I am Chuck Baker, President of the American Short Line and Regional Railroad Association (ASLRRA), the trade association representing the nation’s 600 Class II and III railroads.

It is a privilege to testify before you today. As this Committee and the Congress look to make significant, necessary investments to strengthen America’s supply chains and ensure American competitiveness, rail must be part of the solution.

Freight railroads are a fundamental cornerstone of the Nation’s logistics and supply chain network, providing the most efficient and environmentally-friendly means of surface transportation. The U.S. freight rail system is unique in that it is largely provided on a privately operated and funded right-of-way with a common carrier obligation. These unique factors combine to form what the World Bank has recognized as the best freight rail network in the world, offering the American economy an enduring and crucial competitive advantage, which should be maintained and expanded.

My comments today will highlight how U.S. short line and regional railroads are an important part of the U.S. freight rail network, providing a safe, competitive, and environmentally friendly low-carbon option to thousands of customers and communities who would otherwise be cut off from the national railroad network, and I will offer suggestions for policies that enhance those benefits.

**SHORT LINE RAILROADS ARE A SIGNIFICANT PART OF THE FREIGHT RAIL SYSTEM**

Those of you who have served on this Committee are very familiar with our story – the variety of goods that we haul, the variety of operational size, and the variety of ways we aggressively partner with customers to ensure they remain competitive. Full Committee Chair Cantwell and Ranking Member Wicker, along with many other Members of the Committee have staunchly supported policies and programs enhancing the inherent economic and environmental benefits of freight rail, including short lines, which we greatly appreciate.

The name “short line” can create the mistaken impression that these railroads are all very short rail lines. The fact is they come in all sizes. The Omaha, Lincoln & Beatrice Railway in Senator Fischer’s State
of Nebraska is 2 miles long, while the Rapid City, Pierre & Eastern Railroad in Senator Thune’s State of South Dakota is 743 miles long. In Florida, Iowa, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, South Dakota, and Vermont, short lines operate track that stretches almost the entire length or width of the state.

**Short line railroads operate in 49 states over nearly 50,000 miles of track, or approximately one third of the nation’s freight railroad network.** In the states represented by this Subcommittee’s Members, there are 242 short lines operating over 20,000 track miles. Short lines are often called the first mile/last mile of the nation’s railroad system and handle in origination or destination one out of every five rail cars moving on the national system. In 36 states, short lines operate at least one quarter of the state’s rail network. Subcommittee Chairman Peters’ State of Michigan is one of ten states where short lines operate more than 70% of the state’s rail network—21 short line railroads operating approximately 2,800 miles of track.

Although short lines are most often associated with small-town and rural America, they also serve large urban areas and many of the nation’s busiest ports, including Seattle and Tacoma, Miami, Los Angeles and Long Beach, Hampton Roads, Pascagoula, Savannah, Mobile, New Orleans, and New York/New Jersey. Likewise, various short line railroads operate as neutral terminal switching carriers for multiple Class I railroads in Chicago, New Orleans, Kansas City, and St. Louis. The Chicago South Shore and South Bend Railroad and the New York & Atlantic Railway operate freight traffic over two of the busiest rail commuter corridors in the country.

For the benefit of those not as familiar with short lines, let me comment briefly on four defining characteristics. Taken together, we believe these characteristics contribute significantly to sustaining strong and competitive rail service for regions and businesses that would otherwise be left behind.

**Most short lines operate track that was headed for abandonment under previous Class I owners.** These were light density lines in smaller towns and rural areas with challenging infrastructure that could not generate enough revenue to be viable under the cost structure of the big national carriers. These former branch lines served customers that were located “off the beaten path” for the larger railroads and that typically shipped smaller volumes. With marginal or unprofitable financial returns, the previous owners understandably made minimal capital investment, resulting in deferred maintenance. They were, in the lexicon of this hearing, the weakest link in the freight supply chain. Thankfully, rather than abandoning these lines, the larger railroads spun them off to local entrepreneurs to reconstitute as independent short lines, and that has been a remarkable success story over the last 40 years. To be successful, short line owners must not only eliminate that deferred maintenance but must upgrade the track to handle the heavier, longer trains that are operated today by our Class I connecting partners. Short lines therefore invest on average from 25% to 33% of their annual revenues into maintaining and rehabilitating their infrastructure, and this makes short line railroading one of the most capital-intensive industries in the country.

**Short line railroads are most often the first and last step in a logistics process.** One in five cars on the network originate or terminate on a short line. We are small businesses, and we keep small businesses connected to the larger economy. Even our strongest supporters in Congress support us not because they are particularly interested in railroads but because they understand the importance of our service to farmers and businesses in their states. And that’s the right way to think about it - the trains we run keep customers connected to the national railroad network, allowing them to reach their markets with safe and reliable service at competitive rates. It perfects the supply chain for tens of thousands of
businesses and that perfection is required for American businesses to succeed in a competitive global economy. This is evident in every state in which we do business.

In highly congested areas, we provide critical switching and transloading operations as supply chain options for shippers and receivers seeking flexible and creative ways to address logistics challenges. We do this with a high level of customer-focused service to ensure that every penny of value is squeezed out of every supply chain dollar to ensure competitiveness for American businesses in a competitive global marketplace.

**Flexible, efficient local service drives our success.** Short lines create value not through our size or total market share but in who and where we serve. For large areas of the country and particularly for rural and small-town America, short line railroad service often offers the only connection to the national freight rail network. Without short line service, shippers and receivers in these areas cannot take full advantage of the efficiencies and reach of the national rail network. For the businesses and farmers in those areas, our ability to take a 25-car train 75 miles to the nearest Class I interchange equals in importance the Class I’s ability to attach that block of traffic to a 100-car unit train and move it across the country. Our customers depend on the economics of rail service and our interline services with the Class I railroads to remain competitive in their domestic and international markets where pennies per bushel or dollars per ton can make the difference between winning or losing business.

