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Via E-mail and FedEx

Hgoc Bui
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Re: State Route 85 Express Lanes Project Initial Study with Proposed Negative Declaration/Environmental Assessment

Dear Mr. Bui :

The City of Cupertino appreciates the opportunity to submit comments on the proposed State Route ("SR") 85 Express Lanes Project ("Project") and the Initial Study with Proposed Negative Declaration/Environmental Assessment ("IS/EA"). The proposed Project would convert the existing High-Occupancy Vehicle ("HOV") lanes on SR 85 to express lanes, allowing single-occupant vehicles ("SOV") to pay a toll to use the lanes, while HOVs would continue to use the lanes at no cost. The express lanes would extend along the entire 24.1-mile length of SR 85 and 1.5 miles of US 101 from the southern end of SR 85 to Metcalf Road in San Jose. In addition, the Project includes: (1) paving the existing 46-foot median to construct a second express lane, which would be added in both directions on SR 85 between I-280 and SR 87; (2) an auxiliary lane, which would be added along a 1.1-mile segment of northbound SR 85 between South De Anza Boulevard and Stevens Creek Boulevard; and (3) widening of numerous bridges along SR 85.

I. Overview of City's Concerns

The City has several fundamental concerns with the Project and its environmental review. First, the Project has the potential to hinder or preclude altogether light rail transit along the SR 85 corridor. Second, widening highways is an antiquated approach to

meeting travel demand yet Caltrans fails to consider a single transit-based alternative. The Project, as currently designed is socially inequitable and fails to achieve its own goals. Third, the IS/EA fails to adequately evaluate the Project's environmental impacts or to propose effective mitigation measures, rendering the document inadequate under both the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 *et seq.* and the National Environmental Policy Act ("NEPA"), 42 U.S.C. section 4321 *et seq.* Finally, the City is concerned that federal funding for the Project will require the existing truck weight limit on SR 85 to be removed, which would create a significant environmental effect that must be analyzed.

This letter, along with the transportation report prepared by MRO Engineers ("MRO Report"), attached as Exhibit A, constitute the City's comments on the IS/EA.[1] The City respectfully refers Caltrans to the MRO Report both here and throughout these comments, for further detail and discussion of the IS/EA's inadequacies.

A. The Project Would Preclude the Development of Light Rail Within the SR 85 Median.

The median of SR 85 has long been considered a possible route for mass transit throughout southern Santa Clara County. To this end, in 1989, the predecessor to the Santa Clara Valley Transportation Authority ("VTA")[2]entered into a Performance Agreement with several cities, including the City of Cupertino, to ensure that no improvements would be undertaken to SR 85 that would preclude future mass transit development within the highway's median. *See* Performance Agreement between City of Cupertino and the Santa Clara County Traffic Authority (January 24, 1989), attached as Exhibit B, (paragraph 4 stating that Route 85 through the City will be a 6 through-lane facility with a median width of 46'… ", and paragraph 8 stating that "... Bridges will be designed and constructed in a manner not to preclude future mass transit development in the freeway median."

As recently as 2000, VTA still contemplated the development of a light rail system in Cupertino/Sunnyvale. Measure A, a retail transaction and use tax ordinance sponsored by VTA, was approved by the electorate on November 7, 2000. *See*, Official Ballot, County of Santa Clara, General Election, November 7, 2000, attached as Exhibit C. The tax receipts from this measure were specifically earmarked for various mass transit projects. Sunnyvale/Cupertino is one of the locations that Measure A contemplated providing capital funds for the development of a light rail system.

In addition to being inconsistent with the 1989 Performance Agreement and Measure A, the Project would not comply with Federal Highway Administration

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[1] All exhibits are provided in the enclosed CD.

[2] The Santa Clara County Traffic Authority was the predecessor agency to the VTA.

("FHWA") regulations, which mandate that transportation projects may "not restrict consideration of alternatives for other reasonably foreseeable transportation improvements." IS/EA, p. I-7. Although the IS/EA states that the Project "will not prevent consideration of alternatives for other foreseeable transportation improvements on SR 85" (*id.*), a 22-foot median may preclude the development of light rail transit in certain locations within the median of the highway and will certainly make any future light rail project much more difficult and expensive. That is because the proposed Project would substantially reduce the size of the median. In many locations, including the segments of the highway within Cupertino, the existing 46-foot median would be reduced to approximately 22 feet. MRO Report, p. 8. Indeed, VTA staff member John Ristow publicly confirmed that the proposed Project would require light rail within the SR 85 median to be elevated.

As discussed below, Caltrans must evaluate other alternatives that would meet future travel demand while not precluding or making infeasible light rail transit within the SR 85 median. One obvious alternative is the development of light rail transit along the SR 85 corridor.

B. Caltrans Must Consider Alternatives That Do Not Require Widening the Highway.

The IS/EA acknowledges only one real alternative to the proposed Project. This alternative, which would convert the existing northbound and southbound HOV lanes into an express lane, was rejected during the early stage of Project development because it would preclude the future construction of a second express lane in the SR 85 corridor. IS/EA, p. I-14, 15. The IS/EA therefore fails to include *any* alternative that would not, ultimately, result in the widening of the highway.

While highway widening might be appropriate for some transportation purposes, Caltrans and VTA should also analyze project alternatives that do not rely exclusively on increasing highway capacity. Increases in highway capacity facilitate increased travel. The reduction in traffic congestion results in increases in vehicle speeds, which in turn results in "induced" travel. Induced travel occurs when the cost of travel is reduced (*i.e.*, travel time reduction due to additional capacity), causing an increase in demand (*i.e.,* more travelers using the improved facility). The reduction in travel time causes various responses by travelers, including diversion from other routes, changes in destinations, changes in mode, departure time shifts, and possibly the creation of new trips all together. Increasing highway capacity also results in increased air pollution and greenhouse gas emissions and discourages alternative forms of transportation.

The IS/EA confirms that the additional highway capacity will draw traffic toward the SR 85 corridor. IS/EA Traffic Appendix OA, p. 28 (#8). This Appendix also shows that the Project will result in additional traffic in Cupertino in 2035. *Id.* Consistent with these findings, the IS/EA states that the Project will result in a sizeable increase in vehicle

miles traveled -- 14 percent in the northbound AM peak and 7 percent in the southbound PM peak compared to No Build. IS/EA, p. 2-27. In fact, even with this highway widening, some segments of the express lanes would operate at level of service E or F and /or would have a decrease in level of service compared with the No Build Alternative. IS/EA, p. 2-28.

With this Project, Caltrans has an opportunity to change the trajectory of increased traffic and increased travel and move the region in a more sustainable direction. Widening highways will not move the region toward sustainability. Put simply, transit is sustainable, highways are not. Yet, because Caltrans fails to consider even one transit-based alternative it provides no information about the role that transit could play in meeting the County's long-term transportation needs. Alternatively, Caltrans could evaluate the feasibility of meeting future travel demand using reversible lanes.

C. Significant Concerns And Questions Exist Regarding The Project's Social Inequality and its Failure To Achieve Its Own Goals.

Not surprisingly, the City's elected officials have taken a keen interest in this Project, and have strong concerns about the role that express lanes play in meeting the region's transportation needs. While recognizing that there may be some benefit to traffic flow in an express lane, this approach is socially inequitable in that it unfairly allows the use of the express lanes to those with sufficient income to receive this benefit. It is unacceptable that only those who can afford to pay will have a special privilege on a publicly-funded roadway. In other words, poor people should not be required to travel more slowly than those with more money. Inasmuch as everyone's taxes paid for freeways, everyone should have access to all lanes of the freeway without being charged extra.

The Project may also have unintended environmental consequences. For example, the Project will discourage carpooling since certain individuals, who had been carpooling to gain access to the HOV lanes, will now simply opt to pay the toll rather than seek other riders. Other individuals will forego purchasing alternative energy vehicles since the cost of tolls is comparatively much less.

