

# THE NEW CENTER



Policy Paper

Think Centered

# Infrastructure Underinvestment

**CLOSING THE FUNDING GAP**

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## CLOSING THE FUNDING GAP

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### **ABOUT THE NEW CENTER**

*American politics is broken, with the far left and far right making it increasingly impossible to govern. This will not change until a viable center emerges that can create an agenda that appeals to the vast majority of the American people. This is the mission of The New Center, which aims to establish the intellectual basis for a viable political center in today's America.*

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# Executive Summary

## NEW CENTER SOLUTIONS:

# Closing the Funding Gap

If there is one thing Democrats and Republicans actually agree on, it's the fact that American infrastructure is in desperate need of repair. Most of our major infrastructure systems were designed in the 1960s, and the U.S. population has more than doubled since then.<sup>1</sup> Government at every level has neglected investment in our infrastructure and now we are all paying the price. The average commuter spends 42 hours in traffic and incurs \$599 in damage to their vehicle each year from driving on roads that need repair.<sup>2</sup>

Leaders on both sides of the aisle have proposed plans to address the problem. In April of 2019, Democratic congressional leaders Nancy Pelosi and Chuck Schumer met with President Trump and agreed on a preliminary \$2 trillion funding package, offering a spark of hope. But follow-up meetings were unsuccessful, and leaders have not been able to agree on the details. Why haven't we made any progress?

The simple answer is that nobody can agree on where the money should come from. There is a major ideological difference between the two parties: Democrats prefer a plan that would increase tax revenues to generate new public funding while Republicans prefer to only slightly increase public funding in hopes of incentivizing private investment. Each has a point; we do need more public money to fund infrastructure projects, especially for repairs and deferred maintenance. But there are circumstances where public-private partnerships can deliver cost savings for taxpayers and more efficiently-run projects.

If Washington is interested in filling America's infrastructure funding gap—as opposed to just releasing talking points—The New Center believes it could align behind the following solutions:



Encouraging States and Localities to Consider Public-Private Partnerships



Increasing the Federal Fuel Tax and Indexing it to Inflation in the Short Term



Transitioning From a Fuel Tax to a Vehicle Miles Traveled Fee for the Long Term



Implementing an Overland Freight Tax



Implementing a Capital Budgeting System for the Federal Government



Reinstating the Build America Bonds Program



Lifting regulations on Private Activity Bonds

# Underinvestment and Its Impact



The U.S. spends 2.4% of its GDP on infrastructure while its European peers spend 5%.<sup>3</sup> In 2017, the World Economic Forum's Global Competitiveness Report ranked the U.S. tenth in the world in overall infrastructure quality, behind France, Germany, Japan, and Spain.<sup>4</sup> At 48 minutes per day, the average commuting time in the U.S. is significantly higher than that in Europe due to highway congestion and poorly maintained public transit.<sup>5</sup>

According to the American Society of Civil Engineers (ASCE), the U.S. has only been paying about half of its annual infrastructure bill, and the funding gap is widening. The ASCE estimates that the U.S. would have to procure about two trillion dollars in additional infrastructure funds by 2025 to close the funding gap and achieve a state of good repair across all sectors of its infrastructure.<sup>6</sup> Failure to close this gap by 2025 would bring real economic consequences to American families, jobs, and GDP. ASCE estimates families would lose over \$3,400 in disposable income each year, 2.5 million workers would lose their jobs, and our GDP would drop by \$3.9 trillion.<sup>7</sup>

## WHERE DOES INFRASTRUCTURE FUNDING COME FROM?



Of the \$416 billion in public money spent in 2014 on infrastructure, about a quarter came from the federal government and three-fourths from states and localities. According to the Congressional Budget Office (CBO), “of the federal spending, roughly two-thirds paid for new, improved, or rehabilitated structures and equipment. State and local governments spent money on those things as well, but a much larger proportion of their spending paid for the operation and maintenance of infrastructure.”

