

Testimony prepared for the Subcommittee on Highways and Transit, Transportation and Infrastructure Committee, U.S. House of Representatives

For a hearing on “Building a 21st Century
Infrastructure for America—Long-Term Funding for
Highways and Transit Programs”

Testimony • By [Thea M. Lee](#) • March 7, 2018

Thank you to Chairman Sam Graves and Ranking Member Eleanor Holmes Norton for inviting me to join the witness panel today and to speak with you about these important issues. My name is Thea Lee and I am the president of the Economic Policy Institute (EPI), the nation’s premier think tank for analyzing the effects of economic policy on the lives of America’s working families. EPI has consistently and repeatedly advocated for a substantial increase in investment in the nation’s infrastructure in light of the extraordinary benefits this would bring to the U.S. economy, to workers, and to business.

Thank you for holding this important hearing today. The first step to ensure a healthy national infrastructure is keeping things from deteriorating. Allowing the Highway Trust Fund to become progressively underfunded in the coming decade would do great damage. The federal gas tax, which funds the HTF, is not indexed to inflation and hasn’t been increased since 1993; this means that the purchasing power of the HTF’s dedicated revenue source has been slowly declining. Since then, Congress has used general revenues to cover the gap between HTF project funding and the decaying value of its revenue source. The cumulative shortfall facing the HTF will reach \$138 billion by fiscal year 2027.¹ To ensure that HTF has resources to fund planned expenditures, the current gas tax should be raised or a new dedicated revenue source for the HTF should be found.

But we should be clear that keeping the *status quo* by finding a funding source for the HTF is far from adequate infrastructure policy. There is broad agreement that the current state of U.S. infrastructure is deeply deficient due to past neglect and underinvestment. For this reason, the U.S. economy would benefit greatly from a substantial increase in infrastructure investment. The American Society of Civil Engineers (ASCE) most recently put the 10-year infrastructure funding gap—the additional investment needed to maintain a state of good repair—at about \$2.1 trillion.² This estimate is for maintenance only; it doesn't even include the imperative to modernize and upgrade our transportation, energy, and water systems.

Our research at EPI indicates strongly that reversing this chronic underinvestment in infrastructure will require a strong federal role and a commitment of federal resources. Currently, we rely heavily on state and local governments to finance a large share of infrastructure—particularly highways and transit. This heavy reliance on state and local governments is the strategy that has led us to the current situation, which virtually everybody agrees is suboptimal. Doing better going forward will require a stronger federal role and a significant commitment of federal resources.

Below I highlight some of the findings from our past research. Specifically, this research finds:

- Infrastructure done right would boost job creation as well as the long-run productivity of the American economy.
- The first step to doing infrastructure right is fixing the Highway Trust Fund (HTF). The most important issue is simply ensuring that the trust fund has the resources to fund its planned expenditures. The past practice of using gasoline taxes for the HTF is a perfectly sound strategy. Strategies that call for other funding sources that approximate user fees (like vehicle miles traveled [VMT] taxes) are also reasonable. But the most important goal is simply to provide the resources needed to keep highway and transit investments from being strangled.
- Doing infrastructure right will require a strong federal role and federal commitment of resources for the following reasons:
 - There is no free lunch, or road, or bridge. American households will, in the end, pay for improved infrastructure—either through higher taxes or through user fees and tolls. Too often, advocates of “leveraging the private sector” (via public-private partnerships, or P3s) obscure or underplay this basic economic truth.
 - The federal government provides some key advantages to financing over private actors and even over state and local governments. The clearest advantage is that the interest rate paid on federal debt is lower than what is available to private actors or states. This means long-term debt financing is cheaper for the federal government.
 - Despite this potential federal government advantage, our current mix of infrastructure funding and financing leans much more heavily on state and local governments.
 - There is no economic basis to the glib arguments that state and local provision of

infrastructure is more efficient simply because these levels of government are “closer” to end users. Economic efficiency depends on the funding mechanism, not the level of government.

- Because state and local governments are not incentivized to take account of externalities or regional spillovers, they may underinvest in key infrastructure projects.
- Federally funded infrastructure investment is more likely to incorporate requirements for strong labor standards—ensuring that it supports good jobs with good wages. Plans that lean more heavily on private financing should not be used as an excuse to ignore labor standards, because if they did then these plans would likely see fewer good jobs created through infrastructure investments. Infrastructure projects that pay good wages have durable benefits for communities and local tax bases, unlike those that seek to undermine decent wages and standards.

