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Growth in the Freight Rail Industry	Office of Proceedings
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Testimony of Adriene Bailey, Partner, Oliver Wyman	Part of Public Record

Introduction

I would first like to thank the Surface Transportation Board members for providing me with the opportunity to speak here today. I am Adriene Brooks Bailey, a Partner with Oliver Wyman, a leading general management consulting firm. Before joining Oliver Wyman, I held senior executive positions at Southern Pacific Railroad (which is now part of Union Pacific Railroad), CSX, Pacer International (which is now part of STG Logistics), and Yusen Logistics. I led the service design function at both Class I railroads and was involved in all aspects of intermodal operations at Pacer International and Yusen Logistics.

At Oliver Wyman, I currently lead the North American Rail Practice and actively work with Class I railroads, intermodal equipment and drayage providers, terminal operators, and technology enterprises. I have more than 30 years of experience in total as a railroad executive, railroad customer, and consultant to railroads. I publish and present regularly at industry conferences on growth strategies and other strategic topics for the rail industry. More detailed information and background on what I will discuss today is available on the Oliver Wyman website and referenced as citations in this submission.

Today, I would like to share my and Oliver Wyman's view of the importance of growth to North American freight rail, and what the collective stakeholders in this critically important industry must do to reverse the market share erosion that we have seen in the past 10-15 years.

Why is growth in the rail industry important?

To start, it is important to note that rail is a highly energy efficient, sustainable, safe, and low-cost mode for transporting freight. This is particularly true for the United States and North

America as a whole, which has the largest self-sustaining rail freight network in the world. In other parts of the world, freight rail operations frequently require government subsidies.

As the Board pointed out in its hearing notice, it is concerning that Class I rail volumes have not materially grown over the past decade. Indeed, rail is the only freight transportation mode that has lost overall net tons since 2017. Rail moved eight percent fewer total net tons between 2017 and 2023, while truck increased net tons moved by three percent.

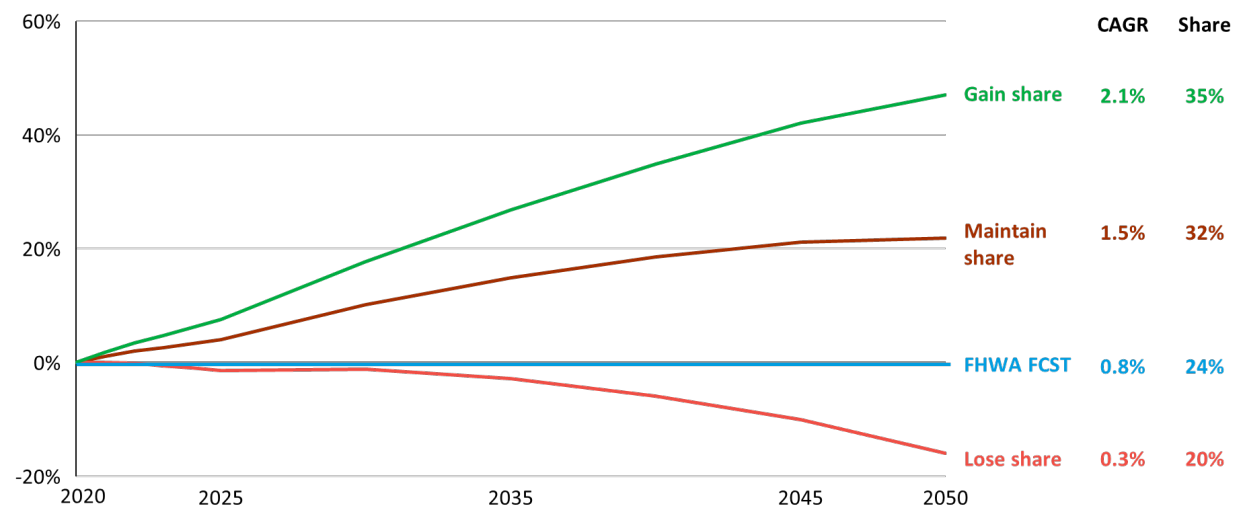
In addition, the US Department of Transportation currently projects that rail will have the slowest growth among freight transportation modes through 2050 – which means that railroads are predicted to lose share to other freight modes over that timeframe.

Implications of share loss

To put context around what a continued loss of rail market share could mean for our society as well as rail stakeholders, I would like to summarize an analysis that Oliver Wyman performed in 2022, in which we looked at the implications of several scenarios for rail market share through 2050. These are shown in Exhibit 1.

