



MEMORANDUM

To: Office of Planning and Research

From: Jeffrey Tumlin

Date: February 14, 2014

Subject: **Preliminary Evaluation of Alternative Methods of Transportation Analysis Comments**

I am pleased to offer the following comments on OPR's Preliminary Evaluation of Alternative Methods of Transportation Analysis.

Nelson\Nygaard is a national, San Francisco-based transportation planning consulting firm, with over 100 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.

PERFORMANCE METRICS

I offer the following comments on specific performance metrics:

VMT

Measured per capita, per employee, per person, per household or per person, Vehicle Miles Traveled offers a good combination of simplicity and comprehensiveness, tied directly to actual negative impacts associated with transportation. VMT covers not only localized impacts, but the overall extent of the regional impacts as well.

We are particularly interested in comparing VMT against person trips. Part of the fundamental flaw in our current CEQA approach is the assumption that travel is bad. On the contrary, increased person trips are good for the California economy, and for the health of its population. Promoting many short trips can have many positive outcomes, provided those trips are primarily in the most energy- and space-efficient modes.

ATG

ATG is similar to VMT in many respects, but it trades greater simplicity for somewhat less consideration of regional impacts. It measures just the number of trips, without regard to their length.

MMLOS

Multimodal Level of Service, at least as it is defined in the Highway Capacity Manual, takes all of the problems associated with LOS and replicates those problems for all modes. MMLOS would likely worsen the unintended negative consequences CEQA entails today. For example, a project built next to an existing high capacity transit station would certainly worsen MMLOS for transit,

while a project built in an isolate site where there is no transit would have no impact on MMLOS for transit. Similarly, a project that generates significant bike ridership could worsen MMLOS for bikes by introducing bike crowding; using some bike LOS metrics, the excess bike ridership could be mitigated by eliminating the bike facility.

Fuel Use

Fuel use is better covered in the air quality section of an EIR. As fossil fuel use for transportation in California declines, as required by the law, transportation impacts are unaffected.

Vehicle Hours Traveled

VHT penalizes short slow trips and rewards long fast trips. Urban infill sites served by slow, pedestrian-friendly streets will therefore be penalized, compared to isolated auto dependent sites surrounding by fast freeways. VHT will reward highway widenings to “ease congestion,” therefore promoting induced demand. This is a poor measure.

OTHER QUESTIONS

1. Yes, in addition to air, noise and safety, transportation also impacts water quality and habitat. Additional non-permeable surface can be an impact on water quality and stormwater impacts. Non-permeable surface per capita is a useful, simple metric for capturing, including roadway and parking pavement. In addition, transportation has strong relationships with public health, and there are particularly high correlations between and array of public health outcomes and rates of walking and cycling.

Roadway design compliance alone is insufficient to assure adequate safety, since many communities’ roadway design manuals do not take pedestrian and cyclist safety into adequate account. The SSTI’s recent report on Caltrans highlights the problems with Caltrans’ antiquated Highway Design Manual. Compliance with the NACTO Urban Street Design Guide, however, should be sufficient to indicate a less than significant safety impact on urban streets.
2. Identifying the best models and tools requires additional discussion, too complex for this letter.
3. If a project is perceived to have too little parking, there is no negative *environmental* impact that would result, any more so than if the project had too few bedrooms or private offices. If the project has too *much* parking, however, or if that parking is provided to motorists at less than cost to build and maintain it, research confirms that the project will generate more than the expected number of vehicle trips, increasing its environmental impact. We believe that if the project provides more parking than would be supported by its vehicle trip generation claims, the VMT/ATG metric should be increased concomitantly.