

**UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS**

**HEARING: AN EXAMINATION OF THE CALIFORNIA AIR RESOURCES BOARD'S
(CARB) IN-USE LOCOMOTIVE REGULATION
JULY 9, 2024**

**WRITTEN TESTIMONY OF MR. DILLON OLVERA, PRESIDENT OF THE
MODESTO & EMPIRE TRACTION COMPANY, ON BEHALF OF THE AMERICAN
SHORT LINE AND REGIONAL RAILROAD ASSOCIATION (ASLRRA)**



INTRODUCTION

My name is Dillon Olvera, and I am the President and CEO of the Modesto and Empire Traction Company, affectionately called the MET. MET is a member of the American Short Line and Regional Railroad Association (ASLRRA), the trade association that represents the nation's more than 600 Class II and III freight railroads (commonly known as short line railroads or short lines) and hundreds of suppliers that support them. In this capacity I can speak to you on behalf of the ASLRRA, representing the interests of our nationwide small railroad industry. I appreciate the opportunity to appear before you today.

The MET is a private, family-owned business established in 1911. MET is a short line railroad with 53 miles of track that provides rail service to approximately 30 customers in Modesto, California, located in the Central Valley of the state and employs approximately 50 employees with stable jobs and benefits. MET meets the Small Business Administration's small business size standard. The Central Valley is home to some of the nation's largest food and agriculture shippers. Our railroad provides the first-mile and/or last-mile service to our customers. We are fortunate to have access to two Class I Railroads, connecting shippers on the MET to the Union Pacific Railroad and BNSF Railway.



Map of the MET Network



MET Employees at Work on the Railroad

We may not be household names, but short lines are critical in your communities and pivotal in making sure that goods and freight that your constituents rely upon can get to their homes and businesses in a safe, efficient, and reliable manner. Smart regulatory action by Congress in the early 1980s helped make this possible, sparking the growth of the short line industry and facilitating the freight rail service we proudly provide today. Now a new regulation in California threatens four decades of economic progress. The regulation is rooted in good intentions—reducing greenhouse gas emissions—but it is problematic in its application, a fundamental violation of federalism, interferes with interstate commerce, and is based on unrealistic assumptions. Moreover, it takes direct aim at our industry and the critical link in the supply chain we represent. The California Air Resources Board (CARB), the agency issuing the regulation, does get one thing right—it predicts the demise of our industry due to the costs of its measure, noting “*it is possible some of these businesses would be eliminated.*”¹ (Emphasis added.)

¹ Proposed In-Use Locomotive Regulation: Standard Regulatory Impact Assessment (SRIA) at 143.

As one of “these businesses”—and on behalf of the families and communities and thousands of other U.S. businesses that rely on railroads like ours—I am here to sound the alarm. If small railroads begin to go bankrupt simply because they cannot afford to comply with the regulation, the effects will ripple across our supply chain, starting in California and stretching across the country. These will be felt in the form of higher costs for shippers and consumers and will be witnessed in the form of more trucks on our roads, greater congestion on our highways, more particulate matter in our environment—and, ironically, more greenhouse gas emissions in California and elsewhere.

We appreciate the subcommittee’s interest in this matter and in providing an opportunity for our industry to speak about CARB’s misguided measure. We also appreciate the leadership that Chairman Graves, Subcommittee Chair Nehls, and many on this panel, and others in Congress, have shown in giving voice to our concerns and urging a thoughtful approach to policymaking by the federal actors who have a rightful say in these matters. This includes the Environmental Protection Agency (EPA), which is currently deliberating over CARB’s authorization request. While CARB fails to recognize the competing interests that must be balanced to achieve good policy outcomes, we remain confident that Congress and the federal government can be reasonable and level-headed in working with our industry to ensure that our shared goals—clean air, a thriving freight economy, and a world class supply chain system—are all achieved. I urge Congress to call on EPA to deny CARB’s request to authorize their In-Use Locomotive Regulation, for the many reasons I cite in this testimony.