Exhibit 1: Possible Growth Trajectories for Rail Market Share to 2050

Percent deviation from US DOT forecast of revenue net-ton miles



Source: US DOT forecast of rail revenue net-ton miles as per FAF 5.4, Oliver Wyman analysis to calculate deviation based on rail market share scenarios

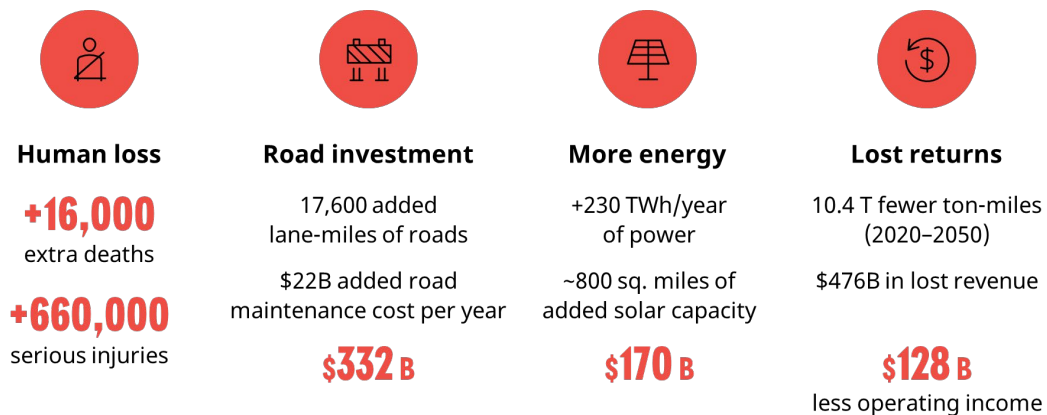
The blue line is the baseline Federal Highway Administration forecast for rail market share. We then created three alternative scenarios to project the potential for rail to gain, hold, or lose additional market share.

The baseline forecast anticipates that rail market share will drop four percentage points by 2050. We believe that this may be optimistic, however, because the FHWA forecast simply grows the current volumes of individual commodities that are NOW shipping on rail. It does not reflect the more critical trend of flexible freight, which is freight with a choice between truck and rail, migrating to truck. That is, we believe that without a change in the railroads' operating performance, shippers using rail now who have the option to ship by truck will continue the current trend of moving more freight by truck in the future. This is shown by the red "lose share" line in Exhibit 1.

In every one of our future scenarios, the volume of rail freight grows. What is critical to understand, however, are the far-reaching implications of rail losing share versus gaining share relative to truck. As an example, let us consider these implications across four dimensions, as shown in Exhibit 2.

Exhibit 2: Implications of Rail Loss of Market Share

Rail market share loss scenario compared to gain scenario



Source: Oliver Wyman analysis of public data

In the area of safety, rail has far fewer incidents each year than trucking that cause injury or a loss of life. With more freight moving on trucks, the US will most certainly see significantly more deaths and serious injuries. On a ton-mile basis, rail is about 28 times safer for the public and workforce than trucking. Our analysis estimates that if railroads could regain share, this would save approximately 16,000 lives and prevent 660,000 serious injuries between now and 2050.

More trucks on highways also would require billions more in federal and state dollars to be spent on maintaining and expanding road infrastructure. There would be no choice but to keep adding

more lane-miles to roads to keep them from gridlock. We estimate that by 2050, the US would need to spend an additional \$332 billion on roads if railroads fail to take share back from trucks.

In terms of overall carbon emissions and energy efficiency, there is no question that railroads are a better solution. In 2022, for example, US railroads accounted for two percent of transportation-related greenhouse gas emissions, while moving 40 percent of intercity freight. Trucking moves one and a half times as much freight, but to do so, generates 11.5 times more greenhouse gas emissions.

But let us also consider a future in which both rail and truck have achieved net-zero emissions. At that point, the goal will shift from sourcing clean energy to minimizing total energy consumption. That's because no matter what future energy sources we use, they are unlikely to be unlimited or free. Given that rail is four times more energy efficient than trucking, a world with little or no freight rail would consume vastly more energy than one that maximizes the use of rail. For example, we estimate that added energy requirements for trucking by 2050, in the rail market share loss scenario, would require 30% of current renewable energy generation. Or put another way, the US would need to install solar panels covering an area five times the size of Washington, D.C., at a cost of approximately \$170 billion.

