Instead, it would work to reduce its vehicle trip generation rate or trip length, helping California address its regional traffic and air quality goals at the same time.
- It is the best metric for capturing the impact on regional traffic congestion. VMT measures impacts on the entire system, not just a few local intersections.

- VMT mitigations are good for the environment, for the state's economy, and for disadvantaged communities. VMT mitigations will also improve the overall transportation system, rather than improving conditions for motorists while making them worse for all other travelers. VMT mitigations would not induce additional demand for driving. Mitigations that reduce per capita VMT give all Californians better, more affordable transportation choices
- VMT is easy to measure, and there are readily available, free, transparent, and court-tested tools for doing so. In transportation analyses, we already must calculate VMT in order to calculate LOS. In air quality, we also have to calculate VMT. Focusing on this single metric simplifies the transportation analysis. In Appendix F of the discussion draft, OPR provides a useful summary of the available tools for estimating VMT.

The establishment of precise significance thresholds merits further development. CEQA is an important tool for helping California meet its overall CO_2 reduction goals under AB 32. Just as we require new development to meet more stringent water conservation targets than existing development, so must we ask new development to reduce its per capita VMT at a faster rate than we require of existing.

At the same time, it is important to allow responsible development in all parts of California, not just places near high frequency transit. Rural development should not face an impossible threshold, and urban development should not be given a free ride. Rural development should have a different threshold than urban development, so that both types of development contribute equitably toward meeting the statewide goal.

Establishing thresholds around existing regional per capita VMT averages provides an opportunity to avoid a "one-size-fits-all" approach. However, managing to existing average regional VMT only keeps us where we are. We would prefer that the California Air Resources Board set VMT-reduction targets that would ratchet down over time to achieve the state's overall 2020, 2030, and 2050 goals. In the absence of ARB targets, however, we would suggest that a starting place for a threshold would be 15% below the existing regional average for the given land use, depending upon how "regional" is defined.

Defining the regional point of comparison is tricky. The regional boundaries should be established with the following in mind:

- Development in rural counties must not be disfavored. Instead, rural development that occurs in existing towns, and in particular along local main streets, should be strongly favored by the CEQA transportation thresholds. Rural main street projects produce significantly less VMT than more isolated rural projects, if only because driving trips are shorter, and motorists will tend to park once and do a few different activities while on main street.
- Even the most urban, transit-oriented projects should be pushed to reduce their VMT. A project next to LA Union Station, for example, with an over-supply of parking spaces, should not get a free ride, even if it does better than the LA County average.
- Infill development in locations with marginal market conditions should not be pushed too hard to reduce VMT. In transit-oriented locations that barely "pencil" in terms of developability, the state's goals are best served if there is no CEQA transportation analysis requirement, or further VMT reduction requirement.

With these extremes in mind, we suggest that "regional" be defined as no larger than a single county and should be a sub-county area in places where density is highly variable within a single county. We also suggest that OPR delegate to the MPOs or RTPAs decisions about how finely they want to define thresholds, and allow them to set higher and lower thresholds as they see fit to achieve the larger CO_2 reduction goal. MPOs and RTPAs can also adjust VMT reduction targets to take market conditions into account, with greater VMT reduction requirements in place with higher real estate value, and no requirement in places that are marginally developable.

To help the regional agencies, the state would ideally develop a statewide heat map that estimates the percentage reduction below the Institute of Transportation Engineers' (ITE) vehicle trips rates that would be expected, based upon most recent data on the effect of land use, transit proximity, mix of uses, and other factors on travel behavior. Isolated, auto-dependent parts of the state would be at 100% of the ITE rates. More transit-oriented and mixed-use areas would be significantly below the ITE rates, with many gradations in between. Robert Cervero's research on Transit Oriented Development trip rates in California, for example, have found such projects generate up to 64% fewer trips than would be predicted by ITE.[1]

Next, there would be another heat map overlay that establishes thresholds for how much additional reduction is required in each decade to meet the state's CO_2 reduction goals. For agriculture-related development in purely agricultural parts of the state, it may be reasonable to establish a threshold matching the expected ITE rates, or slightly lower. For suburban and rural residential, however, perhaps a threshold could be set at 15% less VMT than would be expected based upon the first heat map. For more urban, transit oriented sites, a more ambitious reduction target could be established in places with strong market conditions. The actual reduction thresholds would be established by regional agencies sufficient to achieve the statewide CO_2 reduction goals, with each region of California assuming their reasonable share of responsibility, while respecting their unique considerations.

SAFETY

Proposed Section 15064.3(b)(3) adds "Local Safety" to CEQA analysis criteria.

