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BUILD BACK BETTER — REBOOTING THE U.S. ECONOMY AFTER COVID-19

Public Transit and Transportation Infrastructure: Creating Jobs and Supporting Transit Across the United States

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Summary

As Congress contemplates how to provide economic relief and create desperately needed employment opportunities for millions of Americans suffering as a result of the economic havoc wrought by the COVID-19 pandemic, lawmakers have the chance to ensure that we build back better, in ways that create millions of well-paying jobs and advance a low-carbon economy addressing the climate crisis. Research shows that smart climate action is not only good for but essential to economic growth.[1] These objectives must go hand in hand.

One way Congress could immediately create millions of good jobs and support state and local governments nationwide is to dramatically increase investment in public transit systems and transportation infrastructure. **When every $1 billion invested in public transportation creates nearly 50,000 jobs and returns $5 billion** in economic activity.[2] Expanding investment in the long backlog of "shovel-ready" public transportation projects provides desperately needed jobs and economic stabilization immediately and sets up long-term economic growth, higher quality of life for millions of Americans, and a low-carbon transportation sector.

Background

Local transit budgets are collapsing due to the COVID-19 travel reductions and economic contraction.

- In March 2020 alone, the TransitCenter observed **a 60–70 percent reduction in ridership of public transit** across the United States and estimates a $26–$40 billion budget shortfall for public transit systems by the end of 2020—or 35–55 percent of their annual budget.[3] This is due to decreased fares but also shortfalls in tolls, local tax revenue, and dedicated state funding—as well as increased COVID-related costs for cleaning and social distancing. If the last recession is any indication, transit agencies may be forced to **reduce service, increase fares, shift capital funds to cover operating costs, cut staff hours, and lay off workers.** [4]

COVID-related stay-at-home orders and reduced public transit is revealing acute access and safety problems in the United States.

- The stay-at-home orders have revealed that **a large share of commuters (36 percent according to one estimate[5]) count as essential workers**. Changes to transit service are forcing workers to choose between the risk of contracting COVID-19 on public transit, walking along unsafe roads, or increasing the use—and associated costs—of personal vehicles. This highlights the dependence by many on public transportation and the lack of good, affordable alternatives, especially for accessing jobs and other essential needs. As complementary micromobility companies like e-scooter providers take a financial hit from COVID-19,[6] it exacerbates the existing issues with first- and last-mile solutions. Lastly, the frighteningly high pedestrian strike and death rates in the United States, which increased 35 percent between 2008 and 2017,[7] underscores how **too few streets are "complete streets"** that offer space for biking, walking, driving, and public transit so that everyone can get where they need to go safely, reliably, and affordably. This flexibility in travel is more important than ever to keep the millions of essential workers safe.

The United States already significantly underfunds existing transportation infrastructure—including public transit, roads, bridges, tunnels, ports, and airports.

- U.S. transportation infrastructure is in bad shape. The American Society of Civil Engineers (ASCE) has given a "D-" grade to U.S. transit infrastructure; a "D" for highways, aviation, and inland waterways; and a "C+" for bridges and ports.[8] **The backlog of maintenance, repairs, and enhancements needed will cost a collective $800 billion**. The Capital Investment Grants (CIG) Program—the main source of federal funding for transit—has only $2.6 billion appropriated annually compared to the $23 billion in requests for CIG transit funds.[9] There are also $28 billion in authorized federal spending sitting idle—such as in the Transportation Infrastructure Finance and Innovation Act and the Railroad Rehabilitation Improvement Financing program—that can be appropriated toward transit-oriented community development.

Recommendations for Congress

COVID-19 response measures can address these problems in combination by providing relief to local transit budgets and workers, and helping strapped state and local governments invest in their transportation infrastructure—creating millions of jobs, saving money and spurring economic activity.

1. **Increase funding to fill the budget gaps of local transit agencies and support their ongoing operating costs.** The recent CARES Act appropriated $25 billion through the Urban Areas and Rural Formula programs to help transit authorities cover capital, operating, and other expenses related to COVID-19. In contrast, the 2009 Recovery Act provided only capital funds for transit authorities, which led to many agencies having to buy buses or railcars that they could not afford to operate.[10]

   Therefore, Congress should:

   - **Provide an ongoing support of $25 billion annually for transit operations** that will not only cover a large share of the $70 billion annual expenses, it will allow transit authorities to improve reliability and expand service, lower fares, and free up local revenue for other infrastructure investments.

