Tab 19

From: Roberta L Millstein
To: California Transportation Commission@CATC
Subject: Item 19, Funding of I-80/US-50 Managed Lanes Project with TCEP funds
Date: Sunday, March 17, 2024 2:37:47 PM

Dear California Transportation Commission,

I urge you to **deny - do not approve** - the advance programming request of $105,000,000 from the 2024 Trade Corridor Enhancement Program for the right-of-way support and construction of the I-80/US 50 Managed Lanes Project in Yolo County (Item 19).

As a resident of Davis, I would be directly impacted by these changes to I-80. The added lanes purport to improve traffic flow, but as described in a June 2, 2023 article in the Davis Enterprise, such attempted improvements only help in the short term (and then only by a small amount). In the longer term, they induce traffic, with the result that we have the same traffic delays as before but with more cars and thus a greater contribution of greenhouse gases. Davis has committed to carbon neutrality by 2040 - this project would take us in the opposite direction.

As a Professor Emerit at the University of California, Davis who researches and publishes in environmental ethics, I believe that funding this project would violate California's, Yolo County's, and Davis's stated values, taking an action that would bring further harm to people, plants, animals, and planet at a time when were are already experiencing many negative effects of the climate crisis.

This project was rated last - 24 out of 24 - by Caltrans and 30 out of 49 by CTC staff in June 2023. This past June, the CTC wisely decided not to fund this project. It should make the same "do not fund" decision again.

Sincerely,

Roberta L. Millstein, PhD
Davis resident
Professor Emerit
Department of Philosohy
University of California, Davis

Book in production with the University of Chicago Press: *The Land Is Our Community: Aldo Leopold's Environmental Ethic for the New Millennium*

From:	Mark Huising
To:	California Transportation Commission@CATC
Subject:	Item 19, Funding of I-80/US-50 Managed Lanes Project with TCEP funds
Date:	Monday, March 18, 2024 2:28:46 AM

Dear California Transportation Commission,

I urge you to **deny** - **do not approve** - the advance programming request of $105,000,000 from the 2024 Trade Corridor Enhancement Program for the right-of-way support and construction of the I-80/US 50 Managed Lanes Project in Yolo County (Item 19).

As a resident of Davis, I would be directly impacted by these changes to I-80. The added lanes purport to improve traffic flow, but in reality will not not improve congestion and lead to an increase of 495,000 vehicle miles traveled each day, according to the DEIR for this project, not even counting for additional induced demand that result from changes in land use of people choosing to live further from their jobs or schools because of increased road capacity. This environmental impact from this enormous increase in driving – which is significantly underestimated as detailed in numerous comments submitted by experts in response to CalTrans' DEIR – would be in complete disregard of California's climate goals, which we are failing to meet by a considerable margin as detailed in this week's Los Angeles Times. Instead, we should focus on reducing demand by levying tolls on all lanes in combination with the earmarking of some of the proceeds for equity and income-based rebates to drivers who need this.

As a Professor and Climate Advocate at the University of California, Davis, I believe that funding this project would violate California's, Yolo County's, and Davis's stated values and climate goals and would bring irreparable harm to our climate and everything that depends on it at a time when we are already experiencing the accelerating effects of the climate crisis.

This project was rated last - 24 out of 24 - by Caltrans and 30 out of 49 by CTC staff in June 2023. This past June, the CTC wisely decided not to fund this project. I encourage you to make the same "do not fund" decision again. What is needed is a reset why we find it normal to invest hundreds of millions of dollars of public money into freeway expansions that we know will *not* solve congestion and *will* worsen our climate crisis. Yet, investments in strong public transit is considered a misuse of public funds by those who themselves are not using public transit and therefore think they may not benefit. To the contrary, a well-designed safe and frequent public transit network – built by the people of CalTrans - will move people without cars, to the shared benefit of those who have entirely legitimate reasons to drive. Is a win-win.

Sincerely yours,

Mark Huising

Mark O. Huising PhD

2021 UC Davis Sustainability Champion

Co-lead Fossil Fuel Free UCD

Co-chair of the UC Davis Climate Action and Resiliency Committee tasked with writing a Fossil Fuel Free Pathway Plan for UC Davis.

From:	Derek Blankenship
To:	California Transportation Commission@CATC
Subject:	Do Not Fund I-80 Widening
Date:	Sunday, March 17, 2024 12:34:10 PM
Attachments:	19-4-8-a11y.pdf 00-Agenda.pdf

Hello,

I am a resident of Yolo county seeking to comment on agenda item #19 for the March 21-22, 2024 meetings of the California Transit Commission. The related memo & agenda are attached.

My comment:

Do not fund the I-80 widening in Yolo county! This so-called "managed lanes" project is simply a highway expansion in disguise. In the midst of the climate crisis, we simply cannot afford to double-down on a transportation strategy that is wrecking our climate and putting us on a path towards self destruction. Any financial gains to be made from this project will be outweighed many times over by its contributions to climate catastrophe.

Moreover, the memo describing this project makes two critical misrepresentations of the project benefits.

First, it claims to "improv[e] travel times" which is just flat out wrong, and in defiance of heaps of research and observations that we have of our own transportation system over decades. Induced demand is inevitable, and any attempts to solve congestion with additional lanes are doomed to failure. We've been trying to fix congestion with freeway widening for decades, but it has never worked. Just ask any working person in Los Angeles or the Bay what they do between the hours of 8am and 9am on Monday morning. The answer? Sit in traffic. How many lanes is it going to take before we realize the obvious--adding more lanes will never work!

Second, it claims to "reduc[e] emissions" which has to be the greatest example of self-deception that I have ever seen. It's common sense. If you increase the number of cars & trucks travelling on the highway, you are also increasing the amount of exhaust spewing from tailpipes, and the amount of tire rubber and brakes being aerosolized, and the amount of embodied emissions being created to build new cars and trucks (and yes, that includes the electric ones!).

Granting $105M to further accelerate the climate crisis is unacceptable! Please consider the future of your children and block funding for this deeply misguided project. Do not widen I-80!

Sincerely,
Derek Blankenship
919 Drake Drive, Apt 173
Davis, CA 95616

From:	Anthony Palmere
To:	California Transportation Commission@CATC
Cc:	Autumn Bernstein
Subject:	3/21/24 Agenda Item 19, TCIP Funding for the I-80/US 50 Managed Lanes Project, Yolo County
Date:	Saturday, March 16, 2024 9:33:08 AM
Attachments:	I80 DEIR Comments - APalmere.pdf

Dear Chair Guardino and Members of the CTC:

I am writing with regard to Item 19 on your 3/21/24 Agenda, "Advance 2024 Trade Corridor Enhancement Program Adoption for the I-80/US 50 Managed Lanes Project, in Yolo County, Resolution G-24-30." I believe that it would be a mistake to allocate funding for this project at this time, especially considering that the Environmental Document has not yet been certified.

The CTC staff memo states that the project includes, "a robust Vehicle Miles Traveled Mitigation plan that will improve and expedite transit service through the corridor, along the Capital Corridors Passenger Rail Corridor." I suppose that "robust" is in the eye of the beholder, but the VMT mitigation plan as proposed in the draft Environmental Document purports to mitigate less than half of the increased VMT. Note that even this limited mitigation plan is based on erroneous calculations, including a significant VMT reduction from microtransit which has never been shown to result in VMT reduction. At the same time, the mitigation plan includes little or no increases in actual transit services in the corridor, including the Capitol Corridor. (FYI, I am attaching my comment letter to the Draft ED if you are interested in more details).

For this project to be a truly beneficial project, the transit service improvements in the corridor need to be enhanced, whether in a revised mitigation plan for the final environmental document or some other legally binding commitment on the use of toll funds, such that it will provide real and ongoing improvements to the bus and rail transit service in the corridor. Without a more solid transit enhancement component, this project is not ready for a funding allocation from the TCEP.

Thank you,
Anthony Palmere

January 9, 2024

Masum Patwary
Environmental Scientist
Caltrans District 3
703 B Street,
Marysville, CA 95901

Dear Mr. Patwary:

I am providing comments on the Draft Environmental Document for the Yolo 80 Corridor Improvement Project. I am retired from the public transportation industry, after almost 40 years working in planning and management of transit systems, including over 25 years in California (resume attached). Although I have concerns about many aspects of the project, my particular expertise is related to alternative transportation modes, and my comments will focus on the project definition (alternatives analyzed) and the VMT mitigation measures.

In the draft document, both the alternatives analyzed and mitigation measures reflected lack of vision and common sense with regard to effective and practical options for improving alternatives that could either mitigate the impacts of the project or perhaps even eliminate the need for it. I understand that the results of the mitigation need to be quantifiable, and that the preparer of the mitigation report, Fehr and Peers, represent the gold standard in transportation modeling. However, given the importance of the mitigation plan to the outcome of the project, I think it is critical that the project include the features that will result in the lowest VMT within the constraints of the funding available.

There are three primary alternative modes for travel through the corridor -- train, bus, and bicycle.

For bicycling, the project includes resurfacing the existing bike path on the Causeway along with improvements to the connecting paths on the east and west sides. The possibility of a separate structure across the Yolo Bypass was rejected. However, I could find no mention of improvements to the bike path that would make the ride less unpleasant on the Causeway itself, such as noise and wind protection, which could attract new riders, especially with ebikes, scooters, or other micromobility options. For many potential riders, it is the Causeway itself that is the biggest impediment to riding. Improvements such as noise and wind protection would be difficult to quantify but they would be relatively inexpensive to construct and would likely reduce VMT more than many of the selected measures. Although the travel model may not be sensitive enough to predict the impact of such an improvement, that should not prevent the project from including such an important improvement in either the base project or the mitigation measures.

For improved bus service, the concept of "Bus on Shoulder" operation is mentioned only in the section on alternatives rejected (Proposed Project, 1.5.7 Alternative 5, in explaining why the left-most lanes will be difficult for buses entering on the right to be able to use. At the end of the

section, it says, "...but possible Part Time Lane Use or Bus on Shoulder options may be studied further in the design phase."

What is noteworthy about this discussion is that the difficulty for buses accessing the transit-only lane also applies to all the managed lane alternatives that remain under consideration. Any bus traveling on I-80 between Mace Boulevard in Davis and Enterprise in West Sacramento during congested conditions would find it difficult to get into the express lane on the far left of the highway and would gain little or no travel time advantage (by the time the bus got into the left-most lane it would need to start merging back to the right to be able to exit). And during non-congested times, the express lane would offer no time savings. Given that difficulty, the best option for buses would be to allow Bus on Shoulder operation during times of congestion. Bus on Shoulder could be implemented under the No Project option to greatly improve transit service attractiveness, by improving both speed and reliability. However, it was not analyzed or mentioned as part of the No Build option, nor was it included as a potential VMT mitigation measure. Note that Bus on Shoulder is discussed extensively for this corridor in the SACOG Davis-Sacramento Transit Alternatives Study (2019). It is unclear why such a promising and relatively low cost approach for improved transit service must wait until the design phase rather than discussed in the environmental document as part of the base project or mitigation measures.

Regarding train service, fare subsidies for bus and train service were combined into a single measure showing relative ineffectiveness. However, it is likely that subsidizing the bus service which is already a low cost (but slow) service is much less effective than subsidizing train service, which is high cost and fast. By combining them into a single measure, the likely high effectiveness of a train subsidy is masked by the likely low effectiveness of a bus subsidy. For the modeling of the changes, the train service fare of $9 for a 12-mile commute is so far out of the bounds for typical transit service price elasticities, that the SACSIM model may not be accurate in estimating the impact of a change of that magnitude. I suggest eliminating the bus fare subsidy and concentrating the fare subsidy on the train service for maximum cost effectiveness. For bus service, it would seem to make more sense to consider providing 30-minute frequency on the 42 line rather than considering 15-minute service and rejecting it as being too costly.

In looking for additional mitigation measures to try to close the gap in VMT impacts, the Draft ED includes Microtransit service in Yolo County as reducing VMT by 6.2 million annually (based on the VMT+ model). It is very difficult to believe that such a service could result in a VMT reduction of that magnitude, as most microtransit services operate with low load factors, usually in the 1-2 passenger miles per vehicle mile range (and even lower when vehicle deadheading is taken into consideration). From the brief description, it is not clear if the estimated VMT reduction is net of the added VMT from the microtransit vehicles themselves, but clearly it should be. And, if the calculation is correct and that level of VMT reduction is realistic, it would be very helpful to note where microtransit had achieved such a high level of productivity in the US.

The narrative of the VMT mitigation section includes a relative effectiveness measure of “$/VMT reduced” which was used in evaluating which mitigation measures were selected for implementation. This calculation appears to be based on the "Yolo/80 Contribution" divided by the "Annual VMT Reduced". However, the Yolo/80 Contribution is cumulative over a number of years, ranging from as few as 3 years to as many as 20 years. So the $/VMT calculation is not actually calculating $/VMT on a consistent basis across all the mitigation measures. There is no explanation as to why the $/VMT is not calculated on an annual basis or some other way that would allow the measures to be evaluated consistently. It appears that the method used in the analysis could have led to selecting mitigation measures that are not as effective as other mitigation measures that were rejected. The number of years that the project is contributing to each measure appears arbitrary and, by changing that, the “$/VMT Reduced” calculation would go up or down. Please clarify how the calculation is being done and include the rationale for using differing time frames for the cost effectiveness ratio. It may also be helpful to include an additional column showing the “$/VMT Reduced reported on an annual basis”, so that all the mitigation measures can be seen on a consistent scale.