There are few effective arguments against enhancing the safety of our transportation system. Indeed, safety is arguably the most important transportation objective. **We are very concerned, however, that CEQA is a poor tool for evaluating safety, and that including it in CEQA will have significant negative consequences.**

Transportation safety is easy to measure after the fact, but difficult to predict during the project development phase. In transportation, we try to create safe environments through detailed design controls for all transportation facilities, including roads, rail lines, bike paths, etc. These design standards, however, oftentimes contradict each other. Compare, for example, the *California Highway Design Manual* and the National Association of City Transportation Officials' (NACTO) *Urban Street Design Guide*. These documents take different approaches toward safe roadway design, starting from the foundations of the design process through the appropriate dimensions of roadway elements. The NACTO approach is rooted in an analysis of urban conditions, while the Caltrans approach emphasizes rural highway conditions. In the latter environment, wider travel

[1] Robert Cervero, "Vehicle Trip Reduction Impacts of Transit-Oriented Housing," *Journal of Public Transportation*, Vol. 11, No. 3, 2008, among other sources.

lanes, shoulders, higher design speeds, and greater accommodation of driver error often enhance motorist safety. These same tools that improve safety on the highway, however, result in reduced safety in a multimodal urban environment, particularly for more vulnerable road users.

Caltrans defends its approach as safer, though it has "accepted" the NACTO guide under certain conditions. Who is right? Caltrans still does not consider protected bicycle facilities to be "safe." Should an EIR suggest that a cycle track be eliminated to mitigate "safety" concerns? Should an EIR suggest highway-scale shoulders be added to El Camino Real or other state-controlled urban streets in order to improve "safety" in accordance with the *Highway Design Manual*? The state and courts will likely consider the *Highway Design Manual* to be the more "conservative," well-tested document. As a result, it is reasonable to predict that including safety in CEQA could result in *fewer* investments in safety-enhancing infrastructure such as traffic calming, bicycle facilities, pedestrian enhancements, road diets, and other projects that are known to improve safety performance, yet are still considered experimental and therefore risky by Caltrans.

Because there are no commonly accepted standards of safe roadway design, and because there are currently strong debates within the industry about safer design approaches, inclusion of safety will almost certainly lead to additional litigation, delay, and unpredictability. Project opponents will readily find qualified transportation engineers able to argue that any project's approach is unsafe. Project supporters will find equally qualified transportation engineers to argue the opposite. The courts, unfortunately, have little background in the nuances of the current debates, and are ill positioned to arbitrate.

Proposed Section 15064.3(b)(3)(B) identifies queues on freeway off-ramps as a CEQA safety issue. Indeed, the sudden slowing of traffic on the freeway as a result of off-ramp queues creates significant safety concerns. Including this issue in CEQA, however, is highly problematic.

Almost all projects in California that generate vehicle trips will result in some added freeway trips, all of which will lead to an off-ramp. Many freeway ramps in urban California – and most ramps in our most transit accessible locations like downtown San Francisco, Sacramento, Los Angeles, San Jose, and San Diego -- experience congestion in peak periods that backs traffic up onto a freeway mainline. Should CEQA assume that downtown development projects should be required to contribute toward widening our freeways in order to mitigate this "safety" problem? Should development projects move to more isolated locations far from freeways to reduce backups?

While the rest of the draft guidance seeks to remove LOS from transportation analyses, requiring analysis of highway queues inadvertently puts LOS firmly back in.

Similarly, including adjacent lane speed differentials as a safety concern is equally problematic. Under such a criterion, all Bus Rapid Transit projects would automatically be considered unsafe. Indeed, most urban streets, where the outside lane is used for maneuvering into on-street parking or bus stops, would be considered unsafe.

Recommendation

Our recommendation is to remove safety entirely from CEQA. While we are strong proponents of safer roadways, CEQA is the wrong tool for enhancing safety. To maintain the spirit of proposed Section 15064.3(b)(3), we recommend that OPR rephrase subsections A and E to make sure that transportation projects do not worsen conditions for walking, bicycling, and transit, the success of which is critical to meeting our overall VMT goals. It can be argued that bike lanes have limited direct safety benefit, but they have a powerful effect on attracting cyclists, and the addition of

cyclists improves safety through the "safety in numbers" phenomenon. The following wording may work:

> **(3) Non-Auto Access and Transportation Projects**. Transportation projects that do not directly create VMT but reduce bicycle, pedestrian and transit accessibility; eliminate or reduce bicycle or pedestrian facilities; create transit service delay sufficient to result in an increase in VMT; or increase distances between crosswalks or protected pedestrian crossings would likely be considered to have a significant impact.