THE SHORT LINE FREIGHT RAIL INDUSTRY

Our industry is a great American success story. It was spurred to new life in the early 1980s when partial deregulatory action by Congress—the Staggers Act—allowed larger Class I railroads to spin off moribund, outdated rail lines no longer deemed business-worthy. Short line railroads acquired and revived these marginal lines, which were often in very poor condition. They invested mightily, ran scrappy and smart, knocked on every door they could find, and managed to turn them into thriving enterprises. They have preserved freight rail service for thousands of customers, all while working closely with Class I railroads to ensure the network’s success. Our railroads can be seen here:



Short Lines Serve Communities in Every Corner of The Country

Today, short lines provide first-mile and last-mile freight rail service and are responsible for handling one in five railcars on the national rail system. They ensure that businesses in dense urban centers, small towns, and isolated rural communities in 49 states that would otherwise be cut off from the North American freight rail network have the access they need to domestic and global markets. While we provide a critical connection to all commodities, the manufacturing, industrial, agricultural, mining, energy, and chemical sectors are particularly reliant on short line service. For areas of rural and small-town America, we are typically the only connection to the national rail network. Indeed, our presence can be the tipping point for businesses to locate or expand in a region, driving new family-supporting jobs throughout the country in places that otherwise may struggle to attract investment.

Large, mega-corporations we are not. Most of our members are small businesses.² The typical short line employs about 30 people, operates about 80 route miles, and for those in California, makes about \$1.3 million in revenue per year. While we operate approximately 30% of the national network (or 50,000 route miles) and handle about 20% of the freight cars in

² While some short lines are owned by larger companies, all must stand on their own financially, and properties that become permanently cash flow-negative are not viable.

service, our members earn only about 6% of the total revenue earned by the country's freight railroads.

Nonetheless, our members have a big impact on economic outcomes. Short lines are critical links in the nation's freight supply chain, and are vital engines of economic activity, tied to 478,000 jobs nationwide, \$26 billion in labor income and \$56 billion in economic value-add.³ Altogether, short lines ensure more than 10,000 critical businesses can get their goods and products to market.⁴

Our members provide these customers with a low-carbon freight logistics option that is more environmentally friendly than competing forms of transportation over land, preventing costly damage to pavement that would be borne by often cash-strapped state and local agencies. We are proud of how we relieve traffic congestion, cutting emissions of harmful pollutants while reducing deadly crashes. And we are proud of our reputation for providing attentive, tailored, "white glove" service to a variety of shippers, making the extra effort to ensure that rail service for any shipment size is the right logistics choice and our customers' critical goods get where they are going on time.

Short lines are still investing limited resources to revitalize outdated track

Even after decades of investment by short lines—often a third to 40% of their annual revenue, making short line railroading one of the most capital-intensive businesses in the country—the backlog of repairs still looms large. We estimate more than \$12 billion is still needed to allow short lines to fully modernize and meet the country's freight needs. This estimate unfortunately is subject to rise due to the hard-hitting impact of inflation on construction costs and looming new mandates like CARB's In-Use Locomotive Regulation.

THE SHORT LINE INDUSTRY IN CALIFORNIA

California, as the nation's largest economy—and one of the world's as well—is no stranger to short lines and typifies our profile in many places. There are 25 short lines in my state. All are Class III operations, but some of these run (either by owning or leasing) over lengthy routes, for example the San Joaquin Valley Railroad at around 400 miles. The average

³ The Section 45G Tax Credit and the Economic Contribution of the Short Line Railroad Industry, prepared by PWC for ASLRRRA (2018) (PWC Report).

⁴ (PWC Report)

California short line operates about 57 route miles. Short lines like Sierra Northern Railway and Mendocino Railway each have a few dozen employees. These small railroads move agricultural products, petroleum products, minerals, chemicals, plastics, lumber, and forest products—all critical to the well-being of residents in California and millions beyond the state’s borders. Indeed, some short lines, like the Arizona & California Railroad, operate in both states represented in the railroad’s name, or in the case of Central Oregon and Pacific Railroad, in California and its northern neighbor. These examples emphasize the interstate, integral nature of the short line freight rail economy. All short line railroads, whether interstate or intrastate, are considered by the STB to be integral parts of the freight rail network.

