

# Transportation and Climate: Federal Policy Agenda

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## Summary

For too long, federal transportation policy has prioritized car travel and the infrastructure to support it—roads, bridges, highways, and parking lots—while neglecting cleaner transportation options like transit, walking, and biking. The COVID-19 crisis has further highlighted these inequities in our transportation network, as people who have cars can more easily access groceries and healthcare than those without cars, who must contend with drastically reduced transit service and streets that weren't designed for bicyclists and pedestrians. As a result of decades of lopsided federal priorities, transportation has become the largest source of greenhouse gas emissions in the U.S., with passenger vehicles responsible for the lion's share. In order to reduce emissions from transportation and avoid the worst impacts of climate change, we need to reorient federal spending to promote a cleaner, more equitable transportation system.

Whether it's in the context of an economic recovery package or a surface transportation reauthorization, Congress must act now to put us on the fastest, fairest path to net-zero emissions. This transportation and climate policy agenda proposes four strategies to do that:

- 1. Make public transit a priority;
- 2. Make the current roadway system more efficient;
- 3. Measure the outcomes that support today's goals, including reducing emissions and connecting people to destinations; and
- 4. Promote intercity passenger rail.

## Introduction

The COVID-19 health and economic crisis has revealed deep inequities and failures that have long existed in the U.S. transportation system. Existing infrastructure and policy have greatly contributed to the climate crisis by failing to safely and affordably connect people to jobs and services without a car trip, often over some distance. For the better part of a century, federal transportation policy has prioritized building highways and designing roads for high speed, long distance car travel. By overwhelmingly supporting highway construction and incentivizing highway-oriented development, other options like transit, walking, and biking have become

increasingly unsafe and inconvenient. In this way, federal policy has forced most Americans to drive more and farther to get to jobs and access necessities like healthcare and food, leading to increasing emissions.

For too long, participating in the economy has meant needing a car. After decades of this policy, transportation is now the nation's single largest source of greenhouse gases (GHG), accounting for 29 percent of emissions, 83 percent of which comes from driving.¹ Cars and trucks will continue to be an important mode in our transportation system, and we need to take steps to reduce their contribution to climate pollution including rapidly transitioning to zero-emission vehicles. But while a fully electric vehicle fleet is necessary to meet any ambitious climate targets and stave off the worst effects of the climate crisis, that alone is not sufficient. A fully electric vehicle fleet will not improve connectivity for people who do not have cars, make our roads safer, or solve congestion. Any effective strategy to reduce emissions from transportation must include safe and convenient options that allow Americans to take fewer and shorter car trips.

This transportation and climate policy agenda proposes four (4) strategies, in addition to electrifying vehicles, to reduce emissions: 1) make public transit a priority; 2) make the current roadway system more efficient; 3) measure the outcomes that support today's goals, including reducing emissions and connecting people to destinations; and 4) promote intercity passenger rail. These strategies, discussed in detail below, respond to the inseparable relationship between the climate crisis and our transportation infrastructure, and provide a path to more transportation choices for the American people, and a cleaner, healthier, and more prosperous future for all.

The COVID-19 public health crisis has spotlighted how those with a car can easily access groceries, healthcare, and move about their community. Yet those who rely on transit must now contend with drastically reduced service, and those who walk or bike are still reliant on communities and roads designed without concern for those outside a car. The crisis has also revealed how transit is essential to our communities and economy. A recent report from TransitCenter finds that 2.8 million, or more than a third of, transit riders are considered "essential workers" during the COVID-19 emergency.<sup>2</sup> This includes over 600,000 transit commuters who work at hospitals, in doctor's offices, or as home health providers; 165,000 people who take transit to jobs at grocery stores or pharmacies; and 150,000 workers who work in social services. Those abiding by "shelter in place" orders who normally do not or have never taken transit now find themselves transit-dependent—dependent on others who take transit to keep our health care and supply chains running.