Then eliminate subsections B, C and D.

If safety must be included, we strongly recommend eliminating mention of highway queues or speed differentials as safety criteria. In addition, OPR should specify that safety mitigations not accommodate increased VMT or increased motor vehicle speeds.

TIMELINE

Local jurisdictions need time and resources to accommodate such a significant change to their traffic analysis guidelines. Most jurisdictions will need to adopt or update their transportation impact fees in order to replace the exactions function CEQA currently serves. All will need to update their guidelines and train staff. For most jurisdictions, it may be easier to adopt a single set of new guidelines rather than one set for transit-intensive areas, and another set for the remainder.

We suggest that jurisdictions be encouraged to drop LOS as soon as possible, but establish a single deadline of one year from adoption by the State Resources Agency.

APPENDICES

We recommend that sample VMT reduction measures be removed from the proposed changes to Appendix F. It would be very helpful for OPR to provide more detailed guidance to local jurisdictions, noting the most helpful approaches for reducing VMT in various contexts, and supplying references as to the effectiveness of these measures. This information, however, does not belong in the guidelines.

For the draft checklist in Appendix G, we suggest the following edits in **bold**:

a) Conflict with a plan, ordinance or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes and pedestrian paths, **with the exception of policies concerning vehicle delay**?

b) Cause vehicle miles traveled (per capita, per service population, or other appropriate measure) that exceeds the regional average for that land use, **less VMT reduction targets established by local, regional and/or state agencies**?

c) Reduce bicycle, pedestrian and transit accessibility; eliminate or reduce bicycle or pedestrian facilities; create transit service delay sufficient to result in an increase in VMT; or increase distances between crosswalks or protected pedestrian crossings?

d) 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?

e) Result in an increase **in the average distance from first responders to residents and jobs.**

The edits to the emergency access question, like our safety concerns, are necessary to eliminate the use of LOS as a means for measuring emergency response time.

NON-CEQA RECOMMENDATIONS

To help make the most of OPR's efforts to fix the problems with CEQA, some additional steps are necessary outside of CEQA:

Congestion Management Act

While the state is being helpful removing LOS from CEQA, it is still embedded firmly in the Congestion Management Act. The role of LOS in the Congestion Management Act is far less harmful than in CEQA, in that individual development projects do not need to comply with it, and that Congestion Management Agencies are allowed greater latitude in managing their congestion on a regional basis. Nevertheless, the Congestion Management Agencies should be enlisted as key agents in helping meet the state's VMT reduction targets. That is, they should have their charters changed to focus their congestion-reduction efforts on VMT reduction, not on highway widening.

General Plan Guidelines

Most cities have LOS thresholds established in their general plans. Just as the state has updated Housing Element requirements to help meet statewide housing goals, so should the Circulation Element guidelines be rewritten to focus on VMT reduction.

Impact Fees

Many of the cities that have objected to the LOS-VMT switch have done so because they are concerned about losing the CEQA mitigation funds they need to build out necessary local roads. Fortunately, it is simple in California for local jurisdictions to adopt transportation impact fees. Unlike CEQA mitigations, impact fees are levied on all development projects at predictable rates, and they can be used for any project supported by the fee nexus. Impact fees are far more useful than CEQA mitigation exactions.

One problem with impact fees, however, is that current legislation does not allow them to be imposed at a regional or statewide level. Caltrans is right to be concerned about its declining revenues, and seeks to use CEQA as an exactions tool just like municipalities. The solution for Caltrans is new state legislation to allow impact fees to be collected by MPOs, CMAs, transit districts, or the state, for accommodating necessary adjustments to regional transportation infrastructure.

One current approach that could be expanded is great use of Indirect Source Rule fees by the state's air districts. Both San Joaquin and Imperial County air districts impose impact fees on new development based upon the amount of criteria pollutants that development will generate. In San Joaquin County, the fees vary by location, according to expected rates of VMT.

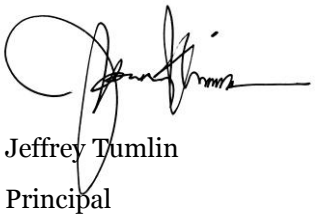
All the air districts have the authority to impose development impact fees based upon CO_2 emissions and use the revenue to invest in projects that reduce CO_2, including projects and programs that create mode shift.

Guidance

Finally, we strongly recommend that OPR produce a compendium of best practices, including sample code language, impact fee nexus studies, traffic impact analysis guidelines, and other resources to minimize the time and effort necessary for local jurisdictions to accommodate this necessary change.

Please let us know if we can be of further assistance as you complete this important work.

Sincerely yours,



Jeffrey Tumlin

Principal