

Testimony of

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**On Paving the Way for Funding and Financing Infrastructure Investments
Before the Committee on Ways and Means
U.S. House of Representatives**

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Chairman Neal, Ranking Member Brady, and Distinguished Members of Congress:

Thank you for this opportunity to testify on paving the way for funding and financing infrastructure investments. I commend the Committee for holding this hearing to explore these foundational issues to improving the quality of our nation's infrastructure.

By way of personal introduction, I have spent the last couple decades working on developing infrastructure projects and exploring a wide range of issues tied to infrastructure policy. I am currently the Founder of Madrus, LLC, a strategic consulting firm dedicated to helping clients deliver critical infrastructure more efficiently. I also serve as a Nonresident Senior Fellow at the Brookings Institution and as a Senior Operating Partner at Stonepeak Infrastructure Partners. My previous roles in public service include serving as Special Assistant to the President for Infrastructure Policy, General Counsel of the U.S. Department of Transportation, and Chief Counsel of the Federal Highway Administration. In addition, my private sector experience includes serving as National Director of Strategic Consulting at HDR, Inc. and as a Managing Director at Macquarie Capital, where I was responsible for leading sell-side advisory teams helping state and local governments attract private investment for infrastructure projects. These experiences have given me the opportunity to experience issues with infrastructure delivery from both public- and private-sector perspectives.¹

Introduction

As the Members of this Committee are well aware, public trust is the foundation on which any successful, long-term policy solution must be built. In the area of infrastructure, we are suffering from a lack funding driven at least partially by lack of public trust. As we explore ways to increase necessary funding for infrastructure, our job will be made significantly easier if we simultaneously build public trust by helping state and local governments deliver the most important projects, at a reasonable price, and within a sensible timeframe.

Infrastructure may be the most public of policy areas as it is utilized by every American every day. Yet, as familiar as the public is with the utilization of infrastructure, it is unfamiliar with how infrastructure is funded, delivered, and regulated. Hearings like this are an excellent way to bridge that knowledge gap.

In my testimony, I will focus on how we can develop an infrastructure policy that will increase public trust by highlighting the counter-intuitive effects of the federal government's involvement in infrastructure. I will discuss why additional federal funding for projects may be suboptimal and areas in which conventional wisdom fails, the need for better data and transparency, and the importance of de-politicizing the issue and focusing on what the owners of infrastructure are telling us.

Challenges Associated with Federal Infrastructure Funding

Providing federal funds for infrastructure investment has long been complicated by the fact that the federal government owns relatively few infrastructure assets. Even by the broadest definition, the federal government owns less than 7 percent of the nation's public, non-defense

¹ These titles and affiliations are for identification purposes only. The views expressed here are my own and should not be construed to reflect the views of Madrus, LLC or its clients; the Brookings Institution or other Brookings scholars, officers, or trustees; Stonepeak Infrastructure Partners; any agency of the U.S. Government; or any former employer.

infrastructure. For major asset classes such as highways and streets, the federal share of ownership is much lower at just 1 percent.² The federal government's primary role in infrastructure is that of a regulator and grant-maker. As a result, virtually all federal infrastructure funding must flow to non-federal governmental entities that actually own the infrastructure. The disconnect between funding and ownership has led to a number of inefficiencies creeping into the system – some behavioral and others practical. Allow me to briefly explore a few of these inefficiencies.

The leading behavioral inefficiency is driven by the urban myth that federal infrastructure funding is supplemental to local and state funding. During my time in the White House, I had the privilege of working with governors, mayors, and county executives from across our nation. With rare exception, they argued for increased federal infrastructure funding to help supplement their own funds. What they frequently failed to realize is that all federal funding comes from communities. Any net increase in a community's federal infrastructure funding may be generated only one of two ways – an increase in federal revenues collected from other communities or a reduction in federal expenditures to other communities. The federal government does not have the ability to create funds, just reallocate them. I am not suggesting that the federal government cannot create considerable value by reallocating funds (note the tremendous benefits of the Interstate System);³ I am just encouraging us to keep in mind that federal funds come from local taxpayers.

Since federal funds come from local taxpayers, we should question the efficacy of having the federal government collect funds from state and local taxpayers and then just returning those funds to states and localities. While the collection of the gas tax is wonderfully efficient, the expenditure of those funds is not. Expenditure of federal highway funds triggers the need for compliance with an exhaustive list of federal requirements.⁴ These requirements not only impose direct additional costs on projects, but can also cause delays, which in turn lead to further costs. The urban myth that federal funds are supplemental results in some recipients of federal funds treating them as if they were “free” and thus ignoring the considerable transaction costs involved in having their funds flow through the federal government and return back to them.

