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**To:** ctp2040@DOT  
**Cc:** info@sccrtc.org; Caltrans\_Dir@dot.ca.gov  
**Subject:** Draft CTP 2040, Comments

Hello, here are comments on the Draft 2040 California Transportation Plan.

Congratulations on helping make new history for California!

I am Jack Nelson, a retired professional land use planner and environmental planner in Santa Cruz, CA, and I am a member of the Campaign for Sensible Transportation (an all volunteer organization in Santa Cruz County) and of Bike Santa Cruz County (a nonprofit bicycling advocacy organization, until recently known as People Power). Although I am not speaking formally for those groups, I believe my comments on the draft CTP 2040 reflect their broad outlook on transportation issues.

I am also an ongoing and committed student of the science of climate change. I am happy that the authors of the draft CTP 2040 seem to recognize that climate change driven by humanity's greenhouse gas emissions is a serious threat to civilization, and addressing that unprecedented hazard cannot be given short consideration when developing a big-picture transportation plan.

I see the CTP 2040 giving fresh, heightened emphasis to healthy, lower-impact alternatives to driving single occupant vehicles. It could be, before long, many more Californians will have better personal experience as to what the term "active transportation" means!

Further, it may be that the CTP 2040 recognizes that aiming to address the vexing problems of state highway traffic congestion in a localized, stepwise fashion by adding freeway lanes is no longer a rational or economic choice when the whole picture of sustainability and climate are considered. Caltrans has been one of human history's mightiest-ever road building agencies, and today the resulting tally stands at a staggering 185 billion vehicle miles travelled on the California state highway system over the last 12 months, according to Caltrans' current estimate posted online.

A figure cited by climate scientist Richard Alley of U. Penn is that passenger vehicles emit an approximate average of 1 pound of CO<sub>2</sub> (gas-state molecules) per each mile travelled. It is now well demonstrated that past greenhouse gas emissions have put the Earth in a radiative energy imbalance with more energy from the sun coming in than going out; the current IPCC AR5 Working Group I report on the physical science basis of climate change provides a figure on page 264-265 explaining that ocean warming accounts for 93% of the increase in global energy inventory from 1971 to 2010, an estimated energy gain of 274 zetajoules. Only 1% of that titanic greenhouse heat imbalance has yet to stay in the atmosphere.

In other words, humanity is living on borrowed time thanks to its Blue Oceans Ltd. credit card, but that is not sustainable.

That is why I applaud Caltrans for producing a statewide plan that appears to be genuinely and bravely a product of new thinking on transportation, land use, public well-being, and sustainability.

Although the CTP 2040 says on page 122, "Avoid funding projects that add road capacity and increased maintenance costs," how will that play out when it comes to so-called Auxiliary Lanes, that is add-on new freeway lanes that run from exit to exit between interchanges? Here in Santa Cruz County, a recent project of that class was deemed an "operational improvement," supposedly not adding capacity, and so with that twist of words no science-based study of long term induced travel or long term emissions outcome was completed.

Last year the Santa Cruz County Regional Transportation Commission adopted a forward looking 2014 Regional Transportation Plan that places new emphasis on sustainability, yet adding more auxiliary lanes on Highway 1 here remains on the RTP menu and "in the works."

How will this "auxiliary lanes" aspect of freeway expansion be addressed in Caltrans' statewide CTP 2040?

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