Bapu Vaitla
23 Russell Blvd
Davis CA 95616

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Masum Patwary
Environmental Scientist
Caltrans District 3
703 B Street, Marysville, CA 95901
Yolo80Corridor@dot.ca.gov

RE: PUBLIC COMMENT FOR YOLO 80 CORRIDOR IMPROVEMENTS PROJECT

Dear Mr. Patwary:

My name is Bapu Vaitla, an elected member of the Davis, California City Council. I am writing with respect to the Yolo 80 Corridor Improvements Project. The views expressed in this letter are my own, and do not represent the City of Davis or my colleagues on the City Council. Davis is one of the jurisdictions most affected by the proposed project.

I have four major comments:

1. **With respect to Build Alternatives 2 through 5, the project does not mitigate VMT to the extent feasible. Incorporate some of the previously analyzed (and rejected) ideas listed in the Draft VMT Mitigation Plan.**

2. **Please add and analyze the environmental impacts of a Build Alternative that converts the six existing general purpose lanes to toll lanes.**

3. **With respect to Build Alternative 6, deepen the analysis to consider projected VMT impacts of expanding transit service supply.**

4. **Please drop all "b" Alternatives—1b, 2b, 3b, 4b, 5b, 6b, 7b—from consideration; they do not meet CEQA's standard of "environmentally superior alternatives."**

This letter expands on each of these comments, as well as provides additional comments.

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Comment 1: With respect to Build Alternatives 2 through 5, the project does not mitigate VMT to the extent feasible. Incorporate some of the previously analyzed (and rejected) ideas listed in the Draft VMT Mitigation Plan.

Build Alternatives 2-5 would induce nearly 500,000 vehicle miles traveled (VMT) daily, or between 181-188 million annually. The associated greenhouse gas emissions would undermine the ability of the City of Davis and Yolo County to attain our climate action goals, with consequent severe impacts on public and environmental health. To put the induced VMT figure in context, analysis conducted by Fehr + Peers in 2021 suggests that in 2016 the annual weekday VMT of the City of Davis inside the SACOG region was about 1.1 million VMT. Thus the VMT induced by Build Alternatives 1-5 equals about 44% of the City of Davis's entire weekday driving total.[1]

In addition, Caltrans' VMT calculations are likely to be under-estimates, given that they are generated using a regional travel demand model instead of the more widely accepted NCST induced demand calculator. The NCST calculator estimates that Build Alternatives 2-5 would induce 233.8 million VMT annually, around 25% more than Caltrans' own estimates. This is without considering other issues, e.g., the challenge of enforcing HOV lanes and HOT lanes that allow free usage for minimum two-person occupancy vehicles, as Build Alternatives 3 and 4, respectively, propose. In any case, Caltrans plans to mitigate only 43% of VMT as calculated using the travel demand model (Table 2.1-27). If the NCST estimate is used instead, this figure drops to 24%.

In addition, accurately estimating environmental impacts such as air quality, greenhouse gases, noise, water pollution, etc. requires using the *overall* amount of induced VMT —that is, VMT of both commercial and passenger vehicles, instead of passenger vehicle VMT only, which is the approach utilized in most of the DEIR. Note also that different measurement methods in different sections of an EIR would be internally inconsistent and not permitted by the CEQA guidelines.

Very importantly, funding constraints call into question whether even the set of proposed mitigation actions will be carried out. Caltrans is only committing to finance 12.5% of the twenty-year cost of voluntary trip reduction, for example, and the DEIR states that the "full implementation of these VMT-reducing measures is outside the regulatory authority of Caltrans." Thus achieving the 57.1 million VMT mitigation goal depends on 87.5% of funding coming from other unidentified and uncommitted sources.

Build Alternatives 2-5 would make it impossible for the City of Davis, Yolo County, and the Sacramento Region to meaningfully contribute to the State of California's target to attain carbon neutrality by 2045 (p. 3-53), especially given that 37% of California's emissions come from the transportation sector (p. 3-56). In fact, Build Alternatives 2-5 would hinder progress towards the state target and do not represent environmentally superior alternatives to the proposed project, which is a primary purpose of including such alternatives within the EIR.

