

Testimony for Beth Osborne
Director, Transportation for America

Transportation Investments for Solving the Climate Crisis
House Select Committee on the Climate Crisis
Wednesday June 30, 2021

Good afternoon Chairwoman Castor and Ranking Member Graves and thank you for inviting me to today's hearing. It is my pleasure to testify before this select committee today regarding the nexus of transportation, land use, and the emerging and evolving climate crisis our nation and our global community is facing. This issue is incredibly important as the climate crisis will affect our access to food, water, and quality of life, especially in our nation's most vulnerable communities.

I am the director of Transportation for America, a national nonprofit committed to designing the transportation system to connect people to jobs and essential services by all modes of travel. We do our work through direct technical assistance to local and state agencies, research and analysis of how the existing transportation system is working, and policy development and advocacy.

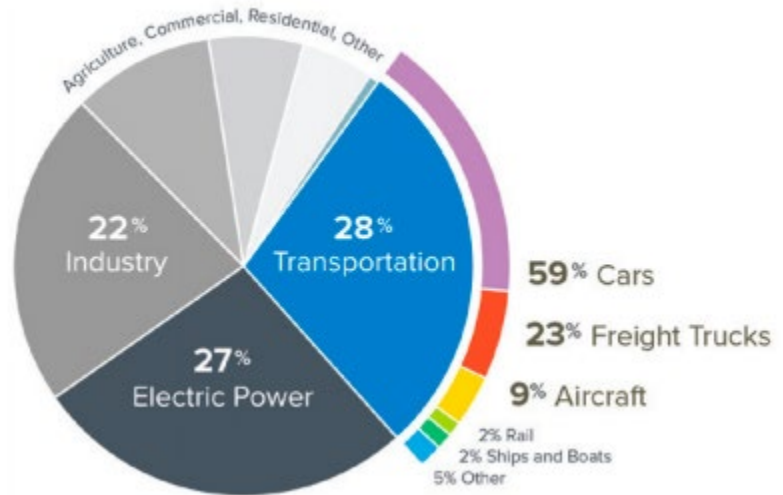
I am here to talk about transportation and land use primarily because transportation is one of the sectors where emissions have been growing the fastest—nearly a third of all US emissions come from the transportation system that moves us and the goods that we consume. But the large majority of those transportation-related emissions come from the vehicles we drive and the dramatic increase in miles-traveled per person are directly related to our land use decisions. Today, I want to make the basic case that we cannot limit our climate efforts within transportation merely by reducing or eliminating emissions from the vehicles themselves—we must also find ways to encourage shorter trips and allow for less driving overall, while also

making our transportation system work far better for the millions of Americans who today either choose not to or cannot drive.

Whereas other sectors are becoming more efficient and reducing emissions, the transportation sector has been going in the wrong direction. To decarbonize transportation, we will need more than new tech or new regulation.

Transportation emissions are driven by two major factors. The first factor is the efficiency of the vehicles we use. While we usually think of the cars that people drive, we also need to consider the trucks that carry the goods we consume. Think how e-commerce has exploded in the past few years. That increase in e-commerce has fueled additional demands for goods mobility, also contributing to emission increases. Without skipping a beat, we can make a huge dent in our transportation emissions through a marked shift towards zero-emission vehicles (such as electric and hydrogen vehicles) for our national fleet of cars and trucks. That means moving towards zero emission, electric vehicles for our public transit fleets, our freight carriers, and incentivizing the consumer shift towards zero emission vehicles. Addressing vehicle emissions is the part of the equation that gets the lion's share of attention.

2018 U.S. GHG EMISSIONS BY SECTOR & SOURCE⁶



The second factor in transportation emissions gets significantly less notice or time. It doesn't have the same allure as new tech. This has to do with how our transportation and development patterns decisions have led to a dramatic increase in the amount each American drives on average, the growing length of those trips, and the inability to make trips safely or conveniently by any mode other than driving. This factor is just as important as the first one; and successfully addressing it involves making changes to the transportation system and the built environment in general to remove the many existing barriers to shorter direct trips, shared trips and non-driving trips. Part of this means getting the government out of the way so that the market can



meet the booming demand for more housing in places where trips are shorter or can be accomplished without having to get in a car for every single trip.