Short lines can make a go of it in challenging locations and markets because we deal face-to-face with customers and offer the flexible service their businesses require. If our customers require an extra switch on Sunday morning, or they need to double their deliveries with almost no notice, they can reach the President or the General Manager of the short line personally who will do everything they can to make it happen. The short line is a small enough operation with enough desire for growth, capacity to support it, and flexibility in their approach to be able to adjust to the ever-changing demands of the marketplace.

**Short lines are a growth engine** – particularly for areas of the country that have not shared in all of the country’s economic growth. Short lines are obsessed with growing our businesses by helping our customers grow their businesses. While we may only move the traffic a few miles to the interchange with the Class I, the service and access we provide each individual customer is critical to that customer’s success. In a recent analysis undertaken by PwC (attached), each job on a short line indirectly drives an additional 2.6 jobs. In total across the US economy, 0.51% of business inputs rely on transportation services provided by the short line industry, amounting to 478,820 jobs, $26.1 billion in labor income, and $56.2 billion in value added.

Short lines work relentlessly to create new business opportunities with current and new customers. After all, a railroad can’t pull up its rails and relocate, so they are committed to the success of their local communities. They invest in technology and innovation that provides increased safety and new opportunities for customers. They are problem solvers, seeking new ways to service a customer, and create value for themselves and the communities in which they operate. As any shipper will tell you, logistics transportation costs and service are huge determinants of success and we take that responsibility very seriously.

**ENVIRONMENTAL IMPACT OF FREIGHT RAIL**
While the transportation sector is the biggest source of greenhouse gases in the United States, EPA data shows that rail, which accounts for 40% of U.S. long distance freight volume, is responsible for just 2.1% of the sector’s emissions. As the AAR has documented (attached), freight trains move on average one ton of freight more than 470 miles on one gallon of diesel fuel.

Let me bring that down to the local level where short lines are making a considerable contribution. **Tacoma Rail in Washington State** moves an average of 69,000 tons of interchanged traffic daily, using an average of 350,000 gallons of fuel per year. Comparable truck moves on the highway would use 645,000 gallons of fuel - that savings is the energy equivalent of the annual electricity usage of 475 homes.

**The Nebraska Central Railroad** moves 56,600 tons of corn from the Stromsburg Subdivision to Columbus, Nebraska using 7,850 gallons of fuel. For trucks to move an equivalent volume of corn from the same origins to the same destination would use approximately 39,900 gallons.

**The Louisville & Indiana Railroad in Indiana** operates two shuttle moves in Southern Indiana to and from Consolidated Grain and Barge (CGB) in Jeffersonville. The first runs from Kokomo Grain in Edinburgh and averages 100 cars annually. Moving this on its privately owned and maintained rail line rather than the parallel publicly owned and maintained I-65 and US31 highways saves 8,759 gallons of fuel and, using EPA’s Greenhouse Gases Equivalencies Calculator, avoids discharging 89 metric tons of CO2 into our environment. The second operates between CGB facilities in Jeffersonville and Louisville and averages 600 carloads annually. This move saves 18,118 gallons of fuel and 184 metric tons of CO2 – that's the equivalent of taking 8,000 trash bags to the recycling center instead of the landfill.

**The Lancaster & Chester Railroad in South Carolina** ships 281,500 tons of soybeans, soy meal and soybean oil per year between the South Carolina cities of Chester, Fort Lawn and Kershaw. That move uses an average of 80,000 gallons of fuel per year. The comparable highway move would use over 320,000 gallons of fuel. That savings is the equivalent of growing 35,000 trees for 10 years.

**Lake State Railway in Michigan** moved 296,000 tons of aggregate from Alpena, MI to Kawkawlin, Grayling and Flint, MI in 2020. Those moves used approximately 111,176 gallons of fuel. Comparable truck moves would use approximately 383,164 gallons of fuel. That savings is the equivalent of the power needed to fully charge every one of the 295 million cell phones in the United States tonight.

**The Fulton County Railway in Georgia** handles a huge amount of the refrigerated food and beverage rail traffic in the southeast United States, and kept vegetables and beer moving from as far away as Mexico and Washington State as demand spiked during the pandemic. In 2020, FCR handled approximately 592,000 tons of cold storage food and beer – apparently not even the coronavirus could quench America's thirst for Corona! Railroads largely exited refrigerated transportation in the 20th century, but small short line innovators like FCR have been winning traffic back. Without this short line, this traffic would have moved the entire way by truck, consuming almost 8.7 million gallons of fuel, compared to 2.8 million gallons by rail. That savings is the equivalent of converting 2 million light bulbs from incandescent into LED.

These savings are real, and they are realized on every short line in the country.

**INFRASTRUCTURE PRIORITIES FOR SHORT LINES**
As Congress begins to develop what will likely be a robust and ambitious infrastructure program, your Subcommittee will play an important role in ensuring the continued strength of the American supply chain, and the competitiveness of businesses large and small across the U.S. Here we offer some suggestions that we believe will maximize the economic, competitive, and environmental benefits offered by the short line freight railroad industry.

A) Include Short Line Railroads Fully in New Infrastructure Investment

We strongly support the CRISI grant program as it specifically provides for short line eligibility and puts a focus on benefit-cost analysis. In our experience, with that level playing field, short line projects fare well. The authorization levels for the program should be significantly increased (we suggest that the $1.4b/year contemplated by the House in H.R.2 in 2020 would be a reasonable target) and there should be no big, new set-asides or eligibilities (e.g. eligibility for commuter rail or set-asides for intercity passenger rail or large projects) to ensure an even playing field for all current applicants and allow for the potential continued success of short lines in the annual CRISI competition.