The second behavioral impact of federal infrastructure funding results in communities delaying increased investment in infrastructure hoping federal funding will be available instead. I call this the “coupon effect” because it is the same type of behavior exhibited by those expecting to get a coupon in the mail for a needed item.⁵ For example, if someone really needed a new suit (like our nation needs new infrastructure) but thought he might receive a coupon in the mail for that suit, he would do what any rational person would do and wait for the coupon before buying the suit. Since the last gas tax increase in 1993, state and local governments have been delaying infrastructure investments in the hope of receiving federal funds. This phenomenon was

² U.S. Bureau of Economic Analysis, “Fixed Assets Accounts Tables, Table 7.1, Current-Cost Net Stock of Government Fixed Assets,” <https://apps.bea.gov/iTable/iTable.cfm?ReqID=10&step=2>

³ Taylor Jaworski, Carl Kitchens, and Sergey Nigai, “The Interstate Highway System and the Development of the American Economy,” Economic History Association, July 12, 2018, <http://eh.net/eha/wp-content/uploads/2018/06/Kitchens.pdf>

⁴ For an example of one such list, see: Federal Highway Administration, “FY 2016 TIGER Grant Agreements Exhibit Template,” September 30, 2019, https://ops.fhwa.dot.gov/freight/infrastructure/tiger/fy2016_gr_exhbt/index.htm

⁵ Kent Smetters, “Improving U.S. Infrastructure: Getting Past the ‘Coupon Effect,’” *Knowledge@Wharton*, October 22, 2018, <https://knowledge.wharton.upenn.edu/article/white-house-infrastructure-plan/>

exemplified in Kentucky in 2014. Prior to that year's election, a candidate for U.S. Senate encouraged local opposition to tolling the Brent Spence Bridge⁶ to pay for its replacement on the basis that, if elected, she would get the federal government to fund the \$2.6 billion needed. While she was successful in generating opposition to the prospect of tolling, six years later the debate on how to fund the bridge replacement is still raging and the chances of receiving billions in federal funding is still highly unlikely.⁷ Meanwhile, the Federal Highway Administration's National Bridge Inventory evaluates the bridge's width and height as "Intolerable; High Priority Replacement."⁸

Fortunately, the coupon effect's impact is limited. State and local governments have increasingly realized that the federal government is unlikely to meet their infrastructure needs. Since 2012 (roughly two decades after the last federal gas tax increase), 36 state governments have acted to raise new revenues reserved for transportation, 31 of them by raising the gas tax that the federal government has been loath to touch.⁹ Using a rough, conservative estimate, these measures have increased state infrastructure funding by \$190 billion on a net present value basis.¹⁰ Local governments similarly are showing strong leadership, with major cities such as Los Angeles and New York embarking on innovative infrastructure funding and pricing initiatives, raising hundreds of billions of dollars.

In addition to behavioral inefficiencies of federal funding, a practical consequence of a sudden increase in federal funding is what economists call substitution or crowding out.¹¹ This occurs when state and local governments reduce their own, planned expenditures on infrastructure after having received federal grants. As a result, providing more federal funds may not increase the total funding available as much as intended, or in the worst case, additional funds can lead to a net decrease in total infrastructure funding.

The effect of substitution was studied by researchers at the Federal Reserve Bank of St. Louis. They examined the \$27.5 billion of additional highway spending granted to states under the American Recovery and Reinvestment Act of 2009 and the impact that spending had on infrastructure investment. They concluded that it had no statistically significant causal effect on a state's total highway spending. Indeed, the study found that over 40 percent of Americans lived in states that *decreased* their total highway capital spending after receiving the federal grants, with many states freeing up their infrastructure funds for other uses.¹² The dynamic of substitution should caution those who want to buoy overall infrastructure investment simply by increasing the availability of federal funds.

⁶ The bridge connects Cincinnati, OH and Covington, KY.

⁷ DJ Gribbin, "Three reasons to think twice about an infrastructure bill," *Politico*, March 27, 2019, <https://www.politico.com/agenda/story/2019/03/27/infrastructure-funding-bill-000886>

⁸ Federal Highway Administration, *National Bridge Inventory (NBI) – 2018*, LTBP InfoBridge Data, Structure Number 059B00046N, 2018, <https://infobridge.fhwa.dot.gov/Data/BridgeDetail/20695664>

⁹ American Association of State Highway and Transportation Officials, "State Transportation Funding Initiatives Since 2013," January 17, 2020, <https://fundingfinance.transportation.org/state-transportation-revenue-packages/>

¹⁰ Madrus, LLC calculations based on American Association of State Highway and Transportation Officials, "State Transportation Funding Initiatives Since 2013," January 17, 2020, <https://fundingfinance.transportation.org/state-transportation-revenue-packages/>; Transportation for America, "State Transportation Funding," 2017, <http://t4america.org/maps-tools/state-transportation-funding/>; and various news sources and legislative reports.

