Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington DC 20515

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March 5, 2021

## SUMMARY OF SUBJECT MATTER

**TO:** Members, Subcommittee on Railroads, Pipelines, and Hazardous Materials
**FROM:** Staff, Subcommittee on Railroads, Pipelines, and Hazardous Materials
**RE:** Subcommittee Hearing on "Full Steam Ahead for Rail: Why Rail is More Relevant Than Ever for Economic and Environmental Progress"

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## PURPOSE

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will meet on Wednesday, March 10, 2021, at 11:00 a.m. EST in 2167 Rayburn House Office Building and via Cisco Webex to hold a hearing titled "Full Steam Ahead for Rail: Why Rail is More Relevant Than Ever for Economic and Environmental Progress." The hearing will explore the importance of rail to the U.S. economy and as a tool to mitigate climate change. The Subcommittee will hear testimony from BNSF Railway; the Virginia Department of Transportation (VDOT); the Transportation Trades Department, AFL-CIO; and the Arkansas & Missouri Railroad (A&M).

## BACKGROUND

For the United States to maintain and increase its economic viability while decreasing overall greenhouse gas (GHG) emissions, rail transportation has the potential to be an important part of the solution. Expanding the use of freight and passenger rail can increase mobility, reduce road congestion, mitigate climate change, sustain good-paying jobs, and enhance our economic competitiveness.

### Freight Movement

America's freight railroads operate over a 140,000-mile national network, delivering on average five million tons of goods every day.[1] In 2019, the rail network accounted for approximately

[1] Association of American Railroads, "Overview of America's Freight Railroads," March 2020.

28 percent of U.S. freight movement by ton-miles (the length and weight freight travels), surpassed only by trucks.[2] Freight railroads are classified in accordance with their annual operating revenues. There are seven Class I railroads, which collectively provide long-haul operations in 44 states and Washington, D.C.,[3] and transport nearly 69 percent of U.S. freight rail mileage.[4] Class II railroads ("regional railroads") and Class III railroads ("short lines") transport the remainder of U.S. freight rail mileage and operate 38 percent of the Nation's rail network.[5] Short lines are often the only way rural America can connect to the rest of the national freight network—playing an important role in providing first-mile and last-mile service that extends the reach of the rail network to urban and rural communities, ports, manufacturers, farmers, and others.[6]

**Passenger Movement**

Amtrak operates a national rail passenger transportation system, which includes the Northeast Corridor (NEC), long-distance routes, and state-supported routes.[7] To provide national passenger rail service, in typical non-pandemic environments, Amtrak runs more than 300 trains per day, services more than 500 stations located in 46 states and Washington, D.C., and operates a network that stretches more than 21,000 miles across the country.[8] Of all Amtrak passenger trips in 2019, approximately 38 percent were taken on the NEC; 48 percent on state-supported routes; and 14 percent on long-distance routes.[9] Further, in fiscal year 2019, Amtrak carried 32,519,241 customers and brought in a total annual revenue of $3.3 billion.[10] In 2020, the COVID-19 pandemic decreased Amtrak's ridership numbers. Nonetheless, Amtrak continues to push for the long-term future of passenger rail, with proposals for expanded service across the country.[11]

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[2] DOT, Pocket Guide to Transportation, January 2019, Accessed Mar. 3, 2020, *available at* https://www.bts.gov/sites/bts.dot.gov/files/docs/browse-statistical-products-and-data/pocket-guide-transportation/224731/pocket-guide-2019.pdf.

[3] The seven Class I railroads include Burlington Northern Santa Fe Railway (BNSF); Union Pacific Railroad (UP); Norfolk Southern Railway (NS); CSX Transportation; Canadian National Railway (CN); Canadian Pacific Railway (CP); and Kansas City Southern (KCS).

[4] Association of American Railroads, "Railroad 101", *available at* https://www.aar.org/railroad-101.

[5] American Short Line and Regional Railroad Association, "The Short Line and Regional Railroad Industry", *available at* https://www.aslrra.org/web/About/Industry_Facts/web/About/Industry_Facts.aspx?hkey=bd7c0cd1-4a93-4230-a0c2-c03fab0135e2.

[6] *Id.*

[7] 49 U.S.C. § 24102.

[8] Amtrak, *FY 2019 Year End Ridership*, *available at* http://media.amtrak.com/wp-content/uploads/2019/11/FY19-Year-End-Ridership.pdf.

[9] *Id.*

[10] *Id.*

[11] Anderson, Eric. "Amtrak route restructure targets new corridors." *Times Union*. February 5, 2021, *available at* https://www.timesunion.com/business/article/Amtrak-route-restructure-targets-new-corridors-15928591.php.