We are also supportive of the INFRA grant program, or a successor program such as PNRS as proposed in H.R.2 in 2020. There is value in a merit-based discretionary grant program open to multiple modes of transportation, especially one that is focused on freight and goods movement. We recommend three changes to this program:

1) Allow the program to support the most efficient and effective freight projects by fully removing or at least significantly increasing the $500 million cap on non-highway portions of the multimodal freight projects, as suggested in H.R.2. We know that we are preaching to the choir on this issue especially with Chairwoman Cantwell and thank her for her relentless leadership on this topic!

2) Ensure that the program can fund efficient and effective projects by increasing the “small projects” set aside. Currently, the 10% cap on small projects, defined as a minimum grant of $5 million for projects that do not meet the $100 million project minimum, does not provide enough opportunity for INFRA grants to be used to help with most short line infrastructure projects. The 10% set aside should be increased to 25% to more accurately represent the many needs in the less populated regions of the country. There’s certainly nothing wrong with dedicating funding to mega projects, but if a less expensive project can achieve significant economic and environmental benefits and improve America’s supply chain and competitiveness, we should remain open to those smaller projects also. The proposal in last year’s H.R.2 to eliminate the small set-aside entirely in PNRS would move in the wrong direction and we hope will be reconsidered.

3) Maintain reasonable non-federal share requirements for INFRA grants and consider increasing the maximum permissible share of INFRA program funding per project from 60% to 80% for small projects. Giving increasing preference to grant requests with “over-matching” may appear logical but can lead to missing otherwise important short line projects that cannot overmatch with internal funds or are not located in urban areas that enjoy significant taxing and bonding authority.

We’d also recommend including short line railroad project eligibility in any new transportation grant programs that are created targeting emissions, congestion reduction, resilience, or any similar goal where short lines can help be part of the solution. For instance, H.R.2 in 2020 created two new...
programs (Sec. 1202, Increasing the Resilience of Transportation Assets - Pre-disaster Mitigation Program and Sec. 1213 – Carbon Pollution Reduction) in which short line projects were not eligible but could have and should have been. Not only is rail an environmentally friendly way to move freight, it is also an attractive option to provide resilient infrastructure that can serve as a competitive alternative to the highway system and enhance America’s supply chain. Adding freight rail project eligibility would help achieve the goals of the program and moving some freight to rail also improves mobility on public roads.

As was done in H.R.2 in 2020 and in the EPW Committee’s America’s Transportation Infrastructure Act of 2019, The National Highway Freight Program should become more multimodal and raise or eliminate the non-highway cap, so that program can become a source of funds for State DOTs to support freight rail projects if they choose. Maximizing short line access to this program, as well as the others I have referenced in my testimony, provides important leverage to attract private investment, provides flexibility to allow State DOTs to solve their transportation challenges in the way that they find most effective, and allows Congress to get the most bang for its buck out of finite resources.

Let me give you a couple of examples from Michigan where the state’s Department of Transportation (MDOT) provides funding to help connect new or expanding businesses to Michigan's rail system, through their Freight Economic Development Program. The grant program can cover up to 50% of the costs associated with rail infrastructure, including rail spurs, loading and unloading equipment, and site preparation.

Cargill utilized these MDOT funds to build the rail infrastructure needed to serve a new $19 million animal nutrition manufacturing plant in Owosso. Previously, Cargill’s animal nutrition business had 43 manufacturing facilities across the U.S. and none were in Michigan until this plant was built, and the rail connection was an important fact in the decision to build.

Zeeland Farm Services utilized MDOT funds to build the rail infrastructure associated with a new $130 million soybean processing plant in central Gratiot County. The plant is capable of processing more than 40 million bushels of soybeans annually and generated 75 new full-time jobs. Both facilities are served by Great Lakes Central Railroad and in 2020 they generated an additional 5,572 carloads for the railroad.

These are huge private investments made possible in part by comparatively modest public infrastructure investments. Together MDOT invested $1.435 million in the rail portion of these projects. This public investment provides important leverage and short line railroads are well positioned to utilize this leverage to build or repair the infrastructure that shippers require. These are wins for American competitiveness and the supply chain at the same time as they’re wins for jobs, the environment, and safety.

Whether as part of existing grant programs or new ones, we would suggest several principles that would help short lines better utilize any infrastructure program:

1. Short lines should be **directly eligible** applicants for project grants, like CRISI. Too often in the past, federal programs have been only open for application to local units of government, which in turn requires short lines to create unnecessarily complex and burdensome applicant structures and which sometimes favors politically popular projects over economically beneficial projects.
2. The application process needs to be as **simple and transparent** as possible. Short lines are small businesses and generally the individuals writing and engaging with the government on our applications are employees with other duties on the railroad. We do not have full time grant writers or the resources to hire expensive consulting firms.

3. The analysis used to judge a project should **not be a rigid one-size-fits-all** process. For example, the process to apply, the public planning and the engineering required, and the appropriate benefit-cost analysis format for incrementally upgrading a ten-mile segment of existing track serving five small grain elevators should not be the same as building a new subway line or adding lanes to an interstate highway.

4. If there is to be an associated **environmental approval** process, it must be streamlined to be completed in a reasonable period of time. Approval processes that last for years are a deal-killer to those running a business.

**B) Improve Highway-Rail Grade Crossing Safety**

We support the **Cantwell-Blunt Railroad Grade Crossing Elimination Act (S.1465)** which would make an important contribution to enhancing safety and reducing traffic congestion. While short line railroads strive to work closely with our communities and customers to avoid causing any unwelcome impacts, there are many opportunities throughout the country to eliminate crossings to improve the mobility of people and goods, and improve the health and safety of communities. This legislation will help provide funds to our government and tribal partners to allow them to work with us to close, relocate or improve many challenging crossings.