Amid the deficit in public infrastructure spending, private investment is filling some of the void. Last year, investors across the globe funneled a record \$85 billion in private equity and debt funds focused on U.S. and global infrastructure.

# Current State of Infrastructure Funding



## PUBLIC VS. PRIVATE INVESTMENT

Currently, American infrastructure funding comes from a combination of public and private investment. An important distinction between public and private investors involves the types of projects that work best for each. While much of the demand for infrastructure projects falls under the category of “deferred maintenance,” private investors are more interested in projects that will provide a return on investment. One prominent example of this type of project is the privatization of airports. There are no fully privatized airports in the U.S., largely because airport financing is more costly for private developers than for governments. However, other countries like Australia and China use this model to generate returns sufficient to attract private investors without the need for additional public support.

**14% of all airports worldwide are at least somewhat privately owned**

**More than 50% of European airports are at least somewhat privately owned**

**Most large Australian airports are privately owned<sup>8</sup>**



The privatization of airports has come with several benefits: increased operating efficiency, improved amenities, and increased capital investment for firms.<sup>9</sup> Now, pressure to expand airports is increasing as passenger demand increases. About four billion passengers passed through airports in 2017, and the International Air Transport Association predicts that this number could more than double to 8.2 billion in 2037.<sup>10</sup> A Brookings Institution report cites public ownership of airports as a major contributing factor to excessive air travel delays.<sup>11</sup> In fact, the world's ten most delayed major airports based on on-time percentage are publicly owned.<sup>12</sup>

The area in which the U.S. most desperately needs funding, however, is repairs to existing infrastructure or deferred maintenance. The demand for surface transportation infrastructure (bridges, roads, and transit) continues to grow while transit vehicles (buses, subway cars, etc.) and structures continue to age and crumble.

As of 2016, 9.1% of American bridges were structurally deficient, according to the American Society of Civil Engineers.<sup>13</sup> According to the transportation research group TRIP, 21% of the nation's highways had pavement in poor condition in 2015.<sup>14</sup> Additionally, 35% of transit guideway elements (e.g., railroad and subway tracks) and 37% of stations in the U.S. are not in a "state of good repair." Although 81% of Americans live in urban areas, only 51% of U.S. households reported they could use public transportation to get to a grocery store in 2013.<sup>15</sup>

## PUBLIC-PRIVATE PARTNERSHIPS (P3s)

The Harvard Business Review defines public-private partnerships (P3s) as projects in which "businesses [such as contractors, developers, or service providers] supplement public investment in return for reaping rewards such as tolls and fees."<sup>16</sup> Often, the private entity in the partnership provides upfront funding for a facility or project (such as toll lanes on a highway), and the public sector repays the cost over time (for example, in the form of toll payments).

This model can be successful if the public and private sectors work together to execute a project properly, both stakeholders can reap the benefits. This model can enable governments to leverage a limited amount of funding, shift risk to the private sector, and harness the innovative technological skills of private companies. Private entities can be better positioned to take on the inherent risks involved in large investments, and in many cases, private

sector stakeholders have expertise and skills that the public sector may not. For the private owner, there is a strong incentive to minimize costs and complete a project in a timely manner. P3 contracts typically specify how to compensate the private party, and compensation often depends on certain performance metrics, such as completion time.<sup>17</sup>

While the U.S. lags behind some other developed countries in its use of the P3 model, it may need to rely more on P3s in the future as governments at every level continue to face significant budget challenges.

One example of an early P3 in the U.S. is the Dulles Greenway, a 14-mile toll road that connects Washington Dulles Airport to Leesburg in Northern Virginia. Before its inception in 1995, commuters and travelers complained of congestion and poor

road conditions. The state government of Virginia recognized the need for an alternative route, but would have had to borrow significantly and take on financial risk to complete the project alone. As a solution, the government partnered with a private developer, Toll Roads Investor Partnership II (TRIP II), which took on the project's demand risk. This risk became a reality when road usage was much lower than expected due to toll costs. TRIP II had to restructure their debt in 1999, and they agreed to a 20-year project extension over which they could repay costs. A larger private company, Macquarie Group Limited, purchased the entire partnership in 2005 and absorbed TRIP II and their debt.