The current transportation system also leads to more pollution, drives up household transportation costs by making everyone own a car, and leads to unsafe conditions for those that don't have one. Those challenges impact the poor and people of color most—and also contribute to the underlying health conditions that make death from COVID-19 more likely.

Any future infrastructure investment—whether additional economic relief and recovery or a surface transportation reauthorization—should support transitioning to a more sustainable and equitable transportation system. This means prioritizing investments which improve access to jobs and services by all modes of travel, thereby enabling Americans to have the safe and convenient choice to walk, bike, take transit, or even a shorter car trip. Together, along with investments in vehicle electrification, we can hit our emission goals, and likely hit them sooner.

This public health and economic emergency cannot be an excuse not to make fundamental reforms to the transportation system. The U.S. can recover in a way that allows people to be more productive *and* provides them with less carbon-intensive ways to access economic opportunities.

To respond to the climate crisis, recover from the economic crisis, and create a healthy and prosperous future for all, we need a comprehensive federal policy agenda. While these recommendations are targeted at federal legislation, many of the proposals have and can be adopted immediately at the state or local level.

## **Policy Agenda**

### Make public transit a priority

To reduce transportation emissions, we need to reduce the distance that people are required to drive. To accomplish this, we need to provide the public with safe and convenient transportation options. Too many are forced to drive because they are either not served by transit, or they rely on systems that are not adequately funded or run frequently enough. Transit provides local communities with extraordinary benefits beyond reduced emissions, including improved economic opportunity, reduced congestion, cleaner air, mobility choice, better health outcomes, and improved quality of life.

Chronic underfunding has left too many communities with deteriorating systems and infrequent, unreliable service. While highways receive more than 80 percent of surface transportation funds, transit is left with the remainder—an amount that cannot meet today's needs. There are transit capital projects waiting for over \$23 billion in funding.<sup>3</sup>

Investing in public transit is an investment in jobs across the country. Operating money for transit produces a significant number of jobs per dollar, because operating is essentially all labor, and can be implemented immediately, preventing layoffs. Capital improvements to public transportation supports thousands of manufacturing jobs, in communities small and large, in nearly every state across the country. Every \$1 billion invested in public transit creates more than 50,000 jobs and returns \$3.7 billion over 20 years.<sup>4</sup> Our economic and social recovery relies on everyone reaching jobs and necessities—including those not regularly using a car to get around. Reliable transit service is needed for Americans to get to jobs and help the economy to bounce back quickly.

### **Recommendations:**

### **ELECTRIFY TRANSIT BUS SYSTEMS**

• Provide adequate resources. Transit agencies currently lack adequate funding to purchase zero emissions vehicles, retrofit and construct maintenance facilities to serve these vehicles, and fund training for maintenance staff. Rather than providing a separate, smaller bucket of money for clean buses through the Low or No Emission Bus Program, Congress should require that the Bus and Bus Facilities program be used exclusively to procure no- and low- emission vehicles and the infrastructure needed to support them. Congress should also significantly

increase funding for the program to support the demand for clean vehicles and related infrastructure. This change should be phased in over 5 years to give U.S. bus manufacturers time to retool their facilities. This eliminates the need for the separate Low or No Emission Vehicle program and ensures all federal funding for buses and bus facilities will contribute to a cleaner transportation system.

### PROVIDE MORE MONEY, INCLUDING FOR OPERATIONS

- Fund transit at the same level as roads. Currently, the federal government splits federal funding between highways and transit 80–20. This is based on a 1982 bargain to raise the gas tax and hold transit to 20 percent because drivers were paying the gas tax that funds the program. Gas taxes haven't covered the cost of the program since 2008. And a COVID–19 recovery bill will have no gas taxes paying for it at all. Transit is needed to support essential workers and to connect millions more workers to jobs as part of the economic recovery. Congress should provide transit with at least as much funding as highways.
- Treat transit projects as generously as highway projects. The federal transportation program will fund up to 80 percent of a road project (even 90 percent in limited cases), while it will only fund up to 50 percent of a transit project. This not only disincentivizes investment in public transit, it creates the false perception that public transit is expensive. Congress should end the rider which has limited the federal share of transit projects to 50 percent.