Last but not least, if railroads fail to reclaim market share from trucking, the industry and its investors would miss out on billions in revenue and operating income. This would impact the railroads' ability to raise capital, to continue to invest in infrastructure and assets, and to employ a growing workforce – all of which benefits US businesses and the economy as a whole.

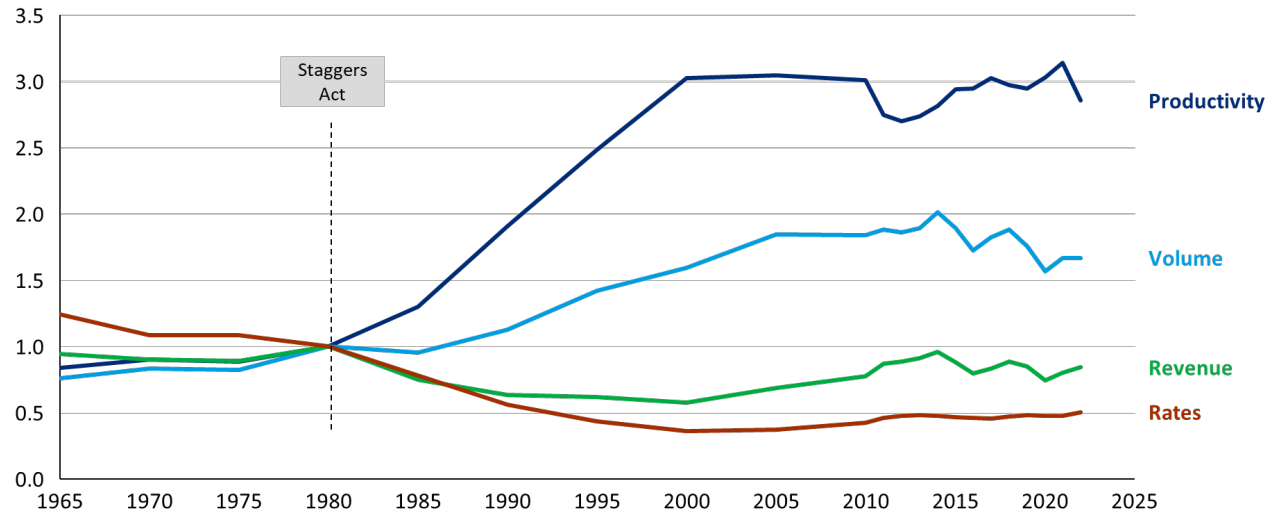
Growing rail market share is a monumentally important public good, whether the goal is improving transportation safety, lowering public spending, ensuring energy independence, or maintaining the efficiency and resilience of US transportation networks.

What is causing the market share erosion that has plagued the industry for a decade?

Next, I would like to briefly review what is causing current rail market share erosion. Since the Staggers Act deregulated rail in 1980, the railroads have delivered tremendous improvements in productivity – much of which has been delivered back to shippers and consumers in the form of rate reductions, as shown in Exhibit 3.

Exhibit 3: Indexed Class I Rail Metrics, 1965-2023

1981=1.0



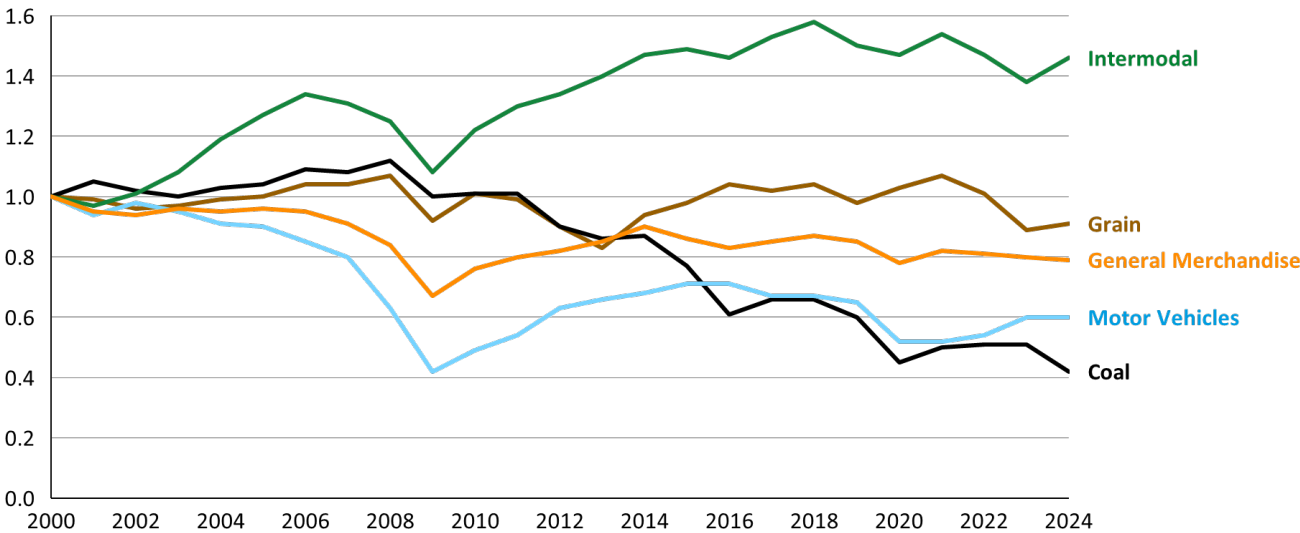
Note: Rates = inflation-adjusted revenue per ton-mile, volume = ton-miles, productivity = revenue ton-miles per constant dollar operating expense, revenue = operating revenue in 2022 dollars
Source: Association of American Railroads