California short lines move roughly 260,000 carloads of freight in California each year, and the MET represents 35,000 of these carloads, almost 15%. Each carload carries the equivalent of 3-4 trucks worth of goods, meaning that short lines in California alone keep roughly one million trucks off the road. California short lines operate approximately 200 locomotives in the state, and our railroad has 11 of those locomotives.

Railroads are already the most environmentally friendly way to transport freight across the country. According to EPA data, the nation’s freight railroads account for less than 2% of total transportation-related greenhouse gas emissions, and short lines make up only a tiny fraction of that 2%. Our trucking competitors account for 23% of transportation-related greenhouse gas emissions.

CARB’S IN-USE LOCOMOTIVE REGULATION

The new regulation and its four key provisions

For many years, CARB recognized implicitly and explicitly that federal law prevented it from regulating the national freight rail network. But in 2022, the agency formally bucked what was a sound, reasonable and legally grounded position and launched the current regulatory regime. The short line industry and our stakeholders presented our significant economic concerns while CARB put together the measure. But our points did not seem to carry much weight in the face of CARB’s single-minded aim of achieving an abrupt transition to zero greenhouse gas emissions. In 2023, CARB formally promulgated the in-use locomotive regulation, and it came into effect on January 1, 2024. Some compliance dates have already come due and many more will come due in the months and years ahead. These include:

1. A mandate to spend millions on new locomotives. The regulation's first key tenet requires railroads to set aside funds annually into a forced "spending account" that can only be used to acquire, lease, or rent certain new technologies approved by CARB, largely limited to low-emission and zero-emission locomotives. The amount of funds is related to the operators' emissions levels. Some short line operators might have to spend several millions of dollars annually to comply with this mandate, potentially exceeding the annual revenue of these companies, much less any profit. The fees levied on locomotive emissions are deliberately scaled to make operation of even locomotives that are fully compliant with EPA's emissions tiers up to Tier 3 prohibitively expensive and the operation of Tier 4 compliant locomotives very expensive—even though all these locomotives are compliant with federal law.
2. A requirement that currently useful locomotives stop operating in California. The regulation's second key tenet is operational in focus, mandating that by 2030, locomotives for switcher, industrial and passenger use cannot operate in California unless they are under 23 years old and meet the newest emissions criteria or are zero-emission. By 2035, all locomotives in line-haul use must meet these criteria. This means that locomotives purchased before 2007, which could have many decades of valuable, useful life left, will be banned in the state. Short line fleets largely consist of used locomotives acquired on the secondary market. It is rare to find a locomotive under a decade old on a short line property. Most are over 23 years old, some far over. Many short lines have only locomotives that are over 23 years old.
3. A limit on the length of time a railroad may remain stationary without turning off its engine. Locomotives with an "automatic engine start/stop" device must be "shut off no more than 30 minutes after the locomotive becomes stationary," in most instances. Railroads must track any idling over this duration, and report the cause, a substantial administrative burden.
4. A mandate for new recordkeeping. The fourth and final element requires railroads to report annually to the state specific emissions information and operating practices.

MET'S EXPERIENCE IN CALIFORNIA

The MET has already made great strides in reducing greenhouse gas emissions. In fact, the MET was an early adopter of clean locomotives. Beginning in 2008, our company worked closely with the state of California to apply for state grants. There are nine locomotives that were upgraded from Tier 0 to Tier 3 due to this work and California's investments. There are three

different grants in place today that have obligations that will be completed between 2026 through 2032, which are as follows:

- Funding from the Diesel Emission Reduction Act program, which will be complete in 2026, and help invest in two locomotives;
- Funding from California's Carl Moyer program, which will be complete in 2028 and help invest in an additional two locomotives; and
- Funding from San Joaquin Valley Unified Air Pollution Control District, which will be complete in 2032 and help with investments for five locomotives.