Background: The large macroeconomic benefits of infrastructure done right

The United States economy has suffered from two glaring macroeconomic problems over the past decade. The first is a severe and chronic shortfall of spending by households, businesses, and governments relative to the economy’s productive potential (i.e., a shortfall of *aggregate demand*). This demand shortfall has slowed growth in both jobs and wages for most of the past 10 years. The second problem is a rapid deceleration in the pace of productivity growth. Productivity is the amount of income (or output) generated in an average hour of work. Productivity growth in turn provides the potential ceiling for how fast average income can rise without spurring inflation.

These are both serious problems, and policymakers should be concerned with each. A large, sustained increase in infrastructure investment would be an effective way to address both. Previous EPI research (Bivens 2017) found:³

- **Infrastructure investment could be an extraordinarily useful tool for macroeconomic stabilization.** Most estimates of the output “multiplier” for infrastructure investment are substantially higher than for other fiscal interventions. If the fiscal boost of infrastructure investment were accommodated by monetary policymakers, each \$100 billion in infrastructure spending would boost job growth by roughly 1 million full-time equivalents (FTEs).
- While unemployment in 2017 was roughly on par with its pre–Great Recession level, this does not mean policymakers should stop worrying about macroeconomic stabilization and maintenance of aggregate demand. **Growing fears of “secular stagnation”—a chronic shortfall of aggregate demand relative to the economy’s productive capacity—seem justified by several data points.** Key among them is the unusually slow growth in nominal wages this late into an economic recovery.
- **Productivity growth has decelerated sharply in recent years.** Much of this

deceleration is likely short-lived, and tighter labor markets should be expected to push productivity growth back toward more historically normal levels. Since infrastructure investment can lead to these tighter labor markets, it could have an immediate effect in restoring productivity growth.

- Further, and more important, **a greater public infrastructure investment effort can also boost productivity in the long run by expanding the public capital stock.** The rate of return to infrastructure investment is large; according to a review of dozens of studies on infrastructure, each \$100 spent on infrastructure boosts *private-sector* output by \$13 (median) and \$17 (average) in the long run.

Other research (Bivens and Blair 2016) has pointed out that the potential job-creation benefits of infrastructure investment are more widespread and broader in impact than commonly thought.⁴ Bivens and Blair show that roughly two-thirds of the total jobs supported by a given investment in infrastructure are outside construction.⁵ Some of these jobs are supported in supplier industries (steel and concrete, for example), while others are “induced” jobs—jobs supported when workers employed directly and in supplier industries spend their paychecks in other sectors.

These large potential benefits from infrastructure investment are why we at EPI have called for years for this investment to be a federal priority.

Lessons for how to make infrastructure investment effective

While a sustained increase in infrastructure investment could bring potentially large benefits to America’s working families, too many current plans being debated would squander this potential. The evidence indicates clearly that strong federal leadership and a strong federal commitment of resources are needed to make the nation’s infrastructure healthy. It also matters how infrastructure investment is implemented. Below we review the arguments and evidence that lead us to this conclusion.

Funding versus financing

Infrastructure spending involves two distinct aspects: *funding* and *financing*. Funding refers to how infrastructure is paid for, which in practice will be through some combination of user fees and taxes. A defining characteristic of infrastructure investment is large upfront fixed costs, so that the bulk of money is needed at the outset, while funding sources may materialize slowly and over time. *Financing* bridges this gap between upfront spending needs and the ongoing stream of funding—structuring user fees and taxes in a way that allows upfront costs to be paid over time. Proposals that rely on shifts in financing will not address the challenge of finding a solution to long-term funding.⁶

World class infrastructure will require a strong federal role

If U.S. infrastructure is to be world class, a strong federal role will be necessary. Currently,

state and local governments take on the bulk of infrastructure spending. According to the Congressional Budget Office (CBO), state and local governments accounted for 77 percent of total public spending on transportation and water infrastructure in 2014. They take on their largest role in operations and maintenance, where they account for 88 percent of such spending. However, they are also the majority partner in capital investment, accounting for 62 percent.⁷

The current system is one in which the responsibility for funding infrastructure has been largely left to the state and local governments. This is the system that has led us to where we are today, which most agree is inadequate. Any plan that doubles down on this approach and puts still more of the onus on state and local governments for finding infrastructure funding will not address our long-term infrastructure needs. Devolving this financial responsibility to the states does nothing to ensure that adequate funds will be available. State and local governments continue to face their own financial challenges. Some of this is purely political, with state governments refusing to adequately fund infrastructure (as well as other pressing public priorities) simply for ideological reasons. But states also face genuine economic and legal constraints that can make it harder for them to borrow money at the scale needed to finance a world-class infrastructure. The federal government's financing constraints are far less binding.

