

The INVEST in America Act and Surface Transport Infrastructure:

Misplaced Priorities and the Need for Real Reform

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Prepared by Gerard Scimeca

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Abstract

The INVEST in America Act, while it represents a laudable effort to address the critical state of the nation's surface transport infrastructure, fails to address fundamental problems with infrastructure funding. It recommits to funding highway maintenance through a series of bailouts rather than seeking reform that might return us to a sustainable user-pay model, such as an increased gas tax, a Vehicle Miles Traveled fee, or equivalent system. In doing so, it increases the federal subsidy given to trucking companies that cause unaccounted damage to America's highways. At the same time, it imposes burdensome and largely redundant new regulations on trucking's direct competitors, the freight rail companies whose own infrastructure is privately funded and which are sorely needed to meet the infrastructure and transport objectives set by policymakers. More comprehensive, forward-looking solutions must be found to enable surface transportation to remain competitive, innovative, and efficient.



Executive Summary

Much of America's surface transportation infrastructure is both aging and increasingly in disrepair, with more than \$420 billion in deferred repairs as of 2020, according to the Department of Transportation. The most recent Federal effort to alleviate the situation is the INVEST in America Act (H.R. 2), a 5-year, \$494 billion spending package that includes \$319 billion for highway investments alongside \$105 billion for transit and \$60 billion for rail.

However, many of these allocations represent ineffective stopgap measures. The bill fails to shift the underlying funding model used to support the nation's transport networks. While freight shipping continues to be self-funded through a variety of user-pay mechanisms, trucking—another major player in long-term shipping—is moving even further away from a user-pay model and toward complete reliance on massive taxpayer bailouts. Everyone relies on America's roads, bridges, and highways, but cargo trucks impose an oversized burden on them in terms of wear and tear, one they fall far short of repaying through existing sales and fuel taxes. That problem could soon be exacerbated by proposals that fail to increase infrastructure funding contributions on the part of the trucking industry.

Highway maintenance is paid for by the Highway Trust Fund (HTF), which receives its primary sources of funding from fuel taxes and large vehicle sales taxes. But fuel tax rates have remained stable for close to 30 years, while Congress has removed spending limits, deferred necessary repairs, and covered the shortfall with emergency bailouts from the Treasury's taxpayer-backed general fund.

The HTF has been broke since 2009. Only a higher fuel tax or equivalent alternatives can start to shift the burden of highway maintenance back to the industry most directly responsible for high damage: trucking. The INVEST in America not only fails to provide such a tax increase, it replaces it with the single biggest bailout the HTF has ever received—more than \$145 billion, more than all of its previous bailouts combined.

Such large-scale expenditures are not financially sustainable and do a disservice to U.S. consumers and taxpayers alike. Clear negative trends in HTF revenue combined with a rapidly rising projected need for infrastructure spending make it clear that America's economy depends on near-term meaningful reform for the HTF and for surface transport funding more generally.

At the same time, the INVEST in America Act imposes a number of redundant, unnecessary, over-generalized, and in some cases outright counterproductive restrictions on freight rail, restrictions that will have no significant effect beyond slowing freight traffic and reducing the efficiency of long-distance domestic shipping.

We join a large and growing number of stakeholders in opposing the INVEST in America Act, and call on lawmakers, businesses, and all stakeholders in our transport infrastructure to do the same.

Freight Rail and Trucking: An Unbalanced Equation



Together, trucking and freight rail account for some 68% of America's freight shipping by [ton-mile](#). Rail handles the majority of bulk agricultural and energy products, while trucking is responsible for higher-value goods and much direct-to-consumer transport of commercial goods. This effective division of labor has been good for America's economy, and competition between trucking and freight rail continues to drive innovation, with surface-freight transport increasing its overall economic profit by [\\$309 billion](#) in 2015 alone.

But those benefits are contingent on a number of critical factors, one of which is competition on even footing. The last two decades have seen two growing disruptions to the balance of factors involved: regulation on freight rail has become increasingly burdensome, and trucking has increasingly been able to avoid the cost of maintaining the infrastructure it relies on. Existing user-pay mechanisms to fund highway, bridge, and road

repair have been rendered inadequate by rising costs and Federal mis-management, forcing infrastructure spending to draw on the Treasury's general fund, effectively subsidizing trucking companies.

Each of these factors will be examined in turn, and potential means of redress suggested.