[1] Fehr + Peers Memorandum to Diana Edwards and Josh Lathan, AECOM, April 19, 2021, "City of Davis Vehicle Miles Traveled (VMT)" estimates. The 1.1 million figure represents weekday driving within the SACOG region. If driving to/from Davis that extends outside the SACOG region is considered, the number rises to 1.7 million.

For these reasons, with respect to Build Alternatives 2-5, the project does not mitigate the VMT impacts to the extent feasible. The current mitigation plan defers the formulation of required and feasible mitigation measures to some future time, in clear violation of Section 15126.4 of the CEQA Guidelines. To comply with CEQA, the mitigation plan must substantially increase the quantity of VMT mitigated, reconsidering the measures previously analyzed and rejected (Draft VMT Mitigation Plan, Table 2). No explanation is given as to why these measures were rejected. The inclusion of these measures could potentially reduce transportation impacts to "less than significant," as opposed to the current determination of "significant but unavoidable" (Summary-27).

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Comment 2: Please add and analyze the environmental impacts of a Build Alternative that converts the six existing general purpose lanes to toll lanes.

Converting existing general purpose lanes to toll lanes would have a strong effect on the project achieving its purpose and need around reducing congestion and travel time reliability. It would also be the least expensive option, require no new capacity, and would manage congestion more effectively over a much longer timeframe than any of the current Build Alternatives.

In addition, toll revenue is a strong determinant of Caltrans's ability to carry out VMT mitigation measures. The currently proposed plan mitigates only 43% of VMT—a likely overestimate of mitigation, as noted in Comment 1—at a cost of $55 million to Caltrans. Additionally, this $55 million only represents 12.5% of the total budget to attain even the current mitigation target, let alone the much higher levels of mitigation needed.

The DEIR already notes that expanding Capitol Corridor frequency, micro-transit in Yolo County, subsidies for monthly transit passes, reduction of transit fares, expansion of Causeway Connection Route 138, and expansion of Unitrans will all be "supplemented with future toll revenue" (Table 2.1-27), but no details are provided. This statement does suggest an acknowledgement that toll revenue is closely tied to the net environmental impact of the project, and even the overall feasibility of the current proposed (and inadequate) VMT mitigation measures. In addition, critically, assessing the impacts of tolling authority on additional lanes would help formulate financially workable strategies to implement Alternative 6 at higher levels of transit service.

In short, analysis of the impacts of a project alternative that converts all or some of the currently existing six general purpose lanes to toll lanes is critical to understanding how congestion can be

managed more effectively and more efficiently in this project, as well as how induced VMT can be minimized and a steady revenue stream to finance mitigation efforts might be generated.

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Comment 3: With respect to Build Alternative 6, deepen the analysis to consider VMT impacts under the assumption of expanded transit supply.

Build Alternative 6 is analyzed under the assumption that transit service will be provided at existing levels (summarized on p. 2-115); p. 2-119, for example, states that "transit service was not assumed to change among the analysis years."[2] Existing levels of transit service are admittedly too low to justify dedicating an additional lane solely for transit. However, planning and constructing an additional transit-only lane would almost certainly stimulate additional transit investments by the Sacramento Region, Yolo County, and various other jurisdictions in the area before Opening Year 2029. Levels of transit service would increase, with potential major impacts on reducing VMT.

In fact, the induced VMT in Alternative 6 could reasonably be expected to be *negative* as motor vehicle use shifts to transit. The Fehr + Peers memorandum on VMT mitigation initially disputes this, basing its argument on Duranton and Turner (2011). However, this same study also states that "the most defensible estimate" of elasticity of highway VKT [VMT] to lane kilometers [miles] is 1.03. The authors conclude: "We take this as a confirmation of the "fundamental law of highway congestion" suggested by Downs (1962), where the extension of interstate highways is met with a proportional increase in traffic for US MSAs" (Duranton and Turner 2011, p. 2645). In other words, the paper concludes that freeway widening does *not* relieve congestion. While the research literature taken as a whole does indicate that the effect of transit supply on VMT is dependent on many contextual factors, many sources *do* point to a negative relationship between transit supply and VMT.[3]