The total cost of these upgrades is \$12.5 million dollars. The cost of these upgrades was shared between the state of California and the MET. These locomotives have many years of remaining useful life, but they would all have to be scrapped and replaced with new locomotives per the CARB regulation. The useful life of a locomotive operated by a short line is typically 40+ years, however, the CARB regulation calls for the elimination of all locomotives that have an age of 23 years or greater. This CARB regulation will also force the MET to contribute to a spending account while continuing to complete our grant obligation. This is an unreasonable ask for any small business to make. With the present fleet mix, our current calculation for the spending account is over \$1.0 million dollars annually, which is an unsustainable percentage of revenue. This spending account creates a use-it-or-lose-it monetary incentive to force locomotive upgrades. As demonstrated by our previous work together, the MET, and short lines in general, are perfectly willing to work with CARB and other similar agencies to reduce emissions when they offer reasonable paths forward, particularly on help acquiring newer and cleaner locomotives. This regulation, however, is just not feasible for us.

The CARB regulation will cause a significant financial impact to the entire short line industry. Railroads are capital-intensive and well-run short line railroads frequently spend at least 80% of revenue on operating expenses and basic upkeep. Short lines are also frequently prevented by contract provisions and/or market competition from trucks from effectively raising prices to cover CARB regulation's costs.



MET Genset Locomotive and Train Operations

The MET recently applied for and was awarded CRISI grant funding to upgrade two SW1500 switch engine locomotives from tier 0 to tier 4. The total cost for these upgrades is approximately \$5 million dollars, to be split between the federal government and the MET.

The CARB regulation's spending account "funding requirement" is charged on a sliding scale based on emissions that is calculated to make the operation of a locomotive that is EPA Tier 3-compliant, or less, prohibitively expensive. This practically forces the operator to upgrade to a Tier 4 or zero emission locomotive. In the case of MET, the cost to operate the recently upgraded Tier 3 locomotives under the new regulation would rapidly become prohibitive. For that reason, MET has submitted another application for CRISI funding to repower the 9 Tier 3 gensets to Tier 4. This dynamic displays the profound conflicts that have been created between prior state policy, present federal policy, and the In-Use Locomotive Regulation. Tier 3 locomotive engines that are quite low-emitting and were acquired with public assistance, and that are legal under today's EPA regulations, are forced to be scrapped with decades of useful life remaining, becoming "stranded assets."

Even with the entire MET fleet upgraded to Tier 4, the spending account requirement would still require MET to deposit hundreds of thousands of dollars each year into its account. The zero emission locomotives promoted as available today are, in our assessment, still in early development. They are not yet an economically or physically practical option that could reliably, effectively, and cost-effectively meet the operational requirements at our active railroad.

This forced diversion of funds, even considering support from state and federal sources, still reflects a massive increase from our historical baseline of locomotive capital expenditure and a pulling forward of decades of that investment. It is orders of magnitude greater than what was spent in the past. This forces tradeoffs in valuable investments that otherwise would have been made at the MET. One is investments in improved track condition, an important driver of safety that reduces derailment risk. Another is investment in public at-grade crossing protection. MET serves a busy industrial park with 50 crossings with varying degrees of protection. This diversion of funding occurs at the expense of investments to improve protection levels at crossings.

Finally, if short lines are driven out of business due to CARB's infeasible regulation, that freight will move onto trucks, increasing damage to roads, increasing traffic congestion and freight cost, and impacting traffic safety. Businesses who have lost shipping options will move out of California or just vanish.

THE PROBLEMS PRESENTED BY CARB'S NEW REGULATION

There are a broad array of problems awaiting California and the nation's freight economy due to CARB's regulation. But the following five are those that our industry finds the most fundamental and concerning.

