



November 21, 2014

Director Ken Alex  
Governor's Office of Planning and Research  
P.O. Box 3044  
Sacramento, CA 95812-3044

RE: Comments on *Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743*

Dear Mr. Alex:

Thank you for the opportunity to provide comments on the *Preliminary Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743*.

We applaud the State of California and the Office of Planning and Research (OPR) for taking this transformative step forward to replace the Level of Service (LOS) measure of transportation-related impacts under the California Environmental Quality Act (CEQA) with a Vehicle Miles Traveled (VMT) measure. To strengthen our state's commitment to mitigating climate change, conserving natural resources, and improving public health, we must adopt the VMT metric.<sup>1</sup> Alignment of CEQA with our

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<sup>1</sup> Ewing, Reid, Keith Bartholomew et al. *Growing cooler: the evidence on urban development and climate change*. Washington, DC: ULI, 2008.  
Litman, Todd, and Marc Brenman. *A New Social Equity Agenda for Sustainable Transportation*. Victoria Transport Policy Institute, 2012.  
Frumkin, Howard, Lawrence Frank, and Richard J. Jackson. *Urban sprawl and public health: Designing, planning, and building for healthy communities*. Island Press, 2004.

state policy goals outlined in AB 32, Executive Order S-3-05, and SB 375 ensures a more sustainable California.

In partnership, we offer the following recommendations to improve the draft CEQA Guidelines Section 15064.3. Our recommendations are organized by sub-division.

### *Background*

- **Add new language about public health to the *Background* and *Explanation of Proposed New Section 15064.3***

To more fully explain the harmful impacts of congestion “mitigation,” we recommend adding additional language to the *Background* section. In the third paragraph of the *Background* Section, after the second sentence ending in “impacts related to congestion,” insert: “Taxpayers also bear the costs of chronic disease associated with low levels of physical activity, in part, because of a failure to include bike, pedestrian and transit amenities in project plans.”<sup>2</sup>

In addition, the purposes of public health should be further explained in the *Explanation of Proposed New Section 15064.3 Subdivision (a): Purpose*. We recommend adding the following language: “As noted in the legislation, it is the intent of the Legislature to promote public health through active transportation. Reducing VMT has been shown to have significant health benefits by changing the built environment in ways that benefit pedestrians, bicyclists, and transit users.<sup>3</sup> Encouraging active forms of transportation, such as walking, bicycling and taking public transit not only has been shown to reduce greenhouse gas emissions but also substantively improve public health outcomes. For example, roadway and streetscape enhancements that expand amenities for pedestrians, bicyclists and transit have been shown to increase physical activity.<sup>4</sup> And increased physical activity has been shown to reduce obesity,<sup>5</sup> cardiovascular and respiratory disease burden,<sup>6</sup> risk of breast cancer<sup>7</sup> and improve mental health.<sup>8</sup>

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<sup>2</sup> Trogon, Justin G., et al. “The economic burden of chronic cardiovascular disease for major insurers.” *Health promotion practice* 8.3 (2007): 234-242.

<sup>3</sup> Ewing, Reid, and Robert Cervero. “Travel and the built environment: a synthesis.” *Transportation Research Record: Journal of the Transportation Research Board* 1780.1 (2001): 87-114; Ewing, Reid, and Robert Cervero. “Travel and the built environment: a meta-analysis.” *Journal of the American Planning Association* 76.3 (2010): 265-294.

<sup>4</sup> See Maizlish, Neil, et al. “Health Cobenefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area.” *American Journal of Public Health* 103, no. 4 (2013): 703-709. Available at <http://ajph.aphapublications.org/doi/full/10.2105/AJPH.2012.300939>; Besser, Lilah M., and Andrew L. Dannenberg. “Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations.” *American Journal of Preventive Medicine* 29, no. 4 (2005): 273-280.; Frank, Lawrence D., et al. “Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ.” *American Journal of Preventive Medicine* 28, no. 2 (2005): 117-125, 124 (concluding that “people are more physically active and more likely to meet recommendations of ≥ 30 minutes of moderate activity when they live in neighborhoods with nearby shops and services, with many street connections between residential and commercial districts.”). Available at [www.ajpmonline.org/article/S0749-3797\(04\)00325-3/fulltext](http://www.ajpmonline.org/article/S0749-3797(04)00325-3/fulltext).