While the private owners of the Dulles Greenway have faced financial challenges, they remain confident in its long-term profitability. To this day, the project has not used any government dollars. Macquarie will cover operating costs and interest while collecting revenue until 2056, when they are contractually obligated to cede ownership to the state of Virginia.<sup>18</sup> The project

has been successful in that it has created a convenient commuting option without the need for the state to take responsibility for its maintenance. The construction of this private toll road effectively cut the average rush hour commuting time between the two points in half, from 30 minutes to less than 15.<sup>19</sup>

While P3s can benefit both the government and the private sector, they aren't a panacea. Success depends on the terms of the deal and the planning and execution of all parties involved. Certain conditions of a project or a partnership can contribute to suboptimal outcomes. To succeed, the government and its private partner must make sure they share the same goals and agree on all project details. A government may incorrectly assume that a private contractor has expertise in the field and take its risk or cost projections at face value. If the government neglects to take the time for a full review of a potential private partner, both parties can incur increased costs during the execution phase.<sup>20</sup>

### Benefits of P3s

- Can fund necessary projects that the government or the private sector alone might have otherwise overlooked
- Private companies can provide expertise in the project area
- Contracts incentivize private partners to complete projects efficiently
- During risk assessment, the private sector can act as a check against unrealistic government promises
- Accountability incentivizes private firms to make good financial decisions and not cut corners with construction costs
- Return on investment can be greater with collaborative project design and favorable financing options unique to P3s

### Drawbacks of P3s

- With only a few private entities capable of completing any one specific type of project, fields of bidders are smaller and competition is lower
- Many P3 contracts contain non-compete clauses, which require the government to compensate the private investor if policy changes affect project revenues
- If the private partner has expertise in an area—and the government does not—the government may not be able to accurately assess the costs they propose
- Incentives among P3 participants can be misaligned (profit vs. public good)