To summarize my comments, the need to improve alternatives for I-80 Corridor Travel is critical to the success of the project, by mitigating or reducing the impact of induced travel and additional VMT. I believe that the project’s negative environmental impacts could be reduced with project features and mitigation measures that focus on the corridor itself, as I’ve described above (bike path improvements on the Causeway, reduced train fares, improved bus speed and reliability using Bus on Shoulder, and improved frequency of bus service), and that an analysis that more accurately estimates and reports the impact of the various options would support the inclusion of those features.

Thank you for the opportunity to comment,

Anthony Palmere

From: Stephen M Wheeler
To: California Transportation Commission@CATC
Subject: ***PLEASE DO NOT FUND YOLO 80 CAUSEWAY EXPANSION***
Date: Friday, March 15, 2024 2:54:30 PM

Dear Members of the California Transportation Commission – Transportation is the single largest source of California's GHG emissions, and the area in which state climate policy is making the least progress. Traffic and GHG emissions keep rising in large part because Caltrans and other agencies keep widening roads rather than considering other alternatives.

The Yolo 80 project's own Draft Environmental Impact Report (DEIR) shows an immediate 9.2% increase in Vehicle Miles Traveled (VMT) for the most likely options studied, and GHG increases of between 2.2% and 10.9%. However, the DEIR fails to consider induced traffic—the extent to which widening roads stimulates more driving, a well-documented phenomenon in the field of transportation planning. Modeling by the National Center for Sustainable Transportation taking induced traffic into account shows a Yolo 80 increase of 495,000 VMT/day for most project alternatives. That is equivalent to an increase of 79,545 tons of CO2e emissions annually in addition to increases in other criteria air pollutants. This project runs radically counter to state policy to reduce both VMT and GHGs.

Equally importantly, the history of freeway widening in California shows that road expansion does not reduce congestion. The academic literature clearly shows that the best way to reduce traffic congestion is to adopt roadway pricing in combination with improved alternative mode options and more balanced land use planning. However, Caltrans never considered such options for Yolo 80. Tolling only one lane of the freeway as proposed is unlikely to lead to either behavior change or substantial transit funding. By far the best alternative would be to toll all existing lanes while constructing bus bypass lanes. In contrast to spending up to $436 million to widen the freeway, this would generate at least $300 million annually (depending on toll level and low-income equity subsidies) which could then be used for transit and affordable housing near jobs, further reducing road traffic.

Approving funding for Yolo 80 is also highly inappropriate at this time since Caltrans has yet to approve the badly flawed EIR for the project. This document failed to study a reasonable range of alternatives, ignored the well-established phenomenon of induced traffic, and identified mitigations that are highly questionable and at best would only cover 43% of the VMT increase. This document will almost certainly be litigated, and quite likely a court will require Caltrans to substantially revise its analysis. Approving funding this month before environmental impacts are fully known would be inappropriate and quite possibly illegal.

I and millions of other Californians rely on you to make good decisions that will help our state meet its climate goals and create transportation systems that do not simply lead to ever-more driving. Please take this opportunity to send Caltrans a message that it needs to rethink its road expansion habit and instead adopt more climate-responsible policies.

Sincerely,

Stephen M. Wheeler, Ph.D., Professor
Department of Human Ecology
U.C. Davis
One Shields Ave.
Davis CA 95616
(530) 754-9332
smwheeler@ucdavis.edu
(he/him/his)

Chair, Community Development Graduate Group
2022 UC Davis Faculty Sustainability Champion

Books

Reimagining Sustainable Cities: Strategies for Designing Greener, Healthier, More Equitable Communities (w/ Christina Rosan; UC Press 2021; info at https://www.ucpress.edu/book/9780520381216/reimagining-sustainable-cities.)

The Sustainable Urban Development Reader (Fourth Edition 2023 from Routledge) Info at www.routledge.com/9781032331935

Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities (Second Edition from Routledge, 2013)

Climate Change and Social Ecology: A New Perspective on the Climate Challenge (Routledge 2012)

From: Nick Bates
To: California Transportation Commission@CATC
Subject: Public comment March 21st/22nd meeting Item 19 Yolo i80
Date: Monday, March 18, 2024 8:01:53 AM
Attachments: 08-Yolo-80-Manged-Lanes-Draft-EIR.pdf

Dear CTC commissioners and staff,

My name is Nick Bates and I am providing public comment on item 19 of your upcoming meeting on March 21st/22nd. I am a resident of Davis and member of the city's bicycling, transportation, and street safety commission. As part of that commission, we reviewed the draft EIR for this project. I will attach the city's response letter to the draft EIR, which includes the minutes from our discussion, to this email for the record.

I would also like to provide my own personal public comment on the project description included in the memorandum ref#4.8. Among the stated project benefits are:
1. improved travel time. However, as acknowledged in the state's CAPTI (p18), "research over the past several decades has demonstrated that highway capacity expansion has not resulted in long-term congestion relief and in some cases has worsened congestion, particularly in urbanized regions". Despite this, there have been no serious efforts by the project to consider solutions which do not add a lane to the highway.
2. reduced emissions. This project induces VMT by its own admission. Saying it will reduce emissions is frankly an insult to everyone's intelligence.
3. improved safety. This project reduces lane and shoulder widths across the Yolo causeway bridge. I do not understand how this improves safety.

Thanks,
Nick Bates

From: Philippe Raymond Goldin <pgoldin@ucdavis.edu>
Sent: Saturday, March 16, 2024 12:31 AM
To: Taylor, Zack@CATC <zack.taylor@catc.ca.gov>; Behrens, Justin@CATC <Justin.Behrens@catc.ca.gov>
Subject: legislation

Dear Mr. Taylor & Mr Behrens:

I understand that there is a proposal to widen I-80 between Davis and Sacramento. Scientist have determined that this would increase emissions by ~79,500 tons CO2e annually. The California Transportation Commission (CTC) must approve funding for Caltrans projects. It seems to me that this proposed solution runs counter to state policy to reduce Vehicle Miles Traveled (VMT) and green house gas (GHG) emission. We need fewer, not more cars. The CTC has the power to send Caltrans a message that it needs to rethink its road expansion habit and instead adopt more climate-responsible policies.

We can look at the example of other cities and countries who incentize public transportation, regular and electric bicycles, safe paths between cities separate from car lanes, and more buses to remove drivers. For example, Stanford University offers the Caltrain Go Pass to eligible off-campus employees and postdoctoral scholars. This free pass is valid for the entire year and allows unlimited travel on the Caltrain across all zones, seven days a week. We could have free or subsidized train and bus travel between Davis and Sacramento with free bicycles to travel to work. Copenhagen has more bicycles than cars because they provide fully protected bike lanes within the city and between cities and bicycles available nearly everywhere in the city. Think bike-share rather than car-share.

Google offered free bicycles to employees who offered to bike rather than drive to work.

Consider the cost to build and maintain extended car lanes and the increase in GHG emission in contrast to getting more people on regular and ebikes between Davis and Sacramento which will be good for physical and mental health. We need leadership and policy that envisions and builds collective wellbeing rather than replicating policies and habits that maintain the ways of transporting that are harming the environment and human health.

Philippe Goldin, PhD, Professor
Director, Clinically Applied Affective Neuroscience Laboratory
Betty Irene Moore School of Nursing
at the University of California Davis
Preferred pronouns: he, him, his
Email: philippegoldin@gmail.com; pgoldin@ucdavis.edu
Website: http://pgoldin.faculty.ucdavis.edu/
Phone: 415-676-9793

From:	Alan Pryor
To:	California Transportation Commission@CATC
Cc:	Don Mooney
Subject:	CTC Meeting 3/21/24 - Item 19 Ref 4.8 - Advanced funding of Yolo80 via TCEP federal funds.
Date:	Monday, March 18, 2024 10:58:07 AM
Attachments:	sZYzox0eJSTeV8KI.png DEIR COMMENT LETTER - SIERRA CLUB YOLANO GROUP (WHEELER) 1-8-24 on Letterhead.pdf Yolo-80 - CARB DEIR Comments_20240110.pdf

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To: CTC (ctc@catc.ca.gov)
From: Alan Pryor, Chair, Sierra Club Yolano Group (alanpryor21@gmail.com)
Date: March 21, 2024
Re: Objection to Award Funding for the Yolo I-80 Project

Introduction and Background - The project considered by this funding request is in Yolo County which lies within the jurisdictional boundaries of the Sierra Club Yolano Group.

We oppose the award of the funding for this project on the grounds that there are serious deficiencies and incontrovertible deficiencies in the Draft Environmental Impact Report (DEIR). These deficiencies have been extensively documented in Comments submitted to the DEIR by CARB and notable transportation experts. A copy of the CARB Comment Letter as well as one authored by Dr. Stephen Wheeler of UC Davis on behalf of the Yolano Group are attached to this communication pointing out these glaring deficiencies.

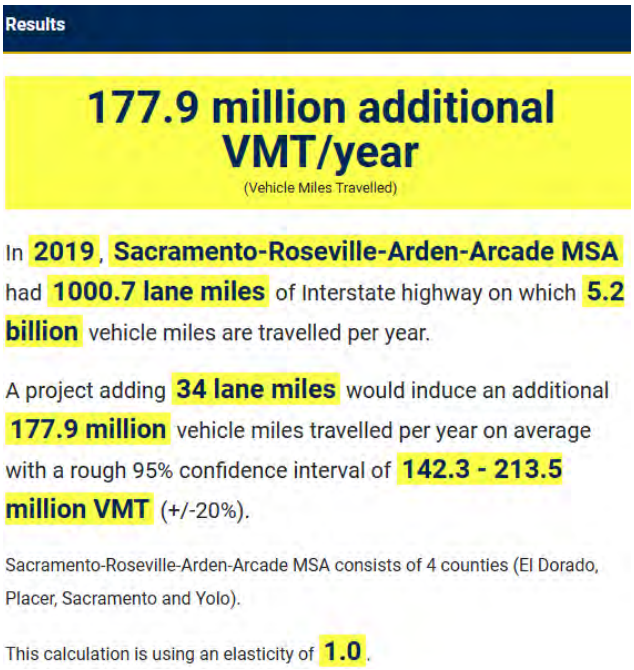
We note in particular that the Staff Report before you states,

"***Anticipated Project Benefits:*** *increased truck throughput,* ***improved travel time, reduced emissions,*** *creation of jobs, and improved safety*." (bold emphasis added)

Unfortunately, the anticipated benefits of *"improved travel times, reduced emissions*" are negated by the objective and quantitative deficiencies in the project's DEIR as pointed out in the DEIR Comment Letters by CARB and Dr. Wheeler and as we otherwise summarize below.

1) Substantially Reduced Estimates of Induced Traffic VMT - The DEIR uses an outmoded and proven deficient method of calculating Induced Traffic by the project. Caltrans has gone on record as agreeing that the Induced Traffic Calculator results developed by the National Center for Sustainable Transportation at UC Davis estimates project additional project VMT within 20% +/- for benchmark modeling for such freeway widening projects. (*see reference in footnote **a)** below*)

When the project parameters are input into the *NCST Induced Traffic Calculator* (*see reference in footnote **b)** below*), the results indicate the project will generate about 178 million VMT per year.



Yet the projected VMT estimates in the DEIR project average about 57 million VMT/year depending on the alternative chosen. This is about 70% less than the 178 million/year calculated per the NCST method. Clearly there is a huge disconnect in the DEIR as to the Induced Traffic VMT estimated by the NCST calculator vs. the outmoded methods used by Caltrans in the DEIR.

a) See *Transportation Analysis Framework (TAF) & Transportation Analysis on Caltrans SB 743 Implementation, October, 2020 - https://www.google.com/url?client=internal-element-cse&cx=001779225245372747843:uh1ozfcfcdu&q=https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-10-06-caltrans-webinar-taf-tac-a11y.pdf&sa=U&ved=2ahUKEwiWpbeqpoT_AhWApokEHQUzCNcQFnoECAYQAg&usg=AOvVaw3teE3s_N-lafVgOmUiLRm*

b) See https://travelcalculator.ncst.ucdavis.edu/

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2) Reduced Estimates of GHG and Priority Pollutants Emissions Resulting from the Project - As a direct result of the inadequacy of the method used by Caltrans to calculate Induced Traffic VMT/year, GHG Emissions and Priority Pollutants are underestimated by the equivalent of 121 million VMT/year (178 million estimated VMT per the NCST calculator - 57 estimated VMT per the DEIR), or about by 70%.

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3) Insufficient Project Alternatives were Evaluated in the DEIR - The 7 alternatives evaluated by Caltrans for this project (other than the "No Project" and one lane reuse alternative) only looked at different lane-adding, widening options. There was absolutely no consideration of public transit alternatives which could accomplish the same congestion relief at dramatically reduced costs. These include options such as increased Capital Corridor Train service (which parallels the project over its entirety), or increased bus service frequency and/or last-mile micro transit transportation options. Failure to consider these alternatives is in clear violation of CEQA standards requiring analysis of a sufficient breath of project alternatives.

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4) Projected Toll Revenue is Grossly Insufficient to Mitigate for the Additional Induced VMT - Caltrans estimates that toll revenue for the current preferred alternative will generate about $9.5 million per year to be used to mitigate their estimate of 57 million VMT/year. That is the equivalent of about $0.167/mile of VMT mitigated. Yet innumerable studies demonstrate that transit agencies, on average, spend between $1.00 and $1.50 per passenger mile of service provided to the public So the amount proposed for mitigation of VMT induced by the project represents, on average only about about 11-16% of the total cost to public transit to provide alternative, VMT-mitigating passenger miles.

In fact, if one assumes that the $9.5 million for mitigation is actually spread across the more likely 178 VMT/year, the proposed cost of mitigation per VMT/year is only $0.053 /mile vs. public transit costs of $1.00 to $1.50 per passenger mile. Thus, the level of funding for mitigation of VMT/year for the project will actually only provide funding for between 3.6 % and 5.3% of actual average public transit costs per passenger mile. Proving grossly insufficient mitigation compared to the environmental damage caused by a project is prohibited by CEQA.