## ECONOMIC BENEFITS OF RAIL

As America's economy grows, the need to move more freight and passengers will grow too. The Federal Highway Administration forecasts that total U.S. freight shipments will increase 30 percent over the next 20 years.[12] If the share of that freight that moves by rail stays steady or gains in comparison with other modes, then freight rail is poised for expansion. In fact, freight rail volumes have been resilient despite being affected by the COIVD-19 pandemic. Overall volumes in 2020 were down by 12.9 percent for carloads and 1.8 percent for intermodal units. However, by December freight volumes had improved compared to December 2019, where carloads were down by only 3.7 percent, and intermodal units were up by 12.2 percent.[13] Freight rail benefits both domestic and international economic viability: international trade accounts for around 35 percent of U.S. rail revenue, 27 percent of U.S. rail tonnage, and 42 percent of the carloads and intermodal units U.S. railroads carry.[14] The affordability of freight rail saves rail customers (and, ultimately, American consumers) billions of dollars each year and enhances the global competitiveness of U.S. products.

Freight rail customers range from large, multi-national corporations, to small-sized operations. They also vary in the commodities they ship, such as corn, wheat, and soybeans; fertilizers, and various chemicals; cement, sand, and crushed stone; lumber, pulp, and paper products; various food products; crude oil, coal, and other petroleum and energy products; and scrap recycling products, among others. The rail network plays a key role in intermodal operations, forming a vital piece of the international logistics chain along with vessels, trucking, and barges.

In 2019, there were an average of approximately 138,000 Class I railroad and Amtrak workers employed in the United States.[15] Generally, workers employed by railroads earn strong wages and benefits when compared to non-railroad workers. For instance, in 2019, employees of Class I railroads earned on average approximately $132,900 per year when accounting for compensation and benefits.[16] This is approximately 61 percent more than the average U.S. worker, according to the Association of American Railroads (AAR).[17] Relatedly, the freight railroad industry remains one of the most densely unionized sectors, with approximately 84 percent of Class I rail employees represented by a labor union.[18] This compares to a 10.8 percent unionization rate in the national economy.[19]

While workers employed by railroads generally continue to earn strong wages and reliable benefits, the employment levels for Class I railroads and Amtrak have steadily decreased since 2015.

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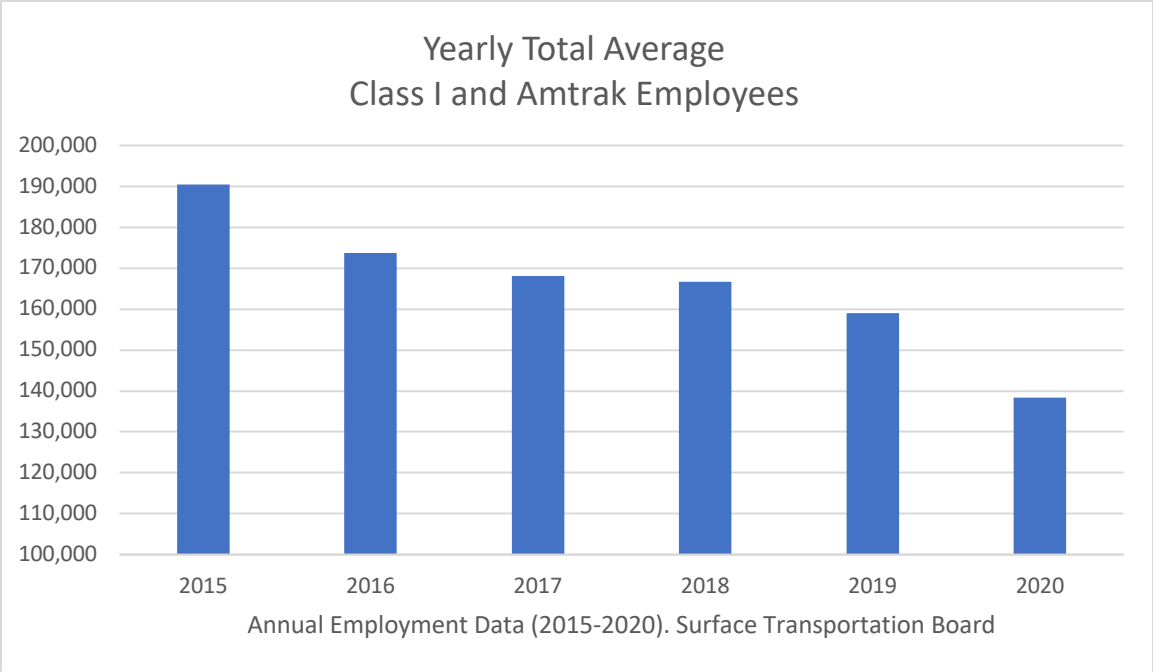
[12] "Freight Economy," United States Department of Transportation, Federal Highway Administration, *available at* https://www.fhwa.dot.gov/freighteconomy/.
[13] "AAR: 'Railroads Looking to the Future,'" *Railway Age*, January 2021, *available at* https://www.railwayage.com/freight/class-i/aar-railroads-looking-to-the-future/.
[14] Association of American Railroads, "Railroad 101," Accessed March 2, 2021, *available at* https://www.aar.org/wp-content/uploads/2020/08/AAR-Railroad-101-Freight-Railroads-Fact-Sheet.pdf.
[15] Annual Employment Data (2015-2020), Surface Transportation Board, *available at*: https://www.stb.gov/econdata.nsf/322683bcf67f4143852566210062ac90?OpenView.
[16] Association of American Railroads, accessed March 1, 2021, *available at* https://www.aar.org/issue/railroad-jobs/
[17] *Id.*
[18] Association of American Railroads, accessed March 1, 2021, *available at* https://www.aar.org/issue/railroad-jobs/
[19] U.S. Bureau of Labor Statistics, Union Members Summary, Economic News Release January 22, 2021, Accessed March 1, 2021, *available at*: https://www.bls.gov/news.release/union2.nr0.htm.