Regulatory Burdens

Freight rail is an \$80 billion industry responsible for more than 135,000 [jobs](#). It is central to our economy, and, unlike trucking, freight rail companies are responsible for the maintenance of their own transport infrastructure. They cover that burden through private investment and careful cost-management, which has been made increasingly difficult by laws that hamper innovation and reduce operational efficiency with little benefit.

The most recent example is the INVEST in America Act, H.R. 2, which contains a number of regulatory changes that threaten to reduce rail companies' ability to operate efficiently and to reliably play their crucial economic role. These changes are not likely to increase safety; in most cases, their intended outcomes are already ensured by other, less burdensome provisions or requirements, or are simply unnecessary.

As argued below, these provisions—along with several others—would reduce rail network efficiency and prevent rail companies from innovating, modernizing, and, ultimately, from competing in certain domains. In return, they are unlikely to provide substantial benefits to employees, consumers, or other stakeholders. The best option for the continued economic success of American shipping is to reject H.R. 2's proposed regulatory changes.

Preventing freight rail from shipping liquified natural gas

Section 8202 of the bill effectively prohibits the movement of liquified natural gas (LNG) by rail, a policy motivated by public health and safety concerns. While these concerns are of course crucially important, there are a number of good reasons to think that safety concerns can be addressed while still allowing for the efficient transport of LNG. The benefits of such an arrangement are clear: LNG has the lowest carbon emissions per [Btu](#) of any natural gas—roughly half those of coal—and is most [easily and cheaply](#) transported by rail.

Meanwhile, the safety concerns are actively being addressed on two fronts. First, the Department of Transportation recently completed real-world testing of tank car safety and, in consultation with the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Federal Railroad Administration, ruled that suitably reinforced [DOT-113C120W9](#) tank cars can reliably and safely transport LNG. Second, an ongoing [\\$1 million](#) study PHMSA is further exploring the safety of LNG transport; the results of that study will better inform subsequent legislation.

Halting the continued modernization of rail crews

Section 9509 of the bill would mandate that all freight trains operate with two-person crews. Crew sizes have already decreased from five people to two over the last fifty years, as advances have been made in technologically assisted management and safety.

Notably, Positive Train Control anti-crash technology will be fully implemented across US freight rail by the end of this year. Meanwhile, many passenger, short-line, and freight rail systems in other countries have safely and successfully operated with single-person crews for more than a decade.

Moreover, there is no evidence that two-person crews are any safer than suitably equipped one-person crews. The Federal Railroad Administration (FRA) agrees, [noting](#) that comparable foreign freight rail operations have acceptable safety records. Proposed two-crew mandates are simply not in accordance with the available evidence.

Reversing recent advancements in freight flexibility on the Southern border

The largest international rail interchange in North America is Laredo, Texas. In [2018](#), Kansas City Southern Railroad (KCS) obtained FRA approval to allow inbound trains to proceed directly to KCS's Laredo rail yard, still operated by their originating Mexican crews. Section 9510 is a continuation of ongoing efforts to legislatively reverse that ruling by requiring slow, costly crew transfers at every border crossing.

While the proposed change is ostensibly motivated by safety concerns, the Mexican crews in question are certified by KCS's Mexican affiliate and have an average of 20 years of operating experience, as well as being trained and tested on U.S. operating rules and regulations. Here, too, H.R. 2 appears to be proposing unwarranted overregulation.

Impractical time limits for blocked crossings

Section 9553 of the bill mandates that no freight train will legally be able to occupy a rail crossing for more than 10 minutes. The proposal is motivated by concerns about emergency response times and traffic congestion, so its goals are both important and laudable. The difficulty is that the rule would apply to more than 200,000 grade crossings that vary from small, remote roads to busy crossing points in densely trafficked areas. There is no one-size-fits all solution that will meet the bill's goals without serious consequences for rail network congestion and regularity of service.

Finer-grained legislation is needed that will grant rail operators the freedom they need to avoid local traffic and road blockage concerns while maintaining rail network integrity.



Infrastructure Funding

America's surface shipping relies on two major branches of infrastructure: rail networks and highways. Rail networks stretch to some [140,000](#) miles of track, and are built, maintained, and monitored by rail companies themselves; taxpayer money is not involved. Instead, what rail companies [require](#) is the ability to compete fairly so that they remain attractive investments for the external funding sources enabling them to operate.

One of the most severe threats to the rail industry is the effective Federal subsidy given to its chief competitor—trucking—in the form of a taxpayer funded Highway Trust Fund (HTF). The HTF was created in [1956](#) to fund the expansion of the Federal highway system, and was designed so that it would be funded by a Federal fuel tax in perpetuity. It remains the central mechanism by which states are reimbursed for highway, road, bridge, and tunnel repair costs, and is crucial not only to trucking but to the entire American economy.