Conclusions - It is objectively clear to both CARB and other transportation experts such as Dr. Stephen Wheeler that the DEIR issued by Caltrans used the proverbial "*Thumb-on-the-Scale*" method of calculating Induced Traffic for the project which rendered their estimates of GHG and Priority Pollutant Emissions grossly inaccurate. Combined with the lack of consideration of a wider array of alternatives and insufficient monetary mitigation proposed for these adverse impacts, this renders renders the DEIR as inadequate and not eligible for certification under CEQA.

The Resolution before you which Staff is recommending approval specifically partially states,

"*2.3* ***BE IT FURTHER RESOLVED****, consistent with 2022 Trade Corridor Enhancement Program guidelines, this project must receive all environmental approvals through the California Environmental Quality Act and the National Environmental Policy Act as applicable, within six months of advanced program adoption, or the Commission may delete the project; and...*"

I believe the overwhelming objective deficiencies of this DEIR precludes proper funding approval of this project by the CTC and urge you to vote ***NO*** for funding approval.

Respectfully submitted,

Alan Pryor, Chair
Sierra Club Yolano Group

SIERRA CLUB
YOLANO GROUP

January 8, 2024

VIA Email
Yolo80Corridor@dot.ca.gov

Masum A Patwary
Environmental Scientist C
California Department of Transportation
District 3 703 B Street
Marysville, CA 95901

Dear Dr. Patwary:

This letter provides detailed comments on the Yolo 80 Draft Environmental Impact Report (DEIR) on behalf of the Yolano Group of the Motherlode Chapter of the Sierra Club.

I have prepared these comments as an unpaid Technical Advisor to the Yolano Group. In my professional life I am a Professor of Urban Planning and Design in the Department of Human Ecology at the University of California, Davis, and Chair of the UC Davis Community Development Graduate Group. I have studied urban and regional planning topics for more than 35 years, including interactions between transportation systems and regional land use patterns, and was formerly chair of the City of Berkeley Transportation Commission and cofounder of the Bay Area's regional transportation-land use-housing advocacy organization Transform. I am the author of urban planning textbooks used in universities worldwide, including *The Sustainable Urban Development Reader* (Fourth Edition, 2023), *Planning for Sustainability* (Third Edition to be published in late 2024), and *Reimagining Sustainable Cities* (2021). My awards in this field include the Dale Prize for Excellence in Urban and Regional Planning.

Let me say first that it's very unfortunate that the Yolo 80 project has proceeded this far without better alternatives being considered. As has been widely known for decades, widening freeways does not fix congestion problems; it just defers them for a few years while increasing overall motor vehicle use, greenhouse gas (GHG) emissions, local air pollution, suburban sprawl, and related problems. The climate crisis gives particular urgency to the need to stop increasing road capacity and vehicle use. Although California is making progress in many sectors towards reducing its GHG emissions, transportation is one area in which it is not. Transportation is also the single largest source of the state's GHG emissions, accounting for 38 percent of the total.

In order to meet California's GHG reduction goals, the state has adopted policies that discourage road expansion and its concomitant VMT increases. SB 743, passed in 2013, required agencies to use VMT as a metric for analyzing transportation impacts of new projects after July 1, 2020 instead of Level of Service (LOS). Put another way, this bill made reducing overall motor vehicle use the goal of state policy rather than short-term reductions in road congestion. The California State Transportation Agency (CalSTA)'s Climate Action Plan for Transportation Infrastructure (CAPTI), adopted in 2021, establishes policy that "projects should generally aim to reduce vehicle miles traveled" and counsels agencies that "when addressing congestion, consider alternatives to highway capacity expansion such as providing multimodal options in the corridor, employing pricing strategies, and using technology to optimize operations." However, Caltrans appears to be disregarding the state's new policy framework with multiple projects including Yolo 80.

A certain amount of congestion isn't bad in that it puts realistic constraints on the public's behavior. However, if congestion is deemed to be a problem beyond that point, the academic and professional literature shows that pricing, better land use planning, and other demand management solutions (e.g. working with large employers to promote vanpools and transit use) are the best strategies. But Caltrans never considered those alternatives in the Yolo 80 case. It clearly wanted to widen the freeway from the start, and indeed appears to have illegally begun widening I-80 east of the Mace intersection and west of the I-50 split in early Fall 2023 well before the current environmental review was completed. This action shows a high level of disregard for CEQA/NEPA processes, and we ask Caltrans to suspend construction activities on Yolo 80 until environmental review is completed and the environmental document certified.

The Yolo 80 DEIR has a great many deficiencies which require revising and recirculating the document. These include the following:

1. **The environmental review studied an overly narrow range of alternatives**. Almost all alternatives considered in this document add a lane to the freeway, thereby increasing road capacity and likely future VMT associated with Yolo 80. Other realistic alternatives that could address the main rationale for the project (congestion) at far lower cost without widening the freeway and increasing capacity weren't considered.

   The DEIR studies 7 alternatives, with (a) and (b) options listed for most of these depending on whether median ramps and a flyover lane at the eastern end are included. Alternative 1 is the required No Build alternative. Alternatives 2-6 add a lane with various configurations of High Occupancy Vehicle (HOV), High Occupancy Toll (HOT), and transit use on the new lane. Alternative 7 takes an existing lane for HOV use (informed observers know that this is highly unlikely to be chosen since Caltrans has always constructed a new lane for HOVs in the past).

   The most obvious alternative not included in the DEIR would be to price all lanes of the existing freeway. Pricing is widely acknowledged to be an effective means to discourage single-occupant vehicle travel (e.g. Small and Gomez-Ibanez, 2005; Clements, Kockelman, and Alexander, 2021). It can be easily implemented in California using FastTrak technology, with either a flat charge or variable congestion tolls, and is currently in use in northern California on the Bay Area bridges. Many other states nationally also use tolls to raise revenue or reduce congestion. Caltrans recently

created an example of the sort of facility that could be built for Yolo 80 when it constructed a new automated toll facility in Martinez for the east-bound I-680 bridge. Equity impacts of pricing can be decreased by direct rebates to low-income vehicle owners and/or by using toll revenue for public transit or other services benefitting low-income communities.

Pricing is also the most cost-effective alternative. Instead of costing up to $465 million, pricing the existing I-80 Yolo causeway would generate in excess of $300 million annually (~150,000 vehicles/day x an $8 toll = $1.2M/day x 365 days/year = $438M). In addition to equity rebates, this money could be used for transit and affordable housing near jobs in the corridor, further reducing traffic.

Pricing strategies are recommended by CalSTA's CAPTI framework as mentioned above as well as by the Sacramento Area Council of Governments (SACOG)'s 2020 Metropolitan Transportation Plan/Sustainable Community Strategy. Policy 11 of the latter document calls for the region to "Initiate a leadership role in testing and piloting roadway pricing mechanisms, such as facility-based tolling and mileage-based fees." That document also states (p. 73) "The roadway pricing mechanisms in the MTP/SCS are a critical component of the regional strategy to raise enough revenue to fund our transportation infrastructure, provide mobility benefits to residents, manage traffic, and help to achieve the region's SB 375 greenhouse gas reduction target."

Pricing alternatives would also have the benefit of improving transit performance. With tolls reducing overall traffic volume, buses would no longer be sitting in congestion. (A managed lane for both HOVs and transit, as proposed under several of the DEIR's alternatives, could easily become congested as HOVs move into it from other lanes.) Pricing itself is not a panacea, and would likely result in a modest increase in VMT over the current situation since free-flowing lanes carry more vehicles than congested lanes. However, such an increase would be far less than that caused by widening the freeway.

A second main alternative would be constructing a dual express lane in each direction with single occupant vehicles tolled (one lane would be added, one existing lane converted). This alternative is used in SACOG's travel demand model as part of its regional planning strategy, which Caltrans should have known about. It was also requested by the Yolo County Transportation District in its letter of May 4, 2022 to Caltrans, asking that "The Project Description…be written broadly enough to consider, and provide environmental clearance for, a multi-laned facility." Tolling two lanes in this way would be more effective at meeting the project's main goal of reducing congestion, and would have the additional advantage of generating additional revenue to mitigate VMT impacts.

A third potential alternative would be "using technology to optimize operations" as suggested by CAPTI. This approach is also a priority of SACOG's Intelligent Transportation Systems (ITS) program, which seeks to use tools such as freeway ramp meters, dynamic message signs, closed-circuit cameras, and real-time information for the public to manage traffic. Congestion on I-80 could conceivably be kept manageable if all entrances featured ramp meters, with transit vehicles and HOVs allowed to bypass ramp queues. Incentives would then be strong for drivers to carpool or take transit, thus reducing VMT and congestion.

A fourth category of alternatives in the I-80 corridor would focus on dramatically better public transit. These alternatives might include better and more frequent bus service, better and more frequent rail service, and better feeder bus and van service in local communities connecting to trains and long-distance express buses.

A fifth category of alternatives would consist of regional Transportation Demand Management (TDM) programs. Air quality management districts in California have historically implemented these in order to address local air quality programs in locations such as the Bay Area and Los Angeles basin. Such initiatives typically include agreements with large employers to implement carpool and vanpool programs, to subsidize employee transit usage, and to charge employees for parking. They also include public education and informational strategies to decrease drive-alone commuting. To be most effective in the I-80 corridor, TDM programs should be combined with regional and local land use planning to create a better balance of jobs, housing, and services in local communities. Since 2008 California state policy pursuant to SB 375 has encouraged such planning, for example requiring regional planning agencies to prepare Sustainable Community Strategies.

Studying all of these alternatives is certainly not necessary for a robust DEIR, and the fourth and fifth would involve challenging inter-governmental coordination. But given the increasingly strong state policy framework against road capacity expansion and VMT increases, we request that the technically simple and cost-effective alternative of pricing all existing lanes be included in a recirculated environmental document.

2. **The DEIR fails to adequately consider induced traffic**. The Yolo 80 DEIR has a major flaw: its analysis fails to consider long-term increases in traffic volume stemming from widening the road, increasing capacity, and in turn influencing land use and behavior patterns. Again, the project would increase road capacity regardless of whether the new lane is an HOV lane, toll lane, or free-flow lane.

   Road widening induces additional traffic in two main ways: 1) by changing short-term behavior, in particular as individuals see reduced congestion and choose to drive rather than using other alternatives such as carpooling, taking transit, or telecommuting; and 2) by changing long-term land-use patterns and behavior, in particular as individuals and businesses perceive that easy availability of commuting makes it possible to locate in certain places rather than others. Induced traffic is a well-established concept in the research literature dating back at least 50 years (e.g. Downs, 1962, Handy and Bournet, 2014; Hymel, 2019; Volker, Lee, and Handy, 2020). Many decades of experience in California also demonstrates the reality of this phenomenon, for example through the rapid growth of communities such as Vacaville, Dixon, and Fairfield which are almost entirely dependent on I-80 for long-distance motor vehicle travel.

   Caltrans appears to have employed an identical future land use scenario for all DEIR alternatives. Agency materials state that “Land use inputs were not developed for each individual alternative. Instead, the SACOG 2020 MTP/SCS land use forecasts associated with specific model years 2016, 2027, and 2040 were used without modification….This approach limits the sensitivity of the traffic and revenue forecasts to any unique land use effects associated with each alternative.” (Caltrans, 2023b, 10).

Consequently Caltrans' DEIR analysis appears to incorporate the first form of induced traffic but not the second. The DEIR shows a substantial increase in traffic at the 2029 opening, but only modest increases long-term. Table 2.2-9 (pp. 2-194-105) shows an immediate 9.2% increase in VMT for Alternative 2 compared with the No Build alternative, but a 2049 increase of only 4.2%. The corresponding figures for Alternative 3 are 9.2% and 4.3%. If induced traffic due to changing land use and lifestyle patterns were fully taken into account, these long-term figures would likely be significantly higher. Indeed, if NCST induced traffic figures of 495,400 VMT/day were simply added to the No Project alternative for these years, Alternatives 2 and 3 would have had increases of 11% in 2049. Actual increases would certainly be higher, since the DEIR shows the No Project alternative to be highly congested, reducing VMT, whereas alternatives would have greater throughput.

The DEIR flatly states (p. 3-38) that the project would have "less than significant impact" on population growth either directly or indirectly. This is particularly surprising given that the document previously includes the NCST data mentioned above showing more than 495,000 additional VMT/day for most alternatives. Here as in other locations the DEIR appears not to have incorporated the NCST data into analyses.

For this DEIR Caltrans District 3 relied on analysis procedures not compatible with more recent Caltrans Headquarters standards that require induced traffic be considered. Caltrans' 2020 CEQA guidance states that

> "[C]apacity-increasing projects generally need to be evaluated for their potential induced travel. The mechanisms by which induced travel occur include:

- Route changes (may increase or decrease overall VMT)
- Mode shift to automobile use (increases overall VMT)
- Longer trips (increases overall VMT)
- More trips (increases overall VMT)
    - Location and land use changes (increases overall VMT)" (Caltrans, 2020a, 18)

Caltrans HQ adopted the NCST induced travel calculator in 2020 as an official tool, and the agency's *Transportation Analysis Framework* document provides extensive guidance on how it is to be applied (Caltrans, 2020a). Table 2 on page 17 of this document specifically says that the NCST calculator is to be applied to Yolo County. But the DEIR fails to integrate NCST numbers for induced traffic into its analysis of long-term impacts of the project, thus understating VMT and GHG emissions while overstating congestion relief.

