February 14, 2014

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

Subject: Alternative Transportation Metrics for Evaluating Transportation Impacts Pursuant to the California Environmental Quality Act (CEQA)

Dear Mr. Calfee,

Thank you for the opportunity to review and submit comments on the Office of Planning and Research’s (OPR) efforts in proposing alternative methods of transportation analysis pursuant to SB 743. We appreciate the opportunity to work with OPR in identifying an ideal metric suited to advance sustainable land use and transportation goals. SB 743 requires OPR to amend the CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts within Transit Priority Areas (TPAs). Building off of legislative trajectory that includes AB 32, SB 97, SB 375 and SB 226, this legislation represents the next logical step to reform CEQA. SB 743 helps to further align CEQA with dual pronged efforts to reduce greenhouse gas (GHG) emissions and promote sustainable land use practices throughout the state. With the largest area covered by transit in the state, a high population density (8,225 people per square mile according to 2010 Census), and a large percentage of remaining capacity, the City of Los Angeles has potential to accommodate a large fraction of California’s growing population, while reducing mobile source greenhouse gas (GHG) emissions consistent with the vision of SB 375.

The poor performance of the LOS metric in encouraging infill development projects has been well documented. Environmental Impact Reports (EIRs) can be required for infill development projects that add even modest trip generation to already built-out urban locations, even while they offer a greater level of access to urban services and impose lower travel demand impacts relative to other locations in the region. Another unintended side-effect of the LOS metric is that the scale of analysis cannot capture the regional trip demand of development that is more remote from urban centers, as noted in OPR’s Preliminary Evaluation of Alternative Methods of Transportation Analysis (Preliminary Evaluation).
Of all the alternatives presented in the Preliminary Evaluation, we believe that Vehicle Miles Travelled (VMT) per capita metric provides the greatest value for establishing a direct nexus to promote the state’s goals of reducing GHGs, while achieving most of the other goals and objectives identified in SB 743, and the Preliminary Evaluation.

VMT-Based Metric

A VMT-based metric incorporates the two most important variables that are determinates of mobile-source GHG emissions: trip generation and trip length. This is an improvement over the Automobile Trips Generated (ATG) metric, which captures trip generation only, and does not capture the regional context of land use and proximity. The ability to account for trip length is a critical factor in Los Angeles, due to the large trip variations within the city’s diverse geography. The City includes dense and highly accessible neighborhoods such as Koreatown, Downtown and Hollywood, as well as areas that are more suburban in character, such as the North San Fernando Valley. The final metric should be able to capture the intrinsic redevelopment benefits in areas with greater land use diversity and access to multiple transportation modes. Conversely, the selected metric should also account for the regional transportation impacts of larger development occurring in areas with less land use diversity and lower access to multiple transportation modes. Over the long-term, a metric that inhibits large trip generators in areas of lower accessibility will also help to lower demand on the freeway system.

Comparison to Other Potential Metrics

As part of SB 743, the legislature directed OPR to also consider the promotion of multimodal transportation networks when choosing an alternative metric to LOS. In the Preliminary Evaluation, OPR also lists health benefits associated with active transportation as a factor to consider. Transportation professionals and advocates that highlight the drawbacks of LOS in supporting active transportation goals often mention Multimodal Level of Service (MMLOS) as having the potential to balance these competing goals by promoting various modes of travel. LADOT and DCP, through support from the Southern California Association of Governments (SCAG), reviewed the potential for MMLOS through the Mobility Performance Measurement Study. The study concluded that MMLOS methods lacked sensitivity to assess multimodal impacts from individual development projects, and also produced unexpected relationships between bicycle and pedestrian-related mitigations and their reported benefits, as measured by the MMLOS score. In addition, it was shown that MMLOS methodology requires large amounts of data and field verification. Drawing on similar findings in the Preliminary Evaluation, City staff concludes that application of the MMLOS metric conflicts with the criteria of minimizing fiscal resources and fostering a simpler development review process.