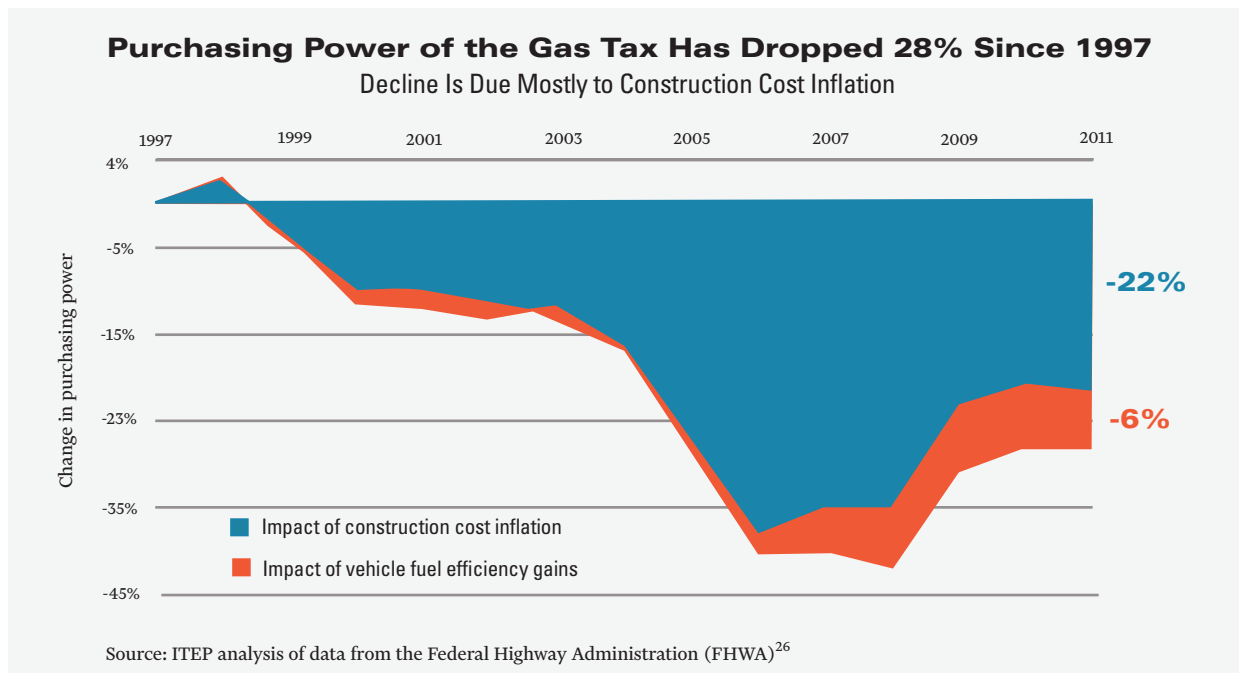
## THE DIMINISHING HIGHWAY TRUST FUND

The Federal Aid Highway Act of 1956 established the Highway Trust Fund to finance the construction of an interstate highway system in the U.S. The Fund receives money from a federal fuel tax, and since 1993, the tax has been set at a flat rate of 18.4¢ per gallon on gasoline and 24.4¢ per gallon on diesel fuel.<sup>21</sup>

The fuel tax is the most important source of federal transportation funding, accounting for about 85% of Highway Trust Fund revenue. In recent years, however, Highway Trust Fund revenue has lagged behind expenditures.<sup>22</sup> Since 2008, Congress has transferred \$140 billion from its general revenue stream to sustain the fund. Transfers will allow the fund to meet spending obligations through 2020, but in the absence of another solution, the Congressional Budget Office predicts the return of revenue shortfalls by 2021.<sup>23</sup> Two main factors explain why gas tax revenues lag behind what is necessary to maintain our infrastructure.

- **Construction cost inflation:** prices of construction materials and machinery have risen, and the federal government has not adjusted the tax rate to keep pace with inflation. Inflation since 1993 has eroded over 40% of the value of the gas tax revenue.<sup>24</sup>
- **Increasing fuel efficiency:** vehicles have become more fuel-efficient over time, so consumers today purchase less gasoline for their vehicles than they did in the past.

As a result of this funding gap, the Highway Trust Fund had a deficit of \$11.8 billion in 2018, spending \$55.2 billion while only collecting \$43.4 billion. The Congressional Budget Office predicts that this deficit will increase each year and reach \$25 billion by 2029.<sup>25</sup>



## LOW-INTEREST LOANS

The Transportation Infrastructure Finance and Innovation Act (TIFIA) of 1998 provides low-interest loans that local governments can use to finance infrastructure projects that expand the economy or transform the community. These loans are some of

the most effective multipliers in government. According to the U.S. Department of Transportation, every dollar the TIFIA program provides in federal loan assistance generates \$40 in nonfederal public and private investment.<sup>27</sup>



## MUNICIPAL BONDS

States and local governments can issue bonds to raise money for infrastructure from private investors. Municipal bonds come with federal tax incentives, including a tax exemption on interest. According to the National League of Cities, tax-exempt bonds finance 87% of electric utility projects, 65% of schools, 40% of healthcare facilities, and 35% of transportation projects.<sup>28</sup>

# Answers from the Left and Right



In the last Congress, Democrats and Republicans offered dueling infrastructure proposals that read more like political documents than real plans.

In 2018, Senate Democrats proposed a repeal of many Trump tax cuts to fund a \$1 trillion federal investment in infrastructure. The plan proposed returning the top individual tax rate to 39.6% and the corporate tax rate to 25%.<sup>29</sup> It is unrealistic to think Trump would ever agree to a repeal of his signature domestic achievement, and top Republicans have expressed similar sentiment. When asked about the proposal to fund infrastructure

improvements with rollbacks to the 2017 tax cuts, Senate Majority Leader Mitch McConnell called the plan “a non-starter.”<sup>30</sup>

In 2018, the Trump administration proposed a \$200 billion infrastructure investment hoping that it would spur \$1.5 trillion in new investments from the private sector. But without any specific funding mechanisms or incentives detailed in the plan, it is unrealistic to think private investors would be interested in investments that would not generate an economic return (fixing pipes, filling potholes, etc.).



