



October 22, 2020

John Thurston, Branch Chief  
Statewide Long-Range Planning Branch  
California Department of Transportation  
P.O. Box 942874  
Sacramento, CA 94274-0001

Submitted via: [CTP@dot.ca.gov](mailto:CTP@dot.ca.gov)

**Subject: Public Health Comments on California Transportation Plan 2050**

Dear Mr. Thurston,

On behalf of the undersigned health and medical organizations, we are writing to provide our comments on the draft California Transportation Plan 2050 (CTP 2050). We appreciate the opportunity to share public health perspectives into the development of the plan because transportation decisions made in the past have had significant effects on public health and equity, and decisions made today will affect health for decades to come.

Californians face the most difficult air pollution challenges in the United States, home to seven of the ten most ozone-polluted cities in the United States, and six of the most particle-polluted cities in the nation according to the American Lung Association's *State of the Air 2020* report.<sup>1</sup> The transportation sector accounts for approximately 80 percent of ozone- and particle-forming NOx emissions and roughly half of the state's climate-forcing greenhouse gas emissions.<sup>2</sup> The impacts of these pollutants range from asthma and other respiratory impacts to heart attacks and other cardiovascular impacts. Particle pollution also contributes to lung cancer, and is responsible for an estimated 5,000 deaths per year in California.<sup>3</sup> These health burdens are felt most acutely by people living with asthma and other lung and heart conditions, children, seniors and lower-income communities and communities of color. Climate change impacts such as extreme heat, drought, wildfires and other effects worsen air quality and add a wide range of public health burdens and negative health effects.

---

<sup>1</sup> American Lung Association. *State of the Air 2020*. [www.lung.org/sota](http://www.lung.org/sota)

<sup>2</sup> California Air Resources Board. *Mobile Source Strategy 2020 Workshop Draft*. September 2020. p. 50. [https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop\\_Discussion\\_Draft\\_2020\\_Mobile\\_Source\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop_Discussion_Draft_2020_Mobile_Source_Strategy.pdf)

<sup>3</sup> *Ibid.* p. 12.

Likewise, the transportation sector can generate additional public health risks beyond harmful air and climate pollution, including heavy impacts on safety, quality of life, neighborhood connectivity and other factors. Recognizing the urgency of addressing harmful impacts of the transportation sector, Governor Newsom has issued Executive Orders in each of the past two years focused on sustainable transportation solutions:

- Executive Order N-19-19 included a significant focus on aligning transportation investments with achieving California's climate standards through projects that protect public health and reduce vehicle miles travelled (VMT), while also promoting electric transportation.
- Last month, Governor Newsom issued Executive Order N-79-20 that includes a heavy focus on accelerating the transition to zero emission cars, drayage trucks, medium- and heavy-duty vehicles and off road equipment, while also directing more near-term transportation projects to promote alternatives to driving.

### **Tracking Implementation**

While the CTP 2050 is a "financially unconstrained" document by law, the identification of funding sources to realize this vision – and Governor Newsom's Executive Orders – will be critical to ensuring its implementation and a break from the current transportation harms to public health. As noted in the CTP 2050, a major consideration for successfully achieving these goals relates to the availability and alignment of funding to support the transitions to zero emission technologies and infrastructure, greater alignment of transportation funding toward active transportation, transit and infill, and ensuring equity within investment decisions to ensure that all communities benefit. Comparisons between the fiscally unconstrained CTP 2050 and fiscally constrained Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCS) are useful to bridging the gap between the limitations of adopted plans and the vision for a healthier transportation sector.

- ***Recommend that the CTP 2050 include criteria for prioritizing funding as it moves from a fiscally unconstrained plan to implementation in a fiscally constrained world - with an emphasis on criteria for optimizing health, equity, and climate benefits.*** Within existing funding programs, guidelines should be reviewed for shifting priorities and evaluating new, and existing but incomplete, projects based on a variety of health-supportive outcomes.
- ***We recommend annual reporting of progress on strategies and funding to illustrate where the CTP 2050 is able to bring changes that support public health, equity and climate benefits, and where more focused efforts are needed at the local, regional and state levels in California and through federal partnerships and private investment.*** Such reporting could include:
  - A dashboard illustrating quantitative and qualitative information as to changes in vehicle miles traveled, greenhouse gas emissions, criteria air pollutants, single occupant vehicles, public health, equity and other factors associated with strategies and investments included in the plan.
  - A comparative analysis between fiscally constrained RTP/SCSs developed by regional planning agencies and the CTP 2050 to demonstrate where RTP/SCSs could be more supportive of public health, equity, and planned climate outcomes are currently falling short, as well as where the CTP 2050 is not able to proceed due to funding limitations.
  - Consider including report on progress toward goals in the CTP2040 and other extant plans, and assessment of challenges in implementation of prior plans that have not yielded the shift to more sustainable transportation options.