2. **Reorient transportation funding toward "fix-it-first" principles and "Complete Streets" infrastructure projects** that create the most jobs while improving U.S. transit systems. "Fix-it-first" provisions focus on maintaining and repairing existing roads, bridges, and transit systems over the expansion of new roads and highways. "Complete Streets" increase access to jobs and essential services by ensuring roads offer space for biking, walking, driving, and transit that is safe and affordable for all citizens.

There is a tremendous need for maintenance across the United States. The U.S. Department of Transportation estimates a public transit maintenance backlog of approximately $99 billion nationally.[11] The highway repair backlog alone is estimated at $400 billion.[12] Between 2009 and 2014, states each invested an average of $21 billion per year on road repair and road expansion; each new lane-mile averages $24,000 in repair each year.[13] Achieving just sidewalk compliance with the Americans with Disabilities Act would require billions, not including new bike lanes and sidewalks.

One analysis of transportation spending showed **that spending on public transportation creates 31 percent more jobs per dollar spent than spending on new roads, and repairing roads creates 16 percent more jobs than expanding new roads.**[14] This jumped to 70 percent higher for every dollar of 2009 Recovery Act spending on public transportation over roads. Increased funding for fix-it-first and Complete Streets projects will engage more than 2,000 manufacturing facilities and companies throughout the United States that are directly tied to supplying materials for the repair, upgrade, and creation of new transit systems.[15]

Therefore, Congress should:

- **Invest $20 billion annually for public transit maintenance over the next five years** to nearly wipe out the maintenance backlog, save operating costs going forward, and create 40,000 job-years of work.
- **Reform the $45 billion in annual highway formula funding** through the National Highway Performance Program and the Surface Transportation Block Grant Program to require that formula dollars be spent on repair, and require that new expansion be funded through a competitive program. **Per dollar, this would create 16 percent more jobs than expansion and return $5.20** in the form of lower vehicle maintenance costs, fewer delays, reduced fuel consumption, improved safety, lower road and bridge maintenance costs, and reduced emissions as a result of improved traffic flow.[16]
- **Invest $4.5 billion annually through a Pedestrian Priority set-aside within the Surface Transportation Block Grant Program** to help state and local agencies plan and execute their Complete Streets projects and training, which can avoid billions of dollars and thousands of lives lost annually in pedestrian- and bicyclist-related crashes.[17]

3. **Invest in electric vehicle (EV) charging infrastructure in every state across the country.** The U.S. EV industry now boasts over 200,000 American jobs and is expected to make up 10 percent of the market share by the mid-2020s, and over 50 percent by 2040. In order to meet plug-in EV demand, the U.S. must deploy at least 330,000 new public charging outlets by 2025.[18]

   Therefore, Congress should:

   - **Invest a minimum of $2.3 billion** to close the gap left by existing state and Volkswagen funds devoted to deploying public charging infrastructure.[19] Increasing funding for EV infrastructure through DOE's **Clean Cities Program, Office of Vehicle Technologies Program,** and **State Energy Programs** will lead to the creation of careers dedicated to building, installing, and maintaining EV infrastructure throughout the United States.
   - **Invest $1 billion in competitive grants from the Highway Trust Fund** to allow for the construction of electric vehicle charging infrastructure along designated alternative fuel corridors—such as proposed in the America's Transportation Infrastructure Act of 2019.[20]

4. **Establish 'Buy Clean' incentives for the concrete used in transportation infrastructure projects.** Concrete is one of the essential building blocks for infrastructure. Reducing CO_2 from the concrete used in these projects requires investments to scale up existing approaches and spur innovation in low-carbon cement and concrete. Approaches such as improving energy efficiency in cement plants, optimizing concrete formulations to use more supplementary cementation material instead of Portland Cement, and matching performance requirements to actual needs for each project could reduce embodied carbon emissions by 20 percent.[21] Pilot projects could demonstrate more innovative solutions, such as negative-emissions concrete using synthetic aggregate made from captured CO_2.[22]

   Therefore, Congress should:

   - **Establish a purchase preference for concrete that has a CO_2 intensity of at least 10 percent lower than the national average,** with the preference increasing as CO_2 intensity decreases. To qualify for the incentive, a bidder should be required to submit an Environmental Product Declaration (EPD) documenting the CO_2 intensity of the concrete in its bid.
   - **Direct the Federal Highway Administration (FHA) to review and update its specifications for the use of concrete** to simplify the optimization of the concrete mix to the performance needs of the project.
   - **Establish a pilot project program within the FHA** to demonstrate innovative cements and concrete mixes that can reduce CO_2 intensity of concrete by 50 percent or more**.**

Endnotes

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