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# *Transportation*

Recommendations to Reduce Congestion,  
and Build More Resilient Infrastructure

## MEETING AMERICA'S INFRASTRUCTURE NEEDS

### Key Takeaways:

- Americans need affordable, dependable transportation to maintain our way of life. However, the transportation sector is also the largest source of greenhouse gas emissions in the United States.
- Reforming government-imposed barriers for infrastructure projects will give taxpayers more bang for the buck, inject more private capital into projects, and deliver cleaner, more resilient infrastructure.
- Reducing congestion provides many economic and environmental benefits including savings on fuel, reduced pollution, fewer greenhouse gas emissions, and less traffic noise.
- Congress and the administration should eliminate energy subsidies, including preferential treatment for fossil fuels. A next-best strategy should be to make existing subsidies more economically and environmentally efficient while not adding more to the federal debt.

Affordable, dependable transportation options are critical for Americans' daily needs. Whether it is driving to work, busing to school, flying to a favorite vacation spot, or transporting goods on a barge, transportation makes our lives easier, safer, and more efficient. By sector, transportation is also the largest source of greenhouse gas emissions in the United States, accounting for 29 percent of domestic emissions.<sup>1</sup> The largest sources of transportation emissions are light-duty vehicles (58%), medium- and heavy-duty trucks (24%), and aircraft (10%).<sup>2</sup> Some 90 percent of America's transportation needs are met through petroleum (gasoline, diesel, and jet fuel).<sup>3</sup>

Globally, transportation accounts for about 20 percent of total carbon dioxide emissions.<sup>4</sup> Passenger road vehicles comprise 45.1% with road freight (29.4%), aviation (11.6%), and shipping (10.6%) making up the rest.<sup>5</sup>

The widespread use of oil as a transportation fuel is because it is affordable and reliable, not because the industry has a monopoly or manipulates the market. The market is changing, however, and innovation and competition is diversifying the transportation sector, providing consumers more choices. As a multi-trillion-dollar market, the transportation sector is ripe for competition and disruption, where economic alternatives to oil-based fuels will benefit tremendously from the profit opportunity that is available. Those alternatives could be batteries, biofuels, natural gas, propane, hydrogen, drop-in fuels, or a fuel that may not even exist yet. For instance, December 2021 marked the first time that electric vehicle sales in Europe outpaced diesel.<sup>6</sup> Still, most vehicles rely on the internal combustion engine.<sup>7</sup>

For their part, U.S. policymakers have not wanted to follow the European model where petroleum prices have been consistently high, mostly because of high taxes. Because international demand for oil (and thus the price) is always changing, higher taxes may not meaningfully reduce consumption or drive a switch to alternative fuels. A July 2019 paper in the National Bureau of Economic Research estimates a global carbon tax of \$200 per ton would only eliminate four percent of oil production and could impose high costs for relatively low cumulative emissions avoided.<sup>8</sup> However, a paper in the *American Economic Journal*, using Sweden as a case study, found that using price elasticity simulations may in fact underestimate the emissions reductions impact of a carbon tax.<sup>9</sup>

Whether or not carbon taxes might work, they are politically difficult to impose and maintain. When prices are high and the economy is slumping, people tend to worry less about the environment and climate change and more about simply making ends meet.<sup>10</sup> In the spring of 2022, as American prices at the pump soared above \$4 per gallon, the priority for most families was determining ways to get to work and take their kids to baseball practice without busting their budget. The stark reality is that even when the economy is strong and energy prices are more affordable, Americans' willingness to pay to reduce emissions is still quite low.<sup>11</sup> Consequently, the role for public policymakers should be to open market opportunities and remove barriers for the development of lower-cost alternatives rather than raise prices on households and businesses. Taxes,

regulations, and subsidies will change behavior at some level, but a policy that works best for consumers will be one that unleashes innovation and competition and empowers the market to reduce any green premiums that exist.