If the system were working as designed, trucking companies would be paying into the HTF through diesel taxes high enough to offset the damage they do to our roads and bridges. Notably, according to [Federal reports](#), that damage currently far outstrips the wear-and-tear imposed by regular passenger vehicles weighing only a few percent of the tonnage of a fully loaded six-axle truck. The best current estimates suggest that trucks are underpaying for their highway infrastructure damage by [more than 27 cents per gallon of fuel](#).

There are a number of reasons that the HTF has failed to keep pace with demand, which are explored below. First, however, the scope of the demand needs to be made clear: the Department of Transportation [estimates](#) that American highways and bridges face more than \$800 billion in deferred investment needs, including an almost \$480 billion backlog of critical repairs. That backlog is in addition to an [estimated](#) \$170 billion per year needed to maintain currently-serviceable infrastructure elements.

A solution is needed that simultaneously meets [two requirements](#): (a) trucking must pay a greater share of the cost of infrastructure maintenance in order to allow for fair competition in surface transport; (b) the HTF's funding model must be reformed to guarantee the fund's continued utility. These goals might be achieved in any number of ways, but both outcomes are critical if freight rail is to continue playing its role as a major engine of economic dynamism and prosperity within the United States.



The decreasing value of the gas tax

The HTF's primary sources of funding are fuel taxes, currently set at 18.4 cents per gallon for gasoline and ethanol-blended fuels and 24.4 cents per gallon for diesel; together they account for almost 85% of the fund's revenue. At present, however, fuel taxes account for only a fraction of the fund's outlays; the [Congressional Budget Office](#) estimates that the fund will accrue a cumulative shortfall of almost \$200 billion by 2028, with a deficit of more than \$25 billion. The fund has already run dry many times, each time requiring a bailout from the Treasury general fund. There are five primary reasons for the HTF's failure to meet its obligations. One is the ongoing failure to reform the fund's revenue model, and is addressed below; the other four are structural and are addressed here.

- First, fuel taxes have not been raised since 1993, despite the support of state and local governments, the construction industry, labor unions, the Chamber of Commerce and other business interests, many members of congress, and even the [American Truckers' Association](#).
- Second, fuel taxes were not indexed to keep pace with inflation. As a result, the effective purchasing power of the HTF's tax receipts have dropped by 40% since 1993.
- Third, vehicles are becoming more fuel efficient. The [Bureau of Transport Statistics](#) estimates that the average miles-per-gallon of light-duty vehicles has increased almost 35% since 1980, a trend driven by state-level efficiency mandates, state and Federal state tax incentives, and changing consumer preferences.
- Finally, sales of electric vehicles have increased sharply over the last several years ([jumping 63%](#) from 2017 to 2018), exacerbating the trend toward fuel efficiency overall and, if current trends continue, threatening to sharply reduce gas tax receipts in the future.

Thanks to these and other factors, the HTF has effectively moved away from its intended user-pay model. It is currently solvent only thanks to the Obama Administration's FAST Act, which allowed the HTF to draw on general Treasury funds, and it will need additional outside assistance at the end of the current fiscal year when the act expires.

Failure to produce reform

The HTF has been on a slow path to insolvency since the passage of the TEA21 infrastructure law in 1998. TEA21 allowed the fund's outlays to be determined based on projected rather than actual revenues. From there, a series of additional legislative missteps have allowed the fund to repeatedly run dry while avoiding any meaningful reform. A full timeline of relevant legislative events can be found [here](#), but the key errors can be summarized as follows:

- Failure to raise gasoline and diesel taxes;
- Further decoupling HTF spending from tax receipts by suspending and then repealing the "Byrd test," which required that HTF spending be reduced if expected outlays exceed expected revenues;
- Shifting costs for various tax credits (including e.g. ethanol tax credits) to the HTF rather than the general fund;
- Redistributing moneys from the HTF to the Mass Transit fund.

The legislative realities behind each of these decisions are complex, but in each case the choice was made to allow the fund's long-term expenses to mount while taking no steps to increase its long-term revenues. A pair of blue-ribbon commissions were established to design solutions; their advice was given more than ten years ago now and has been essentially ignored. In both cases, the [core recommendation](#) was a [gas tax increase](#).