3. **The DEIR fails to adequately take into account changing driver behavior**. A second modelling inadequacy of the DEIR is that it uses a simplistic static trip assignment model rather than a more sophisticated dynamic traffic assignment model. The latter type of model takes into account a variety of feedback loops resulting from traffic congestion, including drivers changing the time of their trips so as to avoid congestion. Use of a static trip assignment model can have the effect of understating the increase in VMT. A related problem is that the model wrongly assumes that additional traffic would be routed off the congested highway up through Woodland, which is unlikely given the distance and likely congestion of that alternative route. Again, this points to a

model with major inadequacies. Interviews conducted as part of Dr. Amy Lee's dissertation *The Policy and Politics of Highway Expansions* show that Caltrans rejected better models (dynamic traffic assignment) because they would have shown increased VMT (Lee, 2023). The DEIR's own technical appendices acknowledge limitations of the static assignment model:

> "Another limitation of the SACSIM19 model is the use of static assignment rather than dynamic assignment of vehicle trips. With congested conditions, static assignment can result in volumes that exceed capacity for the analysis period. With dynamic assignment, trips are rerouted or shifted in time so that capacity is met." (Transportation Analysis Report, I 80/US 50 Managed Lanes, November 2023, 78).

Dynamic travel assignment models are increasingly used elsewhere in the country for projects in urban areas with congested conditions. For example, Colorado's Department of Transportation has concluded that

> "DTA is useful when the analyst's study area includes a congested transportation facility as well as its parallel facilities (or parallel capacity)….DTA's assignment methods is more sophisticated than a traditional travel demand model as it accounts for bottlenecks. DTA also allows for temporal spreading (peak-hour spreading)." (Colorado Department of Transportation, 2023)

4. **The DEIR relies on inadequate mitigations**. The DEIR assumes that VMT/GHG increases can be mitigated if Caltrans funds projects in local cities. But its project list covers only 43% of its estimated VMT increase (which is likely low in that it appears not to include truck traffic), and it's doubtful that such mitigations would be additional and verifiable. These mitigations would have to be implemented by other entities over which Caltrans has no control, and mitigation funding is questionable, with Caltrans committing to funding only 12.5% of the cost of trip reduction programs, for example. The mitigations therefore do not meet the "fully enforceable" standard required by CEQA.

   At least one mitigation,"Build overcrossing at future Nishi Student Housing Development site" is a project that has long been planned by the developer of the Nishi student housing project and approved by the Davis City Council. This "mitigation" is not an additional GHG reduction and would simply give public funds to a private developer. Many other mitigations focus on increasing use of long-distance express bus services. Such services can have their own traffic-inducing impacts, for example if they encourage households to move to outlying suburban communities thinking that they can use long-distance express buses to commute to jobs in Sacramento. Such households then use their motor vehicles for many other types of trips, increasing VMT in the region. For such reasons Caltrans must identify fully enforceable and fully funded mitigations to offset the full amount of likely VMT and GHG increases in the DEIR.

5. **The document falsely concludes no or less-than-significant impact for important topics.** For NEPA and CEQA purposes the DEIR (Tables S-1 and S-2) wrongly states that the alternatives studied would have "no impact" on urban growth and population, air pollutants, and energy demand, and "less than significant" impacts on GHGs and state climate policy. These statements are not true and

should be revised based on additional analysis and up-to-date modeling practices within a recirculated document.

A) Urban growth and population: The DEIR states (Summary-7) "Build Alternatives 2a and 2b **would not remove an impediment to growth**, provide an entirely new public facility, or provide new access to previously unserved areas. Build Alternatives 2a and 2b would not directly increase development of residential land uses, encourage growth outside of existing growth boundaries, **or alter existing access to residential and employment areas**; therefore, no adverse effect associated with population growth would be anticipated with implementation of Alternatives 2a and 2b." (Emphasis added. Text for alternatives 3a and b, 4a and b, and 5a and b says "Same as effects described under Build Alternatives 2a and 2b.")

This is not true. Common sense tells us that since no alternative through-route exists congestion on I-80 is a prime determiner of urban growth in the corridor. If the project reduced congestion upon opening, access to residential and employment areas along the corridor would be greatly altered. It could take, for example, 25 minutes rather than 1 hour to get from Vacaville to Sacramento in the morning rush hour. Such a time difference would have a large impact on people's travel and residency decisions, fueling urban growth and population increase in some locations rather than others.

These "no impact" conclusions, like many other DEIR conclusions discussed below, arise in part because Caltrans did not consider induced traffic within its model. However, this is a well-established concept in the research literature, much of which is summarized by Volker, Lee, and Handy, 2020. The DEIR itself acknowledges the induced traffic concept by including data from the National Center for Sustainable Transportation (NCST) showing an additional 495,000 vehicle miles travelled (VMT) for most alternatives (Table 2-1-26). If induced traffic had been considered, the DEIR's conclusions about no effect on urban growth and population would not have been supported.

B) Air pollutants: Sacramento and Yolo counties are state non-attainment areas for 8-hour ozone and PM 2.5 air pollutants. In terms of pollutant increase, the DEIR (Summary-16) finds "no impact" for the No Build alternative. This is unlikely to be true and shows deficiencies in the underlying analysis. Indeed, Table 2-2-34 shows a 19.9% increase in congestion for the No Project alternative in 2049 (idling cars usually increase pollution), and Table 5 In Appendix J shows increases of 3.5% and 22.2% respectively for PM10 in the years 2029 and 2049 versus the baseline year of 2019, and an increase of 4.5% for PM2.5 in 2049. (That appendix does not show results for other pollutants such as carbon monoxide and ozone. The increases for particulate matter are dismissed with the following statement: "the difference between Build and No Build would be not significant in terms of PM10 and PM2.5 in regards to the increase of total AADT [Average Annual Daily Traffic] between Build and No Build with a HOV-HOV connector.")

The DEIR also finds "less than significant" air quality impacts for all other project alternatives. This is also unlikely to be true. Table 5 in Appendix J shows increases of between 2.9% and 13.0% for PM10 in the opening year of 2029 for alternatives 2-7b compared with the 2019 baseline. For 2049 it shows PM10 increases of 0.5% to 9.5% for alternatives 2-7a and 6.1% to

26.9% for alternatives 207b. For PM2.5, the increases range from -1.9% to 6.7% for the "b" alternatives. It is hard to see how these increases can be called "less than significant." Such figures also do not take into account induced traffic and likely increases in congestion resulting from that well-documented phenomenon, which would likely increase air pollution further.

C) Energy demand: The DEIR states (Summary-12) "When balancing energy used during construction and operation against energy saved by relieving congestion and other transportation efficiencies, the project would not have substantial energy effects. Therefore, no adverse permanent effects are anticipated."

This statement is likely false, since it assumes congestion would actually be relieved in the long-term which is inconsistent with the literature on induced traffic (much of which is summarized in Volker, Lee, and Handy, 2020), and the historical experience of freeway-building in California.

Even without considering induced traffic stemming from secondary land use change and population/employment location decisions, the DEIR's modeling shows sizeable traffic increases from roadway dynamics alone (less congested lanes attracting more drivers). These VMT increases are in turn likely to require additional energy, making a finding of "no adverse impacts" inappropriate. (The form of energy will of course shift as vehicles electrify, though electric vehicles will still have impacts.)

The exact traffic increases from existing conditions under DEIR modeling are difficult to calculate since the DEIR fails to provide existing traffic volume (measured as Average Annual Daily Traffic) anywhere. SACOG gives this figure as 136,700 vehicles in 2017 at the Yolo/Solano county border (https://vitalsigns.mtc.ca.gov/indicators/traffic-volumes-at-gateways). Taking this as the baseline and using Table 4 in Appendix J figures for future AADT, 2029 traffic increases from roadway dynamics compared to the recent baseline would range from 15.0% for the No Project alternative to 14.5%-27.1% for the various alternatives. 2049 traffic increases would range from 31.9% for the No Project alternative to 27.3% to 39.6% for the various alternatives. Again, it is hard to see how such large increases in traffic would produce "no adverse impacts" in terms of energy.

D) GHGs: **The DEIR itself shows that CO2 emissions would increase by between 2.2% and 10.9% for the various project alternatives in the 2029 opening year** (Table 7, Appendix J). That is a substantial amount; it is hard to see how this can be called "less than significant." In the year 2049 the document shows all alternatives reducing GHG emissions versus existing and No Build conditions, but in many cases these reductions are small. For the "b" alternatives, for example, they range between -1.4% and -4.9%. **Most importantly, these modelled GHG emissions reductions do not take into account induced traffic**.

If induced traffic is taken into account, the GHG increase would be large. The DEIR itself includes data from NCST modeling showing likely increases of 495,300 vehicle miles traveled daily from most project alternatives (Table 2-1-26). Based on these NCST figures and average GHG emissions figures for passenger motor vehicles, **widening I-80 in Yolo County would add at least 79,545 tons of CO2e emissions annually (218 tons/day)—equivalent to increasing Davis**

citywide emissions by at least 14%, or unincorporated Yolo County emissions by at least 7.3%. (This figure would be higher still if the higher-emitting truck percentage of up to 29% of vehicles were included.) Building on Table 7, **the increase in GHG emissions produced by the I-80 project in 2049 would then range between 15.4% and 29.5% for alternatives 2-5 (those that add a lane) compared with the No Project alternative**. This is a very large amount for a future date when the state plans to be carbon-neutral, and hardly "less than significant."

The DEIR analysis of greenhouse gas emissions is thus highly inadequate. Caltrans should bring its model up-to-date by including induced travel from freeway projects, and should revise and recirculate this document based on a more accurate model taking this phenomenon into account.

E) State climate policy: Under its 2022 Scoping Plan, California has a state climate planning goal of achieving carbon neutrality by 2045, which means cutting GHG emissions 85% compared with 1990 as well as sequestering large amounts of emissions in natural landscapes and below-ground. In contrast, the I-80 project is likely to produce sizeable increases in GHGs both in the short-term (2029) and the long-term (2049), as shown above. Thus this project, like other freeway widening projects that Caltrans continues to pursue, cannot be said to have "less than significant" impacts on state climate policy.

For the above reasons, the Yolo 80 DEIR should be revised and recirculated.

Thank you very much for your attention.

Sincerely,

Stephen M. Wheeler, Ph.D.
On behalf of the Yolano Group of the Motherlode Chapter of the Sierra Club

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January 10, 2024

Tony Tavares
Director
California Department of Transportation (Caltrans)
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Dear Director Tavares,

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report (DEIR) for the Yolo 80 Corridor Improvements Project (Yolo 80, or project). We appreciate the opportunities that we have had to collaborate with Caltrans to support the success of California's *2022 Scoping Plan for Achieving Carbon Neutrality*. As the agency entrusted with environmental review of our largest transportation infrastructure investments, Caltrans' decisions carry unparalleled weight. The need to improve travel through the Yolo 80 Corridor presents an opportunity to advance the State's climate, air quality, and equity goals, and be a model for effectively managing the state highway system.

CARB staff have identified that the Yolo 80 proposal adds substantial new roadway capacity. This can increase vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions. The DEIR omits project alternatives that could better meet the project's objectives with less environmental impact. Specifically, it only examines alternatives that add lanes and no project alternatives that convert existing lanes to priced lanes, even though converting an existing lane is in the Sacramento region's current sustainable communities strategy for achieving its GHG reduction target. In addition, the DEIR uses a traffic assessment approach that is expected to underestimate the project's impacts and exaggerate its benefits. This could lead to inaccurate DEIR significance determinations on GHG emissions, air quality, energy, noise, and safety, as well as influence whether the project achieves its objectives. Finally, the DEIR's proposal to mitigate less than half of its induced travel impact is inadequate, when additional mitigation is feasible.

Taken as a whole, the project would substantially increase VMT and GHGs, more so than the DEIR discloses, hampering achievement of the State's climate and air quality goals. Several State documents, including the Scoping Plan, CARB's *Progress Report on Implementation of the Sustainable Communities and Climate Protection Act*, and the *Climate Action Plan for Transportation Infrastructure*, call for reimagining or deprioritizing roadway projects that increase VMT to create a more sustainable transportation system. Reducing VMT also benefits health, traffic safety, equity, and the environment. By expanding capacity while

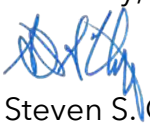
improperly assessing and insufficiently mitigating impacts, the Yolo I-80 project is inconsistent with these State plans.

Procedurally, CARB had previously requested that Caltrans extend the public review period for this DEIR due to the current comment period being effectively truncated by several major holidays and because Caltrans has not posted the technical appendices to its website or otherwise made them available through the full comment period. I appreciate that Caltrans extended the deadline by one week. You may wish to consider further extension to mitigate concerns we are hearing from some stakeholders. Specifically, while Caltrans has committed to making the technical appendices available upon request, we are aware that these documents were not made immediately available to some members of the public who had requested them, leaving members of the public without adequate information and without the full time to evaluate and comment on the DEIR.

Thank you for the opportunity to comment. The attachment to this letter describes our comments in more detail and offers recommendations on how to address the DEIR's inadequacies. We would welcome the opportunity to work together to strengthen the project in ways that achieve its intended purpose while also addressing our shared climate and air quality goals.

If you have any questions, please feel free to contact me or Dr. Jennifer Gress, Chief of the Sustainable Transportation and Communities Division, at (916) 764-0747 or *jennifer.gress@arb.ca.gov*.

Sincerely,



Steven S. Cliff, Ph.D., Executive Officer

Attachment

cc: See next page.