Equally important, the City's officials question the necessity of a project that is not expected to achieve its own goals. The IS/EA explains that the purpose of the Project is to ensure consistency with AB 2032. IS/EA, p. i. AB 2032 established certain operational parameters for the "high-occupancy toll" ("HOT") lane system authorized by the bill. In particular, it requires that Level of Service ("LOS ") be maintained at all times in the HOT lanes. The Project would not, however, ensure LOS C and/or D in the HOV lanes. As the IS/EA concludes, in 2035 some segments of the HOV lanes would operate at LOS E or F. IS/EA, p. 2-26. At best, therefore, the Project is a short term solution to the region's traffic congestion problems. Indeed, as VTA's *Murali* Ramanujam has explained, the Project is intended to be a mere adjustment to the level of congestion on

SR 85, not a solution to it. As such, Caltrans must explore options that would result in more sustainable transportation solutions.

In addition, although this Project has been in the planning stages for decades, a number of crucial questions remain unanswered. First, neither Caltrans nor VTA have identified the source(s) of funding for the Project. A detailed list of the sources and the amount of funding from each source should be disclosed, including any funding restrictions. This information is pertinent to the discussion of alternative approaches.

Furthermore, neither Caltrans nor VTA have identified the dollar value of the projected traffic congestion reduction, if any. VTA representatives, including URS Corporation official Lynn McIntyre, have acknowledged that the VTA did not consider the financial implications associated with a reduction in traffic congestion. Inasmuch as the Project's value has not been quantified, the City questions how VTA intends to justify the Project's costs to the taxpayer? Because VTA does not know how much, if any, net economic benefit the Project will bring, how does VTA expect to demonstrate that the Project will not be a waste of taxpayer money?

The City respectfully requests that Caltrans and VTA address these issues and concerns before taking further action on the Project.

II. The IS/EA Is Legally Inadequate and Does Not Provide the Evidentiary Basis That the Project's Impacts Will Be Less Than Significant.

A. Legal Standard

It is well settled that CEQA establishes a "low threshold" for initial preparation of an EIR. *The Pocket Protectors v. City of Sacramento*, 124 Cal. App. 4th 903, 928 (2005). CEQA provides that a lead agency may issue a negative declaration and avoid preparing an EIR only if "[t]here is no substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." Pub. Res. Code § 21080(c)(1). An initial study must provide the factual basis, with analysis included, for making the determination that no significant impact will result from the project. Guidelines § 15063(c), (d). In making this determination, the agency must consider the direct and indirect impacts of the project as a whole (Guidelines § 15064(d)), as well as the project's growth-inducing and cumulative impacts. *See City of Antioch v. City Council of Pittsburg*, 187 Cal. App. 3d 1325, 1333 (1986).

An agency must prepare an EIR whenever it is presented with a "fair argument" that a project may have a significant effect on the environment. Guidelines § 15064(f)(1). Where there are conflicting opinions regarding the significance of an impact, the agency must treat the impact as significant and prepare an EIR. Guidelines §§ 15064(a)(1) and (f)(1); *Stanislaus Audubon Soc'y v. County of Stanislaus*, 33 Cal. App. 4th 144, 150-51

(1995). Further, where the agency fails to study an entire area of environmental impacts, deficiencies in the record "enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 311 (1988).

As discussed below, the IS/EA fails to adequately evaluate the Project's environmental impacts or to propose effective mitigation measures. Because the Project as described in the IS/EA will have potentially significant environmental impacts, Caltrans must analyze these impacts in an environmental impact report/statement ("EIR/EIS") and adopt enforceable mitigation.

B. The IS/EA's Description of the Project Is Inadequate and Does Not Permit Meaningful Public Review of the Project.

In order for an environmental document to adequately evaluate the adverse impacts of a project, it must first provide a comprehensive description of the proposed project. "An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus*, 27 Cal.App.4th 713, 732 (1994), quoting *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 193 (1977). Courts have found that, even if an EIR is adequate in all other respects, the use of a "truncated project concept" mandates the conclusion that the lead agency did not proceed in a manner required by law. *San Joaquin Raptor*, 27 Cal.App.4th at 730. NEPA similarly requires an accurate and consistent project description in order to fulfill its purpose of facilitating informed decision-making. 42 U.S.C. § 4332(2)(C).

Accordingly, "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity." *McQueen v. Bd. of Directors of the Mid-Peninsula Regional Open Space Dist.* (1988) 202 Cal.App.3d 1136, 1143 (citation omitted). While extensive detail is not necessary, the law requires that environmental documents describe proposed projects with sufficient detail and accuracy to permit informed decision making. *See* CEQA Guidelines, §15124. The IS/EA here fails to meet this basic threshold.

The IS/EA's description of the Project fails to describe numerous, essential aspects of the Project that have the potential to result in significant environmental impacts. This omitted information includes, but is not limited to:

- Project Specifications. The IS/EA provides no map that accurately portrays the precise locations where the widening to provide the second express lane would begin and end. All of the Project's graphics are conceptual and/or schematic. The document does not include detailed (preliminary) design drawings that would show median widths, etc. For example, MRO

Engineers was forced to rely on Google Earth to determine existing median widths.

- Location of the Project staging areas.
- Amount of cut and fill, if any, associated with the Project.
- Location of spoils and soil importation sites, and haul routes.
- Number of truck trips associated with all grading and other construction-related activities.
- Description of construction-related activities (including timeline, location, number of construction employees, types of equipment, etc.).

Without this information about the Project, the public and decision-makers will not be able to balance the Project's benefits against its environmental cost and evaluate feasible alternatives and mitigation measures.

C. Caltrans Must Prepare An EIR/EIS that Analyzes the Potentially Significant Effects Of The Proposed Project.

As stated above, an agency must prepare an EIR for a proposed project whenever substantial evidence in the administrative record supports a "fair argument" that the project may have significant effects on the environment. A fair argument clearly can be made that the Project, which will add travel lanes to SR 85, will have potentially significant impacts on transportation, noise, air quality, climate change and visual resources. For all of these reasons, as discussed below, an EIR/EIS is required.

1. The IS/EA Fails to Adequately Analyze the Project's Transportation Impacts, Which Are Expected to Be Significant.

The IS/EA's evaluation of the Project's transportation impacts is inadequate because: (a) it lacks the required evidentiary basis for its significance thresholds; (b) certain of its analyses are inaccurate, illogical and misleading; (c) it omits any analysis of impacts to the local and regional transportation network; (d) it fails to evaluate the Project's impacts on transit, bicycle and pedestrian systems; and (e) it does not disclose how construction of the Project would affect the local street system.

(a) The IS/EA Lacks the Evidentiary Basis for its Level of Service Standards.

The IS/EA never clearly identifies thresholds of significance for the Project's transportation impacts. The document explains that the express lanes are required to operate at level of service ("LOS") C unless there is a written agreement between

Caltrans and VTA that permits LOS D. MRO Engineers Report, p. 4. The IS/EA implies such an agreement exists – and uses LOS D as the standard of significance for express lanes -- but it provides no evidence that Caltrans and VTA have agreed to use this more lenient LOS threshold. Consequently, Caltrans' reliance on the LOS D threshold allows it to conclude that the Project would result in relatively few impacts on SR 85's express lanes. As the MRO report explains, there would be a "substantial number of additional locations that would have high vehicle densities and impaired traffic flow if LOS C is the correct level of service standard, rather than LOS D." MRO Report, p. 4, 5. In other words, if LOS C is, in fact, the appropriate threshold for express lanes, the IS/EA substantially underestimates the Project's impact on these lanes.

With regard to general purpose lanes, the IS/EA also relies on the LOS D standard. As the MRO Report explains, the Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002) identifies LOS C as the appropriate standard for general purpose/mixed-flow lanes. MRO Report, p. 5. In 2015 and 2035; however, the IS/EA identifies numerous locations where general purpose lanes would operate at LOS D. *See* IS/EA, p. 2-16 through 2-24, Tables 2.1.3-5, 2.1.3-6, 2.1.3-9, and 2.1.3-10. Had Caltrans used the correct LOS standard, it would have identified myriad additional locations where the general purpose lanes would operate at deficient levels of service.