# States have discretion to spend their transportation dollars more equitably between modes.

• Prioritize transit maintenance by providing adequate resources. Federal law allocates twenty percent of the highway trust fund to public transit. Unlike in the highway program (which allows states to neglect their repair needs,) these funds are primarily spent on maintenance. Unfortunately, this still underfunds our transit maintenance needs. In order to truly prioritize maintenance of public transit systems we must provide the necessary resources. Congress should substantially increase the formula public transit maintenance funds to a level that the Federal Transit Administration estimates will substantially or entirely reduce the maintenance backlog.

# States can provide additional resources for transit maintenance, but would be boosted by a major federal investment.

 Provide operating support for public transit. While the federal government will help local communities build new public transit, it provides limited support in small and rural communities and no support in urban areas to operate their systems. While Congress took the rare step of providing \$25 billion in emergency operating support in the CARES Act, continued ridership losses and revenue shortfalls suggest that more resources will be necessary to ensure public transit agencies can continue to provide safe and reliable service. Additional targeted financial assistance for operations to ensure the continuation of safe and reliable service into the future—including when this crisis has subsided but agency budgets are still experiencing strain—will likely be necessary. **Congress should provide public transit agencies with additional operating support.** 

## States can provide greater operating support for transit agencies in their communities.

### IMPROVE THE CAPITAL INVESTMENT GRANT (CIG) PROGRAM

• The Capital Investment Grant (CIG) program supports local communities that have chosen to expand or build new public transit systems. It is the primary program that transit project sponsors use to build or expand public transit. But this program is discretionary and limited to ~\$2.6 billion, which has failed to keep pace with increased construction costs and needs to address operational bottlenecks. Further, in recent years, the Federal Transit Administration (FTA) has failed to communicate with Congress, project sponsors, and the public as to the status of the program and projects seeking funding, undermining the efficient operation of this program and placing a greater burden on local communities. Congress should make significant statutory reforms to the CIG program and increase funding.

### PROMOTE TRANSIT ORIENTED DEVELOPMENT (TOD)

Locating housing and commercial development around existing and planned transit stations (TOD) supports, and leverages, investments in transit, enabling more people to access the service. To ensure these investments are available to all, **Congress** should require states, in coordination with local governments, to develop **equitable TOD plans** that identify priority areas and support implementation of sustainable community transportation and land use plans, creating convenient, safe multi-modal access to transit, with an emphasis on neighborhood-scale, non-motorized access. Further, **Congress should require that HUD and USDOT** coordinate to leverage billions of dollars in existing loan authority that could support mixed-income, mixed-use development and provide new revenue streams for transit, affordable housing, and local governments. Under current law, both the Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation Improvement Financing (RRIF) are supposed to include TOD projects. However, since 2015, USDOT has failed to approve any TOD applications or provide policy guidance on what it would take for future applications to gain approval.

States don't need to wait for Congress. States can create an eTOD and Mobility Plan today.

### Make the current roadway system more efficient

Our current road network prioritizes high speed car travel above all else, with little consideration for those walking, biking, and taking transit. New roads induce more vehicle mileage and car trips that otherwise would not be made, increasing emissions. To reduce emissions, we need to use existing roads more efficiently to move more people by all modes of travel. For the economy to recover and thrive, all Americans need to access jobs and other essential services, regardless of the mode by which they travel. Investing in complete streets and prioritizing roadway maintenance over expansion create jobs and reduce emissions.

Repair and maintenance projects spend money faster and create jobs more quickly than building new capacity. Maintenance jobs are open to more kinds of workers, spend less money on equipment and more on wages, and spend less time on plans and permits. Complete Streets, which are streets that support biking, walking, driving, and taking transit, are critical to making sure people can get where they need to go safely, reliably, and affordably. These are safer streets, designed with all users in mind, that help local economies and small businesses thrive from increased foot traffic. Building Complete Streets also creates thousands of jobs, putting Americans directly to work on infrastructure.