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Attachment: CARB's detailed comments on the Yolo 80 Corridor Improvements Project

Background

The 2022 Scoping Plan[1] charts a path to achieving carbon neutrality by 2045 and describes why significant vehicle miles travelled (VMT) reduction is needed to achieve the State's greenhouse gas (GHG) emissions reduction targets. California's infrastructure investment choices play a central role in achieving those reductions.[2] Adding highway capacity leads to substantial increases in VMT, generally in proportion to the amount of capacity added,[3,4,5,6] moving California in the opposite direction from its climate and air quality goals. The induced VMT caused by highway expansion also has serious impacts on human health[7] and the natural environment.[8] Further, such investments lead to dispersed land use patterns, which move destinations further apart and exclude non-drivers (including people who are too old or young to drive, who cannot afford a car, or who are not physically able to drive) from economic and social opportunities. Exacerbating such land use and transportation patterns by expanding roadways rather than better managing the existing system and

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[1] *2022 Scoping Plan for Achieving Carbon Neutrality*, available at *https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents*

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[8] *Cutting Greenhouse Gas Emissions Is Only the Beginning: A Literature Review of the Co-Benefits of Reducing Vehicle Miles Traveled*. Fang et al., NCST, 2017. Available at: https://rosap.ntl.bts.gov/view/dot/32254

investing public funds to provide more housing and transportation options that reduce the need to drive moves us further away from building an equitable and just society.

Meanwhile, pricing alone, without expansion, can relieve congestion while improving equity,[9] with less induced travel and reduced impact on the environment. Congestion often reduces vehicle flows by a third to a half, and congestion pricing can relieve congestion and return facilities to their full capacity flow. For this reason, pricing can obviate the need for expansion.

Several State documents, including the Scoping Plan, CARB's Progress Report on implementation of the Sustainable Communities and Climate Protection Act,[10] and the Climate Action Plan for Transportation Infrastructure,[11] call for reimagining or deprioritizing roadway projects that increase VMT to create a more sustainable transportation system. Most of the DEIR's proposed alternatives are out of alignment with these State goals, but that is obscured by issues with the analysis. Continuing on this path will not achieve our GHG emissions reduction targets.

This attachment provides CARB's comments on the proposed project in greater detail and offers recommendations for resolving the issues identified in those comments.

I. DEIR omits key project alternatives

The DEIR omits key alternatives that could better address congestion, have less impact on the environment, and in some cases cost less to build.

The SACOG 2020 Metropolitan Transportation Plan / Sustainable Communities Strategy (MTP/SCS), the region's blueprint for transportation infrastructure investment, is designed to achieve the region's transportation GHG emissions reduction goals. It specifies two express lanes for the corridor, one added and the other converted from an existing lane. In the travel demand model SACOG used to assess passenger vehicle GHG per capita reduction in its regional plan, the corridor was specified as follows:

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[9] Pricing can improve access to opportunity for low-income populations by funding improved transit (and, with income-based pricing, improved auto-mobility), and it can reduce environmental, health, and safety burdens by reducing traffic volumes and relieving congestion in neighborhoods near major roadways. See *Pricing Roads, Advancing Equity*. Transform, 2019. Available at: https://drive.google.com/file/d/1cnuJVoDfiKa04I9PhxjktOt4Er03RMuf/view

[10] *2022 Progress Report: California's Sustainable Communities and Climate Protection Act*, available at https://ww2.arb.ca.gov/sites/default/files/2023-05/2022-SB150-MainReport-FINAL-ADA.pdf

[11] *Climate Action Plan for Transportation Infrastructure*, available at https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf

> Dual express lane each direction. SOVs tolled. One lane added, one converted from GP lane during peak hours (7am-10am and 3pm-6pm).

The Yolo County Transportation District also requested that Caltrans evaluate this configuration, showing further regional support for this alternative.

However, Caltrans declined to include this configuration in the DEIR as an alternative. None of the alternatives Caltrans included in the DEIR feature pricing of more than a single lane. Without the revenue a second priced lane would generate, the DEIR claims funds are unavailable to fully mitigate VMT impacts. Without that mitigation, the project would undermine the region's VMT and GHG emissions reduction efforts. Also, pricing only a single lane reduces congestion substantially less, and would therefore be less effective in achieving the project's purpose (as stated on DEIR page summary-2) to:

1. Ease congestion and improve overall person throughput
2. Improve freeway operation on the mainline, ramps, and at system interchanges
3. Support reliable transport of goods and services throughout the region
4. Improve modality and travel time reliability
5. Provide expedited traveler information and monitoring systems

The DEIR could focus on alternatives that achieve more greenhouse gas emissions reduction and cause less environmental impact while achieving the project's objectives. For example, Caltrans could study an alternative that adds congestion pricing on existing lanes. Pricing all three existing lanes in each direction without adding a lane could address traffic congestion and improve vehicle throughput to a similar extent as building a new priced lane,[12] cause less impact to the environment, greatly reduce cost, and generate more revenue to fully mitigate the harms of the project and provide additional benefits to the region. All-lane tolling has been considered elsewhere in California, including recently in District 4 for Highway 37, is feasible given the features of the corridor, and should be considered and studied as an alternative here, too.

Furthermore, consideration of additional project alternatives is likely needed, given that the DEIR's traffic assessment fails to assess travel patterns resulting from the project with reasonable accuracy (as discussed in the next section) throwing into doubt whether the

[12] Congestion typically reduces vehicle flows to 1000-1400 vehicles per hour per lane. A lane operating at free flow lane can carry 1700-1900 vehicles per hour. Therefore, addressing congestion with pricing can adjust vehicle flows during peak periods by roughly +600 vehicles per lane. Because relieving congestion with pricing can increase vehicle flows by 600 vehicles per hour per lane, adding congestion pricing to two congested lanes can add as much to flow as adding one lane that congests (+600 vehicles per hour per lane x 2 lanes = +1200 vehicles per hour). Adding congestion pricing to three congested lanes can add as much to vehicle flow as a lane priced to maintain free flow travel (+600 vehicles per hour per lane x 3 lanes = +1800 vehicles per hour).

project alternatives presented would achieve the project's stated purpose and need. Before building a project of this expense and impact, Caltrans should have better evidence that the project will accomplish what is intended.

II. DEIR uses a traffic assessment that underestimates impacts

A. Caltrans chose to assess traffic impacts using a travel demand modeling approach that does not accurately capture the impacts of this project

Despite having reportedly been advised to do so,[13] Caltrans did not apply a modeling approach that would more accurately capture the impacts of this project. As a result, the DEIR's traffic assessment likely underestimates the project's impact on VMT. Induced VMT generally manifests over the five years after delivery of a highway expansion project,[14] but the travel demand model Caltrans used for this project shows a different trajectory. On opening year (2029), the model predicts a high amount of induced VMT (about four times what the induced travel studies would predict over the long run), increasing VMT of the entire region approximately 3%. But in the long run, the model predicts the effect of the project would be to *reduce* VMT by approximately 3.5%.

The DEIR's technical appendixes note that static traffic assignment travel demand models, like the one used in the Yolo 80 DEIR, have difficulty with assessment in congested conditions:

> Another limitation of the SACSIM19 model is the use of static assignment rather than dynamic assignment of vehicle trips. With congested conditions, static assignment can result in volumes that exceed capacity for the analysis period. With dynamic assignment, trips are rerouted or shifted in time so that capacity is met. If dynamic assignment were used, VMT could be lower if trips are shifted in time to more direct routes or if trips are shifted to different destinations due to congested conditions. VMT could also be higher if longer routes must be used to avoid congested links. (Transportation Analysis Report, Interstate 80/US Highway 50 Managed Lanes, November 2023, page 78)

[13] *The Policy and Politics of Highway Expansions*, Amy Lee, 2023, Page 279. Available at: https://escholarship.org/uc/item/13x3n8zr

[14] *If you build it, they will drive: Measuring induced demand for vehicle travel in urban areas*. Hymel, 2019. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0967070X18301720

Another technical appendix corroborates the concerns raised in the Transportation Analysis Report, acknowledging that static modeling is likely to exaggerate future year traffic volumes on the facility:

> Based on the static validation and knowledge that the model relies on static assignment of vehicle trips instead of dynamic traffic assignment, the model's peak period (and peak hour) forecasts may be higher than would occur. (Interstate 80/U.S. Highway 50 Managed Lanes Travel Demand Modeling Report, p. 27)

Other appendixes raise additional issues that may be compounding the problem:

> "[The model] has a limitation from its use of static traffic assignment instead of dynamic traffic assignment (DTA). For example, the model completes all origin-destination (OD) trips during peak hours even if the congested travel time would require longer than one hour to complete the trip (see Appendix A). This is not realistic and would not occur with a DTA. Instead, trips would only travel as far as congested speeds would allow within one hour. This type of limitation may overestimate peak hour demand." (Interstate 80/U.S. Highway 50 Managed Lanes Traffic and Revenue Report, p. 8)

Assessed with a travel demand model, induced travel is the difference between VMT assessed with the project and VMT assessed without the project. Research shows that static traffic assignment modeling approaches can over-predict future congestion in congested conditions.[15] The approach used here does not model the likelihood that drivers may vary departure time in the face of existing congestion, so in the horizon year, without the project it shows drivers piling onto and jamming the congested facility. The model then shows the jammed facility pushing subsequent drivers to take a lengthy route around the project corridor (in this case, via Woodland and I-5 about 10 miles to the north), adding substantial VMT to those trips. In the horizon year with the project, the model shows the facility accommodating that traffic. Comparing scenarios with and without the project, then, building the project appears to reduce VMT.

Dynamic traffic assignment modeling approaches, meanwhile, aim to better reflect the reality that many drivers would change their departure to a less congested time and forego the longer route. As a result, they would not generate the intensity of the congestion shown in the static traffic assignment modeling approach used for the project assessment. Without that intensity of congestion, and with the ability to change departure time, less traffic would re-route around the facility, so the VMT in the no-project scenario would be lower and the

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[15] *Forecasting the impossible: The status quo of estimating traffic flows with static traffic assignment and the future of dynamic traffic assignment*. Marshall, 2018. Available at: https://www.sciencedirect.com/science/article/pii/S2210539517301232?via%3Dihub

comparison between VMT in the project and no project scenarios—the induced VMT—would be more accurate.

Meanwhile, other states are bringing dynamic traffic assignment modeling techniques into use for complex projects and projects that, like Yolo 80, have congested traffic conditions and parallel routes. The Colorado Department of Transportation offers the following guidance, which would appear to apply to a project like Yolo 80:

> DTA is useful when the analyst's study area includes a congested transportation facility as well as its parallel facilities (or parallel capacity). …[I]t may inform how much traffic redistribution to expect from one facility to another. DTA's assignment methods is more sophisticated than a traditional travel demand model as it accounts for bottlenecks. DTA also allows for temporal spreading (peak-hour spreading)[16] [i.e., changing of departure times to avoid congestion].

Caltrans did not apply a dynamic traffic assignment modeling approach that would more accurately capture the effect of the project on travel behavior and its impacts on the environment, and to have nevertheless opted for static modeling. *The Policy and Politics of Highway Expansions*[17] describes an interview with a transportation expert with knowledge of the modeling for the project:

> …a transportation expert also discussed the travel modeling analysis of HOT lanes on I-80. They discussed the various modeling approaches and scenarios that had been used to analyze the project, including scenarios to estimate long-term changes in VMT that included land use changes and used dynamic traffic assignment. Caltrans rejected these scenarios that showed long-term increases in VMT in favor of scenarios that used static traffic assignment, which showed that VMT would decrease with the highway expansion project because people would re-route off of a longer, parallel route through Woodland and back onto I-80. Caltrans 'liked' the model run using static assignment because it gave quantitative support for the expansion project. Comparisons of dynamic versus static assignment are well-documented in academic literature – generally, static assignment fails to account for the tendency of people to change their departure time as a result of travel time. But in reality, "way more people would change their departure time before they would go all the way around through Woodland." (p. 279, emphasis added)

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[16] *Traffic Analysis and Forecasting Guidelines, Colorado Department of Transportation*, 2023, Pages 129-131. Available at: https://www.codot.gov/safety/traffic-safety/assets/traffic_analysis_forecasting_guidelines/traffic_analysis_forecasting_guidelines

[17] *The Policy and Politics of Highway Expansions*, Amy Lee, 2023, available at: https://escholarship.org/uc/item/13x3n8zr

This account seems to document three important points:

1. For this project, the static trip assignment modeling approach showed exaggerated traffic congestion and VMT in the no-project scenario.
2. Applying static trip assignment modeling in this way helped justify the project and reduce the appearance of environmental impacts associated with the project's induced VMT.
3. Caltrans reportedly considered and rejected dynamic traffic assignment modeling approaches because those would have revealed the environmental impacts of the project and because static trip assignment modeling exaggerated the need for a project it preferred to build (see underlined portion of *Lee 2023* excerpt above).

For this project, using static trip assignment modeling in this way causes crucial information about the intensity of the impact to be omitted; that omitted information is necessary for an informed understanding of the project's impacts.

In addition to the limitations of this static trip assignment approach, the model used for this project appears not to be validated to meet the standard of current practice. For example, in Table 5 of the *Interstate 80/U.S. Highway 50 Managed Lanes Travel Demand Modeling Report*, the Sacramento River screen line does not meet the minimum expectation of "percent within Caltrans maximum deviation" established in the RTP Guidelines. This adds to concerns with the quality of the forecast. Further, there is no speed validation at the corridor level.

B. Caltrans omits the effects of project-caused land use changes in its assessment of the project's effect on travel patterns

Ample research has documented highway expansion changes on land use development patterns,[18] and those changes comprise a substantial portion of the overall induced travel effect of highway projects.[19] This is well understood, and Caltrans' own guidance on assessing induced travel requires that land use development effects be assessed.[20] Guidance from the Governor's Office of Planning and Research also establishes the need to assess land use effects of highway capacity projects.[21]

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[18] *Highway-Induced Development: Research Results for Metropolitan Areas.* Ewing 2008.