Starting around 2015, however, productivity gains began to flatten out and rates began to move up again. Volumes have stagnated, and coal volumes have declined, as utilities have moved away from using coal to generate electricity. To be clear, revenues have still grown – but volume gains have not kept pace with the rise in overall freight volumes, and the industry has been ceding share to truck year over year.

It is tempting to attribute the railroads' market share loss exclusively to the decline of coal, but as shown in Exhibit 4, except for intermodal, major non-coal sectors of rail freight also have not been growing. Truck ton-miles, on the other hand, have grown steadily by 1.4 percent a year since 2000.

Exhibit 4: indexed Rail Carload and Intermodal Traffic, 01/00-07/24

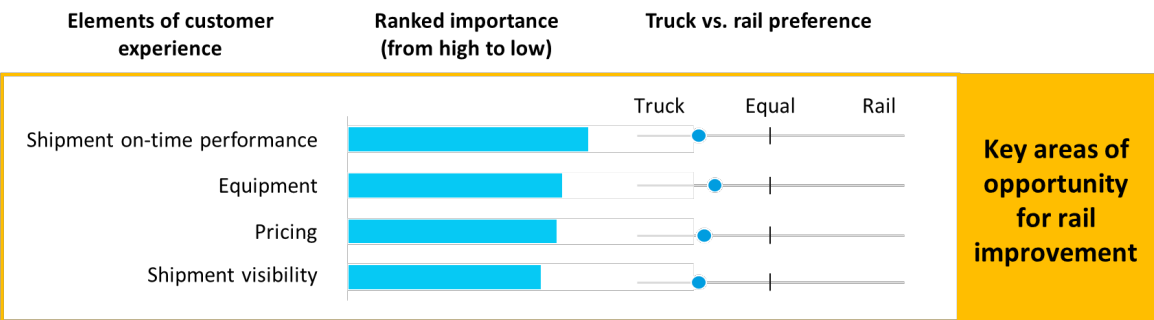
Average annual weekly traffic, 2000 = 1.0



Note: General merchandise is all traffic not included in intermodal, coal, grain, or motor vehicles
Source: Association of American Railroads, US Weekly Railroad Traffic, 12/31/99-8/2/2024

What is behind this shift? In 2020, Oliver Wyman surveyed large rail shippers to identify some of the key reasons as well as their views on what might reverse this trend. Notably, 100 percent of the executives we surveyed found truck to be superior to rail on all attributes of customer experience, as shown in Exhibit 5. At the same time, shippers consistently told us that they want to do more with rail because of its advantages, but that the product and experience simply are not meeting their supply chain needs.

Exhibit 5: Customer Experience Factors: Shipper Ranking of Importance, Truck vs. Rail Preference



Source: Flexible Freight and the Future Of Rail, 2020 North American Freight Shipper Survey, Oliver Wyman

Since the 2000’s, and even before, supply chains have only become more globalized, often involving multiple transport modes. There have been radical changes in how industries and consumers source and buy goods. Shippers have had to become much more sophisticated to

manage these complex supply chains, including changing the criteria by which they evaluate their transportation mode choices.

When I began my career in the industry, the most important thing to a shipper was the pure transportation cost on the invoice. Today's shippers are increasingly focused on the total cost of doing business with a carrier or transport mode. Freight rates are still important of course, but shippers now factor many other considerations into their choice of a carrier or mode, such as safety stock, warehouse productivity, inventory turns, billing accuracy, problem resolution speed, shipment visibility, and timely and accurate data reporting.