### **Recommendations:**

### DESIGN STREETS TO MAKE THEM SAFE FOR BIKING AND WALKING

• Every single transit trip and many driving trips begin and end as a walking trip; but too often, walking is dangerous or unpleasant. Today, most roads—not just highways—are designed to move vehicles at the highest speeds possible, and are not designed for people walking, biking, or taking transit as a priority. With countless Americans practicing social distance walking and exercising outside in their neighborhood, many communities have chosen to close roadways and expand sidewalks and pedestrian space to address the inadequacy of existing pedestrian infrastructure. Congress should create a \$4.5 billion annual fund to retrofit existing roadways into Complete Streets and to require roads built or rebuilt in developed areas (no matter the pot of federal funding used) to be safe and economically prosperous for those on the corridor.

States don't need to wait for funding from Congress. The implementation of Complete Streets has already been successful at spurring economic development and making streets safer all across the country.9

### PRIORITIZE MAINTENANCE OVER EXPANSION

• Repair projects create more jobs per dollar spent because funding does not have to go to pricey right of way acquisition. New highways and lanes induce more driving, leading to more emissions and ultimately more congestion, a terrible feedback loop often called "induced demand." Driving increases in exact proportion with lane-mileage—a 10 percent increase in lane miles will lead to a 10 percent increase

in driving.<sup>10</sup> By prioritizing maintenance, we can improve our infrastructure and create jobs while slowing the rate of vehicle miles traveled (VMT) growth and emissions. Congress should require that maintenance be prioritized within the National Highway Performance Program (NHPP) and the Surface Transportation Block Grant Program (STBG).

# A handful of states already prioritize maintenance in their capital spending, proving that it can be done without Congressional mandate.<sup>11</sup>

### **ENSURE NEW VEHICLE TECHNOLOGIES DON'T LEAD TO EMISSIONS INCREASES**

• New technology brings the prospect of automated vehicles, which can operate without a driver — or a passenger, leading to emissions (and congestion) from empty cars. According to a recent report by the Union of Concerned Scientists, automated vehicles (AVs) could increase driving by 49 percent.<sup>12</sup> The U.S. Department of Energy projects a 15–100 percent increase. Congress should encourage states and local communities to implement innovative policies to maximize the efficiency of local transportation networks to maximize the benefits of the system and new mobility while minimizing impacts. This should include supporting local community efforts to create zero occupancy vehicle fees and requiring all AVs to be electric.

### **USE PRICING TO REDUCE EMISSIONS AND CONGESTION**

• Pricing is a strategy to manage roadway use by charging motorists for access to a lane, road, or specified area. By encouraging some people to drive less, particularly during peak periods, pricing can reduce pollution and spread out traffic, while generating revenue that can be reinvested into the operation and maintenance of roadways, as well as parallel roadways and transit in the area for those that want to avoid the cost or do not drive. Reducing congestion through traffic management can avoid expensive roadway expansions and vehicle emissions generated by driving on expanded roadways. Further, emissions can be reduced if pricing revenue is invested in alternatives that truly reduce emissions, such as transit, biking, and walking infrastructure. Currently, this is not permitted on existing interstates and National Highway System roads. Congress should support local community efforts to enact transportation pricing.

# Measure the outcomes that support today's goals, including climate and access

We measure all the wrong things in our transportation system and therefore get the wrong outcomes. Instead of measuring whether people can get where they need to go (e.g., jobs, healthcare, and grocery stores), we measure how fast cars are moving. Rather than being required to reduce transportation GHG emissions and VMT, states are distributed more money if their residents drive more and burn more gasoline. These perverse incentives need to change so we support today's priorities, including reducing GHG emissions and connecting Americans with economic opportunity.