[19] Many induced travel studies distinguish short-term effects, generally caused by change in destination, mode, route, or number of trips, from long-term effects, generally caused by changes in land use patterns, and find the long-term component adds substantially to the short-term component.

[20] *Caltrans Transportation Analysis Framework*. 2020. Page 21. Available at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf.

[21] *Technical Advisory on Evaluating Transportation Impacts in CEQA*, Governor's Office of Planning and Research, 2018, pages 33-34. Available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

However, in its traffic analysis, Caltrans district staff excluded the land use effects of this project, applying the same land use scenario with and without the project:

> Caltrans district staff directed that the model land uses be maintained without changes from the MTP/SCS versions for all alternatives, including the no build alternative. (*Interstate 80/US Highway 50 Managed Lanes Transportation Analysis Report,* p. 26)

When modeling a project, applying the same land use scenario with and without the project omits the project's effect on land use from the analysis entirely. Omitting the land use effect of the project would likely lead to a substantial underestimate of the amount of induced vehicle travel, as it is generally among the largest of the components of the induced travel effect, as is stated in the Traffic and Revenue Report for the DEIR:

> The development of the SACSIM19 model to represent 2029 and 2049 conditions is documented in the I-80/US 50 Managed Lanes – Forecasts Methodology Memorandum (November 23, 2020) and the I-80/US 50 Managed Lanes – Travel Demand Modeling Report (September 2021). Reviewers should note that the model inputs for land use growth have the largest effect on future travel demand. (Interstate 80/U.S. Highway 50 Managed Lanes Traffic and Revenue Report, p. 10)

Despite its importance to the analysis, Caltrans maintained the same land use scenario across all alternatives, including no-build:

> Land use inputs were not developed for each individual alternative. Instead, the SACOG 2020 MTP/SCS land use forecasts associated with specific model years 2016, 2027, and 2040 were used without modification. Then the resulting vehicle trip tables from the SACSIM19 model were factored to produce 2029 and 2049 vehicle trip tables that were used in the final assignment. This approach limits the sensitivity of the traffic and revenue forecasts to any unique land use effects associated with each alternative. (Interstate 80/U.S. Highway 50 Managed Lanes Traffic and Revenue Report, p. 10)

Excluding land use effects resulted in the exclusion of a major source of additional vehicle travel in the assessment. Omitting land use changes from the project, and the extra vehicle travel they would cause, exaggerates the transportation benefits of the project by showing that it improves traffic more and over a longer period of time than it actually will.

Omitting land use changes also leads to understating the environmental impacts of the project related to vehicle travel. Underestimating VMT will lead to an underestimate of GHG emissions, air pollutant emissions, energy, and noise, likely mischaracterizing the directionality, magnitude, and significance of impacts.

C. Caltrans applies differing values for induced truck VMT in different parts of the DEIR in ways that minimize appearance of environmental impacts

Caltrans claims differing amounts of induced truck travel in different impact analyses in the DEIR. For VMT impacts, it discounts a large amount of induced truck travel from its assessment of induced auto travel, making that impact appear substantially smaller. Assessing other impacts, it assumes less additional truck travel, making those impacts, too, appear substantially smaller. Using truck VMT inconsistently in the manner that Caltrans does minimizes the appearance of environmental impacts of the project.

For VMT assessment under SB 743, truck travel may be either included or excluded.[22] In its VMT analysis, Caltrans chooses to exclude truck travel from induced VMT. To establish the amount of truck travel to omit, the DEIR references the Caltrans advisory *NCST Calculator Truck Adjustment*.[23] That guidance references Duranton & Turner (2011): "…we estimate that trucks account for between 19 and 29 percent of the total increase in interstate VKT [vehicle kilometers travelled],"[24] and suggests applying the maximum value in that range to reduce the amount of induced auto VMT it reports as a transportation impact.

When assessing impacts other than VMT, truck travel must be included. However, the traffic analyses feeding into these assessments report much less induced truck travel.[25] We analyzed the discrepancy between induced truck VMT, as reported in the Transportation Analysis Report for the project[26], and found it ranged from 201% and 565% across the capacity-adding alternatives (see table below).

In sum, Caltrans applies lower estimates feeding into assessment of project impacts such as GHG emissions, air pollutant emissions, energy, and noise, making those impacts appear smaller. Meanwhile, it applies higher estimates where those estimates are subtracted from

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[22] *Technical Advisory on Evaluating Transportation Impacts under CEQA*. Governor's Office of Planning and Research, 2020, pages 4-5. Available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

[23] *NCST Calculator Truck Adjustment: Method for adjusting NCST Calculator results to account for heavy-duty trucks*. Available at: https://dot.ca.gov/programs/esta/sb-743/resources/ncst-truck-adjustment

[24] Page 2644

[25] Further, the technical appendixes make conflicting claims about discussing air quality impacts, the DEIR states, "The project would not change the traffic mix" (p. 3-11). In its assessment of air quality, the share of trucks listed for the no build and build alternatives is the same, indicating that none of the project alternatives would affect truck volumes compared to the no-build (Table 2.2-9, Pages 2-194 – 2-195). It is not possible that 29 percent of the project's induced travel is truck travel, and also that the project does not affect the share of truck travel.

[26] (Interstate 80/US Highway 50 Managed Lanes Transportation Analysis Report, November 2023, Table 31 and Table 32, pages 81-82)

the total induced VMT, making those impacts also appear smaller. The table below shows the magnitude of the discrepancy for each alternative.

Alternative	Long-Term Induced Truck VMT (used to calculate GHG, Air Quality, Energy, and Noise Impacts) (Transportation Analysis Report, Nov. 2023, Table 35, p. 83)	Long-Term Induced Truck VMT (subtracted from VMT impacts)* (Transportation Analysis Report Nov 2023, Table 32, p. 82.)	Difference
1 (No Build)	0	-	-
2 (Add HOV)	67,500	143,600	213%
3 (Add HOT2+)	41,600	143,600	345%
4 (Add HOT3+)	25,400	143,600	565%
5 (Add Toll)	29,200	143,600	492%
6 (Add Transit)	1,200	-	-
7 (Convert HOV)	6,500	3,600	55%
8 (Add HOV with Median Ramps)	61,000	149,600	245%
9 (Add HOV without Enterprise Crossing)	71,400	143,600	201%

Induced truck travel for each alternative used to assess different impacts. (*Caltrans NCST Calculator Truck Adjustment Guidance (available at https://dot.ca.gov/programs/esta/sb-743/resources/ncst-truck-adjustment))

CEQA requires factual conclusions reached in an EIR to be supported by substantial evidence.[27] Here, using different amounts of truck travel in different sections of the document is internally inconsistent, and can therefore inaccurately – and improperly – reduce the appearance of environmental impacts. Substantial evidence under CEQA is that which includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts."[28] The CEQA statute goes on to state that substantial evidence does not include unsubstantiated opinion or narrative, or evidence which is clearly inaccurate or erroneous.[29] Given the EIR is internally inconsistent in support for its key determinations regarding truck-related VMT, these determinations lack substantial evidence. Furthermore, if impacts are underestimated, they will be under-mitigated, and the environment will not be protected as the law envisions.

[27] See Cal. Pub. Resources Code § 21168.5.
[28] Cal. Pub. Resources Code § 21082.2(c).
[29] See *id.*

III. DEIR relies on the traffic assessment for its impact assessment and significance determinations, including the GHG emissions assessment

The DEIR's assessment of GHG emissions, air quality, energy, and noise are all based on the traffic assessment discussed earlier. Therefore, these impacts are likely underestimated, calling the DEIR's significance determinations into question.

CARB staff found this to be the case with the DEIR's assessment of GHG emissions. Table 8 in the Air Quality Report (August 2023) (pages 30 and 31) provides GHG emissions that it claims would result from each alternative. The DEIR's claim on p. 3-26 – 3-27 that "GHG emissions of the Build Alternatives were assessed to be less" than the no-build appears to be based on data from that table. However, data from the table appear to be based upon the output of the static trip assignment modeling approach of comparing scenarios without land use variations, discussed above.

Furthermore, the DEIR GHG assessment appears to incorrectly factor in emissions reductions from vehicle efficiency improvements to justify the project's effect on GHG emissions, stating:

> A quantitative analysis of daily CO2 emissions was performed using the Caltrans CTEMFAC2021. GHG emissions and VMT comparisons were calculated for the Build Alternatives the existing year (2019), in opening year (2029), and design year (2049). As anticipated with new fleet and electric vehicles penetration, in design year 2049, GHG emissions of the Build Alternatives were assessed to be less.

However, the decarbonization of the vehicle fleet is not what this DEIR is supposed to analyze. The DEIR is supposed to analyze the effects *of the project*,[30] which must be determined by comparing emissions with and without the project using the same year.[31] Caltrans' own guidance on assessing transportation projects under CEQA articulates the importance of focusing on the impacts of the project by comparing impacts with and without the project in the same year:

> Transportation projects are typically built years after the CEQA analysis is completed, and comparing to existing conditions would combine the project's VMT effects with other effects…in effect misleading the public and decision-makers by obscuring the impacts of the project itself. When comparing future build conditions to future no-

[30] See CEQA Guidelines § 15126.2(a).
[31] See *id*; see also § 15125(a).

build conditions, the difference is the addition of the project itself and associated changes that may occur to land use and travel behavior.[32]

For these reasons, the DEIR's claim that adding a lane will decrease GHG emissions is not supported by substantial evidence and is likely incorrect.

IV. Amount of VMT mitigation in the DEIR is inadequate

CEQA requires significant impacts to be fully mitigated where feasible. However, while the project as proposed will induce substantial amounts of new VMT, the DEIR proposes to mitigate only 43% of it.[33] Inadequate mitigation of VMT makes it harder to achieve the State's climate goals, which depend on VMT reduction.

Cost is the only reason cited for offering incomplete mitigation, but neither the DEIR nor its appendixes offer reasoning or substantial evidence for setting the ceiling of mitigation funds at 14-15% of construction cost. Also, because the DEIR omits consideration of viable, key pricing alternatives (discussed earlier) the cost of VMT mitigation should not be allowed as justification for less than full mitigation. Considering conversion of existing lanes to priced lanes would bring in more revenue that could be invested to mitigate the impacts of the project and provide additional benefits to the public, including investment in additional low-VMT housing[34] and/or capacity reduction elsewhere on the system (e.g., via road diet or conversion to transit-only lanes).

V. Recommendations

Flowing from the comments on the DEIR presented above, CARB staff have the following recommendations:

Alternatives. Pricing, not expansion, can address congestion and achieve the objectives set forth in the DEIR for this project. Pricing also generates less impact to the environment than expansion. Therefore, Caltrans should study conversions of existing lanes to priced lanes, at a minimum including:

- the configuration specified in the MTP/SCS (i.e., an addition of one express lane plus the conversion of one existing general-purpose lane to an express lane),

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[32] *See Caltrans Transportation Analysis Under CEQA*, page 17, available at https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf

[33] Yolo 80 Managed Lanes Project Draft VMT Mitigation Plan, October 25, 2023, p. 8.

[34] Housing generating less than 85 percent of regional average household VMT, per *Technical Advisory on Evaluating Transportation Impacts under CEQA*, Governor's Office of Planning and Research, 2020. Available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

- pricing existing lanes without any lane expansion.

Caltrans should revisit the question of whether each alternative achieves the stated objectives for the project (i.e., the purpose and need).

Redo the traffic assessment. Given the three major flaws identified in the traffic assessment and given the importance of accuracy in that assessment to impact assessments and significance determinations, we recommend the travel modeling for the project be redone using a modeling approach that is more appropriate for this analysis with the project's effects on land use included, and taking care to use consistent assumptions on induced truck VMT.

Reassess impacts and significance determinations. Redoing the traffic assessment is likely to show different traffic outcomes both with and without the project than the traffic assessment currently in the DEIR. Therefore, GHG, air quality, energy, safety, and noise impact assessments and significance determinations need to be revisited. When revising the impact assessment and significance determination for GHG emissions, please only compare emissions with and without the project, removing the impact of vehicle efficiency improvements.

Provide full mitigation for induced VMT. VMT impacts of the project should be fully mitigated. Pricing of existing lanes can serve both as mitigation itself and to finance other mitigation strategies to achieve full mitigation.

From: Alessa Johns
To: California Transportation Commission@CATC
Subject: Vote AGAINST I-80 Widening
Date: Tuesday, March 19, 2024 1:13:17 AM

Chair Carl Guardino and members

California Transportation Commission CTC@CATC.CA.GOV

Re: Item #19 Sprawl, climate change & "Funding of Yolo80 with TCEP federal funds"

March 19, 2024

I ask CTC members **to vote against the I-80 widening project** on March 21st and instead to support the State climate plan and improve transits.

I am part of the Episcopal Church of St. Martin in Davis, but I am speaking for myself. The well-reasoned letter from Congregation Bet Haverim makes important points about this irresponsible $460 million project.

> **First,** UC Davis and others' research conclusively shows that freeway widening, like what is proposed for I-80, will not fix congestion for long. What happened to Los Angeles offers a clear picture of what our area will come to look like if we don't make the right decisions now. This project threatens the greenbelt between Dixon and Vacaville.
>
> **Second**, the I-80 widening project will move us in the wrong direction in addressing climate change. More cars driving on the freeway will not improve the air quality.
>
> **Third,** adding freeway capacity puts pressure on Davis's housing availability.
>
> **Fourth**, the Caltrans climate mitigation plan relies on the unfair assumption that the poor and working class will use free bus passes to take transit so others can drive.
>
> **Fifth**, the toll lanes continue to increase social inequity by allowing the richest among us to opt out of changes needed to address climate change.

Los Angeles should not be a model for Northern California - we need to protect our better watered farmland from sprawl. We need to focus on the future and invest in public transportation, making it affordable and attractive for everyone so that public transportation becomes the default choice.