According to employment data maintained on the Surface Transportation Board's website,[20] on an annual average, the Class I railroads employed an estimated 17 percent fewer employees in 2019 compared to 2015.[21] Similarly, average annual Amtrak workforce levels dropped by an estimated 9 percent in 2019 compared to 2015.[22] The pandemic has further exasperated the labor reductions.




Investments in rail transportation generate economic benefits felt around the country. In 2017, the Class I railroads' operations and capital investments supported approximately 1.1 million jobs, $219 billion in economic output, and $71 billion in wages.[23] Similarly, Amtrak and its passengers generate national economic activity, estimated at $8.3 billion annually.[24] Amtrak's daily operations support more than 80,000 jobs, and when accounting for its indirect impacts, 100,000 jobs are supported by the Nation's passenger railroad.[25]

[20] Annual Employment Data (2015-2020), Surface Transportation Board, *available at* https://www.stb.gov/econdata.nsf/322683bcf67f4143852566210062ac90?OpenView.
[21] Like all sectors of the economy, the freight railroads were impacted by the coronavirus pandemic. In 2020, average annual Class I employment levels were nearly 29 percent lower than those in 2015.
[22] Like all sectors of the economy, Amtrak ridership was impacted by the coronavirus pandemic. In 2020, average annual Amtrak employment levels were 14 percent lower in 2020 compared to 2015.
[23] Towson University Regional Economic Studies Institute, Association of American Railroads, https://www.aar.org/data/towson-university-freight-rail-economic-impact/.
[24] Based on Fiscal Year 2015 data, Amtrak's Economic Contribution, page 2, *available at* https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/nationalfactsheets/Amtrak-Economic-Contribution-Brochure-083016.pdf.
[25] *Id.*

## ENVIRONMENTAL BENEFITS OF RAIL

According to the Environmental Protection Agency's (EPA) 2018 inventory, the "transportation sector generates the largest share of GHG emissions" in the U.S., accounting for approximately 28 percent of total emissions.[26] Of this amount, rail accounts for some of the lowest emissions contributions of all the modes at approximately 2 percent.[27] On January 20, 2021, the U.S. re-started the process to join to the Paris Agreement and on February 19, 2021, officially rejoined.[28] Further, with consumer-driven trends towards corporate climate and carbon accountability, various corporations have adopted corporate goals to achieve carbon neutrality (or "net-zero") by a date certain.[29]

Freight railroads account for 28 percent of freight volume but just 0.6 percent of total U.S. GHG emissions, according to EPA data, and just 2.1 percent of transportation-related GHG emissions.[30] While the freight trucking industry was responsible for a total of 429 million tons of carbon dioxide in 2018, freight rail contributed only 38 million tons.[31] U.S. freight railroads, on average, can move one ton of freight 470 miles on a single gallon of fuel, which is three to four times more efficient than trucking.[32] Given this, AAR estimates that moving freight by rail instead of trucks would reduce GHG emissions by up to 75 percent, on average.[33] AAR also estimates that if 25 percent of long-distance (defined as trips of at least 750 miles) freight traffic currently moved by trucks were switched to rail, annual fuel savings would total 1.2 billion gallons, and GHG emissions would be reduced by approximately 13.1 million tons.[34]