### **Embed Public Health Improvements**

We appreciate that the plan includes a significant focus on public health protection and improvement, and seeks to align with the California Department of Public Health's (CDPH) Health in All Policies Framework (HiAP) framework<sup>4</sup> to improve public health through transportation decision-making. To gauge whether the plan is being implemented to support healthier transportation systems for all Californians, and to ensure greater attention to health in investment decisions:

- ***We recommend ensuring that public health modeling tools are utilized in regional and state planning, funding, and plan implementation to ensure optimization of health benefits,*** including reliance on California Air Resources Board (CARB) tools for tracking emission reduction health benefits, the Integrated Transportation Health Impacts Model (ITHIM) for evaluating potential health benefits of the strategies laid out in relation to active transportation, and other public and private tools that can inform changes in pollution burden, health disparities, and other public health factors.
- ***We recommend that California's transportation agencies integrate public health metrics into all public funding guidelines*** to ensure public health, air quality, health disparities and other health-related factors will be improved as the result of publicly-funded transportation investments. Funding guidelines should also ensure projects have demonstrated support within the community of project proposals.
- ***We recommend adoption of a more standard method to identify vulnerable communities, such as the [California Healthy Places Index \(HPI\)](#).*** HPI provides a composite score based on 25 indicators of community conditions that influence health outcomes and predict life expectancy. It is already utilized by several transportation grant programs (e.g. Active Transportation, Sustainable Transportation Planning, Adaptation Planning) and other state programs.

### **Advance Active Transportation and Equitable Mobility**

In order to fully realize the health benefits of active transportation, significant focus must be on ensuring that all residents be able to participate safe, reliable and connected infrastructure that not only encourages more active travel, but in ways that protects active travelers. We view building healthier travel options for all Californians, and especially those in our most disadvantaged communities, as a central premise of E.O. N-19-19's focus on funding "transportation options that contribute to the overall health of Californians and reduce greenhouse gas emissions, such as walking, biking and other active modes..." The CDPH Office of Health Equity noted in its 2015 report to the Legislature:

*In addition to reducing transportation costs and the associated inequities, a focus on California's land use and transit systems can address important health inequities. People who live in highly walkable, safe, mixed-use communities with easy access to green space and public transit options have higher levels of physical activity and lower body mass indices, contributing to greater overall health. Strong evidence suggests that active transportation is positively associated with better cardiovascular health, lower risk of diabetes, and lower risk of hypertension.<sup>5</sup>*

---

<sup>4</sup> CalTrans Draft California Transportation Plan 2050. August 2020. CTP 2050 Strategies Element. p. 32. [https://CTP2050.com/wp-content/uploads/2020/08/CTP2050\\_Strategies\\_Element.pdf](https://CTP2050.com/wp-content/uploads/2020/08/CTP2050_Strategies_Element.pdf)

<sup>5</sup> California Department of Public Health. Office of Health Equity. Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity. August 2015. <https://www.phrases.org/wp-content/uploads/2020/06/CA-Statewide-Plan-to-Promote-Health-and-Mental-Health-Equity.pdf>

California will not be able to achieve climate and other critical goals without a shift in land use and transportation planning. Unfortunately, the state is not making progress necessary to achieve many clean air, public health, equity and environmental benefits of more efficient transportation systems. We appreciate the focus in the CTP 2050 on boosting healthier mobility options for all residents and believe that this must be central to all transportation and land use discussions. As noted in the draft plan, rising vehicle miles traveled “means higher travel costs, a greater risk of traffic crashes and fatalities, higher fuel consumption and worsening air quality, and more wear and tear on infrastructure. That’s why reducing VMT is a core goal of the CTP 2050.”

The focus on VMT reductions must remain a central focus of California transportation, housing, health and air quality agencies, and deserves the strong level of focus included in the draft CTP 2050. While much attention has been placed on Governor Newsom’s order N-79-20 in terms of the electric vehicle targets, the order is clear on the need for continued attention to projects that spur accessible alternatives to driving and thereby reduce VMT: “Supporting bicycle, pedestrian, and micro-mobility options, particularly in low-income and disadvantaged communities in the State, by incorporating safe and accessible infrastructure into projects where appropriate.” Achieving needed VMT reductions will require a significant increase in funding for active transportation and public transit funding. We would like to see a commitment to a substantial shift in the proportion of state transportation dollars toward these goals.

Finally, the CARB draft Mobile Source Strategy 2020 makes clear that growing “dependence on cars for travel threatens the environment, our ability to achieve California’s air quality and climate goals, and quality of life for many Californians, especially the most vulnerable. However, electric vehicles alone cannot solve these problems.”<sup>6</sup> We also note that VMT reduction strategies can contribute to reductions in fine particle emissions associated with brake and tire wear that add to local pollution burdens and will not be fully alleviated by zero emission transportation. The CTP 2050 vision for healthy and equitable communities throughout California demand a coordinated local, regional and state-level cross-jurisdictional focus on the policies, investments and strategies needed to both curb VMT and accelerate deployment of electric vehicles and infrastructure.