**C) Improve the Rail Financing Loan Program, RRIF**

We support Senators Thune’s and Hassan’s RRIF reform bill, **the Railroad Rehabilitation and Financing Innovation Act (S.468)**, which would improve the RRIF program and make it more viable for short lines. It addresses several important issues that have been hurdles to participation in the RRIF program for our short line members, including the streamlining of the application process, the extension of loan lengths, the increased flexibility regarding collateral requirements, and the authorization of funds to reduce both the direct cost of applying and also the credit risk premium charges that have frequently been a hurdle to completing successful loans, which would bring the RRIF program more in line with the comparatively more successful TIFIA program. As Senator Thune said at the bill’s introduction, “**States like South Dakota rely on short line railroads to transport agricultural products and other goods to market, and the RRIF program was originally designed to provide stable financing to small railroads for infrastructure investment. Unfortunately, short lines are often unable to afford the time and expense associated with the current RRIF application process, discouraging them from using the program. This legislation makes necessary updates to RRIF so short lines are better able to use the program as originally intended.**”

**D) Implement Regulatory Policies Thoughtfully**

Finally, let me briefly mention two issues that we believe would severely threaten the economics of short line railroading and that we hope will not be included in any surface transportation reauthorization or infrastructure package.

**Avoid any Increases to Truck Size and Weight (TSW) limits** – Any increases and exceptions to current federal limits would further subsidize freight highway transportation, alter the economics of freight
Avoid unnecessary operational mandates on private railroads, such as a crew size mandate – This is an unnecessary and unjustified concept, considering the lack of data regarding any safety benefits of such a mandate and the overall safety record of freight railroads. It would also discourage future innovation, while legislating on an issue that has properly been the subject of labor negotiations for more than a century. Further, this mandate would disadvantage railroads in the competition for freight and over time shift freight to the highway, where it is inherently more dangerous and less environmentally sustainable.

While less headline-grabbing than a crew size mandate, there are also other potential unnecessary operational or regulatory mandates on railroads that are of concern to us, such as banning the transportation of liquefied natural gas (LNG) by rail or forcing STB mediation for commuter rail requests to access freight track. We urge caution on any new mandates or regulations that aren’t supported by solid data, as they limit flexibility, stifle innovation, and ultimately harm our ability to deliver benefits to America’s economy, supply chain, competitiveness, and the environment.

For instance, we believe that the Fischer/Tester/Moran/Klobuchar/Peters blocked crossings portal bill (S.700) is a thoughtful approach and likely to achieve a better result for everybody than the more inflexible approach taken in H.R.2.

SUPPORTING A BIPARTISAN EFFORT AIMED AT SUCCESS

I sincerely appreciate the opportunity to give the views of the short line industry at this hearing. As I wrap up, I would like to share a personal observation prevalent among the small businesses I represent. The short line industry was involved in a decades-long effort to extend and then make permanent the short line 45G rehabilitation tax credit, legislation that many of you on this Subcommittee were instrumental in passing. The tax credit was made permanent last year.

When we launched that initiative in 2003, short line economics were little understood by the majority in Congress. Indeed, for many, short lines were just a quaint name on the Monopoly board. We worked hard at developing and documenting our story and Members of Congress gave us the opportunity to tell that story, took the time to understand the story, and visited our local properties to get a first-hand look at who we were and what we did. Most importantly, our Congressional allies committed to leading a sustained bi-partisan effort, regardless of who controlled Congress. We worked to extend this legislation in seven separate Sessions of Congress, and party control of the House and/or Senate changed many times during that period. Regardless of party control, and often in the face of fierce partisan battles, our chief sponsors never wavered in their commitment to sticking together in bi-partisan support of the legislation. It showed that government works when you work hard at working it out. We need that today more than ever and I hope that can be the spirit in which you approach creating a much-needed surface transportation bill or broader infrastructure package.
Toward that end, Congress should restore the Highway Trust Fund (HTF) to a user-pays system. The U.S. has historically relied upon a user-pays system to fund investments in public road infrastructure, and there is broad agreement in the transportation and business community and Congress that this is how the program should work. Unfortunately, since the gas tax user fee hasn’t increased since 1993, revenues into the HTF have failed to keep pace with investment needs, requiring $157 billion in general fund transfers since 2008. It’ll be another $195b over the next 10 years at the current pace.

As my colleagues at the AAR also point out in their written testimony, general fund transfers to the HTF distort the freight transportation market in favor of the commercial trucking industry and put other modes at an unfair competitive disadvantage. This is especially problematic for railroads which largely build, maintain, and pay for their own private infrastructure. Congress should address this modal inequity by reaffirming the user-pays system and increasing the fuel tax or moving to a VMT fee.

**CONCLUSION**

In conclusion, we seek equitable infrastructure investment in short line freight railroads, an industry with a proven record of success, as you seek to modernize the country’s infrastructure for our collective future success. Congress should ensure that new infrastructure investment encourages as much freight as possible to move by rail because 1) the public benefits when freight moves by rail – in terms of improved safety, reduced congestion, reduced highway damage, and reduced environmental impact and 2) private freight railroads largely pay for their own infrastructure while highways have been relying on tens of billions of dollars of taxpayer subsidies to cover what user fees don’t. Investments into rail and policies that support rail or at least don’t harm rail will translate into jobs and foster growth especially in rural America, reduce transportation’s carbon footprint, and ensure that our nation’s supply chain supports American competitiveness.

**Attachments, additional resources and source material:**

**Short Line “101” 2-pager**

**PwC short line economic impact report** showing economic contributions of short lines, most notably that 478,000+ jobs are dependent on short line service

**AASHTO Freight Rail Study** (update of their original Bottom Line report) showing benefits of mode shift to rail for pavement maintenance savings, congestion savings, environmental savings, safety savings, and shipper savings. It makes the conclusion that “Relatively minor investments in rail infrastructure yields major public benefits.”

**AAR-Freight Railroads and Climate-Change-Report**

**STB Railroad-Shipper Transportation Advisory Council (RSTAC) letter** urging Congress to “include short line railroads fully in any new infrastructure investment funding legislation that may be enacted”
[https://www.nacd.com/pub/?id=224EF08D-0AE0-771E-2A9C-129E0B497F9F](https://www.nacd.com/pub/?id=224EF08D-0AE0-771E-2A9C-129E0B497F9F)
Short line freight railroads are small, hometown businesses directly tied to their local economies. They connect the communities they serve to the national rail network, provide local jobs, and help more than 10,000 shippers reach domestic and international markets. Their success is driven by teamwork, a focus on safety, flexibility and seeking growth opportunities one carload at a time with current and new customers.