Regardless of which LOS standard Caltrans relies on, there is clear evidence that numerous segments of SR 85 – both express and general purpose lanes -- would operate at deficient levels of service, i.e., LOS E or LOS F upon completion of the proposed Project. See IS/EA Table 2.1.3-10, p. 2-24. These are significant effects caused by the Project for which the IS/EA identifies no mitigation. Consequently, Caltrans must prepare an EIR/EIS.

(b) The Analysis of Traffic Impacts on SR 85 is Deficient Because Caltrans' Consultants Artificially Limits the Travel Demand Forecasts to Ensure a Successful Outcome.

Rather than model the actual travel demand on the express lanes in 2015 and 2035, Caltrans' traffic consultants structured the travel demand forecasts so as to preclude the express lanes from carrying more than 1,650 vehicles per hour. The consultants artificially constrained the express lanes to 1,650 vehicles per hour per lane to ensure compliance with the statutory requirements established in AB 2032. The DKS/URS traffic operations report prepared for VTA[3] states:

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[3] DKS and URS, *SR 85 Express Lanes EA #04-4A7900 Traffic Operations Analysis Report Final* (November 6, 2013) ("DKS/URS report").

> It is important to note mandated performance requirements that must be taken into consideration when designing an express lane project. At the state level, AB 2032 mandated that express lanes operate at a Level of Service (LOS) of "C" or better (LOS "D" may be used if Caltrans and the operator agree). This corresponds to a target threshold of approximately 1,650 vph [vehicles per hour] per HOV lane. DKS/URS Report , p. 1.

Later, the DKS/URS report states:

> The volumes presented in the following tables [Tables 5-1 through 5-4] assume that the maximum volume will be limited to 1,650 vehicles per hour per lane on the express lanes. *Id*. p. 28.

This report confirms that Caltrans' consultants artificially limited the travel demand forecasts to ensure a successful outcome. The actual volumes that can be realistically expected in the express lanes are unknown, due to the lack of an unconstrained traffic projection. The actual traffic volumes in the express lanes could be substantially higher than the IS/EA indicates, which would lead to levels of service in those lanes that are much worse than disclosed in the IS/EA.

(c) The IS/EA's Level of Service Analysis Results Are Illogical and, Therefore, Are Likely Inaccurate

As the MRO Report explains, the IS/EA's conclusions as to how SR 85 would operate upon completion of the Project are questionable. For example, under 2015 Southbound conditions, the IS/EA indicates that the HOV/express lanes on three segments of southbound SR 85 would have substantially improved levels of service under Build conditions in the PM peak hour, even though they are in the portion of SR 85 that currently has one HOV lane and will continue to have only one express lane. This is illogical, because implementation of the SR 85 express lanes project will allow additional motorists (i.e., toll-paying SOVs) to use this single lane, which should result in higher lane density and, therefore, equal or lower level of service. This illogical result raises questions as to the credibility of all of the level of service analysis results. The inaccuracies could stem from the flawed travel demand forecasts (as addressed below) or from the LOS calculation process. In either event, the results must be reviewed and corrected.

(d) The IS/EA Overstates the Project's Benefit With Regard To Travel Speeds on SR 85.

The IS/EA identifies SR 85 travel time and speed through the study area under No Build and Build conditions for the express lanes and general purpose lanes. As MRO Engineers determined, when the travel time results are compared to the travel speed results, inconsistencies are apparent that call into question the accuracy and validity of the IS/EA's analysis.

The MRO Report explains that *peak-period* travel speeds should be somewhat higher than *peak-hour* speeds, because the former includes two or three hours of lower traffic volumes (and higher speeds) in addition to the "worst-case" peak hour. Yet, in numerous instances, the IS/EA's data are illogical and misleading because the *peak-period* speed is less than either of the *peak-hour* values, which defies logic. Travel speed data for the AM peak in 2015, the northbound (peak direction), for example, are particularly questionable. Under No Build conditions, the *peak- hour* travel speed is shown as 35.0 MPH in the general purpose lanes and 56.2 MPH in the HOV lanes. In contrast, the *peak-period* speed is shown as 37 MPH, which is approximately the same as the *peak-hour* general purpose lane value. The same is generally true under Build conditions. MRO Report, pages 8-11.

The IS/EA's travel speed results are inaccurate and, therefore, misleading. Until the speed estimates can be corrected so that they provide rational results, they are of no value in demonstrating the value of the proposed Project.

(e) The IS/EA Omits Any Analysis of the Project's Impacts to the Local and Regional Transportation Network.

In violation of CEQA's core requirements, the IS/EA ignores the Project's impacts on the local and regional transportation network. The basic purpose of CEQA is to inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities. *See* CEQA Guidelines § 15002(a)(1). Instead of providing such a comprehensive impact analysis of the proposed Project's impacts on the transportation network, the IS/EA only describes how SR 85 would be affected. The *only* level of service information in the IS/EA is for those segments of the freeway proposed to be widened. *See* e.g., Table 2.1.3-5 beginning on page 2-16. While it is necessary to know how SR 85 would operate upon completion of the Project, this is no substitute for an evaluation of the Project's environmental impacts on the affected local and regional traffic network as well.

According to the MRO Engineers' Report, Caltrans' travel demand forecasts reveal that the Project would result in substantial changes in traffic patterns at many SR 85 access locations, yet the IS/EA fails to analyze how these changes will affect local

traffic patterns.[4] MRO Report, p. 4. For example, the Project will result in the addition of hundreds of vehicles to various freeway ramps and street segments in and near Cupertino in 2015 and 2035. *Id.* The IS/EA completely ignores both this substantial increase in traffic and the potential for significantly increased congestion and delay at these locations.

Many of these ramps and intersections likely carry very high traffic volumes and are integral components of the local and regional circulation system. Therefore, to evaluate the Project's traffic impacts, the IS/EA should have studied the "before" and "after" travel patterns on local street intersections, street segments, freeway ramp terminal intersections, freeway ramps, and freeway mainline segments throughout the region. "An EIR may not ignore the regional impacts of a project approval, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required." *Citizens of Goleta Valley v. Board of Supervisors* (1990)52 Cal.3d 553, 575 . Indeed, an EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *See Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 721-724. This principle stems directly from the requirement that an EIR analyze all significant or potentially significant environmental impacts. Pub. Res. Code §§ 21061, 21068.

Certainly the potential exists for some of these ramps to operate at deficient levels of service as a result of the Project. Caltrans should prepare an EIR/EIS that fully analyzes these potential impacts and identifies feasible mitigation if these impacts are determined to be significant.

(f) The IS/EA Inaccurately Characterizes Existing Traffic Operations at the SR 85/I-280 Interchange.

The IS/EA incorrectly characterizes SR 85 traffic operations in the vicinity of I-280 as being at an acceptable level of service. This finding differs significantly from the experience of motorists who drive through this area on a daily basis. SR 85 near Stevens Creek Boulevard and the I-280/SR 85 interchange is already a major bottleneck. The typical delay traveling north on SR 85 to northbound I-280 is about 15 minutes. Widening SR 85 south of this interchange will encourage additional traffic on SR 85 and, therefore, intensify congestion at the I-280/SR 85 interchange. The IS/EA does not acknowledge the

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[4] It is important to note that the travel demand forecasts are not included in the IS/EA itself. They can only be found by searching through the sizable quantity of ancillary material on the Caltrans District 4 website. CEQA requires that the analysis be presented in the EIR. *See Santa Clarita Organization for Planning the Environment v. County of L.A.* ("*SCOPE*") (2003) 106 Cal. App. 4th 715, 722 (agency's analysis must be contained in the EIR, not "scattered here and there in EIR appendices"). Even worse, the critical DKS/URS traffic operations analysis document is not attached to the IS/EA as an appendix.

potential for this adverse impact, let alone evaluate methods for alleviating this congestion.