¹¹ See: Sheila Campbell, "Fiscal Substitution of Investment for Highway Infrastructure," Congressional Budget Office *Working Paper* 2018-08, August 2018, https://www.cbo.gov/system/files?file=2018-08/54371-workingpaper_1.pdf

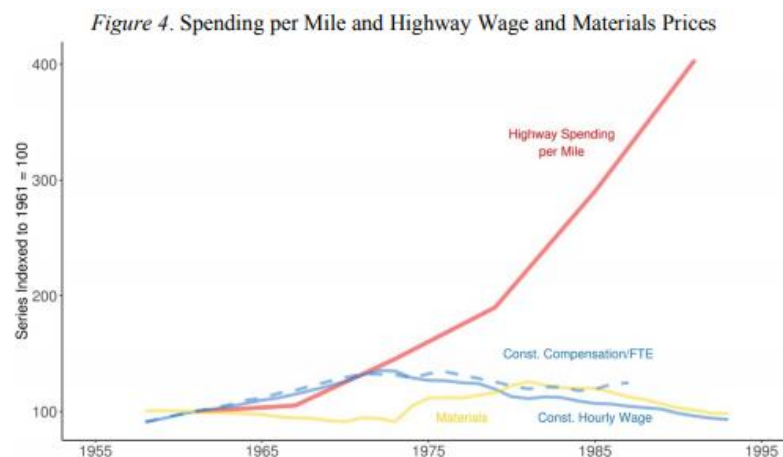
¹² Bill Dupor, "So, Why Didn't the 2009 Recovery Act Improve the Nation's Highways and Bridges?" Federal Reserve Bank of St. Louis *Review*, Second Quarter 2017, <https://files.stlouisfed.org/files/htdocs/publications/review/2017-04-12/so-why-didnt-the-2009-recovery-act-improve-the-nations-highways-and-bridges.pdf>

Notwithstanding the fact that federal funds come from communities, carry significant compliance costs, can create a disincentive for non-federal investment, and may crowd out non-federal funds, the federal government has the opportunity to serve a number of important functions in providing our nation with the infrastructure it needs. These include providing consistent design standards, promoting safety, encouraging innovation, requiring adequate maintenance on Interstates, and providing funding for areas incapable of funding their own infrastructure, e.g. rural broadband.

Understanding and Reducing High Infrastructure Costs

As the Committee explores opportunities to increase resources needed to improve the quality of our infrastructure, it is important to note that building and maintaining infrastructure less expensively is economically the same as raising more funds. As a project developer, I frequently spend more time focused on ways to make projects more cost effective than exploring how to raise additional revenue. If a community has only \$800 million to build a \$1 billion project, it can either raise another \$200 million in funding or figure out a way to drive efficiencies and deliver the project for \$800 million – they are economically equivalent.

Yet despite the myriad technological advances made over the previous decades, U.S. infrastructure costs have become unacceptably, and inexplicably, high. The graph below demonstrates the dramatic increase in highway costs in recent decades.



Notes: This figure shows Interstate spending per mile from our 6-year periods, along with the construction hourly wage (in blue; BLS), construction compensation per full time employee (dashed blue; BEA), and materials prices (yellow; BLS). We index all figures to 100 in 1962.

Source: Brooks and Liscow, "Infrastructure Costs," 2019.

Perhaps the best recent research paper examining infrastructure costs is a working paper circulated last summer by Leah Brooks of George Washington University and Zachary Liscow of Yale University Law School. Brooks and Liscow used a litany of historical data sources to show that real per-mile construction costs for the Interstate Highway System were three times higher in the 1990s than they were in the 1960s (see chart above), and that such a difference could not be explained by geographic factors.¹³ While the authors of this impressive work suggest several reasons that could have led to highway cost increases, including rising incomes and institutional

¹³ Leah Brooks and Zachary Liscow, "Infrastructure Costs," Working Paper, August 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3428675&download=yes

changes leading to “increased citizen voice,” they were unable to isolate the causal factors that led to such dramatic changes.¹⁴

New York City’s inability to affordably tunnel and build subway stations is the best example of the troubling trend to focus on revenue needed as opposed to efficient construction. According to a 2017 *New York Times* article, New York City handily wins the global competition for building the most expensive subway, at a cost of \$2.5 billion per mile. Paris, another expensive city, stands at just \$450 million per mile.¹⁵ And the issue is not confined to New York’s mega projects; other urban rail projects have faced similar cost challenges, albeit to a lesser degree than Gotham’s.¹⁶

These high costs have profound implications. Most obviously, the more spent on one project, the less there is to spend on other infrastructure needs. But more fundamentally, public trust and confidence in the government’s ability to deliver infrastructure is eroded by needlessly costly projects. With each dollar it sees squandered, the public is less likely to support the necessary investments in modernizing the nation’s infrastructure. A great place to start the campaign for additional infrastructure funding is to demonstrate current funds are well-spent.

Surprisingly, high infrastructure costs have received scant attention from the research community, including academia and government. As Brooks and Liscow put it, “Much of the cutting edge [research] in this area consists of *New York Times* exposés and blog posts.”¹⁷ The elusive causes of excessive costs would seem to be a prime opportunity for the federal government to gather and aggregate project information (to which it has unique access) and lead an intergovernmental reform effort. Yet the only major report from the federal government, an attempt at cost comparisons by the Government Accountability Office (GAO), simply found that “The complexity of rail transit construction projects and data limitations, among other things, limits the ability to compare the costs of these projects[.]”¹⁸

In addition to project costs, there is very little research on the overall cost of federal regulations. Indeed, anecdotal conversations with state transportation departments suggest that accepting federal funding reduces purchasing power by 20 to 30 percent due to myriad regulations.¹⁹ While there are specific studies—mostly by think tanks—examining individual regulations and red tape such as NEPA,²⁰ the Davis-Bacon Act and Project Labor Agreements,²¹ Buy America,²²

¹⁴ Ibid..