Economic efficiency depends most strongly on the funding mechanism, not on the level of government

Strict economic efficiency argues that infrastructure investment should be funded by those who use it. This insight has occasionally been used to argue that the federal government should only fund projects that benefit the nation as a whole, while projects that wholly benefit a particular state or locality should be left to their respective governments.⁸ Often, this is the line of thinking used to argue for assigning further infrastructure funding responsibilities to state and local governments.

But this reasoning for assigning federal, state, and local government roles is a bad approximation of efficiency. It ignores funding mechanisms, which play the much more important role in ensuring economic efficiency.

The gas tax provides a clear example for the role funding mechanisms can play in ensuring economic efficiency. Historically, the gas tax has been used to fund surface transportation infrastructure because of its ability to approximate road usage. However, as the number of hybrid and electric vehicles increases, the gas tax's usefulness as an approximation of road usage declines. If a road is funded by just a gas tax, then electric vehicle drivers can obtain all the benefits of road usage while incurring none of the costs.

User fees are a far better guarantor of economic efficiency than simply assigning certain levels of government to different infrastructure project types. For example, the benefits of a local road may largely be enjoyed by local residents, but there will be a leakage of benefits to nonlocal residents and the correspondence between geography and efficiency of infrastructure breaks down quickly.⁹ For example, if a local income tax was used to fund the local road this cost would only fall on local residents, but we would expect some

nonlocal households to receive benefits from the road without paying for them. For example, if the road is used to transport a consumer good from a local company to a nonlocal consumer, then nonlocal consumers will have benefited from the road while not paying for its usage. Because some beneficiaries are not bearing the cost, we would expect these local roads would eventually be underprovided if their construction is reliant only on local resources. Whereas a direct user fee would ensure that beneficiaries bear the cost (through an increase in shipping costs). And no matter which level of government has assigned the user fee, it remains the more efficient option.

In short, there is no compelling efficiency-based reason to think that the current practice of having state and local governments take a dominant role in infrastructure management is optimal. Once this argument is set aside, the affirmative case for a stronger federal role becomes undeniable.

Externalities imply a strong role for federal government

The previous section discussed why efficiency does not dictate that state and local governments should bear the funding and financing burden of mostly local projects. But there is also an affirmative case for a strong federal role. This is because infrastructure is usually part of a network—e.g., our nation’s roads, bridges, airports, waterways, and broadband. These network characteristics create externalities—benefits or harms that fall on third parties to an economic transaction. In order to maximize economic efficiency, externalities must be taken into account.

Network effects, where the benefit of a good or service increases with the number of users in the network, are one example. For examples, think of the nation’s telephones, airports, and broadband. State and local governments will not internalize the benefit extra investments confer on nonlocal others in the network by providing an additional node. This failure to internalize these benefits means that if state and local governments are left alone to fund infrastructure with network effects, it will likely end up underprovided.

Spillover effects provide another externality-driven reason why a strong federal role is needed to ensure infrastructure is not underprovided. Infrastructure investments in one city may provide benefits to those connected to it in a network, or may draw in economic activity from connected cities, having negative effects on those cities. As before, state and local governments will not internalize these effects, and this in turn implies that the federal government may be in a better position to ensure efficiency. Economic evidence so far suggests that spillover effects are substantial.¹⁰ This puts the federal government in the optimal position to increase the efficiency of infrastructure investment by helping to coordinate those investments that result in positive spillovers and discouraging those projects with negative spillovers.

Mass transit provides one instance where a substantial federal investment could provide spillover effects. Public transportation serves as a lifeline for many low-income urban residents who do not have access to a car.¹¹ There is evidence that mass transit can reduce traffic congestion, while highway capacity expansions provide only temporary relief to congestion.^{12 13} Public transportation also has environmental benefits, from

improved air quality to reduced greenhouse gas emissions.¹⁴ This means that mass transit can mitigate environmental externalities and provide spillover effects that can sometimes cross state lines. This puts the federal government in a position to coordinate investments to ensure positive spillovers. Finally, there is strong evidence that agglomeration economies increase the productivity of cities.¹⁵ It is hard to imagine modern American cities could exist without mass transit, and every indicator argues that mass transit will have to be expanded for American cities to absorb those workers wanting to move to them. Insufficient mass transit investments will strangle the ability of high-productivity cities to grow, and mass transit investments in turn will suffer without strong federal commitments.