(g) The IS/EA Fails to Analyze the Project's Impact on Public Transit, Bicycles or Pedestrians.

According to CEQA, a project would have a significant effect on the environment if it would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. CEQA Appendix G, § XVI.f). The IS/EA contains no analysis whatsoever of impacts to public transit, bicycle, or pedestrian facilities, however.

The proposed Project would impact public transit both directly and indirectly. First, as discussed above, the City has long anticipated the development of a light rail transit system within the SR 85 median. By substantially reducing the width of the highway's median, the proposed Project would likely preclude the development of light rail within the highway's median. Moreover, according to the City's General Plan, VTA's Transportation Plan 2020 includes a study of light rail transit in the Sunnyvale/Cupertino Corridor. *See* City of Cupertino General Plan Circulation Element, p. 4-3. Caltrans must disclose whether the Project would preclude development of a light rail system within the SR 85 median and analyze the Project's consistency with the Sunnyvale/Cupertino Corridor light rail transit study.

Second, the Project would use funding to widen the highway that could otherwise be invested in public transportation. This is especially important because a substantial amount of funding is necessary to compensate for the region's long-term dependence on the automobile. Consequently, the region has an extensive highway system but an incomplete transit system. Without a comprehensive, well-integrated transit system, public transportation will never be able to become a truly viable alternative to the automobile in meeting the region's transportation mobility needs. The IS/EA fails to acknowledge, let alone analyze, this impact.

Third, increasing highway capacity at the same time as the region is trying to increase transit ridership is an inherently flawed approach to regional transportation mobility. As discussed above, increases in highway infrastructure undercut transit ridership. Traffic congestion provides a significant incentive to seek alternative modes of transportation. High-quality public transportation tends to attract travelers who might otherwise drive. Once highways are widened, however, traffic congestion eases, travel speeds increase (at least for some period of time), and travelers again begin to drive. Moreover, if transit ridership continues to decline because travelers are taking advantage of freed-up capacity on freeway lanes, regional transportation agencies will invest even less funding in transit systems and transit service. With less funding, transit agencies cut, or eliminate altogether, routes and transit headways, which in turn reduces transit ridership further. Once again, the IS/EA fails to acknowledge or analyze this effect on public transit.

Fourth, investing in highways perpetuates development patterns that are inherently unsuited to alternative modes of transportation. Typical suburban development – characterized by low-density cul-de-sacs, wide, high-speed arterials, and massive intersections – makes it less cost-effective for transit to serve scattered destinations. Investing in transit capital and operational improvements, on the other hand, creates transit certainty which in turn is a critical factor for supporting the growth of compact communities. This will result in a *virtuous* cycle whereby transit investments encourage transit-oriented development, boosting transit ridership, and encouraging more transit investments. Here too, the IS/EA fails to account for this phenomenon or to analyze the effect that continuing highway expansion has on this cycle.

The Project also has the potential to adversely affect pedestrian and bicycle use and to be inconsistent with the City of Cupertino's Pedestrian Transportation Guidelines and the Cupertino Bicycle Transportation Plan. *See* Cupertino General Plan, Circulation Element, p. 4-7. Caltrans must evaluate these adverse environmental impacts in an EIR/EIS.

(h) The IS/EA Fails to Analyze or Mitigate the Project's Construction-Related Transportation Impacts.

According to the IS/EA, construction of the proposed Project would span two years. IS/EA, p. 1-14. One would expect that, given the massive scale and prolonged duration of such a construction project, the IS/EA would have comprehensively analyzed what are certain to be extensive local and regional traffic impacts. Traffic patterns will be impacted from lane closures, rerouting of traffic, delivery of materials, hauling of excavated material, and construction employees commuting to/from the job site.

Unfortunately, the IS/EA provides no analysis of the Project's construction-related impacts. Instead, the IS/EA looks to a future "Traffic Management Plan" to minimize the expected traffic delays and closures — a Plan that will be developed after Project approval. IS/EA, p. 2-28. But this deferral of mitigation violates CEQA. *See* CEQA Guidelines § 15126.4(a)(1)(B) ("Formulation of mitigation measures should not be deferred until some future time."); *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 93.

Caltrans should prepare an EIR/EIS that (1) provides a complete analysis of the Project's construction-related impacts, and (2) includes the agency's actual mitigation plan. The public and decision-makers must be apprised of the magnitude of these impacts, and the actions that will be necessary to mitigate them, prior to the Project's approval.

2. The IS/EA Fails to Adequately Analyze the Project's Noise Impacts, Which Are Expected to Be Significant.

Widening SR 85 will, without question, increase noise levels throughout the Project area, yet the IS/EA fails to adequately analyze or mitigate these significant impacts. The most serious deficiencies are discussed below.

(a) The IS/EA Fails to Mitigate For the Project's Significant Noise Impacts.

The threshold of significance for noise impacts used by the IS/EA appears to be "when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the Noise Abatement Criteria ("NAC")." IS/EA, p. 2-88. Approaching the NAC is defined as "coming within 1 dBA of the NAC." *Id.* Applying this threshold of significance, the IS/EA identifies segments all along the stretch of SR 85 to be widened where the long-term noise impacts associated with the Project will be significant. *Id.* p. 2-93 through 2-96. Two of these segments -- (Segment 4: Fremont to I-280 and Segment 5: I-280 to South De Anza Boulevard) -- are located within Cupertino.

Despite the significant increase in noise levels at these locations, the IS/EA fails to mitigate these impacts. The IS/EA selects only one noise abatement type for the Project (sound walls) and then rejects each and every one of the sound walls, stating that none of the walls meet Caltrans' feasibility and reasonableness criteria. *Id.* p. 2-97.

The City can find no logical explanation as to why Caltrans does not consider other feasible mitigation measures. Indeed, the IS/EA acknowledges that Caltrans has several potential noise abatement measures available to mitigate noise impacts. These include: avoiding the impact by using design alternatives, using traffic management measures to regulate types of vehicles and speeds, and acoustically insulating land uses such as auditoriums, day care centers, hospitals and libraries. *Id.* p. 2-97. Yet the IS/EA fails to evaluate the feasibility of such measures.

Moreover, other feasible approaches exist for reducing traffic noise impacts. The IS/EA fails to evaluate, for example, the use of pavement options such as open graded asphaltic concrete or rubberized asphalt materials. These alternative pavement options have been proven to be quite effective to attenuation noise. Rubberized asphalt, for example, can result in an average of a four dBA reduction in traffic noise levels as compared to conventional asphalt. *See* "Report on the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County, Bollard & Brennan, Inc., November 1999, attached as Exhibit D. The fact that other feasible mitigation exists to reduce or eliminate potentially significant impacts demands review and analysis in an EIR/EIS.

(b) The IS/EA's Analysis of the Project's Operational Noise Impacts is Deficient.

The flaws in the IS/EA's noise analysis extend beyond its failure to mitigate the Project's significant noise impacts. Indeed, the document fails to adequately analyze the Project's noise impacts altogether. One of the first steps required to analyze environmental impacts is to describe the existing environmental setting. An EIR's description of a project's environmental setting plays a critical part in all of the subsequent parts of the EIR because it provides "the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a). Similarly, under NEPA, an EIS must "describe the environment of the area(s) to be affected or created by the alternatives under consideration." 40 C.F.R. § 1502.15. Here, the IS/EA omits essential information about the existing sensitive receptors in the vicinity of SR 85.

For purposes of noise analyses, Caltrans categorizes land uses based on the type and level of human use. *See* Caltrans Traffic Noise Analysis Protocol ("Noise Protocol") at 6 through 12, attached as Exhibit E. According to the Noise Protocol, noise impacts vary depending on how humans use a site. As an example, the parking lot for a place of worship is not considered to be an area of frequent use that would benefit from a lowered noise level because people only spend a few minutes there getting in and out of their cars and there would be no benefit to a lowered noise level. However, if outdoor worship services are held at this location, this would be an area where people are exposed to noise for an extended period of time and where the ability to hear is important. This then would be considered an area of frequent human use that would benefit from a lowered noise level. Caltrans Protocol, pp. 7, 8. The Noise Protocol thus specifically acknowledges types of land uses that warrant comparatively low interior noise levels. These uses, referred to as "Category D", which includes auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recordings studios, schools and television studios, should have interior noise levels of 52 dBA. *Id.*, p. 7.