Freight railroads are improving these numbers by lowering their own fuel consumption with increasing fuel efficiency. Numerous advancements, such as locomotive design improvements and zero-emission cranes, allow the freights to leverage technology in all aspects of their operations to mitigate their environmental impact. In 2019 alone, U.S. freight railroads consumed 656 million fewer gallons of fuel and emitted 7.3 million fewer tons of carbon dioxide than they would have if

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[26] EPA's most recent GHG emissions inventory in 2018, the transportation sector surpassed the energy sector for the first time as the largest emitter of GHGs, *available at* https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

[27] Fast Facts, U.S. Transportation Sector Greenhouse Gas Emissions 1990 –2018, June 2020, *United States Environmental Protection Agency*, accessed Mar. 3, 2020, *available at* https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100ZK4P.pdf

[28] Press Release, U.S. State Dep't., *The United States Officially Rejoins the Paris Agreement*, Feb. 19, 2021, *available at* https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/; The Paris Agreement is an ambitious multi-lateral treaty, negotiated in 2015, in which countries commit to making the individual GHG reduction, contributions necessary to halt the overall rate of temperature increase. *See:* https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement. https://www.aar.org/wp-content/uploads/2021/02/AAR-Climate-Change-Report.pdf

[29] Freight Railroads & Climate Change. February 2021, Page 3, *available at* https://www.aar.org/wp-content/uploads/2021/02/AAR-Climate-Change-Report.pdf.

[30] "Fast Facts on Transportation Greenhouse Gas Emissions," *United States Environmental Protection Agency*. Accessed March 2, 2021. Available at https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions.

[31] "Freight Transportation Energy Use and Environmental Impacts." *United States Department of Transportation, Bureau of Transportation Statistics*, October, 2019, *available at* https://data.bts.gov/stories/s/Freight-Transportation-Energy-Use-Environmental-Im/f7sr-d4s8.

[32] Association of American Railroads, *available at* https://www.aar.org/railroad-101/.

[33] Association of American Railroads, "Freight Rail and Preserving the Environment," accessed March 2, 2021, *available at* https://www.aar.org/wp-content/uploads/2020/06/AAR-Sustainability-Fact-Sheet.pdf.

[34] *Id.*

their fuel efficiency had remained constant since 2000.[35] Further, several of the individual Class I railroads have made public commitments to help fight climate change by setting declining GHG emissions targets.[36]

Passenger rail carriers are further leading the charge on sustainability. According to the 2019 U.S. Department of Energy Data Book, Amtrak is 47 percent more energy efficient than traveling by car and 33 percent more energy efficient than domestic air travel on a per-passenger-mile basis. Traveling on the electrified Northeast Corridor system emits 83 percent fewer GHG emissions than driving and up to 73 percent fewer than flying. In fiscal year 2019, Amtrak reported a 11.3 percent reduction in diesel fuel use and a 20.3 percent reduction in GHG emissions in comparison to fiscal year 2010.[37]

Amtrak continues to invest in technology improvements that will yield environmental benefits. For example, it is investing in new Acela trainsets with one-third more passenger seats per car.[38] Amtrak plans to operate the new trainsets along the NEC initially at speeds up to 160 mph, but they will be capable of achieving speeds up to 186 mph to take advantage of future NEC infrastructure improvements.[39]

## WITNESS LIST

**Ms. Shannon Valentine**
Secretary of Transportation
The Commonwealth of Virginia

**Ms. Caren Kraska**
President/Chairman
Arkansas & Missouri Railroad

**Mr. Greg Regan**
President
Transportation Trades Department, AFL-CIO (TTD)

**Mr. Tom Williams**
Group Vice President for Consumer Products
BNSF Railway

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[35] *Id.*
[36] For example, on February 10, 2021, UP announced its plan to reduce absolute scope 1 and 2 GHG emissions from its operations 26% by 2030 against a 2018 baseline. *See* https://www.up.com/media/releases/210210-SBTi.htm. Norfolk Southern has also set company-wide emissions goals. *See* http://nscorp.com/content/dam/nscorp/get-to-know-ns/about-ns/environment/NS-2020-CRR-report.pdf/.
[37] "Amtrak Sustainability Report FY2019," *Amtrak, available at* https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/environmental1/Amtrak-Sustainability-Report-FY19.pdf.
[38] "Next-Generation High Speed Trains," *Amtrak – Northeast Corridor*, *available at* https://nec.amtrak.com/project/next-generation-high-speed-trains/.
[39] "Next-Generation High Speed Trains," *Amtrak – Northeast Corridor*, *available at* https://nec.amtrak.com/project/next-generation-high-speed-trains/.