The result of these repeated and multi-faceted failures to produce meaningful reform have been some \$140 billion of non-HTF taxpayer money spent to repair highways over the last decade and a half. The INVEST in America Act would more than double that, with a new one-time bailout of \$145 billion. It would do nothing to reform the HTF's funding model and would provide no new revenue streams for ongoing maintenance.

Possible Solutions

Luckily, there is reason to think that a well-designed multi-pronged approach to reforming the HTF might both restore it to long-term solvency and re-establish the user-pay model it was always intended to rely on. There are two key elements of any reform effort, the first of which is simple: raise the gas tax. As mentioned above, the move has more than two decades of support from every major stakeholder, with the primary barrier appearing to be a matter of public perception and political risk. The Congressional Budget Office (CBO) [estimates](#) that raising the gasoline and diesel taxes by just one cent per gallon would increase HTF revenues by approximately \$1.6 billion; the lowest recommended increase, made in the 1990s, was three cents over five years. Even a modest fuel tax increase—accompanied by a measure indexing those taxes to inflation—would grant the fund much-needed short-term reprieve and open the door to more serious reform in the future.

One likely avenue for that continued reform is the implementation of a [Vehicle Miles Traveled fee](#) (VMT). Such a fee would rely on additional infrastructure for monitoring and levying the tax that is [not yet in place](#), but it has a number of critical benefits. The most noteworthy is that it would [not be affected](#) by increasing fuel efficiency or the prevalence of hybrid and electric cars. Another, spelled out in a [recent CBO report](#), is that a VMT fee could be adjusted based on factors such as vehicle configuration, weight, location, purpose, and other factors, allowing vehicles causing the greatest infrastructure damage to support their share of infrastructure costs without imposing an unsustainable burden on commuters or other drivers.

Conclusions

America's surface transport infrastructure underlies the activity of huge sections of the nation's economy, and it is essential that it be kept in good repair. The INVEST in America Act allocates Federal funds to many of the most crucially affected areas, but it is not designed to provide the forward-looking solutions that the economy needs.

The funds it provides will be most effective if they are delivered without the additional burden of redundant and unnecessary regulations. Freight rail is reliable, effective, and enjoys high levels of public trust; it is also our most efficient form of long-distance transport and the most climate-friendly form of surface shipping under most conditions. It is safe and is already well-regulated. And it is self-funding. What the industry needs is fair competition and a chance to grow, innovate, and develop its own solutions so as to best serve the public.

One crucial element in that formula is the need for the trucking industry to pay a greater share of the costs of highway and bridge maintenance, so that Federal taxpayers are not subsidizing an industry that is already competitive. The clear way forward is to return the HTF to a user-pay model through fuel tax increases, inflation indexing, and the introduction of a Federal-level VMT based on existing state-level pilot programs.