# The Solutions



## Encourage States and Local Governments to Consider Public-Private Partnerships

The federal government should require states to evaluate all potential funding options, including P3s, to become eligible for federal infrastructure funding. A cost-benefit analysis requirement would allow a state or local government to determine which funding method would make the most sense and provide the most value for a specific project.<sup>31</sup>



## Increase the Federal Fuel Tax for the Short Term...

According to the U.S. Travel Association, 60% of respondents said traffic congestion would better deter car travel than a 25¢ increase in gas taxes.<sup>32</sup> Even though politicians often view a gas tax increase as a political non-starter, this and similar survey data suggest Americans are open to an increase if they believe it will ease traffic. Since 2013, 30 states—red and blue—have voted to raise state gas taxes to fund state-level infrastructure development.<sup>33</sup> Nationally, even some Republicans have warmed to the idea of a fuel tax increase. In a private infrastructure meeting with lawmakers in 2018, President Trump reportedly voiced his support for a 25¢ fuel tax increase and returned to the idea several times over the course of the meeting.<sup>34</sup> Senate Finance Committee Chairman Chuck Grassley (R-IA) said he would be open to discussing a fuel tax hike in his committee despite Senate Majority Leader Mitch McConnell's long-time opposition to increased fuel taxes.

In May 2019, Democratic Congressman Earl Blumenauer (OR-03) introduced the Rebuild America Act of 2019, which would increase the federal fuel tax by five cents each year for the next five years and tie the tax rate to inflation thereafter. The bill also cites the intention of Congress to repeal and replace the gas tax with a more sustainable source of funding by 2029.<sup>35</sup> When accounting for inflation

and improving vehicle fuel economy, this plan could raise \$394 billion over the next ten years.<sup>35</sup> Supporters of this bill include the U.S. Chamber of Commerce, AFL-CIO, and the American Trucking Associations.

Addressing concerns that an increased gas tax would be regressive, or disproportionately burdensome to the poor, Blumenauer argued that it could actually have the opposite effect. Vehicle damage from deficient roads and traffic congestion, which the tax would combat, disproportionately affects poor commuters because they are often paid by the hour.<sup>36</sup>

Additionally, many supporters of a gas tax increase suggest offering a rebate to lower income taxpayers to offset any added burden it could impose—a caveat Democrats included in the legislation the last time the federal government raised the gas tax.<sup>37</sup> The Omnibus Budget Reconciliation Act of 1993 both raised the federal gas tax to 18.4¢ and expanded the Earned Income Tax Credit to offer a small rebate to taxpayers without children—a way to minimize the regressive effect of the tax hike.<sup>38</sup> The maximum earned income to qualify for the rebate is indexed to inflation, so a small increase to the rebate would be the only change necessary to accompany a new gas tax increase.



## ...and Transition to a Mileage Tax for the Long Term

With the increasing prevalence of electric and hybrid vehicles, the fuel tax will likely generate diminishing revenues over time, which is why Congress should transition from a fuel tax to a sustainable funding source by 2029.<sup>35</sup> A user fee based on miles traveled, regardless of fuel consumed, could be an option for the long-term fuel tax replacement. Although high-MPG vehicles are environmentally friendly, they impose just as much of a burden on roads as do less fuel-efficient vehicles.