<sup>5</sup> David Menschik et al., “Adolescent Physical Activity as Predictors of Young Adult Weight.” *Archives of Pediatrics & Adolescent Medicine* 162, no. 1 (January 1, 2008): 29–33, <http://archpedi.jamanetwork.com/article.aspx?articleid=378855#qundefined>.

<sup>6</sup> Maizlish, Neil, et al. “Health Cobenefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area.” *American Journal of Public Health* 103, no. 4 (2013): 703-709. <http://ajph.aphapublications.org/doi/full/10.2105/AJPH.2012.300939>; Penny Gordon-Larsen et al., “Active Commuting and Cardiovascular Disease Risk: The CARDIA Study,” *Archives of Internal Medicine* 169, no. 13 (2009): 121–223, <http://archinte.jamanetwork.com/article.aspx?articleid=773531#qundefined>; Bicycling also reduces mortality rates because of fewer traffic related deaths and respiratory illnesses. David Rojas-Rueda et al., “The Health Risks and Benefits of Cycling in Urban Environments Compared with Car Use: Health Impact Assessment Study,” *British Medical Journal*, 343 (2011): d4521, [www.bmj.com/content/343/bmj.d4521.long](http://www.bmj.com/content/343/bmj.d4521.long).

<sup>7</sup> Bicycling has also been shown to improve mental health in men and lower risk of breast cancer in women. R. Luoto et al., “The Effect of Physical Activity on Breast Cancer Risk: a Cohort Study of 30,548 Women,” *European Journal of Epidemiology* 16, no. 10 (2000): 973–980.

<sup>8</sup> Jan Garrard, Chris Rissel, and Adrian Bauman, “Health Benefits of Cycling,” in *City Cycling*, ed. John Pucher and Ralph Buehler (Cambridge, MA: The MIT Press, 2012), 31–56; see also Mallory Atkinson and Lynn Weigand, “A Review of the Literature: The Mental Health Benefits of Walking and Bicycling,” *Initiative for Bicycle and Pedestrian Innovation*, Portland State University (June 2008), [www.pdx.edu/ibpi/sites/www.pdx.edu/ibpi/files/Mental%20Health%20Benefits%20White%20Paper.pdf](http://www.pdx.edu/ibpi/sites/www.pdx.edu/ibpi/files/Mental%20Health%20Benefits%20White%20Paper.pdf).

#### *Subdivision (a): Purpose*

- **Limit unintended consequences of language on “other relevant considerations”**

Currently, the Guidelines read: “Other relevant considerations include the effects of the project on transit and non-motorized travel and the safety of all travelers.” The safety of a transportation project is of primary concern, and we strongly support the consideration of impacts on transit and non-motorized travel. In addition, we recommend that impacts on public health be considered. However, the language in the Guidelines on these “considerations” is so general that it could be interpreted in several ways, some of which conflict with each other. Improving the safety of a driver might conflict with improving the safety of a pedestrian. OPR should resolve this ambiguity. In addition, we recommend eliminating mention of highway queues or speed differentials as safety criteria in Section (3)(a).

#### *Subdivision (b) (1) Vehicle Miles Traveled and Land use Projects*

- **Base the new VMT threshold on the existing state policy framework of AB 32 and SB 375**

We appreciate that the proposed threshold of regional average VMT is simple and easily measured. However, the regional average threshold is not based on an existing policy framework or relevant research. In addition, a threshold based on any average inherently encourages only marginal improvement—theoretically, if all of the projects in California for the next 20 years were just hardly below the regional threshold, we would see hardly any progress towards reduced VMT.

The state has well-researched, ambitious goals for greenhouse gas emissions (GHG) set by AB 32, California’s Global Warming Solutions Act, and Executive Order S-3-05. There are a wide variety of strategies needed to meet these goals, one of which is reduction in VMT as demonstrated by the legislature’s findings in SB 375, California’s Sustainable Communities and Climate Protection Act.

The CEQA threshold of significance for transportation-related environmental impacts should be based on AB 32 and SB 375. Within the next 1-2 years, the California Air Resources Board will be updating the SB 375 regional GHG reduction targets. To inform this process, the state should conduct new research on how much VMT reduction is needed to meet the state’s GHG reduction goals, including the VMT reduction needed in each region, specifically from new development. We recommend that the threshold of significance of transportation-related impacts in the CEQA Guidelines be based on this research. The thresholds could ratchet-down over time to help achieve state climate goals outlined in AB 32 and Executive Order S-3-05.