This second factor gets less attention is because there's a perception that the built environment around us is permanent and unchanging, and we just can't control it. In actuality, it is changing all around us all the time, and we've made proactive decisions in recent decades to cut off short

trips and make travel without a car extremely dangerous. Rather than disregard it or get frustrated by our past and ongoing mistakes, we can look at the actions that have created problems and instead harness the vibrant and changing built environment to make the transportation system more efficient. In doing so, we can also make the system less expensive for both government and people, safer, and more equitable, as we discuss in our report from 2020, *Driving Down Emissions*.¹

To the credit of this committee, your report "Solving the Climate Crisis" released last summer got into these issues and covered the various impacts of the transportation system on the climate (and safety, repair and equity) quite well. Additionally, the House transportation reauthorization proposal addresses climate (and safety, repair and equity) by providing funding to fix the current problems in the transportation system but also by seeking to prevent future

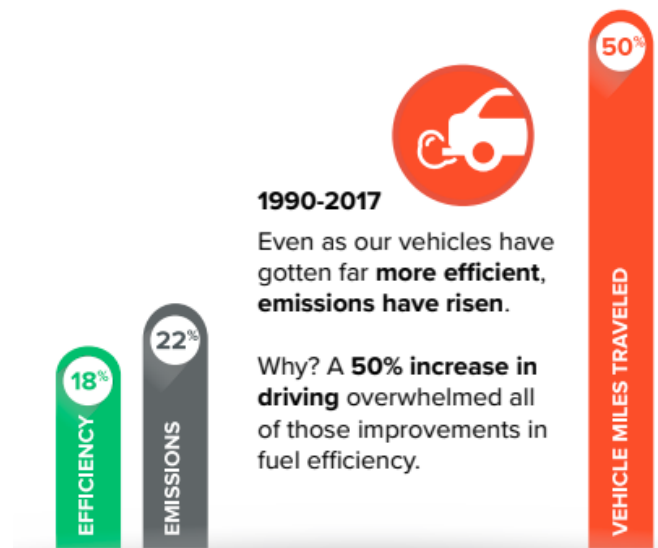
¹ <https://t4america.org/wp-content/uploads/2020/10/Driving-Down-Emissions.pdf>

projects from creating additional problems. We have a history of creating challenges through the larger core programs while fixing them with other smaller programs.

There is a danger in an approach that focuses only on the technology of our vehicles. We have talked for years about making cars more efficient, and we have made some strides. However, our technology-only approach has led to the transportation system becoming less efficient at getting people where they need to go, undercutting the good work we have done at making vehicles more efficient. We can't afford to continue that pattern. Let me be clear: Transportation for America strongly and enthusiastically urges decarbonizing vehicles. We co-lead an electrification coalition called CHARGE², and I was personally involved at

the staff level in crafting legislation to increase CAFE standards—then went to USDOT and worked on implementing them. Even with those gains in efficiency, increases in overall driving wiped out those gains, leaving us with a net increase in emissions. Electrifying the fleet is essential and we absolutely must do it. But we do not have the luxury of stopping with vehicle efficiency, no more than we could improve the efficiency of the HVAC systems in our buildings while leaving the windows open.

We need an approach to climate change that considers both of these factors, bringing the most opportunity to improve the system for everyone who depends on it, while also lowering emissions. About two-thirds of all trips in our communities are under three miles, many of which could be made by biking or walking if it was safe and hospitable. Considering that people pay a premium to live in walkable areas³ and near transit⁴, there is clearly high demand. It is the government that stands in the way of meeting that demand by making it very challenging to build and co-locate housing near jobs, retail, groceries and restaurants. Government also employs a one-size-fits-all approach to roadways that applies high speed highway designs in



² <https://www.chargingusforward.com/>

³ <https://www.nar.realtor/newsroom/real-estate-story-ideas/the-value-of-walkability#:~:text=The%20more%20walkable%20the%20community,homes%20in%20less%20walkable%20areas.>

⁴ <https://realtorparty.realtor/community-outreach/transit-property-values>

developed areas. [The whole reason we built Interstates separated from the surface streets is because it was obvious that they would be both ineffective and unsafe if there were cross streets and traffic lights every 500 feet. Somehow we lost that clarity and started designing roadways as highways through areas with cross roads, driveways, and pedestrians, producing places where traffic is both terrible and walking is dangerous.] Government could get out of the way by deregulating development and updating to roadway designs appropriate to the surrounding area. This way we could build roads that service all users of the system—including local travel, thru-trips, drivers, freight, transit, bicyclists and pedestrians.