Finally, infrastructure networks act as intermediate goods in the production process of firms. Problems in electricity generation or transportation will not confine themselves to those sectors, but will instead have knock-on effects that reduce output throughout other sectors of the economy. Maintaining economic efficiency means ensuring consistent quality throughout the system—a chain is only as strong as its weakest link. For example, if one state doesn't maintain its transportation infrastructure, truck drivers may have to avoid those roads or else damage their vehicles, which will have productivity repercussions in the sectors of the economy that rely on trucking. Again, ensuring consistent quality in infrastructure across regions calls for a stronger federal role.

A strong federal role provides the best potential protection for vital labor standards

For several decades now, wages for the vast majority of American workers have lagged far behind overall economic growth and productivity. What we now know from years of research at EPI is that this delinking of wage and productivity growth is not just some sad accident, but is instead the product of a decades-long policy project aimed precisely at wage suppression. This policy assault on wage growth was not one single piece of legislation. Instead it was a concerted effort to reduce workers' economic leverage and ability to bargain for higher wages along every policy margin. Macroeconomic policy kept labor markets too slack for workers to credibly threaten to quit unless their wages were hiked; the federal minimum wage stagnated and shrank in the face of price inflation; labor law enforcement failed to keep the playing field level for workers trying to organize, while employers undertook ever more aggressive tactics to thwart them; trade policy exposed workers to fierce global competition while providing greater protections for corporate profits; and regulatory and tax policies gave corporate managers greater incentive and ability to claim a larger share of the income that their firms generated.

Since intentional wage suppression occurred along dozens of margins, a campaign to raise Americans' pay must also be fought along every margin possible. One key margin is labor protections that have traditionally covered workers engaged in infrastructure investments. These protections help to ensure that contractors do not engage in a race to the bottom on wages and benefits. They also help ensure that contractors receiving public funds contribute resources to help train and expand the skilled construction workforce. The most well-known and important infrastructure-related labor standard is, of course, the

Davis-Bacon Act's prevailing wage provision, which protects community wage and benefit standards for all construction workers on federally funded projects.

Public infrastructure investments that contain strong labor protections can be an arrow in the quiver of attempts to reverse the era of wage stagnation for America's workers. Infrastructure plans that are managed and financed by private actors are less likely to contain strong labor protections, and hence represent an opportunity squandered when it comes to using public investment to restore broadly shared prosperity.

Finally, a strong federal role also provides the best opportunity for making sure that best practices in inclusive hiring are followed as contractors bid on projects. In the past, communities of color were too often formally excluded from the employment generated by public investment. Recent improvements in this regard must be built upon and extended.¹⁶

Conclusion: The status quo must be fixed

We know that the current *status quo*, where state and local governments are required to bear the brunt of infrastructure funding, is failing to meet our long-term infrastructure needs. Fixing this state of affairs is the most obvious way to put U.S. infrastructure investment back on track. Given this, any plan that doesn't put up significant new federal commitment of resources should be viewed as a distraction from the real issue at hand.

This includes vague promises to leverage public-private partnerships (P3s). P3s provide an alternative *financing* option for infrastructure, but do not provide any *funding*. Private partners will not build infrastructure for free. They invest only in return for a future revenue stream. This revenue must come from some combination of taxes or user fees, meaning that P3s do nothing to address the funding question. And the natural monopoly characteristics of infrastructure mean that P3s come with their own set of problems and do not avoid the need for an engaged public role.¹⁷ Because P3s are no free lunch and because state and local governments already bear a too-large burden for the nation's infrastructure investment, new plans must include substantial new sources of federal funding.

Additional distractions from this central fact include plans that emphasize changes to the environmental review process. These plans tend to claim benefits from rolling back environmental regulations that are vastly overstated and rely on data on project completion that is significantly out of date.¹⁸ For example, between 2012 and 2016, the average time needed to complete Environmental Impact Statements (EIS) under the National Environmental Policy Act (NEPA) fell to 3.6 years. This fall in the review time was driven by reforms included in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 as well as subsequent transportation reauthorizations.¹⁹ More importantly, only 4 percent of approved Federal Highway Administration projects required completing an EIS at all.²⁰

The central problem facing the nation's infrastructure is an insufficient commitment of federal resources. Nothing else besides this strong federal commitment will fix our public investment shortfall, and plans focusing on other issues are distractions. Fixing the

Highway Trust Fund (HTF) is an important step that nevertheless just keeps the status quo from getting worse. We need to aim much higher than this.

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