Until we can make a more informed decision about the threshold of significance based on strong research into how much VMT reduction is needed to help the state achieve its climate goals, we recommend that the threshold of significance be based on the SB 375 regional targets. These targets are simple, motivated by AB 32 targets, and tailored to each region. Accordingly, projects with a percentage reduction in VMT per capita less than the regional SB 375 target for percentage reduction in GHG per capita should be considered to have a significant impact.

It is important to note here the consideration of the particular needs of rural communities. Rural development that occurs in town centers with existing infrastructure, walkable design, and adjacent development, should be favored by the CEQA transportation thresholds. We have seen maps of average VMT in different areas of Butte County and the Bay Area<sup>9</sup> and based on this preliminary research, development in existing town centers would likely not be considered significant according to thresholds

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<sup>9</sup> MTC’s map can be found here: <<http://analytics.mtc.ca.gov/foswiki/Main/VmtPerCapita>>

based on SB 375 targets. We recommend further consideration of the effects on existing small town centers.

- **Add parking ratio to transit-proximity as an indicator that a development project will have reduced VMT**

The language on development projects that “generally may be considered to have less than significant transportation impact” is concerning because a) it is vague and b) distance from transit is inadequate as a sole indicator of VMT.

a. *Vague language*: Although the explanatory pages that introduce the proposed text of the draft Section 15064.3 help clarify the Guidelines, it is not clear in the actual text of the Guidelines whether certain projects are or are not relieved of the need to do a VMT study. Specifically, may projects within a half-mile of a transit stop choose not to analyze VMT? Or are these projects illustrative examples of projects for which a VMT analysis will likely determine a less than significant impact? We ask that the Guidelines be clarified and incorporate language from the *Explanation of Section 15064.3*.

b. *Distance from transit is inadequate as a sole indicator of VMT*: The *Explanation of Section 15064.3* explains well that some transit-proximate projects might have high VMT. Appendix A of this letter provides images of existing development within a half mile of two transit stops: the Bay Area Rapid Transit (BART) stop in Walnut Creek and the Light Rail Rio Vista Station in San Diego. These images provide examples of development within a half mile of transit that is auto-oriented and does not encourage reduced VMT. Research also demonstrates that transit-proximity is not an adequate indicator of VMT. In a study published in 2013, Dr. Chatman from the University of California at Berkeley concludes: “Developing high-density, mixed-use housing near rail stations may reduce regional road congestion and auto pollution while slowing the growth in greenhouse gas emissions caused by auto use. But those benefits may not depend very much on rail access.”<sup>10</sup>

We support the goal of having a simple, transportation-related CEQA process for development that is likely to have reduced VMT. Therefore, in addition to the transit-proximate indicator, we recommend adding one simple indicator that will generally determine whether a project will have reduced VMT: the project’s parking ratio. As with the supply of any item, the amount of parking supplied can be an indicator of the parking demand and projected car travel. Not only can parking act as an indicator of VMT, but it effects VMT, also. An oversupply of parking reduces the price of parking, and according to Dr. Donald Shoup of the University of California at Los Angeles, “vehicle trip demand is higher where the price of parking is lower.”<sup>11</sup> In another study, Dr. Robert Cervero of University of California at Berkeley explains the relationship between parking in transit-oriented development (TOD) and car travel: “...municipal parking standards for TOD housing appear on the high side, which probably further induces car ownership and usage—i.e., the classical vicious cycle of supply and demand feeding off each other.”<sup>12</sup> Please see Appendix B for recommendations on straight-forward and appropriate parking ratios.

If projects are required to be near transit and have a reduced parking supply, we suggest that other indicators of VMT, such as density of units and diversity of uses, are unnecessary. In fact, measures of density and diversity of uses can be misleading indicators of VMT if parking is not considered. In another

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<sup>10</sup> Chatman, Daniel G. “Does TOD need the T? On the importance of factors other than rail access.” *Journal of the American Planning Association* 79.1 (2013): 28.

<sup>11</sup> Shoup, Donald. “The trouble with minimum parking requirements.” *Transportation Research Part A* 33 (1999): 551.

<sup>12</sup> Cervero, Robert, Arlie Adkins, Cathleen Sullivan. “Are Suburban TODs Over-Parked?” *Journal of Public Transportation* Vol. 13, No. 2 (2010): 66.

study, Dr. Chatman concluded that best practices in “mixed uses, density and street grid patterns” may not actually result in decreased VMT if street design and parking supply are still focused on car travel.<sup>13</sup> Finally, parking supply is project-based rather than based on characteristics of the surrounding neighborhood, therefore developers in collaboration with local governments, have some control over parking supply.