¹⁵ Brian Rosenthal, “The Most Expensive Mile of Subway Track on Earth,” *New York Times*, December 28, 2017, <https://www.nytimes.com/2017/12/28/nyregion/new-york-subway-construction-costs.html>

¹⁶ Alon Levy, “Why It’s So Expensive to Build Urban Rail in the U.S.,” *CityLab*, January 26, 2018, <https://www.citylab.com/transportation/2018/01/why-its-so-expensive-to-build-urban-rail-in-the-us/551408/>

¹⁷ Brooks and Liscow, “Infrastructure Costs,” 2019.

¹⁸ U.S. Government Accountability Office, “Federal Transit Administration Could Improve Information on Estimating Project Costs,” Report to Congressional Committees GAO-19-562, July 2019, <https://www.gao.gov/assets/710/700394.pdf>

¹⁹ Witness experience.

²⁰ Philip K. Howard, “Two Years Not Ten Years: Redesigning Infrastructure Approvals,” Common Good, 2015, <https://www.commongood.org/wp-content/uploads/2017/07/2YearsNot10Years.pdf>

²¹ Michael Sargent and Nicholas Loris, “Driving Investment, Fueling Growth: How Strategic Reforms Can Generate \$1.1 Trillion in Infrastructure Investment,” Heritage Foundation *Background*, May 3, 2017, <https://www.heritage.org/transportation/report/driving-investment-fueling-growth-how-strategic-reforms-can-generate-11>

²² Philip Rossetti, Jacqueline Varas, and Brianna Fernandez, “Buy America Regulations May Raise Cost of Subsidized Infrastructure,” American Action Forum, July 7, 2017, <https://www.americanactionforum.org/research/buy-america-regulations-may-raise-cost-subsidized-infrastructure/#ixzz6BiIWlc9F>

and mode- or grant-specific requirements, it remains unclear how specifically these interrelated policies contribute to increasing infrastructure costs, particularly when compared to international projects in countries that may have similar regulations. What is clear is that the need to understand and address such costs remains at least as critical to infrastructure modernization as increasing available federal funding.

Please note that I'm not questioning the policy importance of these federal regulations; I'm only noting that good government requires understanding of their costs.

The infrastructure community's ability to explore cost-saving can only proceed so far until we are able to answer basic questions around the delivery of governmental infrastructure, including why Interstate construction is dramatically more expensive; how federal requirements affect project cost; and what is happening in New York City.

Infrastructure Policy Pitfalls to Avoid

In exploring how to improve infrastructure funding and financing, policy makers should be wary of the following pitfalls that commonly affect the infrastructure policy discussion:

Confusing Funding and Financing

The Committee should be commended for distinguishing between funding and financing in the title of this hearing because funding and financing are substantively different, but frequently confused. Funding is a revenue stream dedicated to a project, such as user fees or tax receipts. Financing is a means of converting the availability of funding over time to obtain up-front cash to build a project. Methods of financing include issuing bonds, obtaining loans, or utilizing private equity. Funding is then used to pay back the bonds, loans, and/or investments used to finance the project.

While the availability of financing is very important for the infrastructure industry, financing should never be considered a replacement for funding. Given the scope of this Committee's jurisdiction, it is inevitable some commenters will recommend that the government can solve the infrastructure problem through novel financing options such as new types of bonds (e.g., Build America Bonds), special loans, or an infrastructure bank. While all of these tools may be helpful in lowering the cost of financing, they do not substitute for funding.

An infrastructure bank is particularly politically attractive because proponents rarely focus on the need to capitalize the bank. Yet such a bank would have little to offer because its benefits are already imbedded in existing programs such as Better Utilizing Investments to Leverage Development (BUILD), Transportation Infrastructure Finance and Innovation Act (TIFIA), and Private Activity Bonds (PABs). In addition, those interested in creating a new governmental entity to help finance infrastructure need look no further than Canada for some of the challenges posed by establishing such an entity. Canada's infrastructure bank, just established in 2017, has made only a handful of loans to projects, and some lawmakers are already considering scrapping the organization due to concerns over delays, political interference, mismanagement, and the relative inefficient use of taxpayer funds.²³

²³ Jesse Snyder, "Infrastructure bank CEO rebuts claims of project delays, political meddling: 'It's easy to be on the sidelines,'" *National Post*, August 1, 2019, <https://nationalpost.com/news/infrastructure-bank-ceo-rebuts-claims-of-project-delays-political-meddling-its-easy-to-be-on-the-sidelines>