Furthermore, as in every sector, transportation climate policy requires pragmatism and careful consideration of costs and benefits. Oil use has an environmental cost, as does mining for batteries, charging an electric vehicle from a coal-fired plant, or converting land for biofuel use. Effective climate policy must take into consideration lifecycle emissions, potential unintended environmental consequences, and abatement costs per dollar spent. Energy pragmatism should also recognize that oil is expected to be a transportation fuel source well into the future, so policies that restrict development in the United States could outsource production to dirtier authoritarian regimes (For further discussion, see energy security chapter).

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## **POLICY RECOMMENDATIONS TO BUILD MORE INFRASTRUCTURE, REDUCE CONGESTION, AND ACCELERATE INNOVATION**

Reforming government-imposed barriers that delay infrastructure projects and increase congestion would stretch taxpayer dollars, inject more private capital into projects, and deliver cleaner and more resilient infrastructure in a timelier manner. A May 2017 Heritage Foundation report outlined many potential reforms to make infrastructure spending more efficient.<sup>12</sup> These recommendations, which are still relevant today, include:

- **Modernizing the National Environmental Policy Act (NEPA).** While the Fiscal Responsibility Act included several reforms to modernize NEPA, such as instituting page limits and timeframes to complete Environmental Impact Statements and Environmental Assessments, the law failed to tackle one of the biggest NEPA-related challenges: litigation. The current statute of limitations for NEPA litigation is six years. To speed up the development of infrastructure and clean energy projects, lawmakers should reduce the statute of limitations, ideally to 120 days. (For more information, see permitting chapter).
- **Repealing Davis-Bacon Act (DBA) requirements.** From Heritage: “The Davis-Bacon Act, enacted in 1931, effectively requires construction contractors on federal projects to use union wage and benefit scales and follow union work rules. These rules inflate the cost of federal construction by nearly 10 percent on average. Eliminating the DBA has current support in Congress and would stretch each federal construction dollar further, delivering more infrastructure without the need to increase spending levels. Barring complete elimination, the Labor Department should shift to using more accurate Bureau of Labor Statistics data to estimate DBA ‘prevailing wages’ so they more closely reflect market pay.”<sup>13</sup>
- **Ending Buy-America Restrictions.** Also from Heritage: “Like with the [Davis-Bacon Act] most federally funded infrastructure projects must comply with ‘Buy America’ mandates, which require that certain input components must be manufactured in the United States. This protectionist mandate limits selection and price competition among input manufacturers, which often leads to higher costs for projects.”<sup>14</sup>

- **Improving Opportunities for Public Private Partnerships.** Recommendations to increase the private sector’s role in major infrastructure projects, as recommended by the Heritage report, include:
  - Remove the grant repayment requirements mandated by Executive Order 12803 (issued in 1992), which requires the repayment of federal grants in order to lease or sell certain infrastructure assets intent on entering into a public-private partnership (P3). This payment amounts to a tax on P3s.
  - Lift the ban on tolling existing federal interstate highways.
  - Comprehensively audit and amend other regulatory impediments to private infrastructure investment.”<sup>15</sup>

Another priority for federal, state, and local policymakers should be to reduce congestion. Reducing congestion provides many economic and environmental benefits including savings on fuel, reduced pollution, fewer greenhouse gas emissions, and less traffic noise.<sup>16</sup> Recently, New York City cleared the final hurdle to implement a congestion pricing scheme that will charge higher fees for driving into Midtown during rush hour. Money collected from these tolls will go toward investments in the city’s mass transit.<sup>17</sup> In addition to exploring congestion pricing, policymakers should:

- **Repeal the Foreign Dredge Act.** More than a century old, the Act prohibits any foreign-built or chartered ships from dredging in the U.S. Consequently, some of the world’s best dredgers, ships that could deepen and widen America’s ports at a fraction of the cost and time, cannot bid on contracts. The Dutch and Belgians own these dredgers, not countries that are hostile to the U.S.

More competitive dredging bids would be beneficial to taxpayers, American consumers and companies, and the environment. With just an inch of additional depth, a cargo ship could transport millions of dollars in more products per trip. The National Oceanic and Atmospheric Administration equates that additional inch of depth to “50 more tractors, 5,000 televisions, 30,000 laptops, or 770,000 bushels of wheat.”<sup>18</sup> Deeper, wider port channels would also improve transportation efficiency, reducing emissions from unwanted congestion and light-loading.

