



October 12, 2022

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Docket No. FHWA-2021-0004

Dear Secretary Buttigieg:

Thank you for proposing this rule to require states and regions to track emissions of greenhouse gases (GHGs) from surface transportation. As organizations working to protect our environment and the public health, we strongly support this proposal and encourage the Department of Transportation (DOT) to finalize it quickly, with the modifications suggested below.

At Environment America, our mission is to transform the power of our imaginations and our ideas into change that makes our world a greener and healthier place for all. U.S. PIRG is an advocate for the public interest. We speak out for a healthier, safer world in which we're freer to pursue our own individual well-being and the common good.

IIJA funding could make transportation more or less sustainable

The Infrastructure Investment and Jobs Act (IIJA) authorizes almost \$600 billion¹ in funding for surface transportation in the next five years. As federal funding flows in, we must make sure that we are taking this opportunity to make our transportation system more, not less, environmentally sustainable. Our roads can make forms of transportation like walking, biking, and transit more or less accessible, depending on the choices we make. Of the transportation reauthorization funding in the IIJA, 30% percent of funding is discretionary and 70% is formula funded. While the discretionary funding gives state and local governments the most leeway, even within formula funding directed at highways, agencies have the choice to invest in climate problems or climate solutions.

¹ Georgetown Climate Center. 2021. *Issue Brief: Estimating the Greenhouse Gas Impact of Federal Infrastructure Investments in the IIJA*. Georgetown Law. <https://www.georgetownclimate.org/articles/federal-infrastructure-investment-analysis.html>.

If IIJA highway funding is used for expensive new highways and highway expansions, as is already being proposed² by some states³, it will increase emissions and intensify the climate crisis. If, instead, a fix-it-first approach is taken and money is used for repair, maintenance, and modifications that make it easier to reduce vehicle miles traveled, it could reduce emissions and make the transportation system more sustainable and in line with climate goals. Discretionary funding offers more opportunity but also more risks- if the funding is used for projects that reduce growth in vehicle miles traveled like improving and electrifying public transit, creating pedestrian and-bike friendly complete streets, as well as EV charging infrastructure, it could reduce emissions. However, if we use it for highway expansions, or to construct streets and roads that prioritize cars above other modes of transportation, it will lock in increased transportation emissions for decades. We support this rule, which would encourage states and metro areas to invest in solutions, not problems, and to use this opportunity to create a more resilient and functional transportation system.

Current data is insufficient to make smart decisions

The ability to have clear data about the emissions of roads and highways is vital to reducing them. The current Department of Energy (DOE) and Environmental Protection Agency (EPA) state-by-state carbon dioxide estimates do not disaggregate on-road mobile emissions from those produced by air, rail, and marine sources, which made up 17%⁴ of nationwide transportation emissions in 2020. These estimates are also published on a greater than yearlong lag from the FHWA's fuel use data. The new rule would create a source of information that would allow for agencies on every level of government to set targets. This data would allow for governments to better understand how things like land use, housing and zoning policy affect transportation emissions, and would allow for better, more informed, and more data-driven decisionmaking on a wide variety of issues.

Transportation infrastructure is threatened by climate change

Transportation is both a source of planet-warming greenhouse gas emissions, and at risk of climate-related disruption. Reducing the greenhouse gas emissions of our transportation system is vital to protecting our transportation infrastructure from the worst effects of climate change. Airports, roads, railways and seaports all face major threats from climate-related disasters such as hurricanes, storms, wind, drought, heat waves, and wildfires⁵. Long-term sea level rise also is a major threat, with 24% of interstate highway miles⁶ in the Gulf Coast region at risk of being underwater in the next 50 to 100 years. Overall, it's estimated that annual maintenance costs for roads nationwide will increase by \$785 million⁷ by 2050- in a system that already faces a major repair backlog⁸. It's clear that climate change will negatively impact our nation's transportation infrastructure. However, working to sharply cut

² Horrox, James, Bryn Huxley-Reicher, and Matthew Casale. "Highway Boondoggles 7: Wasting Infrastructure Funding on Damaging and Unnecessary Road Projects." *PIRG Education Fund, Frontier Group*: 57.

<https://publicinterestnetwork.org/wp-content/uploads/2022/09/Highway-Boondoggles-7.pdf>.

³ "Louisiana Will Receive \$100 Million More in Funding." 2022. *Roads and Bridges*.

<https://www.roadsbridges.com/iija/news/21286388/louisiana-will-receive-100-million-more-in-funding> (September 8, 2022).

⁴ EPA Office of Transportation and Air Quality. 2022. *Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990-2020*. Environmental Protection Agency. <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P10153PC.pdf>.

⁵ Jonathan Woetzel et al. 2020. *Will Infrastructure Bend or Break under Climate Stress?* McKinsey Sustainability.

<https://www.mckinsey.com/business-functions/sustainability/our-insights/will-infrastructure-bend-or-break-under-climate-stress>.

⁶ US EPA, OA. "Climate Impacts on Transportation."

<https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-transportation> (September 9, 2022).

⁷ Victor Hugo Souza de Abreu, Andrea Souza Santos, and Thaís Guedes Máximo Monteiro. 2022. "Climate Change Impacts on the Road Transport Infrastructure: A Systematic Review on Adaptation Measures." *Sustainability*.