Before introducing new federal financing tools or subsidies, Congress should consider fixing limitations found in the current system. The following adjustments to existing programs would be particularly impactful:

- Streamline the application and approval process for credit programs such as TIFIA. Federal credit programs' timelines and the associated burdens are far outside the market norm, making it difficult to deliver projects in a timely or economic fashion.²⁴
- Expand TIFIA-like lending programs to all forms of governmental infrastructure.
- Expand access to Private Activity Bonds by raising or eliminating the volume cap and expanding eligibility to governmental infrastructure projects. Current law places a maximum cap of \$15 billion on the dollar-amount of PABs that may be issued for transportation projects.²⁵ Currently, \$13 billion of this amount has been issued or allocated, likely limiting the availability of this important financing tool in the near future.²⁶

In addition, a novel reform that would have a positive impact on the quality of our infrastructure (and would improve transparency) would be to require governmental issuers of tax-exempt debt to clearly disclose the condition of their infrastructure and their unfunded maintenance liabilities.

Currently, most governments make use of federal tax preferences when issuing debt, allowing them to issue bonds at lower interest rates than private sector parties at the expense of federal revenues.²⁷ As the federal government already conditions the issuance of this debt, adding this requirement would be minimally disruptive and would help realign incentives to encourage appropriate maintenance.

Today, state and local leaders are incentivized to ignore maintenance (which is typically not visible to the public); so they can spend those funds elsewhere. Yet, poor maintenance practices damage the long-term quality of infrastructure and result in a maintenance backlog that must be met by future taxpayers. Not surprisingly, delaying maintenance also markedly increases overall life-cycle costs. As Larry Summers neatly summarized: "Prevention is cheaper than cure. Waiting for the road bridge to collapse is much more expensive than buttressing the bridge before it collapses."²⁸ In addition, estimates show that investing in maintenance pays off considerably with a 25 to 40 percent economic rate of return, potentially more in some cases.²⁹

²⁴ For more information on this topic, see: "The Implementation of MAP-21's TIFIA Program Enhancements," Testimony of DJ Gribbin Before the U.S. Senate Committee on Environment and Public Works, July 24, 2013, https://www.epw.senate.gov/public/_cache/files/6/2/62018451-4a4f-4a7d-b3f5-dad18ae56dc5/01AFD79733D77F24A71FEF9DAFCCB056.72413hearingwitness testimonygribbin.pdf

²⁵ 26 U.S.C. § 142 (m)(2)

²⁶ U.S. Department of Transportation, Build America Bureau, "Private Activity Bonds," November 19, 2019, <https://www.transportation.gov/buildamerica/programs-services/pab>

²⁷ See: U.S. Congressional Budget Office and Joint Committee on Taxation, "Subsidizing Infrastructure Investment with Tax-Preferred Bonds," October 2009, <http://www.cbo.gov/sites/default/files/111th-congress-2009-2010/reports/10-26-taxpreferredbonds.pdf>

²⁸ Peter Olson and David Wessel, "The case for spending more on infrastructure maintenance," Brookings Institution, January 31, 2017, <https://www.brookings.edu/blog/up-front/2017/01/31/the-case-for-spending-more-on-infrastructure-maintenance/>

²⁹ Felix Rioja, "What is the Value of Infrastructure Maintenance? A Survey," Lincoln Institute of Land Policy, May 2013, <https://www.lincolninst.edu/publications/conference-papers/what-value-infrastructure-maintenance>

To overcome the hidden nature of deferred maintenance and to incentivize proper maintenance practices, the federal government should consider requiring full disclosure of maintenance liabilities in tax-exempt bond offering statements. Such a requirement would have the added benefit of giving investors important information about the issuing entity's long-term financial liabilities.

The Federal Role: Offering a Vision or Federalizing State and Local Decisions?

Another potential pitfall in federal infrastructure policy is the over-federalization of project-level decision making. Since the beginning of the 2010s, Congress made a concerted effort to reduce the number of categories of federal infrastructure funding, limit the artificial restrictions on federal grants, and generally create more flexibility for states and local governments. Reforms that embody this mindset include the consolidation or elimination of 60 programs into just six core programs under MAP-21 and the expansion of the Surface Transportation Block Grant Program under the FAST Act.³⁰ The Administration's infrastructure plan continued this trend by making its proposed grants mode-neutral and asset class-neutral, i.e. funding was equally available for transportation and water projects.

However, there are troubling signs this trend may be reversing. Virtually all of the 2020 presidential candidates that have released infrastructure plans fall into the trap of being prescriptive with federal programs.³¹ Along these lines, the highway authorization released by the Senate Committee on Environment and Public Works, America's Transportation Infrastructure Act,³² harkens back to the old model of federal prescription. The bill includes such provisions as establishing a new competitive grant program solely targeting state and local bridge repairs – despite the fact that current funding is already eligible to be used on such projects and that bridge conditions have seen significant improvements in recent decades.³³ The law further creates grant programs (many of them competitive grants) specifically for charging and fueling stations, emissions reductions at ports, carbon reduction, congestion relief, infrastructure resiliency, bollard installation, bicycle use in disaster situations, and removing existing infrastructure facilities.³⁴

The challenge with this very detailed federal approach is not that these programs are unworthy. The problem is that state and local governments invariably will be saddled with funding that does not meet the needs of their communities, and they will be left with the option of spending the funding on sub-optimal investments or not spending it at all. Not surprisingly, most will select the first alternative, risking a further degradation of public trust as the community wonders why their tax dollars are being spent on second- or third-tier priorities.