In 2015, Politico surveyed a group of three dozen transportation experts in both the private and public sectors on the most effective methods of infrastructure funding. 58% of the experts believed the most effective long-term source of funding was a mileage fee.<sup>40</sup>

Some cite privacy concerns as a reason for hesitation, but the mileage fee collection system could actually be more privacy-protective than toll systems such as E-Z Pass. An internal system within the vehicle would record information about miles traveled, but it would only be necessary to transmit vehicle ID and payment information, not trip location information, to the government.<sup>41</sup>



## Implement a Tax on Overland Freight Transport

Heavy-duty trucks and rail cars are the primary vehicles for overland freight transport of goods. These vehicles must pay an annual heavy-vehicle use tax, but this tax does not match the costs they impose on our infrastructure. In 2015, the Federal Highway Administration estimated that tractor-trailer trucks traveled about 175 billion miles and freight railcars traveled about 36 billion miles.<sup>42</sup> Engineers estimate that it would take between 5,000 and 10,000 cars to equal the pavement damage caused by just one fully loaded, five-axle truck.<sup>43</sup>

To provide a new revenue source for the Highway Trust Fund and account for the extra damage freight vehicles impose on our infrastructure, Congress should impose a per-mile tax on freight vehicles. The Congressional Budget Office analyzed an option involving a 30¢ per mile tax on heavy-duty truck transport and a 12¢ per mile (per railcar) tax on transport by rail.<sup>44</sup> The freight tax could encourage trucks to take fewer trips with fuller loads and shippers to consider rail transport. This could leave the Highway Trust Fund with not only more funding to repair the roads, but also fewer roads to repair.



## Implement a Capital Budgeting System for the Federal Government

Unlike most businesses and many state governments, the federal government essentially treats all spending the same despite the fact that some kinds of spending (e.g. infrastructure) deliver significant economic returns while others do not. The federal government should separate its budget into two parts: a capital budget for long-term investments such as research and infrastructure and an operating budget for annual expenses. This would allow the government to consider both costs and economic return for budget scoring purposes.

One striking example of the federal government's counterproductive budget practices has to do with how it accounts for its own infrastructure costs. Because federal appropriations happen annually, federal agencies face an incentive to lease properties rather than purchase them. The annual cost is cheaper for a rental, but in the long term, rentals can be much more expensive than up-front construction costs. For example, the Department of Transportation leases its headquarters for \$50 million each year, and by the end of the 15-year lease, the overall costs will total \$750 million—more than double what construction costs would have been if they had built their own facility.<sup>45</sup>



## Revive 'Build America Bonds'

In 2009, President Barack Obama introduced the Build America Bonds program, which offered states and localities a 35% subsidy for interest costs on taxable debt they issued. This program reduced the costs of borrowing and stimulated the municipal bond market. Before its expiration at the end of 2010, the program generated \$181 billion to finance public infrastructure projects. State and local government issuers saved an estimated \$20 billion in borrowing costs as compared to traditional tax-exempt bonds.<sup>46</sup> Congress should reinstate this program to the benefit of investors, municipalities, and American infrastructure.



## Lift the Cap on Private Activity Bonds (PABs)

Private Activity Bonds are useful financing tools for projects that benefit private entities while serving some public purpose (water facility upgrades, for example).<sup>47</sup> For some qualified projects, PABs are tax-exempt, but the legislation governing these bonds contains notable restrictions and caveats.

The tax code specifies that some types of projects, such as airports, docks, and mass-commuting facilities, must be government-owned to qualify for tax-exempt financing. Even projects that do qualify for income tax-exempt PAB financing are not completely tax-free. Qualifying projects are subject to the Alternative Minimum Tax (AMT), which is a parallel tax to the income tax system intended to ensure that taxpayers with many deductions and exemptions pay a minimum

percentage of their gross income.<sup>48</sup> While a PAB is a more attractive option than a traditional taxable bond, the AMT is a deterrent for private firms interested in infrastructure investment.

For many types of projects, the federal government also sets an annual volume cap on PABs state and local governments can issue. These regulatory barriers make PABs less appealing and less accessible, forcing state and local governments to pay higher interest rates to keep attracting potential buyers. Congress should encourage the wider use of PABs by expanding the range of projects that qualify for tax-exempt financing, increasing or eliminating state volume caps, and excluding PABs from the Alternative Minimum Tax.

In early 2019, Senators John Hoeven (R-ND) and Ron Wyden (D-OR) introduced the Move America Act, which would accomplish these goals.<sup>49</sup> Congress should pass this bipartisan legislation before the end of the current session.

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