⁸ Zhao, Jerry Zhirong, Camila Fonseca-Sarmiento, and Jie Tan. "America's Trillion-Dollar Repair Bill." *Volcker Alliance*: 54. <https://www.volckeralliance.org/sites/default/files/attachments/Americas%20Trillion-Dollar%20Repair%20Bill%20-%20Capital%20Budgeting%20and%20the%20Disclosure%20of%20State%20Infrastructure%20Needs.pdf>.

emissions can help us avoid the worst impacts, and as transportation makes up the largest portion of the United State's greenhouse gas emissions⁹, it's a necessary target for emissions reductions targets.

This rule has a precedent and is in line with Transportation Performance Management goals

Several state departments of transportation have enacted rules similar to this one to measure and regulate greenhouse gas emissions from the transportation sector. Colorado, Minnesota, Oregon, California, Connecticut, Washington, Pennsylvania, Vermont, Hawaii, Illinois, and Washington D.C's state governments and departments of transportation have all enacted rules that regulate or measure transportation-related greenhouse gas emissions¹⁰. One of the goals¹¹ of the Federal-aid Highway program established by Congress is environmental sustainability, and this rule would go a long way in making progress in that metric.

Modifications

While we appreciate the intention of the proposed rule, we believe it would be strengthened by making the following modifications:

- States and MPOs should be required to track emissions from travel on all roads and set targets for reducing them, not just those on the National Highway System. The NHS represents only about 5 percent of total US roadways, and just over 50 percent of vehicle miles traveled.¹² Limiting the rule to the NHS means that nearly half of the miles driven - and the associated GHG emissions - will remain unaccounted for.
- States and MPOs should be required to take specific actions if they fail to meet the targets they set, such as committing to use their federal funding only for emission-reducing projects until the target is met. Alternatively, incentives could be provided for those states and regions that meet their targets, such as providing extra points in competitive grant programs.
- Both states and MPOs should be required to report every two years on the GHG performance metric, rather than limiting MPO reporting to every four years as proposed. MPOs have a significant impact on transportation investment decisions in metropolitan areas and should be as transparent as states in this regard. Moreover, both states and MPOs should be required to set 8- and 20-year targets for emissions reduction in addition to 2- and 4-year targets, to provide greater visibility and accountability for long-term plans.
- We encourage the FHWA to consider emissions during the entire life cycle of vehicles, not just tailpipe emissions, and to consider other transportation emissions as well. Electric vehicles are increasing in sales, and as California and other states adopt rules that will phase out the sale of gas cars, this trend is likely to continue. As electric vehicles become more common, the emissions associated with highways and driving will shift from tailpipe emissions to those created upstream by

⁹ US EPA, OAR. 2015. "Sources of Greenhouse Gas Emissions."

<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions> (September 12, 2022).

¹⁰ National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure, 87 FR 42401 (Proposed July 15, 2022). Comment ID FHWA-2021-0004-0008, State Department of Transportation of Minnesota, Pennsylvania, California, Colorado, Washington, Hawaii, Connecticut, Oregon, Vermont, Illinois, and District of Columbia, <https://www.regulations.gov/comment/FHWA-2021-0004-0008>

¹¹ Federal Highway Administration. "National Goals - About TPM - Transportation Performance Management - Federal Highway Administration." <https://www.fhwa.dot.gov/tpm/about/goals.cfm> (September 9, 2022).

¹² Federal Highway Administration statistics, <https://www.fhwa.dot.gov/policyinformation/statistics/2020/hm18.cfm> and <https://www.fhwa.dot.gov/policyinformation/statistics/2020/vm3.cfm>.

utilities generating power to charge EVs and those created by the manufacture of batteries for EVs, both of which will be significant sources of emissions as more EVs are sold. While electric vehicles emit fewer greenhouse gases than internal combustion engines, calculating that these vehicles have zero emissions because they have zero tailpipe emissions is inaccurate, and does not set a foundation for informed policy decisions. Only considering tailpipe emissions also means that other emissions from transportation infrastructure are not taken into account when making decisions, such as emissions from asphalt and road construction, urban heat island effects, and habitat loss. This rule should be expanded to include all significant life cycle GHG emissions produced by the transportation sector.

- The rule should be adjusted to account for factors such as population change by states and MPOs. Under the proposed rule, a MPO that loses population and becomes less efficient would meet the target but not an MPO that gains population and becomes more efficient, leading to perverse incentives for MPOs, because all regions are held to the requirement of declining GHG emissions, regardless of population loss or growth. To address this, the rule should permit GHG emissions reductions targets to be adjusted for regional population, such as kilograms of CO₂-equivalent emitted annually per capita.
- The rule sets a target for states to halve their transportation tailpipe emissions by 2030. This would be more effective and realistic if intermediate benchmarks were provided. The FHWA should annualize the existing targets within the rule to make it more likely that states will meet their 2030 targets.
- Current traffic modeling practices have not always been accurate in the past, and do not take into account increased traffic as a result of induced demand. The rule would benefit from better data collection and analysis techniques as well as a more standardized approach to documenting projects within state and MPO transportation improvement plans. It should also be mandated that emissions from induced demand be included in the modeling.

Once the rule is finalized, DOT should commit to providing technical support to states and MPOs to assist them in achieving their GHG reduction targets. For example, DOT should provide tools and best practices for modeling the emissions impacts of various types of projects, to ensure that state and local transportation planners have the information they need to select emissions-reducing projects. In addition, DOT should commit to publishing regular reports on states' and MPOs' progress toward their targets. Accessible, user-friendly data will help state and regional policymakers and other stakeholders assess the impact of transportation decisions on emissions and adjust policies and programs if needed.

Sincerely,

Mackenzie Brown
Environment America Global Warming Associate

Matt Casale
U.S. PIRG Environment Campaigns Director