Such an approach would not just reduce carbon emissions, it would improve other environmental and public health effects of the transportation system. We often forget, but a vehicle's tailpipe is not the only problem caused by our transportation system. Electric vehicles still generate particulate matter through brake dust and the breakdown of rubber tires. That is in addition to the other environmental damage that roads bring to cities through their construction, including the loss of green space, the increase in impervious surface, and the addition of surfaces that can increase the urban heat island effect. In fact, the roads themselves have been found⁵ to emit as much pollution as cars on a hot day, days that are occurring more often.

This approach also pays dividends to the consumer through lower transportation costs. Transportation is usually the second largest household expense⁶. By making it possible for a family of five to function with two cars instead of four (like mine required growing up) can save substantial funds that could be better used for property investment, household improvements, education, and retirement.

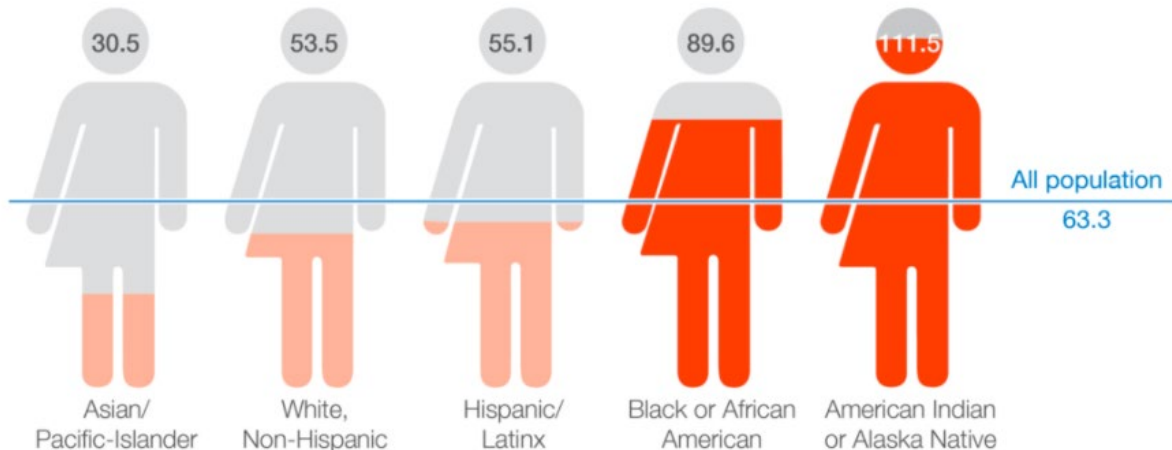
As someone who struggled to find work as a college student in Baton Rouge for lack of a car but could not afford a car for lack of a job, our car-only system is a massive barrier to economic opportunity. Those who try to get around without a car may not have any alternative, and they risk their lives walking on roads that are more dangerous than they have been in 30 years. This burden is not shared equally: Black and Native Americans along with older Americans are more likely to be struck and killed as a pedestrian. Risking your life to cross the street is not much of a choice, but that is the choice we have given too many people in too many communities. There are huge equity and climate implications when we require even short distances to be traversed only through driving.

⁵ <https://www.smithsonianmag.com/smart-news/hot-days-asphalt-may-release-much-air-pollution-cars-180975756/#:~:text=During%20heat%20waves%2C%20pavement%20can,harmful%20particles%20into%20the%20air&text=The%20study%2C%20published%20by%20a,being%20released%20into%20the%20air.>

⁶ <https://htaindex.cnt.org/map/>

The burden is not shared equally

Relative pedestrian danger by race and ethnicity
(2010-2019)



If we ignore our overall patterns of development, the built environment, and transportation, we could end up with the terrible outcome of mostly decarbonizing our cars while doubling down on the danger, public health and inequity of the current system. Instead, we can and should remove the barriers that make it so hard to get around without a car, driving shorter and more direct routes, and sharing trips. We can do this by meeting demand for more walkable communities, designing our streets for safety over speed, measuring the carbon impacts of our transportation investments, providing high quality transit, and both measuring and focusing on connecting people—no matter how they travel—to jobs and opportunity.

If we take this approach to decarbonizing our transportation system, we will reduce carbon emissions, improve public health outcomes, improve roadway safety, save people a lot of money, and improving equitable access to economic opportunity.

I thank you for your time and look forward to the committee discussion and questions.