Although the IS/EA acknowledges generally that residences, schools, churches, and hospitals are located along the Project corridor (at 2-90), it does not identify the specific receptors. It does not tell the public and decisionmakers, for example, how many schools are located along the corridor or the proximity of the schools to the freeway. Are these schools already protected by sound walls? Do they have noise attenuation features such as double-paned windows? The IS/EA omits this important information.

Detailed information about existing land uses is all the more important because Caltrans' requires additional analysis of Category D land uses "after a determination has been made that exterior abatement measures will not be feasible and reasonable." *Id.* p. 10. The IS/EA concludes that there is no feasible mitigation for the Project's significant noise impacts but fails to take the necessary next step ; i.e., examination of interior noise

levels in Category D land uses. An EIR/EIS must evaluate the Project's effect on interior noise levels and identify appropriate mitigation if noise levels exceed the required thresholds.

Second, the IS/EA fails to include an evaluation of noise impacts beyond the highway's immediate right-of way ("ROW"). By focusing only on noise receptors located immediately adjacent to the ROW, the IS/EA fails to take into consideration phenomena such as reflective noise. Reflective noise results from sound waves reflecting off of nearby buildings and structures. *See* Sound Walls: Absorptive Versus Reflective Design and Effectiveness, Sound Fighter Systems, attached as Exhibit F.

As studies show, the sound waves that travel around the ends and over the tops of sound walls in particular can be significant. *Id.* Reflection is a critical factor when a vehicle (such as a truck) is almost as tall as the wall or, as in many cases, taller than the wall. The sound levels at the receiver can be easily increased perhaps 3 to 5 dB, and sometimes up to 10 dB because of reflective noise. *Id.* In addition, these reflections can be directed uphill causing impacts to residences located at higher elevations on the slopes surrounding the ROW. Because of this phenomenon, noise conditions at receptor locations uphill from the ROW may differ substantially from those receptors within the ROW. Caltrans must expand its study area to include all receptors that are likely to experience increased noise levels resulting from the proposed Project.

Third, the IS/EA does not evaluate single noise events. Motor vehicle noise is characterized by a high number of individual events, which often create a higher sustained noise level in proximity to areas sensitive to noise exposure. Buses and motorcycles, in particular, generate significantly more single noise events than other vehicle types, especially along hills where engine brakes are applied or acceleration is needed. Yet, rather than analyze how these single-noise events will impact receptors, the IS/EA focuses only on average noise

Analyzing only average noise impacts has been rejected by California courts because impacted residents do not hear noise averages, but single events. *See Berkeley Keep Jets Over the Bay v. Port of Oakland* (2001) 91 Cal. App. 4th 1344, 1382. Single event noise levels have been shown to be likely to result in sleep disruption and speech interference, and heightened levels of stress and annoyance. Noting that "sound exposure level [SEL] has been found to be the most appropriate and useful descriptor for most types of single event sounds," the court in *Berkeley Keep Jets* held that the Port was required to prepare a supplementary noise analysis. Accordingly, the EIR/EIS must analyze the impacts of single event noise on sleep, speech, stress and annoyance levels, and analyze adequate measures to mitigate those impacts.

Fourth, the IS/EA does not differentiate between daytime and nighttime noise. Noise can be far more intrusive during the evening and nighttime hours when ambient noise levels are at their lowest and when residents are sleeping. Since the surrounding

area is quieter at these times, the masking effect of other noise does not screen the freeway noise. Caltrans should have taken into account this higher sensitivity to noise and evaluated how the increase in noise from the Project would affect receptors during these time periods. The EIR/EIS must include such an analysis.

(c) The IS/EA Fails to Adequately Analyze the Project's Construction-Related Noise Impacts.

Although construction of the Project would occur over two years, and would apparently occur near residences, schools, hospitals and businesses, the IS/EA fails to provide any analysis of this massive construction project. Instead, the document merely concludes that noise generated by project-related construction activities would be temporary and that noise levels would not be substantially higher than existing hourly average traffic noise levels on SR 85 (53 to 71 dBa). IS/EA, p. 2-103. Members of the public are given no specific information as to the type, severity or even the duration of the construction-related noise impacts at their specific locations. Nor does the IS/EA provide any assurance that sensitive receptors would be sufficiently protected during the Project's protracted construction process.

A conclusion regarding the significance of an environmental impact that is not based on an analysis of the relevant facts fails to fulfill CEQA's informational goal. *See Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 191, 196; *Citizens of Goleta Valley*, 52 Cal.3d at 568. The IS/EA fails to fulfill this paramount CEQA purpose both because it neglects to present all relevant facts relating to the Project's construction noise impacts upon sensitive receptors and because its cursory conclusions are based upon no analysis. Without a detailed quantitative analysis of construction-related noise, it is not possible to determine the severity of these impacts or whether the proposed mitigation measures would effectively reduce such effects. Similarly, "NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council,* 462 U.S. 87, 97 (1983) (internal quotation omitted).

According to a recent EIS/EIR prepared for another Caltrans' Project (I-5/SR-56 Interchange Project), noise levels from construction can be as high at 101 dBA at 50 feet.[5] A noise level of 110 dBA is as loud as the sound of a jet fly-over at 300 meters or a rock band. *Id.* p. 3.16-2. Given the potential for the ear-splitting noise levels associated with the SR 85 Project construction, the proximity of sensitive receptors, and the protracted construction schedule, the IS/EA should have made at least some attempt to evaluate the Project's construction-related noise impacts.

Omission of this analysis is particularly egregious given that the FHWA *requires* that construction noise be considered during the development of any transportation

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[5] I-5/SR-56 Interchange Project DEIR/S, May 2012 at 3.16-28.

facility, and identifies the specific FHWA model that agencies should use to predict noise levels for highway construction projects. *See* FHWA, Highway Traffic Noise Handbook available at: http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/index.

An EIR/EIS should be prepared, which should include an analysis of construction-related noise impacts. An adequate analysis would include a description of existing ambient noise levels at receptor locations, predicted noise levels during each phase of construction at each sensitive receiver location, a comparison of noise levels during construction to the existing ambient noise levels, the establishment of appropriate significance thresholds to assess whether the increase would be substantial, and a finding as to whether noise levels would substantially increase. This type of evaluation is necessarily complex, requiring a thorough description of the type, duration, amplitude, topological conditions, relationship of sensitive receptors to construction areas, construction techniques, construction phasing, and construction durations for each highway segment.

The deficiencies in the IS/EA extend beyond Caltrans' failure to analyze construction-related noise impacts. The document also ignores construction-related vibration impacts. In addition to contributing to high levels of annoyance, construction-related vibration also can cause substantial property damage. Caltrans' EIR/EIS must undertake a comprehensive assessment of construction-related vibration impacts.

Notwithstanding the IS/EA's failure to analyze the Project's construction-related noise impacts, the document identifies a few measures to minimize construction noise. The IS/EA calls for the preparation of a construction plan to identify the schedule for major noise-generating construction activities. IS/EA, p. 2-103. However, the IS/EA provides no performance criteria that will ensure that construction-related noise does not adversely impact nearby sensitive receptors. Courts have allowed deferral of mitigation only in very limited circumstances. "[F]or kinds of impacts for which mitigation is known to be feasible, but where practical considerations prohibit devising such measures early in the planning process . . . , the agency can commit itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of project approval." *Sacramento Old City Ass'n v. City Council* (1991) 229 Cal. App. 3d 1011, 1028-29 (emphases added).