Administration Efforts to Reform Incentives Associated with Federal Infrastructure Funding

³⁰ P.L. 112-141, Moving Ahead for Progress in the 21st Century Act; P.L. 114-94, Fixing America's Surface Transportation Act

³¹ See: Madrus, LLC, "A Guide to 2020 Presidential Candidate Infrastructure Proposals," January 17, 2020, https://static1.squarespace.com/static/5c913ffeda50d32839326672/t/5e22504d6fef6f177e0095fe/1579307085649/Candidate+Infrastructure+Plans_Overview+011720.pdf

³² America's Transportation Infrastructure Act of 2019, S. 2302, 116th Cong., 2019

³³ Robert Kirk and William Mallett, "Highway Bridge Conditions: Issues for Congress," Congressional Research Service *Report* R44459, January 27, 2018, <https://fas.org/sgp/crs/misc/R44459.pdf>

³⁴ America's Transportation Infrastructure Act of 2019, S. 2302, 116th Cong., 2019

In 2017, the Trump Administration launched a year-long conversation with the owners of our nation's infrastructure. Governors, mayors, county executives, and the heads of authorities were asked what actions the federal government should take to help them improve their infrastructure, while fulfilling basic federal stewardship responsibilities. This exercise culminated in an executive order creating One Federal Decision and the 2018 Legislative Outline for Rebuilding Infrastructure in America.³⁵

The Legislative Outline was crafted to offer a post-Interstate vision for the role of the federal government. Given the completion of the Interstate, dramatic expansion of technology, increased professionalism of grant recipients, and shifting needs of communities – the current federal role is antiquated. The federal government's oversight of infrastructure spending is largely built on a foundation designed to meet the needs of our nation in the 1950s and '60s. The time to update our approach to infrastructure is long overdue.

Before addressing what was in the plan, let me spend a moment explaining what was not. I was heavily involved in crafting the 55-page document and was disappointed in the reaction it initially garnered from many policy leaders and the media. Critics of the Administration's plan inventively described it as an attempt to sell our nation's infrastructure and create windfall profits for Wall Street, primarily citing media coverage that described how the plan would be funded by private equity.³⁶

Not only is this characterization unrepresentative of the proposal, but it is rooted in the common mistake of conflating financing with funding (as described above). The plan cannot be funded by private equity because private equity is a form of financing. Indeed, because the Administration's proposal was developed to incentivize the generation of additional revenues from users or local governments, private equity capital and other forms of financing were simply ineligible to receive federal incentives under the proposal's largest program.³⁷

Another imaginative criticism was that the proposal eliminates the 80-20 federal-local split that currently governs federal highway funding, and replaces it with a 20-80 split.³⁸ The claim stems from the proposal's Incentives Program, which provides up to a 20 percent federal match for any jurisdiction that makes the politically difficult decision to increase user fees, taxes, or other revenues for infrastructure. The Incentive Program is designed to counteract two of the challenges to federal funding mentioned above – the coupon effect and substitution. It also recognizes the reality that non-federal funding comprises more than three-quarters of all

³⁵ Executive Order 13807: Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, 82 Fed. Reg. 163, August 24, 2017, <https://www.energy.gov/sites/prod/files/2017/09/f36/EO-13807.pdf>; The White House, "Legislative Outline for Rebuilding Infrastructure in America," February 2018, <https://www.whitehouse.gov/wp-content/uploads/2018/02/INFRASTRUCTURE-211.pdf>

³⁶ See, e.g., Michael Hiltzik, "Trump's infrastructure plan: no money, no action, no surprise," *Los Angeles Times*, February 12, 2018, <https://www.latimes.com/business/hiltzik/la-fi-hiltzik-trump-infrastructure-20180212-story.html>

³⁷ "Legislative Outline for Rebuilding Infrastructure in America," p. 4.

³⁸ For example, House Transportation and Infrastructure Committee Chairman Peter DeFazio stated in an interview: "You can't say it's a 20-80 match. It's always been 80-20." Steve Inskip, "Are Democrats Willing To Support Trump's Infrastructure Plan?" *KNAU Arizona Public Radio*, February 12, 2018, <https://www.knau.org/post/are-democrats-willing-support-trumps-infrastructure-plan>

governmental infrastructure funding,³⁹ using federal funds to spur non-federal investment is likely to generate far more infrastructure funding than just direct federal spending on projects.

Regretfully, critics ignored the fact that the Incentives Program is additive – it leaves untouched the 80-20 approach to funding – and pretended as if the Incentive Program replaced the current way the federal government reimburses states for highway construction.