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- **Repeal the Jones Act,** which mandates that oil (and other goods) shipped between two ports in the U.S. must be transported on a U.S.-built, U.S.-flagged vessel with a crew that is at least 75% American. Colin Grabow of the Cato Institute writes, “By disincentivizing the use of water transport—by far, the most carbon-friendly means of transporting goods—the Jones Act serves to drive up the emission of greenhouse gasses. Rather than transporting cargo by water, a portion is instead diverted to more carbon-intensive modes, such as trucking and rail.”<sup>19</sup>
- **Deploying smart technologies.** Technology can improve efficiency, reduce congestion, and lower emissions. The installation of an Intelligent Transportation System, which is a “network of technology embedded in transport infrastructure and vehicles to improve safety and mobility,”<sup>20</sup> has helped cities significantly reduce congestion and emissions. This includes cameras, sensors, and technologies that help communicate real-time information to commuters and local governments. A study examined the implementation of these technologies from 1994-2014 in 99 urban areas in the United States and found they saved “over \$4.7 billion dollars and 175 million hours of travel time annually in US cities. It also reduced fossil fuel consumption by about 53 million gallons and saved over 10 billion pounds of CO2 emissions.”<sup>21</sup> Technological innovation is also making bus service more efficient by transitioning to an on-demand service rather than having the vehicle stop at each bus stop.<sup>22</sup> With funding available, states, cities, and localities should expand the use of cutting-edge technologies to help drivers and commuters and reduce emissions.



Policymakers should also voice concern over the market-distorting effects of subsidies. In addition to the direct cost to taxpayers,<sup>23</sup> subsidies tip the scale toward one energy source or technology over another, taking capital away from potentially promising technologies. As a result, public and private resources are stuck in unproductive places, stifling competition and innovation. Or, if the technology is successful, public dollars merely displace private dollars that would have been invested. Ideally, Congress and the administration would eliminate energy subsidies, including fossil fuel subsidies. A next-best strategy should be to make existing policies more economically and environmentally efficient while not adding more to the federal debt. While maintaining revenue neutrality, improvements could:

- **Replace targeted transportation fuel and EV tax credits in favor of a technology-neutral one.** Swapping the convoluted mix of credits for an emissions-based, technology-neutral one would bring more efficiency and reward performance over political preference. Neutrality should also harmonize tax credits available for alternative fuels and alternative technologies (ie, biofuels<sup>24</sup> and EVs). A reverse auction that awards the lowest-priced bidder could improve the efficiencies of production tax credits. Similar to the Energy Sector Innovation Credit, credits should expire once a defined market penetration has been met to support nascent transportation fuels.
- **Explore ways to incorporate ridesharing.** Recent research has demonstrated that one of the quickest and most effective ways to reduce emissions is through pooled rides, or ridesharing.<sup>25</sup>
- **Consider shifting the EV tax credit to hybrid-electric vehicles and secondary markets.** A common complaint about EV tax credits is that they accrue to the wealthiest Americans who would have bought an EV without the credit. Repurposing existing credits to apply to hybrids and secondary markets could be a more effective and equitable use of the funds and could go much further in reducing emissions.<sup>26</sup>
- **Consider replacing the Renewable Fuel Standard and Corporate Average Fuel Economy Standards (CAFE) with higher octane standards.** Rather than prolong policies that pick winners and losers and have mandates with complex formulas based on antiquated notions of energy scarcity such as CAFE, Congress should charge agencies to simply address the source of emissions. A higher octane standard would likely still benefit corn ethanol, as it is an effective oxygenate for fuel, and could lower emissions significantly.<sup>27</sup>
- **Continue research and development into breakthrough alternative fuels.** Drop-in hydrocarbon biofuels and hydrogen transportation could be economic and climate gamechangers for the transportation sector.<sup>28</sup> Congress should continue to support basic research, development, and demonstration for alternative fuels and maximize public expenditures allocated in the bipartisan Infrastructure Investment and Jobs Act.

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