Vote No! Do NOT fund this unsustainable project! but redo the environmental study to consider bus or rail transit improvements that were neglected in the first study.

Alessa Johns

Professor Emerita of English, UC Davis

38-year Davis Resident

--
Alessa Johns, Ph.D.
Professor Emerita of English, UC Davis
amjohns@ucdavis.edu
https://english.ucdavis.edu/people/amjohns

From:	Christopher Reynolds
To:	California Transportation Commission@CATC
Subject:	vote against the I-80 widening
Date:	Tuesday, March 19, 2024 4:27:29 AM

Chair Carl Guardino and members
California Transportation Commission CTC@CATC.CA.GOV

Re: Item #19 Sprawl, climate change & "Funding of Yolo80 with TCEP federal funds"

March 19, 2024

I ask CTC members **to vote against the I-80 widening project** on March 21st and instead to support the State climate plan and improve transits.

I am part of the Episcopal Church of St. Martin in Davis, but I am speaking for myself. The well-reasoned letter from Congregation Bet Haverim makes important points about this irresponsible $460 million project.

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Second, the I-80 widening project will move us in the wrong direction in addressing climate change. More cars driving on the freeway will not improve the air quality.

Third, adding freeway capacity puts pressure on Davis's housing availability.

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Fifth, the toll lanes continue to increase social inequity by allowing the richest among us to opt out of changes needed to address climate change.

Los Angeles should not be a model for Northern California - we need to protect our better watered farmland from sprawl. We need to focus on the future and invest in public transportation, making it affordable and attractive for everyone so that public transportation becomes the default choice.

Vote No. Don't fund this unsustainable project. Instead, redo the environmental study to **consider bus or rail transit improvements** that were neglected in the first study.

Thank you,

Christopher Reynolds

Distinguished Professor, Emeritus

UC Davis

From: David Schonbrunn
To: California Transportation Commission@CATC
Subject: Item #19 I-80 Yolo Widening vs Unstudied Rail Alternatives
Date: Tuesday, March 19, 2024 8:11:47 AM

Chair Car. Guardino and Members,
California Transportation Commission

RE: Item #19 I-80 Yolo Widening vs Unstudied Rail Alternatives.

The Train Riders Association of California (TRAC) opposes the proposed widening of Interstate 80 through the City of Davis, on the Yolo Causeway to West Sacramento. It's now well-documented that widened highways fill back up in 5-6 years because of induced demand. In addition, expanded highway capacity encourages further auto-dependent sprawl development, which locks in increasing VMT. This is contrary to the climate-oriented direction of State policy.

In our view, the estimated $300-$460 million full cost of adding an additional lane in each direction would be better spent on increasing rail capacity in the corridor and increasing Capitol Corridor frequencies to competitive levels. In fact, Caltrans own I-80 Comprehensive Multimodal Corridor Plan indicated that, with more capacity and increased frequencies, the rail option could attract four to five times current Capitol Corridor patronage. That would certainly improve mobility in the corridor.

As further evidence, Table 5.13 Page 77 from Caltrans I-80 Comprehensive Multimodal Corridor Plan, which was finished Jan. 2023, compares freeway widenings to a rail upgrade alternative. The I-80 CMCP report showed the rail upgrade (scenario #4 cc) upgrade cap corridor to 110mph / 30 minute frequency is 15x more cost-effective overall than freeway widening. (https://dot.ca.gov/-/media/dot-media/district-3/documents/i80-cmcp/update_final_i80_cmcp_comprehensive_multimodal_corridor_plan_.pd).

We urge the CTC to respect the long history of innovative environmental policies by the City of Davis. The community supported and used bicycles as an alternative to driving decades before cycling became popular in California. The first advocacy for improving passenger trains in California began at UC Davis in the late 1960's through the Davis Railroad Club. Encouraging transit use through environmental policy-based infrastructure improvements is the next logical step in this tradition.

TRAC urges the CTC to not fund this project at least until a rail alternative has been added to the EIR. TRAC further urges the CTC to reject the proposed I-80 widening and to instead support upgrading Capitol Corridor capacity and service.

--David

David Schonbrunn, Vice President
Train Riders Association of California (TRAC)
P.O. Box 151439
San Rafael, CA 94915-1439

415-370-7250 cell & office
President@calrailnews.org
www.calrailnews.org

From: Paul Kolarik
To: California Transportation Commission/CATC
Subject: Item 19 - Funding Yolo80 Managed Lane with TCEP
Date: Tuesday, March 19, 2024 8:17:16 AM

Chair Carl Guardino and members"
California Transportation Commission CTC@CATC.CA.GOV

Reference: Item 19 "Funding of Yolo80 Managed Lane with TCEP federal funds.

I support the following well-reasoned letter from Congregation Bet Haverim expressing these five points about the $460 million I-80 widening project- and the draft letter from the City of Davis noted the I-80 widening is contrary to state and city climate policy and the CAPTI.

1. "Research conclusively shows that freeway widening, like what is proposed for I80, will not fix congestion for long."
2. The I-80 widening project will move us in the wrong direction in addressing climate change." More cars driving on the freeway will not improve the air quality.
3. Adding freeway capacity puts pressure on Davis's housing availability.
4. The Caltrans climate mitigation plan relies on the unfair assumption that the poor and working class will use free bus passes to take transit so others can drive.
5. "The toll lanes continue to increase social inequity by allowing the richest among us to opt out of changes needed to address climate change.

To these comments from Bet
Haverim, I would like to add my own comment. I drive the causeway. With the current work which narrows each of the 3 lanes of traffic, I find it quite frightening to drive to Sacramento. If the new plan goes through and we squeeze one more lane into the same causeway footprint, these narrow lanes will be a permanent fixture.

The risk of accidents will increase and there will be no side shoulder for emergency vehicles. UC Berkeley ITS research has noted the narrowing shoulder from 10ft to 2ft doubled the number of accidents. I also note that in some places the lanes are being narrowed to 11 and 11 ½ feet in in addition to eliminating the shoulder.
The DEIR did not discuss the safety impact of this design.

The Draft Environmental Impact Report failed to study an upgrade of the capitol corridor rail service as an alternative to the widening. Rail service currently is slow, unreliable, expensive ($9 Sacramento to Davis) and lacks sufficient passenger station (only one in both Sacramento!! and Yolo Counties). It has greats potential but continues to be neglected.

I hope the CTC will fully encompass Governor Newsom's commitment to climate change and sustainability and reject this freeway expansion and instead promote more effective and social equity.

Thank you.

Yours sincerely

Ellen Kolarik MD
Member of the Lutheran Church of the Incarnation

From: james zanetto
To: California Transportation Commission@CATC
Subject: I-80 widening
Date: Tuesday, March 19, 2024 10:16:25 AM

CTC,

Regarding the proposed widening of I-80 through Yolo County, item #19, DO NOT FUND.

James Zanetto
LEED Accredited Professional
Carbon Leadership Forum member
James Zanetto, Architect & Planner
License no. C10631
530.758.8801
530.574.4427 cell

From: Gayna
To: California Transportation Commission@CATC
Subject: "For Item19= Respect the science, respect the planet, do not fund Yolo80"
Date: Tuesday, March 19, 2024 11:21:21 AM

We do not need to add another lane to the freeway. We need to fund much more public transportation.

Gayna Lamb-Bang
Davis, CA
gayna@dcn.org

From: Scott Steward
To: California Transportation Commission@CATC
Subject: Re: Item #19 Zero net transportation & I80Yolo Advanced Funding for $105 Million.
Date: Tuesday, March 19, 2024 11:22:18 AM

We need to build true net zero GHG transportation system and rail is key.

I urge you to look at the letter proposed by City of Davis on I-80 from March 5th. The letter quotes from California's State Climate Action Plan for Transportation Infrastructure (CAPTI) that building more freeways acknowledged "is the wrong approach to achieve our climate action and transportation policy goals" ... and from the same CAPTI source, "Further, research over the past several decades has demonstrated that highway capacity expansion has not resulted in long term congestion relief and in some cases has worsened congestion, particularly in urbanized regions."

Caltrans needs to be incented not to continue to build freeways but to build trains, and the legal obstacles to rail need to be removed (via eminent domain or what have you.

Without a fiduciary commitment to net-zero carbon transportation solutions, I don't see how CTC can responsibly invest $105 Million more in something that has proven to add to the problem of greenhouse gas use.

As others have stated in earlier meetings on this project, the freeway widening offers no solutions and is biased to the needs of cut-through

traffic. We need more assurance of the climate benefit of funds generated from the proposed 11 road revenue.

We need to reckon with the fact that Caltrans is conducting itself to propose freeway widening because our larger electorate has yet to take the responsibility to defeat the political and legal opposition to widespread rail. So we start to take that responsibility now.

Thank you for your consideration,

Scott Steward

Davis, CA

From:	Paul Rippey
To:	California Transportation Commission@CATC
Subject:	Yolo80
Date:	Tuesday, March 19, 2024 10:58:22 AM

Please do not fund Yolo80.

The arguments against it are overwhelming, and you have seen them. Please take them seriously. I know there is still momentum, carried over from the 1950s and 1960s, to building and widening freeways. To use a fitting metaphor, this is a dead-end street.

The car culture has been well treated. It's time to move on.

Sincerely,
Paul Rippey

From: Jim Frame
To: California Transportation Commission@CATC
Subject: Yolo80
Date: Tuesday, March 19, 2024 10:34:26 AM

EXTERNAL EMAIL. Links/attachments may not be safe.

I am writing to object to the plans to further widen I-80 through Yolo County. We know from long and repeated experience that widening freeways induces additional traffic, leaving us with more congested lanes and degraded air quality. Please shelve this widening project and put the money toward a forward-looking and sustainable plan for the area.

Thanks!

--

Jim Frame jhframe@dcn.org 530.756.8584
Frame Surveying & Mapping 609 A Street Davis, CA 95616
----------< Davis Community Network >----------

March 19, 2024

Chair Carl Guardino and member

California Transportation Commission

I urge the CTC not to advance fund the I-80Yolo Widening on Thursday 3/21.

Their are multiple factual reasons for this which I will summarize below and link to publish articles and studies.

But first want to bring to attention of commission the process locals used to discourage Inclusion and public input to the process by strategically withholding of information, telling the public the freeway widening was inevitable , they did venue shopping for input, presenting traffic models the promise congestion benefits to public that do not reflect induced demand, and promising funding for better transit from toll lanes but don't discuss how it will not even fund its own mitigation- And then choose a toll lane alternative for the project that reduces net revenue by 60%.

How is this "inclusive" of public participation?

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- ✓ To generate support for their project, YoloTD or Caltrans has not disclosed expected toll level on the managed lanes as part of public input to compare alternatives.
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- ✓ **Not Discussing Safety Impact of reducing shoulders to 2 ft.** Public polling indicates "safety" is #2 concern on this project. But adding the new managed lane means dramatically narrower shoulders and, in some places narrowed lane widths. Caltrans has largely hidden from public, and YoloTD has held no discussion of safety, The DEIR does not address cost an increase accident rates in the Benefit/cost calculations. One UC Berkeley study shows cutting shoulder width from 10ft to 2ft double accident rate.

- ✓ **Picking your audience**: YoloTD staff has made presentation before business groups. However, even though Yol80 has massive environmental/climate impact, YoloTD never made a presentation at any of the five city and council climate (CAP) commission in Yolo County.
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Some Other Factual Points to Consider

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2. UC Davis experts say it won't fix congestion for long due to induce demand (You have previously received the attached letter from Professor Susan Handy, UC Davis professor and Head of National Center of Sustainable Transportation. This letter has not been responded to by Caltrans or YoloTD.
3. This project was rated last - 24 out of 24 - by Caltrans and 30 out of 49 by CTC staff in June 2023.

4. Project will create per DEIR 180M VMT/year induced demand - 70% will be unmitigated in EIR.
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8. The project does not forecast financial impact on fare revenue and ridership on competing rail service the widening the I-80/causeway will cause**.** Tickets from Davis to Sac are now $9.
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10. Caltrans DEIR denies any increase in sprawl development widening this freeway will have in underdeveloped Yolo and Solano County. Isolated Rural community of Winter (population 13,000) – with little employment is already grew at 10% in last two years. YoloTD executive director has celebrated the wider freeway will support super commuter from the bay area.

Please do not fund this project. As former director of Caltrans Media Relations (and Davis council member) Will Arnold said continuing to try to build our way out of traffic Congestion and expecting a different answer is **"insanity"**

Sincerely,

Alan Hirsch

Yolo Mobility

Yolo TD Say More I-80 Super Commuters Will Affect Local Affordable Housing Supply
3/5/2024: Davis Vanguard https://www.davisvanguard.org/2024/03/guest-commentary-yolo-td-admits-i-80-will-effect-affordable-housing/

Arnold Calls I80 Widening 'Insanity' and Uses Caltrans CAPTI Policy as Proof 1/12/24 Davis Vanguard https://www.davisvanguard.org/2024/01/guest-commentary-arnold-calls-it-insanity-and-uses-caltrans-policy-as-proof/

Dr. Susan Handy
516 Hermosa Place
Davis, CA 95616

slhandy@ucdavis.edu

June 22, 2023

Dear Chair Lee Ann Eager and Members of the California Transportation Commission:

I support CTC staff recommendation to not fund the Yolo 80/US 50 Corridor Improvement Project at this time. I oppose this project based both on my expertise as one of the top transportation researchers in the country and as a long-time resident of Davis.