Another measure calls for avoiding the staging of construction equipment within 200 feet of residences and as far as practical from noise sensitive receptors. *Id.* This measure is unlikely to be effective inasmuch as Caltrans has not even identified the specific affected sensitive receptors. Moreover, the use of language "as far as practical" is vague and unenforceable. The CEQA Guidelines state that "mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments." CEQA Guidelines 15126.4(a)(2).

In sum, the Project's operational noise impacts would be significant. The IS/EA concludes that there are no feasible mitigation measures to reduce these impacts. In addition, the IS/EA lacks the evidentiary support that the construction-related measures will reduce construction noise impacts to a less-than-significant level. Inasmuch as the IS/EA offers no effective mitigation for these significant noise impacts, Caltrans must analyze these traffic impacts in an EIR/EIS.

3. The IS/EA Fails to Adequately Analyze the Project's Air Quality, Which Are Expected to Be Significant.

The Project area does not attain federal standards for ozone and fine particulate matter ($PM_{2.5}$). For the state standards, which are more stringent than the federal, the region does not attain the ozone, $PM_{2.5}$, or inhalable particulate matter (PM_{10}) standards. *Id.* p. 2-77. Given the region's serious air pollution problem, one would expect that Caltrans would have extensively studied the Project's contribution to this problem. Unfortunately, this is not the case. Although the Project has the potential to result in a significant increase in air pollution, the IS/EA's analysis of air quality impacts is grossly inadequate. The most serious flaws in the air quality analysis are described below.

(a) The IS/EA Lacks Thresholds of Significance to Evaluate the Project's Air Quality Impacts.

CEQA and NEPA's most basic purpose is to inform governmental decision-makers and the public about the potential significant environmental effects of a proposed project. CEQA Guidelines § 15002 (a) (1); 40 C.F.R. § 1500.1(b). Determining whether a project may result in a significant adverse environmental effect is one of the key aspects of CEQA. Guidelines § 15064(a) (determination of significant effects "plays a critical role in the CEQA process"). CEQA specifically anticipates that agencies will use thresholds of significance as an analytical tool for judging the significance of a Project's impacts. *Id.* § 15064.7.

Thus, one of the first steps in any analysis of an environmental impact is to select a threshold of significance. Here, the IS/EA contains no thresholds of significance for the Project's air quality impacts. This flaw leads to a cascade of other failures: without a threshold, the IS/EA cannot do its job. For example, although the IS/EA concludes that the Project would not violate any air quality standards, the document provides no standard by which to evaluate this impact's significance. Caltrans' EIR/EIS must include these thresholds and evaluate the Project's impacts against these thresholds.

(b) The IS/EA Fails To Adequately Describe The Project's Environmental Setting.

The IS/EA contains no information regarding the number of people who live within the SR 85 study area, or more importantly, who live within a mile of the freeway.

Studies indicate that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas. *See* California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective* (excerpts), attached as Exhibit G.

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. The Bay Area Air Quality Management District ("BAAQMD") includes in its list of sensitive receptors, residences, schools, playgrounds, childcare centers, convalescent homes, retirement homes, rehabilitation centers, and athletic facilities. BAAQMD CEQA Guidelines at D-4, Updated May 2011. Sensitive population groups include children, the elderly, and the acutely and chronically ill, especially those with cardio-respiratory diseases. Residential areas are also considered to be sensitive to air pollution because residents tend to be home for extended periods of time, resulting in sustained exposure to any pollutant present. Although Caltrans would widen SR 85 and bring the highway even closer to established neighborhoods, the IS/EA fails to quantitatively, or even qualitatively, identify the number and type of sensitive receptors that would be affected by this proposed Project. Such information must be provided so that the public and decision-makers can understand who will be at particular risk due to poor air quality caused by the Project.

(c) The IS/EA Does Not Analyze Whether The Project Would Conflict With Or Obstruct Implementation Of The Applicable Air Quality Plan Or Whether It Would Violate Any Air Quality Standard.

Caltrans cites two reasons for its lack of an evaluation as to whether the Project would conflict with the applicable air quality plan or violate any air quality standard. First, it asserts, absent any evidence, that the Project will not interfere with the adoption of the BAAQMD's 2010 Clean Air Plan. IS/EA, p. 2-82. Second, it states the Project is included in the Bay Area's Regional Transportation Plan ("RTP") and that since the RTP has undergone regional evaluation for conformity with federal air quality standards, including ozone, the Project would result in no ozone impacts. *Id.* The document makes no attempt to provide the necessary facts and analysis to support its conclusions and thus falls far short of satisfying CEQA and NEPA's mandates. *Citizens of Goleta Valley v. Board of Supervisors* (1990)52 Cal.3d 553, 568 ; *Maryland-Nat'l Capital Park & Planning Comm'n v. U.S. Postal Serv.,* 487 F.2d 1029, 1040 (D.C. Cir 1973) (requiring agencies to take a "hard look" at the environmental impacts of a project, and not merely rest on "bald conclusions").

If Caltrans intends to rely on the Project's inclusion in the RTP and that Plan's federal conformity evaluation, the IS/EA must discuss this evaluation and explain how the Project fits in with the evaluation. Moreover, it is important to note that no less than three lawsuits have been filed challenging the adequacy of the environmental analysis for the

RTP.[6] *See* Alameda County Superior Court "Domain Web" (http://www.alameda.courts.ca.gov/pages.aspx/domainweb) and search by case number. Caltrans should disclose whether any of these suits address the adequacy of the RTP EIR's air quality analysis. Finally, the IS/EA must evaluate whether the Project's federal conformity determination is sufficient to demonstrate that the Project would not violate any state air quality standard. As discussed above, the state air quality standards are more stringent than the federal standards.

An EIR/EIS should be prepared and should include an accurate assessment of the Project's contribution to regional air pollution. Once this assessment is undertaken, mitigation measures and/or Project alternatives should be identified if the impacts are determined to be significant.

(d) The IS/EA Erroneously Concludes That The Project Will Not Have Any Significant Impacts Due To Emissions Of Mobile Source Air Toxics.

The IS/EA states that the Project will cause emissions of mobile source air toxics ("MSAT") to increase over existing conditions. IS/EA, p. 2-83. The IS/EA ignores the

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[6] **Lawsuit 1**
Name: *Bay Area Citizens v. Association of Bay Area Governments*
Court: Alameda Superior Court
Case No: RG13690631
Status: Writ Petition (CEQA) filed on 8/06/13; case pending.
https://www.pacificlegal.org/Release/Lawsuit-says-Plan-Bay-Areas-drafters-wore-blinders

Lawsuit 2
Name: *Building Industry Association v. Association of Bay Area Governments*
Court: Alameda Superior Court
Case No: RG13692098
Status: Writ Petition (CEQA) filed on 8/16/13; case pending. The Building Industry Association's press release regarding the filing is available at: http://www.biabayarea.org/bay-area-builders-sue-regional-agencies-over-failure-to-comply-with-landmark-state-housing-law/

Lawsuit 3
Name: *Communities for a Better Environment v. Metropolitan Planning Commission*
Court: Alameda Superior Court
Case No: RG13692189
Status: Writ Petition filed on 8/19/13.

data, though, and summarily concludes that the Project would not have an adverse impact on MSAT emissions. *Id.* p. 2-84. The question is not whether the Project would have an adverse impact on MSAT emissions but whether it would have an adverse impact on nearby sensitive receptors. Unfortunately, the IS/EA does not evaluate this potential impact, claiming that there are no available tools to enable prediction of the project-specific health impacts of the emissions changes associated with the Project. *Id.* p. 2-83.