That said, if OPR chooses to pursue a few additional, simple indicators of reduced VMT, we recommend referencing the Leadership in Energy and Environmental Design – Neighborhood Development (LEED-ND) Guidelines.<sup>1</sup> The Natural Resources Defense Council and the Congress for New Urbanism spent years developing these Guidelines which provide specific metrics for VMT indicators.

- **Consider the correlation between VMT and income when revising the draft Guidelines**

We recommend that OPR take into consideration the research on the correlation between VMT and income when revising the Draft Guidelines. A recent analysis of the 2013 Caltrans California Household Travel Survey<sup>14</sup> added to existing literature on this subject demonstrating that lower-income households generally have lower VMT than higher-income households. We recommend that OPR consider whether the VMT reduction potential of affordable housing is appropriately accounted for by the suggested VMT models, including the California Emissions Estimator Model (CalEEMod,) and that OPR provide further guidance on how housing affordability should be incorporated into transportation analyses.

- **Clarify that the definition of “major transit stop” is the statutory definition**

We recommend clarifying that the definition of “major transit stop” used in the draft CEQA Guidelines is the definition in the Public Resources Code 21064.3: “a site containing an existing rail station, a ferry terminal served by bus or rail transit, or the intersection of two or more routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute period.”

- **Provide more guidance on determining consistency of land use plans with SCSs**

We support the reference to consistency with Sustainable Community Strategies (SCS). However, more clarification and guidance is needed. There is no standard method of determining consistency between a land use plans and an SCS. In addition, within a single SCS, some jurisdictions may be expected to contribute more to reducing the region’s per capita VMT than others. Therefore even when a plan is consistent with an SCS, it might not greatly contribute to the region’s VMT reduction. We recommend working with MPOs to help provide guidance on determining SCS consistency.

- **Each region should have a standard threshold**

Although we understand the benefit of flexibility in modeling VMT at the project level, each region’s threshold of significance should be standardized. There should be no variation in the value of a threshold within a region.

- **Limit metric to per capita**

Section 15064.3(b)(1) allows for any “appropriate measure” of VMT. We recommend limiting units of measurement to per capita. Maps of Chicago produced by the Center for Neighborhood Technology

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<sup>13</sup> Chatman, Daniel D. “Deconstructing development density: Quality, quantity and price effects on household travel.” *Transportation Research A* 42, no. 7 (2008): 1009-1031.

<sup>14</sup> TransForm and the California Housing Partnership. “Why Creating and Preserving Affordable Homes near Transit is a Highly Effective Climate Protection Strategy.” 2014. < <http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate>>

help clarify the importance of selecting the correct unit of measurement for GHG emissions and VMT.<sup>15</sup> For example, although cities seem to produce more GHGs than suburban areas, city residents produce less GHGs on a per capita basis than suburban residents. In this example, if GHGs were measured by a neighborhood-level unit, then suburban development would be encouraged, resulting in an overall increase in GHG emissions in Chicago.

- **Define “land use types” broadly**

The land use types by which projects will be compared should be better defined. An overly stringent typology could allow projects to maintain a high VMT. For example, if commercial projects of similar variety are compared to each other (i.e. “big box” stores surrounded by abundant parking), then the status quo will be maintained.

*Subdivision(b) (2) Induced Vehicle Travel and Transportation Projects*

- **All road expansion projects—whether safety-related, involving high-occupancy vehicle lanes, or otherwise—should be analyzed for VMT impacts**

In Section 15064.3(b)(2) it is noted that the addition of general purpose highway lanes “may indicate a significant impact except on rural roadways where the primary purpose is to improve safety and where speeds are not significantly altered.” It will be hard to distinguish between capacity enhancements and safety enhancements, and thus all road projects should be measured for VMT impacts.

Similarly, Section 15064.3(b)(2) states that new managed lanes, for example HOV and HOT lanes, would be considered to have a less than significant impact, if these lanes were “adequately analyzed” for induced travel in the SCS. It is difficult to determine adequate analysis of induced travel, therefore, we recommend removing this presumption and requiring a VMT analysis for new managed lanes.

- **Define “rural”**

Section 15064.3(b)(2) refers to “rural roadways” without defining “rural.” The term “rural” should be clearly defined in the Guidelines.

We look forward to assisting OPR in the development of the CEQA Guidelines and this critical transition from LOS to VMT as a measure of environmental impact under CEQA.