**SHORT LINES ADDRESS FOUR CHALLENGING PUBLIC ISSUES**

**GROWING JOBS**

- **478,000** jobs at customer locations across the country that require short line services driving
- **$26 BILLION** in labor income and
- **$56 BILLION** in economic value-add*

**PROTECTING THE ENVIRONMENT**

Freight rail is a sustainable, environmentally-friendly mode of transportation.

- **ONE TON** of freight moved
- **479** miles by rail uses only
- **1 GALLON** of diesel fuel

**SAVING PUBLIC INFRASTRUCTURE**

Moving freight by rail reduces highway congestion, and lowers fuel burned by vehicles going nowhere.

**IMPROVING TRANSPORTATION SAFETY**

- **50% REDUCTION** in train derailments since 2005 when the Short Line Tax Credit (45G) went into effect, incentivizing more than $5B in industry infrastructure investments to date, according to Federal Railroad Administration data.
- **33%** of annual revenues in infrastructure, vs. relying on public funds to support infrastructure.

**SAVING PUBLIC INFRASTRUCTURE**

- U.S. Environmental Protection Agency data show freight railroads account for only 0.6% of total U.S. greenhouse gas emissions and only 2.1% of transportation-related sources (trucking, shipping, air, etc.).
- **75% reduction in greenhouse gases vs. trucks**

- Short lines annually invest 25-33% of revenues in upgrading rails and bridges to modern standards, ensuring that railroads are the safest form of surface transportation.
- Short line railroads keep 31.8 million heavy trucks off local roads, and away from the motoring public.

- **75%** reduction in greenhouse gases vs. trucks

**MOVING MORE FREIGHT BY RAIL**

- Short line railroads are privately owned, investing up to
- **$1.5 BILLION** annually on the nation’s beleaguered highway system, lessening the cost burden to the taxpayer.

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For large areas of rural and small-town America, the short line rail industry provides the only way shippers can be directly connected to the national economy, while ensuring business and employment stay local. Short lines serve every industry, but are particularly critical for manufacturing, agriculture, and energy.

**Short Line Freight Rail is Essential in Providing Service to More Than 10,000 Shippers**

“The railroad provides access to additional markets, reduces cost, reduces highway investment and repair and improves prices farmers receive. Access to efficient and responsive rail service is essential for the economic well-being of agricultural and rural areas.” - Jim Magnusen, General Manager, Key Cooperative, Holmen, Wisconsin

“We work in economic development and short lines are vital to the success of our manufacturing sector’s future.” - Mark Nolte, President, Iowa City Area Development (ICAD), Iowa City, Iowa

**TOP LEGISLATIVE ISSUES**

- **Increase CRISI Funding** - The Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant program is a very popular and successful program that includes short line railroads as eligible applicants. CRISI funding should be increased and there should be no big, new set-asides to ensure an even playing field for all applicants, including small business freight railroads.

- **No Increases to Truck Size and Weight (TSW) Limits** - Increases and exceptions to current federal law resulting in a shift from freight rail to truck transportation would be harmful to everyday drivers, the environment and the public infrastructure paid for with taxpayer dollars. We oppose any legislation that increases current limits.

- **Other Grant Programs** - Congress should ensure short line railroad projects can access funding through programs like INFRA, BUILD, and new transportation grant programs targeting emissions and congestion reduction by including freight rail project eligibility and maintaining rural and small project participation.

- **Short Line Safety Institute (SLSI)** - Continue federal support for the SLSI. The SLSI helps build a stronger, more sustainable safety culture through safety culture assessments, training and education - including the safe transportation of energy products and hazardous materials - outreach activities, and research.

- **No Crew Size Mandate** - Safety is our top priority, but there is no safety data to support the need for a crew size mandate, which could impede development and adoption of new safety technologies. Crew sizes have always been and should continue to be handled as part of collective bargaining agreements and not a one-size-fits-all federal mandate.
Freight Railroads & Climate Change

Our planet and nation face challenges that demand communities, businesses, and policymakers come together and create solutions that will fuel economic recovery and combat climate change. With nearly 200 years of experience moving America through times of both prosperity and trouble, freight railroads have always looked to the future, adapted, and risen to the challenge.

March 2021
Summary

As policymakers attempt to balance economic recovery from the coronavirus pandemic with meaningful progress toward combating climate change, the nation’s railroads want to be — and must be — a part of the solution.

The Association of American Railroads (AAR) and the rail industry recognize that the climate is changing. If action is not taken, climate change will have significant repercussions for the planet, our economies, our society, and even day-to-day railroad operations.

The Congressional Budget Office recently projected that the effects of climate change will reduce real GDP growth rate by 0.03% annually from 2020-2050, and, as a result, this diminished annual GDP growth rate will reduce real U.S. GDP by 1.0% in 2050. AAR urges U.S. policymakers to adopt effective, coordinated, and market-based strategies to significantly reduce greenhouse gas (GHG) emissions and combat climate change.

Today, railroads account for roughly 40% of U.S. long-distance freight volume (measured by ton-miles) — more than any other mode of transportation. Through smart, targeted investments, the freight rail industry has worked to increase fuel efficiency, drive down GHG emissions, and make rail operations even more sustainable. However, the industry recognizes there is much more work to be done and the right policies are essential for charting a path forward.

To be effective, policy strategies aimed at fighting climate change must encourage innovative solutions, leverage market-based competition, and allow for varied approaches that drive down emissions. Most importantly, these strategies must be grounded in data and established through a cooperative, multi-faceted approach involving all stakeholders.