### **Build for Zero Emission Travel and Goods Movement**

Transportation sources are responsible for the vast majority of poor air quality challenges in California. This is especially true for communities most impacted by major transportation hubs, freeways, ports, warehouse centers in the Inland Empire and San Joaquin Valley and other diesel hot spots. CTP 2050 provides significant focus on the transition to zero emission transportation as a critical component of achieving critical air quality and climate standards. We appreciate that the plan notes the importance of Governor Newsom’s Executive Order (N-79-20) which established a goal for 100 percent of California sales of new passenger car and trucks be zero-emission by 2035; all drayage trucks to zero-emission by 2035, all off-road equipment to zero-emission where feasible by 2035, and the remainder of medium- and heavy-duty vehicles to zero-emission by 2045.

We know that we must do far more to accelerate the widespread transition to zero emissions to reduce transportation impacts on public health. Personal vehicles, public fleets, the freight sector

---

<sup>6</sup> California Air Resources Board. Mobile Source Strategy 2020 Workshop Draft. September 2020. p. 71.  
[https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop\\_Discussion\\_Draft\\_2020\\_Mobile\\_Source\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop_Discussion_Draft_2020_Mobile_Source_Strategy.pdf)

and other portions of the transportation system must move forward with strong policy drivers, investments in infrastructure and coordination at the state and local levels to build secure a successful transition as rapidly as possible to zero emission technologies.

Again, CARB's draft Mobile Source Strategy 2020 illustrates the wide range of health effects of our current transportation burdens:

*Mobile source emissions contribute to a wide range of heart and lung illnesses, chronic health conditions, increased cancer rates, and premature death. Every year, over 5,000 premature deaths and hundreds of illnesses and emergency room visits for respiratory and cardiovascular disease in California are linked to PM2.5 pollution, of which more than half is produced by mobile sources. Recent research demonstrates that fine particulate pollution impacts not only the heart and respiratory system, but also brain health and adverse birth outcomes. The current COVID-19 pandemic demonstrates that air pollution may be a key factor in increasing the vulnerability of individuals to contracting COVID-19, as well as increasing mortality risk from the virus, and the severity of illness in people suffering from COVID-19. Moreover, for the millions of California residents living in low-income and disadvantaged communities and experiencing disproportionate levels of negative health impacts from air pollution, actions to reduce fossil fuel combustion and move to cleaner power sources are even more important.<sup>7</sup>*

The widespread transition away from combustion technologies (e.g. gasoline, diesel, natural gas) toward zero emission vehicles (e.g. battery electric, hydrogen fuel cell) everywhere possible is critical to achievement of clean air and climate standards. A widespread transition to electric cars, trucks and buses could yield up to \$22 billion in annual public health benefits in California, according to research published in September by the American Lung Association.<sup>8</sup> As the CTP 2050 process moves forward, it is especially critical that the trucking sector make the transition to zero emission as rapidly as possible given projected growth in the freight – and associated health impacts. We acknowledge the attention paid to the negative impacts of freight referenced in the draft:

*Pollution attributed to freight related sources are linked to numerous health and environmental problems, which are elevated in low-income communities and communities of color. Reducing non-exhaust particulate matter such as brake, tire, and road wear and dust, are also crucial to reducing environmental impacts of the freight sector.<sup>9</sup>*

We recommend a high priority be placed on the installation and incorporation of zero emission vehicle charging infrastructure within state-funded projects, as elevated within Strategy 8 of the CTP 2050, and encourage a critical review of infrastructure locations that will have the greatest potential to improve health and reduce disparities. Further, we recommend that strong attention be paid to the development and deployment of charging infrastructure for goods movement via medium- and heavy-duty vehicles.

---

<sup>7</sup> California Air Resources Board. Mobile Source Strategy 2020 Workshop Draft. September 2020. p. 11.

[https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop\\_Discussion\\_Draft\\_2020\\_Mobile\\_Source\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-09/Workshop_Discussion_Draft_2020_Mobile_Source_Strategy.pdf)

<sup>8</sup> American Lung Association. Road to Clean Air. September 2020. <https://www.lung.org/clean-air/electric-vehicle-report>

<sup>9</sup> CalTrans Draft California Transportation Plan 2050. August 2020. p. 56. <https://CTP2050.com/wp-content/uploads/2020/08/CTP2050-Transportation-Plan-Draft-1.pdf>

Thank you for considering our comments, and for developing a thoughtful vision. Our organizations look forward to working with you to ensure progress is made toward achieving a healthier, more sustainable and equitable transportation system serving all of California.

Sincerely,

Will Barrett, Clean Air Advocacy Director  
**American Lung Association**

Linda Rudolph, MD, Director  
**Center for Climate Change and Health**

Kevin Hamilton, RRT, Co-Director  
**Central California Asthma Collaborative**

Matthew Marsom, Vice President for Programs  
**Public Health Institute**

Joel Ervice, Associate Director  
**Regional Asthma Management and Prevention (RAMP)**