Academic studies have convincingly and conclusively established that increases in highway capacity lead to increases in vehicle miles of travel (VMT). The work by my team at the Institute of Transportation Studies at the University of California, Davis shows that traditional methods for evaluating highway widening projects consistently underestimate the increase in VMT that such projects generate, thereby over-estimating their benefits with respect to congestion reduction and under-estimating their impacts with respect to greenhouse gas emissions and other environmental impacts. Increased emissions associated with the increase in VMT swamps any reduction in emissions stemming from what will inevitably be a temporary improvement in traffic flow. In short, highway widening projects are inconsistent with the state's goal for reducing greenhouse gas emissions.

As a solution to congestion, highway widening projects are ineffective, as research as well as historical experience demonstrate. This is true whether the project is a conventional lane or a managed lane open to private vehicles. The only proven way to reduce congestion is to combine congestion pricing with substantial investments in alternatives to driving, particularly high-quality transit service. Investments in transit as a *mitigation* for the highway widening rather than a replacement for it are also ineffective, in that the highway widening reduces the incentive to use transit. Any attempts to mitigate the increase in VMT short of implementing a pricing strategy is likely to fall short.

As a Davis resident I regularly observe traffic on I-80 when bicycling to south Davis and when driving to Sacramento at various times of day. Yes, traffic slows in Davis but it rarely reaches extreme levels except on Friday afternoons. This level of congestion can only be considered a problem because we have set unrealistic standards for travel time and because we have given people few alternatives to driving. The solution is not to persist in a century-old approach that has proved unsuccessful time and time again. The solution is a new way of thinking about transportation.

Susan Handy

Caltrans' Own Charts Show Expanded Transit More Effective than Road Widening

https://www.davisvanguard.org/2023/10/guest-commentary-caltrans-own-charts-show-expanded-transit-more-effective-than-road-widening-to-speed-travel/

Caltrans I-80 CMCP study shows upgrading Capitol corridor rail service to 110 mph and 30 minute service is 15x a cost-effective as freeway widening.

Rail upgrade to 100 mph 15x more cost effective than freeway widening: Caltrans Table 5.13 Source: Caltrans I-80 CMCP Page 103

Note bottom line in chart: CC cap corridor scenario 4 is 3.05 vs 0.22 for best road widening option scenario 3. HOT (Tool/HOV lanes)

This chart raises questions as to why full corridor rail transit alternative (not just buses in the short segment within Yolo County) were not included in Yolo80 EIR study, particularly because 95% of traffic on the Yolo Causeway begins or ends in Solano County and points west. In the below chart Segment 6 is Davis and segment 7 is Causeway, but of course the rail upgrade (Scenario 4 CC) needs to be analyzed for entire corridor (last line of table).

5.9.3 | Benefit Cost Analysis Results

Table 5.13 | Benefit Cost Ratio by CMCP Segments shows the benefit-cost ratios of the I-80 CMCP for each of the Build scenarios. Among the five scenarios, Scenario 4 (Capital Corridor Improvements) has the best (highest) benefit cost ratio. Scenario 4 has least cost among the scenarios and does provide more benefits due to model projected shift from single occupancy vehicle to transit. As shown, the Cal-B/C varies widely by segment, primarily based on the cost of the improvements.

TABLE 5.13 | BENEFIT COST RATIO BY CMCP SEGMENTS

	Scenario 1 (HOV 2+)	Scenario 2 (HOT 2+)	Scenario 3 (HOT 3+)	Scenario 4 (CC)	Scenario 5 (TDM)
Segment 1	0.08	-0.04	0.23	1.58	0.36
Segment 2	0.32	0.07	0.49	46.26	15.71
Segment 3	0.00	-0.08	-0.02	0.55	0.08
Segment 4	0.82	0.59	0.81	6.98	0.15
Segment 5	0.42	0.42	0.43	4.18	0.07
Segment 6	-0.29	-0.18	0.09	82.21	6.87
Segment 7	-1.52	-1.62	-1.15	2.19	0.55
Segment 8	-0.45	-0.36	1.06	3.90	39.63
Segment 9	-1.15	-1.00	-0.62	7.88	0.73
I-80 Corridor	**0.03**	**-0.02**	**0.22**	**3.05**	**0.27**

New carpool lanes or HOT2+ and 3+ do not make freeway use more efficient. Caltrans Table 5.3 Source: Caltrans CMCP page 95

Chart shows less than 1-4 % increase in carpooling if HOV lanes are added shift from (1.32-to max 1.37 people in the average car). This is change in average vehicle occupancy between current "no build" vs scenario 2 & 3 HOV and HOT scenarios). This mean the user of carpool lanes are not due to a behavior change: they are "dates" or family or groups who were going to travel together regardless of the existence of the lane. This mean HOV lanes have not environmental advantage, they just add lane capacity to the freeway. Note also that "Carpool only" is in practicality just a theory: With tinted window and enforcement minimal one can believe this is just Caltrans justifying on paper building another lane- maybe to prevent shift of money to a local transit agency. On highway 99 in Sacramento it was found 48% of carpool lane users were single occupancy vehicles- so they become as congested as the other lanes: there is no reliable automated way to enforce HOV lane usage.

TABLE 5.3 | VEHICLE OCCUPANCY BY SEGMENT BY ALTERNATIVE

Occupancy	Existing	No Build (Baseline)	Scenario 1 (HOV 2+)	Scenario 2 (HOT 2+)	Scenario 3 (HOT 3+)	Scenario 4 (CC)	Scenario 5 (TDM)
Segment 1	1.31	1.31	1.32	1.28	1.28	1.32	1.31
Segment 2	1.31	1.34	1.34	1.34	1.34	1.35	1.34
Segment 3	1.31	1.35	1.35	1.34	1.35	1.36	1.35
Segment 4	1.33	1.35	1.36	1.35	1.35	1.37	1.37
Segment 5	1.34	1.37	1.37	1.37	1.37	1.39	1.37
Segment 6	1.33	1.34	1.34	1.34	1.34	1.34	1.34
Segment 7	1.31	1.31	1.32	1.32	1.33	1.31	1.31
Segment 8	1.33	1.31	1.31	1.34	1.35	1.31	1.31
Segment 9	1.31	1.32	1.33	1.34	1.34	1.32	1.32

From: Shishpal S. Rawat
To: California Transportation Commission@CATC
Subject: Do not fund Yolo80
Date: Tuesday, March 19, 2024 1:18:12 PM

Dear YoloTD officials, Caltrans officials and other transportation officials

Widening a "wide highway" is very temporary fix to solve our transportation problem. We need to facilitate getting cars and associated pollution off the road.

Respect the science, respect the planet, do not fund Yolo80 this Thursday.
Thank you.

Best Regards
Shishpal Rawat
Shishpal
+1 916 803 3866

From: Ben Matsubayashi
To: California Transportation Commission@CATC
Subject: I-80 Segment Widening
Date: Tuesday, March 19, 2024 12:48:51 PM

Respect the science, respect the planet, DO NOT fund Yolo80.

March 19, 2024

Chair Carl Guardino and member

California Transportation Commission

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Yolo Mobility

Yolo TD Say More I-80 Super Commuters Will Affect Local Affordable Housing Supply
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Arnold Calls I80 Widening 'Insanity' and Uses Caltrans CAPTI Policy as Proof 1/12/24 Davis Vanguard https://www.davisvanguard.org/2024/01/guest-commentary-arnold-calls-it-insanity-and-uses-caltrans-policy-as-proof/

Dr. Susan Handy
516 Hermosa Place
Davis, CA 95616

slhandy@ucdavis.edu

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Dear Chair Lee Ann Eager and Members of the California Transportation Commission:

I support CTC staff recommendation to not fund the Yolo 80/US 50 Corridor Improvement Project at this time. I oppose this project based both on my expertise as one of the top transportation researchers in the country and as a long-time resident of Davis.

Academic studies have convincingly and conclusively established that increases in highway capacity lead to increases in vehicle miles of travel (VMT). The work by my team at the Institute of Transportation Studies at the University of California, Davis shows that traditional methods for evaluating highway widening projects consistently underestimate the increase in VMT that such projects generate, thereby over-estimating their benefits with respect to congestion reduction and under-estimating their impacts with respect to greenhouse gas emissions and other environmental impacts. Increased emissions associated with the increase in VMT swamps any reduction in emissions stemming from what will inevitably be a temporary improvement in traffic flow. In short, highway widening projects are inconsistent with the state's goal for reducing greenhouse gas emissions.

As a solution to congestion, highway widening projects are ineffective, as research as well as historical experience demonstrate. This is true whether the project is a conventional lane or a managed lane open to private vehicles. The only proven way to reduce congestion is to combine congestion pricing with substantial investments in alternatives to driving, particularly high-quality transit service. Investments in transit as a *mitigation* for the highway widening rather than a replacement for it are also ineffective, in that the highway widening reduces the incentive to use transit. Any attempts to mitigate the increase in VMT short of implementing a pricing strategy is likely to fall short.

As a Davis resident I regularly observe traffic on I-80 when bicycling to south Davis and when driving to Sacramento at various times of day. Yes, traffic slows in Davis but it rarely reaches extreme levels except on Friday afternoons. This level of congestion can only be considered a problem because we have set unrealistic standards for travel time and because we have given people few alternatives to driving. The solution is not to persist in a century-old approach that has proved unsuccessful time and time again. The solution is a new way of thinking about transportation.

Susan Handy

Caltrans' Own Charts Show Expanded Transit More Effective than Road Widening

https://www.davisvanguard.org/2023/10/guest-commentary-caltrans-own-charts-show-expanded-transit-more-effective-than-road-widening-to-speed-travel/

Caltrans I-80 CMCP study shows upgrading Capitol corridor rail service to 110 mph and 30 minute service is 15x a cost-effective as freeway widening.

Rail upgrade to 100 mph 15x more cost effective than freeway widening: Caltrans Table 5.13 Source: Caltrans I-80 CMCP Page 103

Note bottom line in chart: CC cap corridor scenario 4 is 3.05 vs 0.22 for best road widening option scenario 3. HOT (Tool/HOV lanes)

This chart raises questions as to why full corridor rail transit alternative (not just buses in the short segment within Yolo County) were not included in Yolo80 EIR study, particularly because 95% of traffic on the Yolo Causeway begins or ends in Solano County and points west. In the below chart Segment 6 is Davis and segment 7 is Causeway, but of course the rail upgrade (Scenario 4 CC) needs to be analyzed for entire corridor (last line of table).

5.9.3 | Benefit Cost Analysis Results

Table 5.13 | Benefit Cost Ratio by CMCP Segments shows the benefit-cost ratios of the I-80 CMCP for each of the Build scenarios. Among the five scenarios, Scenario 4 (Capital Corridor Improvements) has the best (highest) benefit cost ratio. Scenario 4 has least cost among the scenarios and does provide more benefits due to model projected shift from single occupancy vehicle to transit. As shown, the Cal-B/C varies widely by segment, primarily based on the cost of the improvements.

TABLE 5.13 | BENEFIT COST RATIO BY CMCP SEGMENTS

	Scenario 1 (HOV 2+)	Scenario 2 (HOT 2+)	Scenario 3 (HOT 3+)	Scenario 4 (CC)	Scenario 5 (TDM)
Segment 1	0.08	-0.04	0.23	1.58	0.36
Segment 2	0.32	0.07	0.49	46.26	15.71
Segment 3	0.00	-0.08	-0.02	0.55	0.08
Segment 4	0.82	0.59	0.81	6.98	0.15
Segment 5	0.42	0.42	0.43	4.18	0.07
Segment 6	-0.29	-0.18	0.09	82.21	6.87
Segment 7	-1.52	-1.62	-1.15	2.19	0.55
Segment 8	-0.45	-0.36	1.06	3.90	39.63
Segment 9	-1.15	-1.00	-0.62	7.88	0.73
I-80 Corridor	**0.03**	**-0.02**	**0.22**	**3.05**	**0.27**

New carpool lanes or HOT2+ and 3+ do not make freeway use more efficient. Caltrans Table 5.3 Source: Caltrans CMCP page 95

Chart shows less than 1-4 % increase in carpooling if HOV lanes are added shift from (1.32-to max 1.37 people in the average car). This is change in average vehicle occupancy between current "no build" vs scenario 2 & 3 HOV and HOT scenarios). This mean the user of carpool lanes are not due to a behavior change: they are "dates" or family or groups who were going to travel together regardless of the existence of the lane. This mean HOV lanes have not environmental advantage, they just add lane capacity to the freeway. Note also that "Carpool only" is in practicality just a theory: With tinted window and enforcement minimal one can believe this is just Caltrans justifying on paper building another lane- maybe to prevent shift of money to a local transit agency. On highway 99 in Sacramento it was found 48% of carpool lane users were single occupancy vehicles- so they become as congested as the other lanes: there is no reliable automated way to enforce HOV lane usage.

TABLE 5.3 | VEHICLE OCCUPANCY BY SEGMENT BY ALTERNATIVE

Occupancy	Existing	No Build (Baseline)	Scenario 1 (HOV 2+)	Scenario 2 (HOT 2+)	Scenario 3 (HOT 3+)	Scenario 4 (CC)	Scenario 5 (TDM)
Segment 1	1.31	1.31	1.32	1.28	1.28	1.32	1.31
Segment 2	1.31	1.34	1.34	1.34	1.34	1.35	1.34
Segment 3	1.31	1.35	1.35	1.34	1.35	1.36	1.35
Segment 4	1.33	1.35	1.36	1.35	1.35	1.37	1.37
Segment 5	1.34	1.37	1.37	1.37	1.37	1.39	1.37
Segment 6	1.33	1.34	1.34	1.34	1.34	1.34	1.34
Segment 7	1.31	1.31	1.32	1.32	1.33	1.31	1.31
Segment 8	1.33	1.31	1.31	1.34	1.35	1.31	1.31
Segment 9	1.31	1.32	1.33	1.34	1.34	1.32	1.32