Railroads Are the Most Fuel Efficient Way to Move Freight Over Land

One train can carry the freight of hundreds of trucks, which reduces highway congestion**

Freight railroads are 3-4 times more fuel efficient than trucks, on average

Moving freight by train instead of truck reduces greenhouse gas emissions by up to 75%

Railroads account for 40% of U.S. freight but only 2.1% of U.S. transportation-related greenhouse gas emissions*

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* According to the U.S. Environmental Protection Agency (EPA). ** According to the Texas Transportation Institute’s 2019 Urban Mobility Report, highway congestion cost Americans $165 billion in wasted time (8.8 billion hours) and wasted fuel (3.3 billion gallons) in 2017.

† Federal Highway Administration, Freight Analysis Framework, Version 4.5.1.
Leading by Example: How Railroads Help Reduce Emissions

Railroads are developing and implementing new technologies, refining operating practices, and working with their suppliers, customers, and supply chain partners to create a more sustainable future. For example, railroads have greatly improved their fuel efficiency. On a gross ton-miles per gallon basis (gross tons include the weight of rail cars as well as the weight of the freight in them), rail fuel efficiency in 2019 was up 82% since 1980 and up 17% since 2000.

U.S. freight railroads move more freight with much less fuel than before thanks to technological innovations, improved operating practices and a lot of hard work. In 2019 alone, U.S. freight railroads consumed some 656 million fewer gallons of fuel and emitted 7.3 million fewer tons of CO₂ than they would have if their fuel efficiency had remained level compared to 2000. From 2000 through 2019, U.S. freight railroads consumed 9.6 billion fewer gallons of diesel fuel and emitted 108 million fewer tons of CO₂ thanks to industry-wide fuel efficiency efforts. In 2019, railroad CO₂ emissions from diesel fuel consumption were 18% lower than their peak in 2006.

These efforts continue. Many of AAR’s members voluntarily report GHG emissions from their operations to the Climate Disclosure Project (CDP), an international non-profit organization that helps companies disclose their environmental impact. Several Class I railroads have also committed to voluntary reductions in GHG emissions intensity.

For example, Canadian Pacific, Canadian National, CSX, Kansas City Southern, and Union Pacific are participating in the Science Based Targets Initiative (SBTi), an international collaboration focused on limiting global warming to less than two degrees Celsius. Norfolk Southern has created the “Trees to Trains” program — a carbon-mitigation strategy that reforests thousands of acres in environmentally critical areas to offset the company’s carbon footprint. BNSF is testing the first battery electric locomotive in the United States and both Canadian Pacific and Canadian National are participating in pilot projects to test hydrogen fuel cell locomotives. And AAR and its members have formed a dedicated working group to understand new lower-or-zero-carbon fuel technologies and other climate-related issues.

Railroads Consistently Improve Fuel Efficiency

- **Fuel-efficient Locomotives**: Acquiring and retrofitting thousands of new, more fuel-efficient locomotives that emit fewer criteria pollutants and GHGs over the past decade.

- **Operational Improvements**: Carrying an average of 3.667 tons of freight per train in 2019, up 25% since 2000. By carrying more freight, railroads reduce unnecessary train and railcar movements, which reduces fuel use.

- **Fuel Management Systems**: Developing and installing computer systems that calculate the most fuel-efficient speed for a train over a given route, determine the most efficient spacing and timing of trains on a railroad’s system and monitor locomotives to ensure peak performance and efficiency.

- **Zero-emission Cranes**: Increasing use of zero-emission cranes to transfer containers between ships, trucks, and trains at ports and rail facilities.

- **Aerodynamics & Lubrication**: Adopting operational fixes to reduce fuel use. For example, advances in lubrication techniques reduce friction, ultimately decreasing drag and saving fuel.

- **Anti-idling Tech**: Installing idling-reduction technologies, such as stop-start systems that shut down a locomotive when it is not in use and restart it as needed.

- **Distributed Power**: Expanding use of distributed power (positioning locomotives throughout the train) to reduce the total horsepower required for train movements.

- **Training**: Training employees and contractors to help locomotive engineers and other personnel develop and implement best practices and improve awareness of fuel-efficient operations.
More Rail Means a Sustainable & More Prosperous Future

The potential reduction in transportation-related GHG emissions associated with moving more freight by rail is substantial. If 10% of the freight shipped by the largest trucks were moved by rail instead, greenhouse gas emissions would fall by more than 17 million tons annually. That’s the equivalent of removing 3.35 million cars from our highways or planting 260 million trees. Policymakers can help make this happen by removing impediments to transporting freight by rail, promoting policies that enable the rail industry to move more goods, more efficiently, and promoting modal equity in the incorporation of new and emerging technologies. Here are three approaches to consider:

☑️ Institute market solutions to reduce emissions

Programs that establish market incentives to reduce emissions from the freight transportation sector specifically should strive to achieve two key policy goals: encouraging businesses to ship their products using modes with lower GHG emissions — such as rail — and incentivizing transportation providers to find the most cost-efficient ways to further reduce or eliminate emissions associated with their operations.

Any broad climate change policies should provide long-term regulatory certainty and be crafted to permit capital-intensive industries to make investment and planning decisions in an economically rational manner while also maintaining their competitiveness. This approach will allow markets, not mandates, to drive the reduction in GHG emissions. An appropriate, predictable policy can enhance the nation’s competitiveness, grow the economy, and create jobs.

☑️ Return the Highway Trust Fund to a user-pays system

The pending insolvency of the Highway Trust Fund (HTF) should be a matter of significant concern within the larger transportation sector and beyond. Policymakers can address both the solvency of the HTF and climate change through a short-term, temporary fuel tax increase. In the longer term, policymakers should implement a vehicle miles traveled (VMT) fee that takes into account vehicle weight or axle count along with an emissions surcharge (see below for a more detailed discussion).