Literature notwithstanding, the DEIR states in various locations that VMT cannot be estimated for Alternative 6 (e.g., p. 2-117, 2-122). This is highly problematic, as induced VMT is indeed the "metric most appropriate for determining a transportation project's impact" (p. 2-116). Without a VMT estimate for Alternatives 6a and 6b, a fair comparison of impacts is not possible. Conclusions that suggest Alternatives 6a and 6b would perform similarly to Alternatives 1-5

[2] Possibly the analysis assumes increased transit supply as a result of buses being freed from congestion, which would presumably allow more trips in a given time period with the existing fleet. This assumption is not stated anywhere in the DEIR, however.

[3] See, for example, Ewing et al. 2014, "Structural equation models of VMT growth in US urbanized areas"; Beaudoin and Lawell 2018, "The effects of public transit supply on the demand for automobile travel."; McMullen and Eckstein 2013, "Determinants of VMT in urban areas: a panel study of 87 U.S. urban areas 1982-2009."

(e.g., Summary-27 and the measures in Table 2.1-25) must be interpreted in view of this incomplete analysis.

Additionally, despite initially citing the Duranton and Turner (2011) conclusion above, the Fehrs + Peers memorandum goes on to utilize the CAPCOA argument that "a 25 percent increase in transit service mileage or hours will result in a 0.29 percent reduction in passenger vehicle VMT within the area affected by the expanded transit service" (memo, p. 4) to estimate the annual VMT reduction associated with various proposed mitigation measures. But if this elasticity is good enough to use for VMT mitigation calculations, why is it not used in estimating VMT reduction for Build Alternative 6, under various scenarios of transit service expansion? This is an internal inconsistency and not permitted by CEQA; two different methods are used in two different sections of the EIR.

More realistic scenarios that incorporate higher supply in the proposed transit-only lane may alter the DEIR's conclusions on Build Alternative 6. For example, the "Inconsistent" finding of Build Alternatives 6a and 6b with respect to Policy 6.3 (p. 2-21) may instead be "Consistent," and the 3.2.17(b) finding of "Significant and Avoidable Impact" (p. 3-41) may change to "Less than Significant." The overall point is that, with the assumption of greater transit supply, the amount of induced VMT would be much lower for Build Alternative 6 compared to other Build Alternatives.

Caltrans might then focus their (lower level of required) mitigation investments to expand transit supply, providing funds to the providers of bus and rail transit on the corridor—Amtrak, Fairfield/Suisun Transit, Solano Express Bus, Yolobus, Unitrans, Sacramento Regional Transit, and Greyhound Bus—as well as improving bicycle and pedestrian accessibility. Of special importance would be augmenting Capitol Corridor services between Oakland and Sacramento; the DEIR (p. 2-13) states that 3 additional roundtrips of this route reduce VMT by 12.6 million.

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Comment 4: Please drop all "b" Alternatives—2b, 3b, 4b, 5b, 6b, 7b—from consideration; they do not meet CEQA's standard of "environmentally superior alternatives."

All "b" Alternatives, which add managed lane direct connectors, have greater impacts on VMT (Table 2.1-26) and fuel consumption (Table 2.2-33), and thus greenhouse gas emissions. In fact, the "b" options completely wipe out the benefits of projected fuel efficiency gains (driven by EPA regulations, p. 3-51), and fuel consumption *increases* in Opening Year 2029 as compared to the Existing and No Build scenarios. Even at Horizon Year 2049, fuel consumption for "b" Alternatives are only slightly below the Existing and No Build Scenarios. The same is true for greenhouse gas emissions (Table 3.4-2).

In addition, the "b" Alternatives increase the construction timeframe considerably. Build Alternative 2b, for example, is estimated to take 14 months (289 construction days) longer than Build Alternatives 2a. The greater construction timeframe results in more energy consumption, in addition to hindering traffic flow.

In short, the "b" Alternatives do not represent environmentally superior alternatives, as required by CEQA, and should be excluded from the analysis.