Caltrans is wrong that it cannot conduct an analysis of health impacts. Agencies regularly conduct health risk assessments for road projects. The American Association of State Highway and Transportation Officials ("AASHTO") has prepared guidelines on available analytical models and techniques to assess MSAT impacts. *See* AASHTO, *Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process* (March 2007), attached as Exhibit H. These AASHTO Guidelines include over 200 pages of detailed procedures, and were designed specifically to assist transportation agencies in the evaluation of the potential health impacts caused by exposure to toxic air pollutants emitted from surface transportation sources. *Id.* p. 6,14. The AASHTO Guidelines explain that modeling tools are widely available that are capable of predicting MSAT impacts from transportation projects and that there are a variety of air quality dispersion models applicable to transportation projects. *Id.* p. 2,3 and Appendix B. Caltrans could use AASHTO's Guidelines as a starting point for preparing its own analysis of the health impacts of the Project. *See also* http://www.dot.ca.gov/hq/env/air/pages/msat.htm (Caltrans acknowledging that health risk assessments can be done for road projects and that some air districts emphasize doing it). Moreover, even if a health risk assessment were not feasible, Caltrans must use some method to quantify and analyze MSAT risks to sensitive receptors to the best of its ability.

A fair argument exists that the Project would result in significant air quality impacts. Consequently, Caltrans must prepare an EIR/EIS that comprehensively evaluates these impacts and identifies feasible mitigation and/or alternatives if the impacts are determined to be significant.

4. The IS/EA Fails to Adequately Analyze the Project's Impact on Climate Change, Which Is Expected to Be Significant.

While the IS/EA includes a discussion of the Project's impacts on climate change, the analysis is essentially perfunctory. The analysis focuses its efforts on a lengthy discussion about the Project's potential to increase average vehicle speeds and thereby reduce carbon emissions. The IS/EA calculates only a portion of the carbon emissions for which the Project will be responsible and then ignores its obligation to determine whether the impact is significant. The document thus fails at the most basic purpose of an EIR, which is to disclose to the public a project's significant environmental impacts and mitigation for these impacts or alternatives to the proposed project that will avoid or substantially reduce the project's significant impacts.

(a) The IS/EA Incorrectly Focuses on Increased Travel Speeds to Reduce the Project's Carbon Emissions.

The IS/EA includes a lengthy discussion on the Project's potential to increase average vehicle speeds as a way to reduce carbon emissions. IS/EA, p. 2-137. It downplays the role that the Project's increase in vehicle miles traveled ("VMT") will play in increasing greenhouse gas ("GHG") emissions. As AASHTO recognizes, the only way that California will be able to achieve sustained reductions in GHG emissions is by reducing VMT. Recognizing the unsustainable growth in driving, AASHTO, which represents state departments of transportation throughout the country, is urging that the growth of vehicle miles traveled *be cut in half*. *See* "Growing Cooler: Evidence on Urban Development and Climate Change," Urban Land Institute, attached as Exhibit I (emphasis added).

Focusing on vehicle speeds is an unrealistic approach to controlling GHG emissions. As discussed above, the increased speeds that accompany highway expansion are short-lived since increased capacity attracts additional motorists, resulting in even greater levels of congestion. In any event, Caltrans cannot rely on the travel speed data identified in the IS/EA since, as the MRO Report explains, this data is inaccurate.

(b) The IS/EA Fails to Properly Quantify the Project's Emissions Contributing to Climate Change.

The IS/EA's estimate of the Project's carbon emissions only tells a small part of the story of the Project's contribution to climate change. The document includes calculations of the amount of emissions attributable to peak hour speeds and VMT, and then apparently uses these figures to develop only a rough estimate of total emissions. As discussed below, the IS/EA errs in its failure to identify all of the Project-related emissions.

The IS/EA's explains that it did not include in its emission calculation life-cycle emissions associated with manufacturing and lifecycle of its building materials, the production and distribution of the fuel, and fuel additives like ethanol prior to combustion in the vehicle. IS/EA, p. 2-138. Nor does the IS/EA's emission calculation include gases other than carbon dioxide in its calculation of GHG emissions. Greenhouse gases that were not considered include, but are not limited to, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. *Id.* , p. 2-134. The document also does not include black carbon emissions, which are produced by burning fossil fuels such as diesel fuel. Black carbon has significant global and regional effects and its contribution to climate change is second only to carbon dioxide.[7] Caltrans must

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[7] *See*, U.S. House of Representatives Committee on Oversight and Government Reform Hearing, October 18, 2007; Science and Development Network "Black Carbon Climate Danger Underestimated" April 3, 2008.

inventory all of the Project's emissions, including life-cycle emissions, other gases, and black carbon.

An agency's first duty under CEQA is to disclose accurately a project's impacts. The IS/EA does not do so. Because it skips over several potentially significant sources of GHG emissions, it fails to accurately quantify the Project's increase in GHG emissions. Until GHG emissions are properly quantified, the IS/EA will remain inadequate.

(c) The IS/EA Fails to Arrive at a Conclusion as to Whether the Project's Contributions to Climate Change Would Be Significant.

Although the IS/EA acknowledges that the "Build" emissions would be higher than the "No Build" emissions in 2015 (p. 2-137), the document stops short of identifying the Project's impact on climate change as significant. Caltrans has a clear statutory obligation under CEQA to determine whether or not this Project's impacts are significant. The first step in any discussion of an environmental impact is to select a threshold of significance. The IS/EA does not choose such a threshold. Under CEQA, a determination of the significance of an environment impact calls for "careful judgment ... based to the extent possible on scientific and factual data." CEQA Guideline § 15064(b). Accordingly, a significance threshold for GHG emissions must reflect the grave threats posed by the cumulative impact of additional new sources of emissions into an environment where deep reductions from existing emission levels are necessary to avert the worst consequences of global warming. *See Communities for Better Env't v. California Resources Agency* (2002) 103 Cal. App. 4th 98, 120 ("[T]he greater the existing environmental problems are, the lower the threshold for treating a project's contribution to cumulative impacts as significant. *See, e.g., Berkeley Jets*, 91 Cal. App. 4th at 1370. The lack of published standards and thresholds of significance alone cannot justify Caltrans' failure to analyze the potentially significant climate change impacts of the Project.

The California Air Pollution Control Officers Association's ("CAPCOA")[8] "CEQA & Climate Change" white paper assists lead agencies in analyzing greenhouse gas impacts under CEQA. *See* Exhibit J. Noting that "the absence of an adopted threshold does not relieve the agency from the obligation to determine significance" of a project's impacts on climate change, CAPCOA explored various approaches to determining significance and then evaluated the effectiveness of each approach. In doing so, CAPCOA determined that only thresholds of zero emissions or of 900 tons of CO2

[8] CAPCOA is an association of air pollution control officers representing all local air quality agencies and air districts in California.

equivalent ("CO2e")[9] emissions had "high" effectiveness in reducing GHG emissions and "high" consistency with the emission reduction targets set forth in AB 32 and Executive Order S-3-05. *Id.*

NEPA also requires Caltrans to analyze the Project's GHG emissions. *Ctr. for Biological Diversity*, 538 F.3d 1172, 1217 (9th Cir. 2008) (NEPA requires agencies to assess impacts of project on GHG emissions); *Earth Island Institute v. U.S. Forest Service*, 351 F.3d 1291, 1300 (9th Cir. 2003) (NEPA requires that federal agencies "consider *every* significant aspect of the environmental impact of a proposed action . . . ") (emphasis added) (citations omitted). The President's Council on Environmental Quality issued draft guidance on analyzing this issue under NEPA. *See* February 18, 2010, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, attached as Exhibit K. This document recognizes that "the NEPA process should incorporate consideration of both the impact of an agency action on the environment through the mechanism of GHG emissions and the impact of changing climate on that agency action." *Id.* at p. 11.

In any event, the Project, with its yearly emissions of more than 2,500 tons per year of CO2e (p. 2-138), is well above either of the two potential thresholds of significance.[10] Its contribution to global warming must therefore be considered significant. With this significance determination comes CEQA's mandate to identify and adopt feasible mitigation measures that would reduce or avoid the impact. CEQA Guidelines § 15126.4(a)(1); *see also Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (2007) 150 Cal. App. 4th 683, 724 ("The EIR also must describe feasible measures that could minimize significant impacts.").