Based on our interviews with shippers, Oliver Wyman identified three important factors that are causing shippers to shift more freight to trucking. The first is that railroads have failed to adapt as supply chain structures and shipper choice models have changed. Railroads must become more integrated with their customers to understand how they can best fulfill shippers' more complex needs.

They also need to be more proactive, to ensure shippers are not making decisions that could lock them out of future rail access. For example, some shippers told us they were converting rail sidings and rail unloading doors to "higher value purposes," while others were evaluating sites for distribution centers without considering whether this would make it more difficult to use rail intermodal. Railroads cannot grow back share if they allow themselves to be dealt out before the game even starts.

The second factor is that rail service performance is simply not good enough. Shippers we surveyed expressed disappointment in rail's poor on-time performance and lack of shipment visibility and accurate ETA's. It is important to note here that shippers are not expecting "fast" service nor even the same degree of reliability as trucking. But they do expect substantially more transit time consistency and a more responsive approach to problem resolution if they are going to risk their freight on rail.

Third, the railroads are not delivering an overall customer-centric experience. It is no secret that trucking is considered the gold standard for ease of doing business. Rail shippers we talked to are frustrated with slow response times, overly complex transaction processes, and a general unwillingness by the railroads to be accountable for rail-related service failures. Ultimately, this

may be the most difficult challenge to overcome, as it requires the railroads to make a full on culture shift and to take a different approach to how processes are designed, how employees are evaluated and rewarded, how resources are deployed, and how strategic projects are selected.

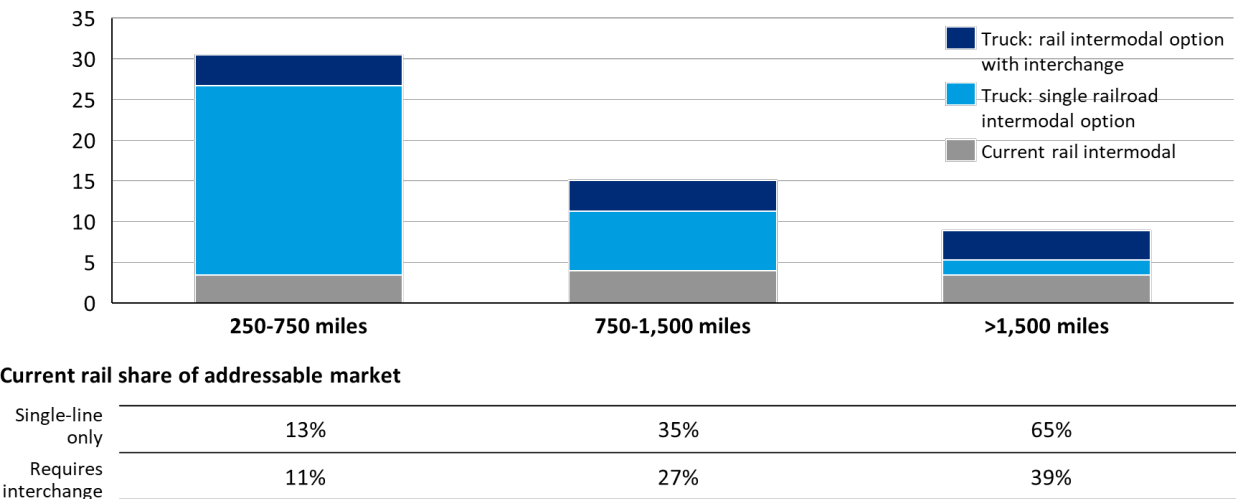
Can the volume decline trend be reversed?

So, given the challenges that have led to market share erosion for rail, is there hope that this trend can be reversed? At Oliver Wyman, we would say yes, if railroads can deliver consistent, reliable transit times and a customer experience that is much closer to truck on all touchpoints or moments of truth. We think this is entirely feasible.

Assuming railroads can solve their transit reliability and customer experience issues, Oliver Wyman has identified several specific volume and market share growth opportunities that the Class I railroads could begin to pursue and that I will briefly discuss here.

The first of these is in intermodal. As shown in Exhibit 6, railroads already have a 65 percent market share for intermodal in lanes that are over 1,500 miles and served by a single railroad. But rail only accounts for 11 to 13 percent of volume in lanes under 750 miles. We estimate that rail intermodal could serve as many as 27 million out of the 41 million total truckloads in these lanes, using the current terminal and railroad network.