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Additional comments

a) The proposed VMT mitigation measures that appear in Table 2.1-27 and in the "VMT Mitigation Plan" do not appear in Appendix C ("Avoidance, Minimization, and/or Mitigation Measures Summary") or Appendix E ("Standard Measures"). Please explain the reason for this omission.

b) In the revised EIR, please study Part Time Lane Use solely for transit vehicles and/or Bus on Shoulder options for Build Alternatives 2-5.

c) Given the estimated 181-188 million VMT induced by Build Alternatives 2-5, the finding for Policy M-1.3 ("Reduced Vehicles Miles Traveled") should be "Inconsistent," not "Partially Consistent."

d) Please provide detailed reasons for rejecting the VMT-reducing measures in Table 2.1-28. Specifically, please provide reasons for rejecting funding for building 1,000 housing units in Downtown Davis, especially given the relatively low ($0.27/VMT) cost.

e) Build Alternatives 6a and 6b are stated to have the "same" environmental impacts as Build Alternatives 1-5 in the summary on p. 2-74; however, given the much lower VMT of Build Alternatives 6a and 6b, environmental impacts—VMT itself, greenhouse gas emissions, and particulate matter, among others—should be much lower than Build Alternatives 1-5.

f) Note that Project ID D-2 listed on page 1-27, the University Mall Redevelopment Project, will no longer contain residential units.

g) Given the incomplete funding for transit-related VMT mitigation strategies, Build Alternatives 2-5 should be "Partially Consistent" instead of "Consistent" for "Enhance Transit Service" (p. 2-22), as stated for Policy CI-2.3 (p.2-23) and Policy M-4.2 (p.2-27).

h) Build Alternatives 6a and 6b will reduce congestion for transit services, allowing an increase in the number of trips possible in a given time frame. This would have much

stronger benefits for environmental justice communities than the other Build Alternatives. This should be stated on p. 2-84.

i) Please provide a detailed description of viable options for providing rebates and/or exemptions for low-income populations, as stated in AMM EJ-1 on p. 2-85, including procedures for identifying qualifying individuals.

j) Please provide projected contour tables for weekday speeds (as on p. 2-107 and 2-108), corridor travel times (Table 2.1-21), and operational summaries (Table 2.1-23) for each Build Alternative, for both Opening Year 2029 and Horizon Year 2049. Descriptive summaries are given on pages 2-118 and 2-119, but comparative tables would be useful.

k) Please provide a description for how qualitative assessment of the Build Alternatives relates to the quantitative scores (1-5) given in Table 2.1-25. Please provide a justification for weighting each performance measure equally in constructing the average score.

l) With respect to 3.2.6(b) under CEQA (p. 3-22), the DEIR states "less-than-significant" impact. The Build Alternatives result in either an increase or a "nominal decrease" in energy consumption and GHGs (Table 3.4-2), which deviates greatly from the regional reduction target of 19% reduction in passenger vehicle GHG emissions per person by 2035, from 2005 levels. In addition, the use of the regional travel demand model rather than the NCST calculator means that VMT, and thus energy consumption and GHGs, is greatly underestimated. These impacts merit a "significant impact" finding for Build Alternatives 2-5.

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Overall, there is no evidence for freeway widening as a long-term solution for congestion (see sources in footnote 1). While freeway widening for non-transit purposes may relieve congestion in the short-term, such an approach comes at great cost in terms of public funds, environmental damage, and public health. A more effective strategy for sustainable improvements in traffic flow would be tolling, as well as the expansion of public transit with accompanying zoning reform that allows people to live near where they work. Pursuing expanded transit access, as in Build Alternative 6, would help incentivize higher-density, transit-linked development on the Bay Area to Sacramento corridor, including in my jurisdiction of Davis.

Finally, if Caltrans does not pursue Build Alternative 6 for the project, please select the No Build Alternative. Doing nothing for the present time while developing a more comprehensive vision for increasing transit use on the corridor is a better option than widening the freeway to accommodate more non-transit motor vehicles.

Thank you for your consideration. Sincerely,

Bapu Vaitla
Councilmember, City of Davis