Works Cited

- Arora, S., & McConnell, S. (2017). Four forces to watch in trucking and rail freight. McKinsey. <https://www.mckinsey.com/industries/travel-logistics-and-transport-infrastructure/our-insights/four-forces-to-watch-in-trucking-and-rail-freight>
- Association of American Railroads. (2020). Freight Rail Infrastructure Priorities. <https://www.aar.org/issue/freight-rail-infrastructure-policies/>
- Atkinson, R. (2019). A Policymaker's Guide to Road User Charges. Information Technology & Innovation Foundation. <https://itif.org/publications/2019/04/22/policymakers-guide-road-user-charges>
- Bureau of Transportation Statistics. (2020). Average Fuel Efficiency of U.S. Light Duty Vehicles. <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles>
- Burton, M. (2020). Estimating the Rail-to-Truck Traffic Diversions Attributable to Increased Truck Size and Weight. Appalachian Transportation Institute. <http://www.cabt.org/wp-content/uploads/2020/07/DIVERSION-STUDY-FINAL.pdf>
- Congressional Budget Office. (2015). Testimony on the Status of the Highway Trust Fund and Options for Paying for Highway Spending. <https://www.cbo.gov/publication/50297>
- Congressional Budget Office. (2019). Issues and Options for a Tax on Vehicle Miles Traveled by Commercial Trucks. <https://www.cbo.gov/system/files/2019-10/55688-CBO-VMT-Tax.pdf>
- Carey, L. (2020). White House calls Moving America Forward Act "not a serious" proposal. Transportation Today. <https://transportationtodaynews.com/featured/18749-white-house-calls-moving-america-forward-act-not-a-serious-proposal/>
- Corselli, A. (2020). USDOT Issues Rule Authorizing Bulk Transport of LNG by Rail. Railway Age. <https://www.railwayage.com/news/usdot-issues-rule-authorizing-bulk-transport-of-lng-by-rail/>
- Davis, J. (2018). Ten Years of Highway Trust Fund Bankruptcy: Why Did It Happen, and What Have We Learned?. ENO Center for Transportation. <https://www.enotrans.org/article/ten-years-of-highway-trust-fund-bankruptcy-why-did-it-happen-and-what-have-we-learned/>
- Davis, J. (2019). Final FY20 Bill Provides \$87.2 Billion for USDOT. ENO Center for Transportation. <https://www.enotrans.org/article/final-fy20-bill-provides-87-2-billion-for-usdot/>
- Dovell, E. (2012). U.S. Rail Infrastructure. U.S. Council on Foreign Relations. <https://www.cfr.org/backgrounder/us-rail-infrastructure>
- EVAAdoption.com. (2020). EV Market share by state. <https://evadoption.com/ev-market-share/ev-market-share-state/>
- Federal Highway Administration. (2020). MAP-21 Comprehensive Truck Size and Weight Limits Study. <https://ops.fhwa.dot.gov/Freight/sw/map21tswstudy/index.htm>
- Federal Highway Administration. (2012). New Department of Transportation Report on Highway and Transit Conditions Underscores Need for Transportation Investment. <https://www.fhwa.dot.gov/pressroom/fhwa1212.cfm>
- Federal Railroad Administration. (2020). Freight Rail Overview. <https://railroads.dot.gov/rail-network-development/freight-rail-overview>
- Federal Railroad Administration. (2020). Train Crew Staffing. A Proposed Rule by the Federal Railroad Administration on 03/15/2016. Federal Register. <https://www.federalregister.gov/documents/2016/03/15/2016-05553/train-crew-staffing>
- Holtz-Eakin, D. (2019). Digging Deeper on the VMT. American Action Forum. <https://www.americanactionforum.org/daily-dish/digging-deeper-on-the-vmt/>
- Kaack, L. H., Vaishnav, P., Morgan, M. G., Azevedo, I. L., & Rai, S. (2018). Decarbonizing intraregional freight systems with a focus on modal shift. Environmental Research Letters, 13(8), 083001.
- Langer, A., Maheshri, V., & Winston, C. (2017). From gallons to miles: A disaggregate analysis of automobile travel and externality taxes. Journal of public Economics, 152, 34-46.
- National Surface Transportation Infrastructure Financing Commission. (2009). Paying our way: A new framework for transportation finance. https://financecommission.dot.gov/Documents/NSTIF_Commission_Final_Report_Mar09FNL.pdf
- National Surface Transportation Policy and Revenue Study Commission. (2007). Transportation for Tomorrow. Report of the NSTPRSC. <https://catalog.hathitrust.org/Record/010619918>
- Peter G. Peterson Foundation. (2020). The Highway Trust Fund, Explained. <https://www.pgpf.org/budget-basics/budget-explainer-highway-trust-fund>
- Tax Policy Center. (2020). What is the highway trust fund, and how is it financed?. <https://www.taxpolicycenter.org/briefing-book/what-highway-trust-fund-and-how-it-financed>
- The Office of Daniel Lipinsky. (2019). Request for cosponsors. Dear Colleague. <http://dearcolleague.us/2019/11/cosponsor-hr-3896-the-protection-of-american-jobs-in-cross-border-rail-operations-with-mexico-act/>
- U.S. Department of Transportation. (2019). Pocket Guide to Transportation. <https://www.bts.gov/sites/bts.dot.gov/files/docs/browse-statistical-products-and-data/pocket-guide-transportation/224731/pocket-guide-2019.pdf>
- U. S. Department of Transportation. (2020). GROW AMERICA Act: Making Critical Investments in Highway and Bridge Infrastructure. https://www.transportation.gov/sites/dot.gov/files/docs/Making_Critical_Investments_in_Highway_and_Bridge_Infrastructure.pdf
- U.S. Energy Information Administration. (2020). How much carbon dioxide is produced when different fuels are burned?. <https://www.eia.gov/tools/faqs/faq.php?id=73&t=11>
- Varn, J. (2019). The Highway Trust Fund Has a Numbers Problem. Bipartisan Policy Center. <https://bipartisanpolicy.org/blog/the-highway-trust-fund-has-a-numbers-problem/>



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2221 S. Clark Street, Arlington, VA 22202
571-766-8476

info@caseforconsumers.org
caseforconsumers.org