Exhibit 6: Estimated addressable US domestic rail intermodal market >250-mile length of haul
Million equivalent loads



Note: Intermodal compatible, mode-flexible freight commodities only, excludes revenue empties
Source: US Department of Transportation Freight Analysis Framework FAF 5.5.1; Oliver Wyman analysis

In addition, some lanes over 750 miles that are now served by truck could be made more accessible to rail in the future by adding smaller, more flexible terminals closer to demand. Railroads also have noticeably lower share of intermodal when there is more than one railroad involved, so streamlining interchanges to match single-railroad levels of service could add more volume to the existing network as well.

The second opportunity for rail is capturing freight growth from the manufacturing upturn now occurring in North America. Railroads are indeed investing to develop large flagship transloading and industrial parks in locations they can efficiently serve. But we believe a more comprehensive view of the industrial space is needed. As I mentioned previously, shippers do not always consider rail access in their site selection, and some shippers have repurposed existing rail infrastructure. These are lost opportunities that will tax our system for decades to come, as that freight will default to moving on the highway, with no rail option. Thus, there is a need for a renewed focus on building rail access to shippers – including new lanes, connections, service offerings, and transload facilities – as well as preventing further loss of access at existing rail-served sites.

A third opportunity for growth lies in the short line rail sector. With a strong customer-first culture, many of these railroads have realized impressive volume gains in recent years by leveraging infrastructure, ancillary services, and industrial development that is not directly available to the Class I's. Although they only account for a small share of industry revenue, short lines contribute 25 to 35 percent of Class I rail volume.

Oliver Wyman recently interviewed senior executives representing some 300 of these short line railroads – over half of the industry. Many believe there is more volume to be captured if Class I railroads would help their short line connections better leverage their strengths and complement their efforts to deliver growth. There are several steps that Class I's could take here.

One would be to ensure C-suite-level line of sight and support for growth-oriented short line strategies. Another would be to increase active collaboration with short lines to attract more shippers to rail. To justify the investment and transit time risks of choosing rail, shippers need to be confident in the partnership between their serving short line and the Class I providing their mainline transportation.

Lastly, Class I's could work to improve their timelines for responding to short line requests for new business support, as well as interchange performance with their short line connections. Many short line customers have the option to ship by truck – which typically can supply a rate and capacity commitment in a matter of hours. By comparison, Class I railroads may take days or even weeks to provide a response.

In general, railroads face a challenge that truckers do not, which is that they must work with connecting railroads – whether other Class I's, regionals, or short lines – for well over half of their shipments. Is it harder? Yes. Does that mean it is impossible to design joint processes that are simple, fast, and easy for customers, or to deliver consistent transit times door-to-door? At Oliver Wyman, we believe the answer to that is no. But if the railroads fail to figure out how to solve for this, their share of freight will continue to erode.

I do believe that as a group, the Class I's are more strategically focused on growth now than they have been at any other time in my career. I am hearing CEO's articulate that while efficiency is always a goal, and there are ways of making any operation more efficient over time, earning more of shippers' share of wallet and bringing more volume to the railroad is going to be the next opportunity to create substantive earnings growth.

However, I am not yet sensing that the investor community has bought into this strategy. And we should not underestimate the influence of the investment community on where public companies focus their efforts. Ultimately, I am confident that successful railroad growth strategies will prove that increasing market share also yields higher investor returns.

If railroads can deliver a customer-centric experience and more reliable on-time performance, they will take trucks off of our highways. And we will all enjoy the benefits of a US transportation system that is safer, less costly, more energy efficient, and more sustainable.

Thank you for this opportunity to appear before the Board. I appreciate your attention to this matter and I am happy to take any questions you might have.

Citations

Flexible Freight and the Future of Rail: 2020 North American Freight Shipper Survey, Adriene Bailey, Oliver Wyman, December 2020.

[Following the Freight – Where to Find Rail Intermodal Growth](#), Matthew Schabas, Oliver Wyman, June 2024.

[The Great Pivot: Can North American Rail Become a Customer-Centric Growth Industry?](#) Adriene Bailey, RailTrends 2021.

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[The Path to Long-Term Shareholder Value for Rail is Growth](#), Adriene Bailey and Matthew Schabas, Oliver Wyman, April 2024.

Unleash the Short Lines: Accelerating North American Rail Industry Growth, James Miller and Michelle Bowling, Oliver Wyman (available online September 2024).