Sincerely,

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Environmental Council of Sacramento

Veronica Beaty  
Land Use Policy Director  
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<sup>15</sup> Center for Neighborhood Technology. *Transit Oriented Development and the Potential for VMT-Related Greenhouse Gas Emissions Growth Reduction*. <<http://www.cnt.org/repository/TOD-Potential-GHG-Emissions-Growth.FINAL.pdf>>

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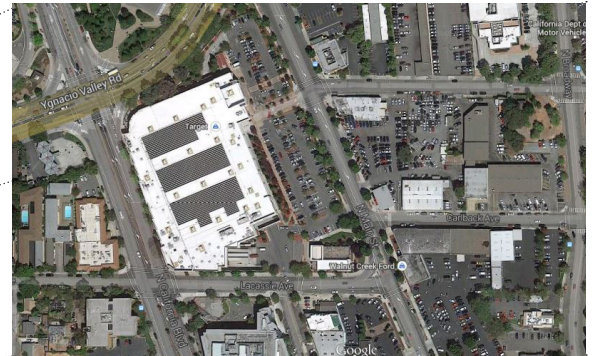


## Appendix A: Examples of development within 1/2 mile of frequent transit

### 1/2 mile buffer around Walnut Creek BART



close-up example of urban form



street views in station area

A



B



C

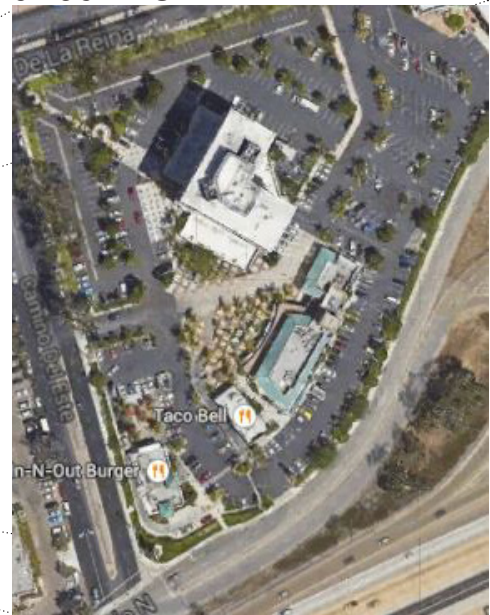




## 1/2 mile buffer around Rio Vista Light Rail Station



close-up example of urban form



## street views in station area

A



B



C



## Appendix B: Parking ratios

The GreenTRIP<sup>1</sup> program of the nonprofit organization TransForm provides research and experience reducing VMT through different strategies, including reduced parking supply. We recommend using GreenTRIP's<sup>2</sup> parking ratio:

### GreenTRIP Parking Ratios

Place Type (and example from Bay Area)	Maximum Parking Spaces per Unit
Regional Center (Downtown SF, Oakland and San Jose)	0.75
Urban Center (Downtown Hayward, Berkeley and Santa Rosa)	1.00
Urban Neighborhood (Oakland Fruitvale, Mission District in SF, Berkeley Ashby BART)	1.00
Sub-Regional Center (Pleasant Hill BART, Dublin/Pleasanton BART)	1.25
Town Center (Downtown: San Mateo, Petaluma, San Leandro, South Hayward BART)	1.50
Neighborhood (Whisman Station San Jose, Mountain View, Hercules)	1.50

We recommend a similar, simple chart of parking ratios for commercial development supported by accurate and place-specific data. For example, below is data from Nelson/Nygaard illustrating actual parking demand in areas **without** regional rail transit. Therefore, the parking ratio in the CEQA Guidelines should be lower than those observed in the data below.

### Downtown Comparisons—Mode Split to Actual Demand by Nelson/Nygaard

City	City Population	Occupied Parking Spaces per 1,000 Square Feet
Oxnard	193,000	0.98
Chico	59,900	1.7
Palo Alto	58,600	1.9
Santa Monica	84,100	1.8

Source: Census Transportation Planning Package (CTPP) 2000. SF refers to occupied non-residential built area in Chico and Palo Alto and both vacant and occupied non-residential built area in Santa Monica and Kirkland.

<sup>1</sup> GreenTRIP. *GreenTRIP How-To Guide*. <[http://www.transformca.org/sites/default/files/greentripguide\\_0.pdf](http://www.transformca.org/sites/default/files/greentripguide_0.pdf)>

<sup>2</sup> For more information on GreenTRIP: <<http://www.transformca.org/landing-page/greentrip>>