The United States has historically relied upon a user-pays system to fund investments in public road and bridge infrastructure. Unfortunately, revenues into the HTF have failed to keep pace with investment needs, requiring general fund transfers to cover the shortfall.
According to the Congressional Budget Office, general fund transfers into the HTF have totaled almost $157 billion since 2008, including the $13 billion provided by the continuing resolution signed on October 20, 2020. An additional $203 billion could be required to cover expected deficits through 2030.\textsuperscript{2} With the one-year extension of the FAST Act, the issue of HTF solvency will come to a head in September 2021.

Funding the HTF through a VMT fee instead of the existing gas and diesel taxes could also resolve impending insolvency and restore a user-pays model. Additionally, a VMT fee offers the opportunity to create a more equitable system of funding public road and bridge infrastructure by ensuring that all passenger and commercial vehicles pay for their use. Because the technologies to implement a VMT fee are still under development, a modest, short-term increase in the gas tax and the diesel tax over the next several years would still be required to shore up the HTF.\textsuperscript{3} However, while fuel taxes incentivize the purchase of more fuel-efficient vehicles, they are not the long-term solution for HTF solvency.

- **Impose an emissions surcharge and provide dedicated funding for passenger rail**

  Imposing a graduated emissions surcharge based on the fuel efficiency of vehicles (utilizing Environmental Protection Agency miles per gallon ratings), in addition to a VMT fee, as discussed above, could encourage the transition to more environmentally-friendly passenger and commercial vehicles. Doing so would also raise additional revenues for the HTF.

  From a modal-shift perspective, a reliable passenger rail network is the most environmentally-friendly mode to move people over land\textsuperscript{4} and is essential to helping address transportation-related emissions. Intercity passenger rail is the only mode of passenger transportation in the United States that does not receive any dedicated federal funding through a trust fund, leaving Amtrak completely dependent upon annual discretionary appropriations. This fiscal uncertainty makes it difficult for Amtrak to plan its operations and capital needs for the long term. Given the benefit of reduced congestion on our nation’s highways, a Passenger Rail Account similar to the Mass Transit Account of the HTF could be created, and Amtrak’s operating and capital costs could be funded with a portion of the additional revenues from the emissions surcharge. This Passenger Rail Account could be dedicated to Amtrak’s Northeast Corridor and National Network Accounts. However, states could also be eligible to receive funding for their state-supported routes.

- **Embrace partnership opportunities for research funding**

  Despite impressive improvements in fuel efficiency, railroads continue to search for ways to further reduce their GHG emissions footprints. Technological advancements will play a major role in future gains, and AAR supports increased federal funding for research into a variety of technologies on the cusp of economic viability.

  For decades, diesel fuel has been the only realistic option to power freight rail locomotives. However, BNSF and Wabtece are working with the California Air Resources Board to test a prototype long-haul battery electric locomotive. Additionally, Canadian Pacific and Canadian National plan to develop what would be North America’s first line-haul hydrogen-powered locomotives and conduct rail service trials and qualification testing to evaluate the technology’s readiness for freight rail operations. Finally, Progress Rail and the Pacific Harbor

\textsuperscript{3} While technologies may not yet be available for implementation of a VMT fee for personal vehicles, previous Congresses have considered proposals to implement a VMT fee for commercial motor vehicles utilizing existing electronic logging devices to measure miles travelled.
Line are planning a demonstration project of a new EMD Joule battery electric locomotive in the Ports of Los Angeles and Long Beach. These projects have the potential to further reduce GHG emissions.

Partnerships between the federal government and railroads to further research and develop technologies that fuel locomotives with alternatives to traditional diesel fuel are also essential to advancing innovation. Additional funding should be provided for the development of battery and fuel cell technologies, such as the ongoing efforts at the Joint Center for Energy Storage Research (JCESR), a Department of Energy (DOE) Energy Innovation Hub focused on technologies to enable next-generation batteries.

Another potential fuel source is “blue hydrogen,” which is hydrogen made from natural gas in a way that captures, stores, or reuses associated carbon emissions. Similarly, biofuels are traditional fuel alternatives including ethanol, biodiesel (diesel made from nonpetroleum renewable sources such as natural fats and vegetable oils), and renewable hydrocarbon biofuels or green drop-in fuels (renewable hydrocarbon fuels derived from biomass sources that are comparable and compatible to existing petroleum-based fuels). Although biofuels and renewable diesel are widely available as fuel blend stock, there are limited ASTM standards for these fuels, and equipment manufacturers have been leery of approving their use in locomotives. Additional funding for research on these lower-or-zero-carbon fuels and technologies will speed their adoption and continue to inform the development of standards for such fuels. Finally, funding should continue to be provided for grants under the Diesel Emissions Reduction Act (DERA) program.

**Support policies to further develop carbon capture, utilization, and storage technology**

Policymakers should continue to invest in the development and scaling of technologies that would both reduce emissions and keep the economy moving. Carbon capture, utilization, and storage (CCUS) technology is one of these solutions.

CCUS technology would allow industries to capture up to 90% of emissions and prevent their release into the atmosphere. Since 2008, Congress has provided a tax credit (Internal Revenue Code Section 45Q) on a per-ton basis for CO2 that is captured and either sequestered or utilized. As a result, many programs, including pilot and demonstration projects, have been proposed to spur industries and create new markets for CCUS technology. AAR supports efforts to further mature this technology and expand the commercial use of CCUS technology through market development programs and tax incentives. Encouraging storage and broader industrial utilization of captured carbon creates new economic opportunities, and railroads believe this technology can be an important part of a broad effort to address the impacts of climate change.

Since railroads provide the most fuel-efficient way to move freight over land, railroads believe they can play an integral part in the broader utilization of CCUS, as transportation remains one of the bigger challenges of scaling up CCUS technology. In most cases, captured carbon dioxide must be transported from the point of capture to a permanent storage site. Current limited capacity for these movements has been a significant challenge to further scaling up CCUS technology. Today, trucks, ships, and pipelines transport the carbon that has been captured from the gases produced in electricity generation and industrial processes as part of a CCUS chain using the same technologies as those used to transport natural gas, oil, and other fluids. The rail industry has decades of experience safely transporting carbon dioxide. Moreover, construction of new pipelines in the United States can be a lengthy process that is expensive, environmentally harmful, and subject to intense community and legal opposition.