While the IS/EA points to a handful of measures to reduce impacts, these measures are vague, undefined and unenforceable. In many instances, the IS/EA simply lists strategies such as "Portland Cement," "non-vehicular conservation measures," "education & information program," and "Goods Movement," but never defines these strategies, explains how they would be employed or how the CO_2 cost savings were calculated. Dozens of potential mitigation measures, at least, are available to reduce the Project's greenhouse gas emissions. A small sampling includes:

- Require all aspects of the Project to be "carbon neutral" through a combination of on-site and off-site measures. An important aspect of this mitigation could be the

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[9] Carbon dioxide equivalents (CO2e) provide a universal standard of measurement against which the impacts of releasing different greenhouse gases can be evaluated. As the base unit, carbon dioxide's numeric value is 1.0 while other more potent greenhouse gases have a higher numeric value.

[10] This amount was calculated by comparing 2015 "Build" and "No Build" emissions.

adoption of an off-set requirement for any reductions that could not be achieved directly. Emissions could be offset either through contributing to the financing of sustainable energy projects or through the purchase of carbon credits. The programs are increasingly common and thus raise no issue of infeasibility.

- Require that off-road diesel-powered vehicles used for construction be new low-emission vehicles, or use retrofit emission control devices such as diesel oxidation catalysts and diesel particulate filters verified by the California Air Resources Board.

In addition to the mitigation measures identified above, Caltrans should also consider the mitigation measures proposed in CAPCOA's publication.

In short, the IS/EA clearly states the Project would result in an increase in GHG emissions yet fails to identify feasible mitigation measures capable of offsetting these impacts. Caltrans must prepare an EIR/EIS to examine these impacts.

5. The IS/EA Fails to Adequately Analyze the Project's Impact on Visual Resources, Which Are Expected to Be Significant.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." Pub. Res. Code § 21001(b) (emphasis added). Thus, courts have recognized that aesthetic issues "are properly studied in an EIR to assess the impacts of a project." *The Pocket Protectors*, 124 Cal.App.4th at 937 (overturning a mitigated negative declaration and requiring an EIR where proposed project potentially affected street-level aesthetics).

The accepted approach to analyzing visual and aesthetic impacts is as follows:

a. Describe the criteria for significance thresholds.

b. Characterize the existing conditions of the project site and the surrounding area by photograph and description, and select key viewpoints within the area, including scenic corridors and landscapes.

c. Use photomontages or visual simulations, to illustrate the change in character of the project site before and after project implementation.

d. Identify feasible mitigation measures and alternatives to reduce or eliminate significant impacts.

e. Where mitigation measures are proposed, use the simulations to illustrate the change in character before and after project mitigation

measures are imposed (e.g., landscaping at various stages of growth, setbacks, clustering, reduced scale and height, building color modification).

The IS/EA lacks much of the aforementioned information, making it nearly impossible to evaluate the Project's aesthetic impacts. The document contains no thresholds of significance and, therefore, provides no standard by which to judge the significance of the Project's impact on visual resources. It does not adequately characterize the existing setting because it omits photographs of SR 85 within Cupertino, focusing primarily on locations within and adjacent to San Jose. The IS/EA does not include any before/after simulations; therefore, neither the public nor decision makers have sufficient information about how the character of the setting will be altered upon completion of the Project. Thus, while the IS/EA acknowledges that the appearance of SR 85 will change, through pavement widening, bridge widening, installation of project signs, toll structures and lighting, the IS/EA lacks a visual representation of any of these features. Consequently, when the IS/EA concludes that the Project is expected to have little, if any, effect on visual quality, it lacks the evidentiary support to reach this conclusion.

The Project would pave the SR 85 median through Cupertino yet there is no information about trees or ornamental landscaping in this location. In addition, an auxiliary lane would be added, the highway would be widened outside the current lanes, existing abutments would be removed and new retaining walls would be constructed. *Id.* p. 2-34. Rather than graphically show these changes, the IS/EA simply concludes that these changes would be visually compatible with the existing freeway corridor and that there would be "a low level of change" to the existing corridor. *Id.* But what the term "low level of change" means as a practical matter is not explained. Low compared to what benchmark? The information in the IS/EA is not "presented in a manner calculated to adequately inform the public and decision makers" of real environmental consequences of approving the Plan, in violation of CEQA. *See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.

In addition, the IS/EA fails to inform the public of the effect that the new signs (including dynamic message signs) and toll structures would have on existing views. The Project would add 15 sets of overhead signs and toll structures. These would be installed in the median on cantilever structures and the tops of the signs and toll structures would be approximately 26 feet in height. *Id.* p. 2-36 through 2-39, 37. Here too, the document simply states that the "signs would introduce a low to moderate level of change to the existing environment" and that views of these project features would not "be highly conspicuous." *Id.* p. 2-36. But because the IS/EA does not include any criteria for assessing a change in visual character or show "before and after" photographs, the

phrases "low to moderate" and "not highly conspicuous" have no context.[11] This is very important, because SR 85 is below grade by as much as 25 feet, in many segments between I-280 and SR 87. *Id.* p. 2-30. Upon completion of the Project, the signs and toll structures may starkly interfere with existing views or abruptly change the character of the community.

The IS/EA's analysis of light and glare impacts is particularly deficient. Mast-arm luminaires would be mounted on the median barrier along each of the 15 express lane access zones on SR 85. IS/EA, p. 2-39. At each access zone, approximately seven luminaires would be placed in the median over a distance of 2,000 feet (one luminaire every 250 to 400 feet). The number of luminaires would increase if the access zone is longer than 2,000 feet, to maintain a spacing of one luminaire every 250 to 400 feet. *Id.* The luminaires would be 35 to 40 feet tall. *Id.* p. 2-40. Although this Project would result in a substantial increase in light sources, the IS/EA provides no reasoned analysis of how these light sources would affect light and glare. The IS/EA never attempts to describe how this increase in lighting would compare with existing lighting or whether it would adversely affect nighttime views in the area as CEQA requires. CEQA Guidelines, Appendix G,§ I.d). Here too, the IS/EA simply concludes that light and glare on the surrounding uses would be "minimal." *Id.* p. 2-44. Such non-specific statements provide little meaningful information to the public or local decision-makers. What the label "minimal" means, as a practical matter, is not explained. Minimal compared to what benchmark? Because the highway is below grade in Cupertino, the 40-foot-tall light structures could flood surrounding properties with light and glare.

Because the IS/EA contains insufficient analysis to support its sweeping conclusions that the Project's visual impacts will be less than significant, and because there is a fair argument that impacts would be significant, an EIR/EIS must be prepared.

III. Conclusion

As set forth above, the IS/EA does not adequately identify the Project's potentially significant impacts and thus does not satisfy the requirements of CEQA or NEPA. To correct these inadequacies, Caltrans must prepare an EIR/EIS for the Project and adopt enforceable mitigation and or/alternatives to address the Project's significant impacts.

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[11] The IS/EA does include "representative" photographs of signs and toll structures from another Bay Area freeway. IS/EA, p. 2-37. While it is helpful to see the design of these structures, such representative photographs cannot replace an analysis of how these structures would appear throughout Cupertino.

Very truly yours,

David Brandt
City Manager
City of Cupertino

Exhibits:

Exhibit A:	MRO Engineers Report
Exhibit B:	Performance Agreement between City of Cupertino and the Santa Clara County Traffic Authority, January 24, 1989.
Exhibit C:	Measure A Official Ballot, County of Santa Clara, General Election, November 7, 2000.
Exhibit D:	Report on the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County, Bollard & Brennan, Inc.
Exhibit E:	Caltrans Traffic Noise Analysis Protocol.
Exhibit F:	Sound Walls: Absorptive Versus Reflective Design and Effectiveness, Sound Fighter Systems.
Exhibit G:	California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective* Excerpts.
Exhibit H:	AASHTO, *Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process* (March 2007).
Exhibit I:	Growing Cooler: Evidence on Urban Development and Climate Change," Urban Land Institute.
Exhibit J:	CEQA & Climate Change, CAPCOA (Introduction and Appendix G).
Exhibit K:	February 18, 2010, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions.

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