Interestingly, describing the current system as 80-20 is incorrect. Many popular DOT programs have maximum federal shares below 80 percent. These include INFRA Grants (60 percent), Capital Investment Grants - New Starts (51 percent), and TIFIA Credit Assistance (33 percent).⁴⁰ Overall, the federal government currently provides just 22 percent of total annual public spending on transportation and water infrastructure, with state and local governments covering the remaining share.⁴¹

Finally, a major critique of the plan was that it streamlined project approvals by scrapping critical environmental protections. This criticism has also been applied to the Administration's broader efforts to rationalize the environmental review process, most recently to its proposed rulemaking regarding the National Environmental Policy Act.⁴² The Administration's proposal, however, does not jettison any major environmental provisions. It instead proposes to drastically improve the performance of the environmental review process while maintaining our environmental stewardship responsibilities.

Throughout my career, I have experienced a broad consensus among governors, mayors, and county executives on the need to drastically reform the current permitting process. Indeed, the current process does not work rationally and often delays projects that would improve the environment. The Council for Environmental Quality found that the average time to complete an Environmental Impact Study between 2010 and 2017 was 4.5 years.⁴³ Rapid approvals are scarce: A 2018 review found just one out of 144 environmental impact studies took less than one year to complete.⁴⁴ Large projects likewise face longer delays, averaging seven years to complete the review process for complex highway projects, according to a 2014 Government Accountability Office (GAO) study.⁴⁵ And as the GAO's 2014 report title states: "Little information exists on NEPA analyses." The government does not know how much NEPA adds

³⁹ Congressional Budget Office, "Public Spending on Transportation and Water Infrastructure, 1956 to 2017," October 2018, <https://www.cbo.gov/system/files/2018-10/54539-Infrastructure.pdf>

⁴⁰ 23 U.S.C. § 117; Federal Transit Administration, "Annual Report on Funding Recommendations," March 2019, <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/grant-programs/capital-investments/131541/fy20-annual-report.pdf>; 23 U.S.C. § 604

⁴¹ Congressional Budget Office, "Public Spending on Transportation and Water Infrastructure, 1956 to 2017," October 2018, <https://www.cbo.gov/system/files/2018-10/54539-Infrastructure.pdf>

⁴² Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, Council on Environmental Quality Notice of Proposed Rulemaking, 85 Fed. Reg. 1684, January 10, 2020, <https://www.federalregister.gov/documents/2020/01/10/2019-28106/update-to-the-regulations-implementing-the-procedural-provisions-of-the-national-environmental>

⁴³ Council on Environmental Quality, "Environmental Impact Statement Timelines (2010-2017)," December 14, 2018, <https://www.whitehouse.gov/wp-content/uploads/2017/11/CEQ-EIS-Timelines-Report.pdf>

⁴⁴ National Association of Environmental Professionals, "2018 Annual NEPA Report of the National Environmental Policy Act (NEPA) Practice," November 2019, https://naep.memberclicks.net/assets/documents/2019/NEPA_Annual_Report_2018.pdf

⁴⁵ U.S. Government Accountability Office, "Little Information Exists on NEPA Analyses," Report to Congressional Requesters GAO-14-370, April 2014, <https://www.gao.gov/assets/670/662546.pdf>

to project costs in aggregate and did not have any plans to begin quantifying such basic data until recently.⁴⁶

Compare this performance to our peer countries'. Australia manages an average approval time of 3.5 years and is looking to accelerate that performance in its once-a-decade review of its environmental protection law.⁴⁷ Canada similarly sets a timeline of two years to complete environmental assessments.⁴⁸ Despite the fact that these countries complete their assessments more rapidly than the United States, they still outrank the U.S. on Yale University's Environmental Performance Index.⁴⁹ Evidently, countries need not compromise efficiency to achieve environmental outcomes.

A prime example of how the dysfunctional process harms environmental goals involves New York City's plan to implement congestion pricing. Congestion pricing is a market mechanism with the potential to drastically lower emissions simply by charging drivers market-clearing prices to enter congested areas.⁵⁰ Implementing such a pricing plan requires a negligible footprint; the only new infrastructure needed is the erection of tolling "mast arms" on existing structures in Manhattan.⁵¹ Yet the current NEPA process may force the project to undergo the same level of analysis (an Environmental Impact Statement) as required for the construction of the new Tappan Zee Bridge,⁵² a 3.1-mile span crossing one of the East Coast's most important estuaries.⁵³ Delaying a beneficial project for months to study how hanging tolling arms on Manhattan streetlights affects parklands and recreational resources; topography, geology, and soils; water resources; and ecology (including that of endangered species and bald eagles) hardly makes sense from an economic or an environmental standpoint.