### **Recommendations:**

### SET PERFORMANCE MEASURES FOR REDUCED GHG AND VMT PER CAPITA

• In the 2012 surface transportation authorization, Congress gave states wide discretion over spending in exchange for a weak, opaque system of accountability. States are required to set targets for transportation safety, state of repair and traffic movement, but the targets can be set for worsening outcomes (e.g., a slower rate of growth in roadway deaths) and there are no rewards for hitting targets nor effective penalties for missing them.<sup>13</sup> After seven years most of those targets are still not public. Further, states are not measuring the right things. States and communities should be required to measure and report GHG emissions and VMT per capita effects of their transportation investments. USDOT should provide technical assistance to states and communities that do not already measure emissions and VMT.

# State Departments of Transportation can do this today, and several states, including California, are currently doing this.

### MEASURE HOW WELL THE TRANSPORTATION SYSTEM CONNECTS PEOPLE TO DESTINATIONS

• Today, we measure speed and traffic flow on roads, failing to even consider whether a traveler arrives at their destination. Instead, we should measure how the system, and any new investment, connects people to jobs and services by all modes of travel. This would capture and value shorter car trips as well as biking, walking, transit, and passenger rail trips, leading to infrastructure investments which support these trips. It is time to harness technology to create an apples-to-apples comparison of the benefits of all projects, supporting better transportation planning and spending. Congress should require the USDOT to collect data necessary to measure access to jobs and services, and set national goals for improvement.

Virginia has successfully been using destination access to assess infrastructure spending and to ensure limited taxpayer dollars are spent wisely.<sup>14</sup>

### **IMPLEMENT A BUY CLEAN STANDARD FOR FEDERALLY FUNDED PROJECTS**

Updating and maintaining our transportation infrastructure will require billions of dollars in manufactured goods such as asphalt, cement, and steel. The federal government can support clean manufacturers who are reducing emissions and creating well-paying, union jobs by accounting for the embodied carbon emissions in certain products and ensuring only the cleaner product options get used.
 Congress should require USDOT to implement a "Buy Clean" standard for all transportation infrastructure projects that use federal dollars. 15 State DOTs and other entities that receive federal funding for infrastructure would need to direct all businesses competing for contracts to submit an Environmental Product Declaration (EPD) that accounts for the embodied carbon emissions in manufactured materials

used for the project, and then heavily weight the EPD into their contract award decisions. Congress should similarly require USDOT to adopt a Buy Clean policy for all federally managed transportation infrastructure projects. This will help ensure that transportation infrastructure projects in the U.S. are completed with the lowest emissions possible.

California requires agencies to consider the embedded carbon emissions from materials like glass and steel when contracting for public infrastructure projects.

## Promote intercity passenger rail

Passenger rail is far more efficient than air travel for short distances. Amtrak's national network of long distance and state–supported routes, along with the Northeast Corridor, provide essential transportation connections for local communities. This service is threatened by both a lack of funding and policy which fails to truly support a robust passenger rail system. Our vital rail infrastructure requires significant investment to maintain and expand service. These investments are costly and occur over many years and therefore require stable, sustained, multi-year funding. At the same time, policy makers must create and enforce laws that will enable passenger rail to operate efficiently and to compete for riders across the country.

Supporting passenger rail provides an unmatched opportunity to invest in the economic revitalization of small and midsize communities. Rail service provides communities of all sizes with connections to jobs and services and is a low-carbon alternative to driving or flying.

### **Recommendations:**

#### **PROVIDE STABLE FUNDING**

 It is transportation dogma that major airport, highway, and transit investments would not be possible if it were not for multi-year, dedicated funding. But Amtrak has always been expected to do without such support. It is long past time that Congress provide dedicated passenger rail funding.

#### **CREATE REGIONAL INTERCITY RAIL COMMISSIONS**

Most intercity passenger rail serves a multi-state region, with passengers
regularly traveling across state lines. Congress should incentivize new multistate passenger rail compacts to foster better regional collaboration to support
passenger rail service, improving coordination between governors, state
departments of transportation, and other relevant state and local officials and
entities.

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