Railroads are a nimbler transportation solution that can increase traffic as needed, while also meeting demand from varied origins and destinations. As plans for new CCUS facilities are developed, the carbon captured at these facilities could be transported via rail. This would minimize additional GHG emissions, avoid unnecessary highway congestion, and take advantage of the world-class private rail network already in existence. It is likely the facilities where carbon would be captured — and the destination where it would be stored or utilized — already have rail service.
Help railroads test and deploy green technologies by streamlining waiver acquisition

Railroads have shown their commitment to developing, testing, and deploying new technologies that reduce the environmental impact of their operations. Policymakers should offer industries — including freight rail — operational and regulatory flexibility to encourage further innovation. This would allow railroads to experiment with new technologies and processes that could help meet environmental goals, including decarbonization and lower emissions. This needed flexibility could cover everything from technologies and procedures to increase fuel efficiency to new technologies that require extensive testing and research. Flexibility and streamlining are necessary to empower the rail industry to explore these options without risking regulatory enforcement. For example, policymakers should consider streamlining waiver review timelines, encouraging pilot programs, and establishing performance-based thresholds.

Ensure railroads can invest in maintaining and greening their infrastructure

An efficient and sustainable rail industry depends upon railroads’ private investments, which the Staggers Rail Act of 1980 helped make possible by creating a balanced regulatory system. Partial deregulation allowed railroads to improve their financial performance from anemic levels prior to Staggers to much healthier levels today. That, in turn, has allowed railroads to pour nearly $740 billion — of their own funds, not taxpayer funds — back into their networks since 1980. These investments have greatly improved the productivity and sustainability of their operations. Policy decisions that upset the productivity and efficiency gains of the railroads or shift freight to other modes of transportation can impact the environment. Policymakers must maintain the existing regulatory balance to ensure railroads can meet customers’ needs in a safe, reliable and sustainable manner.

Invest in what works

As policymakers examine potential solutions, they should invite stakeholders to the table to provide needed insight and prevent the wasting of resources. While AAR encourages federal investment in the development of technologies that reduce GHG emissions, policymakers should avoid prescriptive means for reducing emissions by certain industries and allow innovation to guide GHG emissions reduction decisions. For example, studies over the years have consistently shown that the catenary electrification of the freight rail network would be unworkable. Initiatives, such as catenary electrification, that are clearly not viable should be set aside to focus on and invest in policies and programs that will work to reduce GHG emissions and combat climate change, such as those noted above.
Dear Chair Cantwell and Ranking Member Wicker, and Chairman DeFazio and Ranking Member Graves:

On behalf of the Railroad-Shipper Transportation Advisory Council (“RSTAC”) we respectfully urge Congress to include short line railroads fully in any new infrastructure investment funding legislation that may be enacted. Small railroads provide the integral “first-mile—last mile” link for small shippers to the nation’s Class I freight railroad network, and deserve equitable treatment as part of a welcome renewed focus on federal infrastructure investment.

The RSTAC was established pursuant to the ICC Termination Act of 1995 (49 U.S.C. § 1325, formerly § 725) to advise the Secretary of Transportation, the Chairman of the Surface Transportation Board, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Transportation and Infrastructure of the House of Representatives “with respect to rail transportation policy issues it considers significant, with particular attention to issues of importance to small shippers and small railroads.” As outlined in the establishing statute, the RSTAC’s mission from a private sector perspective is to “prevent, or identify and effectively address, obstacles to the most effective and efficient transportation system practicable.”

The nine voting RSTAC members all believe that it is essential for Congress to treat small railroads, and their integral connection to small shippers, equitably in new infrastructure spending legislation now being considered, in order to overcome barriers to investment impeding the most effective and efficient transportation system practicable. Federal grant programs for which short line railroads are eligible, including Consolidated Rail Infrastructure and Safety (“CRISI”), Better Utilizing Investments to Leverage Development (“BUILD”), and Infrastructure for Rebuilding America (“INFRA”) as administered by the U.S. Department of Transportation, and other current or future new grant programs aimed at emissions or congestion reductions, or safety or other public benefits, should affirmatively foster enhanced small railroad participation.

Should Congress commit to significant new infrastructure investments, the RSTAC urges that federal grant opportunities available to small railroads be expanded proportionately. Congress should also ensure that current and any future new eligibility criteria treat small railroads fairly.
Structured in this way, new additive federal infrastructure investment can generate public benefits and job growth for small railroads and the shippers they serve, many of which are in rural areas. Such an approach would help alleviate impediments to growth and efficient service in our national transportation system, promote small freight railroads as well as large passenger rail systems, and boost rural interconnectivity for shippers along with enhanced urban mobility – all while advancing vital sustainability goals.

We appreciate this opportunity to convey the RSTAC’s perspective to the Congress. Please do not hesitate to contact us if the RSTAC can address questions or provide further information that may be helpful. We look forward to continuing a productive dialogue on this and other issues of importance to the RSTAC and the small railroads and shippers we represent, and we thank you for your consideration.

Sincerely,

Mathew A. Brainerd, KCHS
Chairman
Railroad-Shipper Transportation Advisory Council

cc: Members of the Railroad-Shipper Transportation Advisory Council

The Hon. Martin J. Oberman, Chairman, Surface Transportation Board
The Hon. Robert E. Primus, Vice Chairman, Surface Transportation Board
The Hon. Ann D. Begeman, Member, Surface Transportation Board
The Hon. Patrick J. Fuchs, Member, Surface Transportation Board
The Hon. Michelle A. Schultz, Member, Surface Transportation Board

The Hon. Pete Buttigieg, Secretary, U.S. Department of Transportation