On the other side of the spectrum, federal agencies can grant Categorical Exclusions to activities that clearly have tangible environmental impacts.⁵⁴ Among the more egregious instances of Categorical Exclusions include the decision to wholesale exclude 179,000 projects that received stimulus funding in an effort to get funds out the door faster. It is likely that some projects involved would normally meet the standard of having "individually or cumulatively... a significant effect on the human environment."⁵⁵ Another instance that proved controversial was the

⁴⁶ Executive Order 13807: Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, 82 Fed. Reg. 163, August 24, 2017, <https://www.energy.gov/sites/prod/files/2017/09/f36/EO-13807.pdf>

⁴⁷ Peter Hannam, "Morrison government announces pick for environmental law review," *Sydney Morning Herald*, October 29, 2019, <https://www.smh.com.au/environment/conservation/clean-skin-samuel-picked-to-head-environmental-law-review-20191029-p5357e.html>

⁴⁸ Government of Canada, "Basics of Environmental Assessment," November 18, 2019, <https://www.canada.ca/en/impact-assessment-agency/services/environmental-assessments/basics-environmental-assessment.html>

⁴⁹ Yale Center for Environmental Law and Policy, *2018 Environmental Performance Index*, 2018, <https://epi.envirocenter.yale.edu/2018/report/category/hlt>

⁵⁰ Federal Highway Administration, "Congestion Pricing: Environmental Benefits," October 8, 2019, https://ops.fhwa.dot.gov/congestionpricing/resources/enviro_benefits.htm

⁵¹ Clayton Guse, "MTA documents offer first glimpse into plans for congestion pricing infrastructure," *New York Daily News*, August 11, 2019, <https://www.nydailynews.com/new-york/ny-mta-congestion-pricing-mast-arms-infrastructure-tolling-20190811-al7y4fgh7ffgdbhpdtofnxvnwq-story.html>

⁵² Now known as the Mario Cuomo Bridge

⁵³ Tappan Zee Hudson River Crossing Project, *Final Environmental Impact Statement*, July 2012, <https://www.newnybridge.com/documents/feis/vol1/vol-i-cover-and-table-of-contents.pdf>

⁵⁴ 40 CFR § 1508.4

⁵⁵ 40 CFR § 1508.4; Kristen Lombardi and John Solomon, "Big Polluters Freed From Environmental Oversight By Stimulus," *The Center for Public Integrity*, May 19, 2014, <https://publicintegrity.org/environment/big-polluters-freed-from-environmental-oversight-by-stimulus/>

Categorical Exclusion granted by the Minerals Management Service to the exploration plan that ultimately resulted in BP's Deepwater Horizon oil spill in 2010.⁵⁶ Either the environmental review process is critical for environmental preservation or it is a well-intentioned but time-intensive hurdle that can be waived when convenient. It cannot be both and still be considered good governance.

Rather than scrapping environmental protections as critics claimed, the framework in the Administration's Legislative Outline proposed commonsense improvements that allow projects to more successfully navigate the process while maintaining the letter and intentions of key environmental safeguards. One such proposal was improving agency coordination and accountability by creating a "One Agency, One Decision," structure that requires a lead agency to produce a single record of decision. This is hardly a radical poison pill. Indeed, such a provision was included in a bipartisan bill passed unanimously out of the Senate Environment and Public Works Committee, obtaining votes from Democratic Senators including Tom Carper and Sheldon Whitehouse, as well as Sen. Bernie Sanders.⁵⁷

The current NEPA process is a train wreck of subjectivity, leaving project developers in a quandary as to what environmental impacts need to be studied and to what extent. A system that results in an EIS for hanging tolling equipment in an urban environment and a CE for gulf oil exploration is a system that is fundamentally broken.

As federal policy makers seek to address infrastructure financing issues, it is my hope that they are able to look past political rhetoric and press releases. Our nation needs a thoughtful evaluation of the comments made by hundreds of state and local officials that found their way into the Administration's proposal.

Conclusion

In conclusion, I would like to once again thank Chairman Neal, Ranking Member Brady, and the Members of this Committee for its continued commitment to modernizing America's infrastructure funding and financing system.

Infrastructure is one of the few truly non-partisan issues affecting our nation. The comments we received from liberal, moderate, and conservative state and local leaders were remarkably similar. They wanted a federal infrastructure policy that created incentives for quality infrastructure, respected state and local ownership, and encouraged a robust but sensible environmental permitting process.

As this Committee continues to explore the challenges of infrastructure funding and financing, thank you for allowing me to highlight: the impact of federal funding is nuanced; conventional wisdom regarding financing can frequently mislead; and while some may disagree with the current Administration's policies, it did spend a year distilling the recommendations of hundreds of non-federal infrastructure owners and produced a collection of ideas helpful in informing the thinking around how to best move to the next generation of infrastructure oversight by the federal government.

⁵⁶ See Kristina Alexander, "The 2010 Oil Spill: MMS/BOEMRE and NEPA," Congressional Research Service *Report* R41265, March 2, 2011, <https://fas.org/sgp/crs/misc/R41265.pdf>

⁵⁷ S. Rept. 116-200 - America's Transportation Infrastructure Act of 2019, 116th Cong., 2019, <https://www.congress.gov/congressional-report/116th-congress/senate-report/200>