Given the primary unit of analysis is vehicle trip generation, a VMT-based metric does not directly measure transit and bicycle ridership and pedestrian activity. However, a VMT-based metric does complement transit and active transportation investment in two ways. Transportation research demonstrates that active transportation and transit investments perform best, in achieving higher modal participation, in urban environments characterized by dense and diverse land use patterns. A VMT-based metric that supports land use diversity and density around transit would also support transit and active transportation strategies given their greater ability to increase non-vehicular travel
modes. Additionally, if transit and active transportation projects would not be shown to generate new trips, the VMT performance would show no overall increase. In contrast, there may be VMT reduction if a transportation model can demonstrate increases to other modes of travel relative to driving. There appears to be progress on measuring the relationship between active transportation modes and VMT through the application of active transportation models, and modeling these relationships should improve over time.

The Preliminary Evaluation mentions several variants of VMT that have different denominators. Adopting a VMT metric that is divisible by population unit (per capita), or service population (per employee) would help ensure that projects and planning activities are not penalized for scale, and impacts are properly portioned to regional context and high trip generating uses. Some of the other denominators described below present challenges, or have decreased utility in their effectiveness in applying mitigation in a regulatory context.

A VMT per fuel-use threshold would require estimating vehicle model preferences of future occupants. The metric also may not result in additional mitigation measures that would be within an agency's authority to implement other than requiring electric vehicle charging stations in development projects. Additionally, while closely tied to GHG, using fuel-use as a denominator would distance the link with inefficient land use patterns and promotion of mobility goals, since fuel-efficiency gains (already occurring with Pavley regulations) could largely overshadow VMT benefits. This could also discourage investment in lower income areas where households rely on older, less fuel-efficient vehicles.

A VMT per trip based metric was considered due to its potential to promote mobility goals. However, this metric would appear to only evaluate the estimated trip length, rendering all projects equivalent regardless of intensity of land use or scale. The analysis conducted under this metric would be difficult to explain to the public in that the analysis would conclude equivalent transportation impacts of two projects in similar location that may vary dramatically in scale. For example, 10 multifamily units and 500,000 square foot of commercial retail could have equivalent VMT per person trip since they would likely report the same trip length.

We concur with the Preliminary Analysis that notes the methodological simplicity of VMT per capita relative to other metrics. A metric pre-requisite may include an up-to-date Travel Demand Model to derive VMT data for each transportation analysis zone (TAZ) within an agency's jurisdiction. However, once the VMT average is known at the TAZ level, it may not require running a model for each project-level evaluation. In contrast, some of the other metrics may require additional data collection effort to develop, with greater fluctuation in analysis outcome. Motor vehicle hours traveled would be dependent on sophisticated modeling tools, requiring a greater level of investment that would likely be beyond the capacity of budget constrained jurisdictions.

Further Considerations

While we see VMT per capita as having the highest potential to satisfy the criteria identified in the Preliminary Analysis, selecting the VMT per capita metric may also introduce some unintended consequences. A recent report by the Dukakis Center for
Urban and Regional Policy at Northeastern University\(^1\) has demonstrated a transit decline in 19 percent of study areas with recent transit investments. The study attributed this decline to the unintended displacement of lower income households that are more reliant on transit by affluent households. Household travel surveys indicate that households with annual income below $40,000 generated approximately 45% fewer trips than households making an annual income above $80,000 (National Household Travel Survey, 2012). The application of a VMT per capita metric poses some risks in stimulating development pressure for strictly market rate housing in infill locations if the low trip generation rates of affordable housing are not properly accounted for. This could have the perverse consequence of increasing VMT where low-income people are displaced from transit accessible areas to distant, jobs poor areas with low transit access due to availability of cheaper housing. To address any unintended consequences that would result in displacement, we suggest that OPR include advisory language that lead agencies consider the relationship between housing income levels and trip generation as they proceed to formalize their transportation analysis methodology pursuant to CEQA.

Due to the reasons described above, the City recommends that OPR select VMT per capita metric to replace LOS in Transit Priority Areas. In addition, we request that OPR clarify several issues where the legislation and the Preliminary Evaluation are less clear. OPR should specify that lead agencies will continue to have the authority to adopt a threshold of significance for whichever metric is selected. We also request that OPR clarify the time period that a planned transit stop included in a Transportation Improvement Program needs to be scheduled for completion to be defined as a TPA. There planning horizons in the regional Transportation Improvement Program and the State Transportation Improvement Program differ, and could result in conflicting TPA maps that are recognized under the law.

Thank you for considering our recommendations,

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