The regulation is preempted by federal law

The nation's rail industry has been around 200 years, and it is the poster child for interstate commerce. California's actions effectively regulate the national network and the interstate commerce it supports. It is logical that no state should be able to regulate the national rail network any more than it can regulate the national airspace and the interstate commerce that relies on our aviation system. Two centuries of jurisprudence interpreting the Commerce Clause as well as several federal statutes, among them the Interstate Commerce Commission Termination Act (ICCTA) and the Clean Air Act and the Locomotive Inspection Act, all clearly render CARB's regulation illegal. Freight trains and railcars are constantly moving between states on an integrated and interoperable network demonstrating every day the inherently national characteristic of the freight rail industry.

We understand the proper venue for our legal arguments is in court, and ASLRRA is engaged in ongoing litigation with CARB alongside the Association of American Railroads (AAR). We are confident in those proceedings, but we regret that litigation is necessary to stem regulatory activity that never should have been seriously contemplated in the first place. We also remain eager to work with Congress to advance legislative efforts and support federal administrative activity that asserts the rightful federal primacy over our country's freight rail network.

The regulation mandates technology that does not exist in a viable form and at scale, and that may not for years to come

CARB's regulation is replete with faulty assumptions about current technological capabilities, the direction they are going, and the scale and timing of new developments.

The regulation requires that over the next decade, railroads acquire and use locomotive technology that is low-emission, and eventually, zero-emission. While an admirable goal, this requires the locomotive manufacturing industry to make massive leaps in development in just a few short years. To go from the current situation, in which there are not proven commercially viable zero-emission freight locomotives or adequate manufacturing capacity in North America, to one in which there are thousands running throughout California and many other states from which goods and freight might move into and out of California is impossible based on realistic commercial testing and manufacturing timelines.

Locomotives are massive, complex machines designed to haul heavy, voluminous amounts of freight. These are not 4,000-pound Tesla EVs moving a few bags of groceries around the neighborhood. The locomotives in use today must be capable of hauling hundreds if not thousands or tens of thousands of tons (i.e., trains generally weigh well into the millions of pounds) of stone, grain, chemicals and other heavy goods and commodities in demanding weather conditions such as the high heat in the San Joaquin Valley, or through California's Sierra Nevada mountains in the depths of winter, for hours on end. As impressive as advances have been in battery technology in recent years, they pale in comparison to the advances that would be necessary to outfit a locomotive to ensure it can reliably move strings of massive railcars. The most efficient batteries in use today would need to demonstrate a greater than tenfold increase in capacity to achieve CARB's aims—and a swift ability to recharge that is not

possible with today's technology. As much as our industry would like to see that happen, there is no path forward yet for that technology to be achieved—just writing it into a state regulation does not make it so.

The same applies to other new technologies, like alternative fuels, hydrogen, and hydrogen fuel cells. These efforts, while moving quickly and with our full support and participation, are still in a nascent stage—nowhere near the readiness necessary to justify scrapping years of investments in diesel engines and stranding tens of thousands of perfectly functional locomotives.

The regulation ignores how short lines acquire and use locomotives and the fundamental short line business model

Just as CARB-mandated technology remains many years away from the market, it is farther still from any secondary market where our members could realistically afford to acquire the technology and incorporate it into their operations.

The rail industry engages in a practice known as “cascading,” where used locomotives from Class I railroads are sold to short lines, as the Class I's locomotive models are replaced with newer motive power. A locomotive that has reached its practical end of life in Class I service can have decades of use left in the less punishing short line operating environment. This has been a bedrock principle of railroad operating economics from the advent of interstate railroading. It is an economic win-win that benefits all involved in rail: the Class Is, the short lines, and the shippers that depend upon efficient, cost-effective, and safe rail transportation as an alternative to higher-cost truck transportation.

California's ban on any locomotive older than 23 years old beginning in 2030 is a completely unworkable proposal for short line railroads that regularly rely on 30-, 40- and 50-year-old locomotives, which are fully compliant with federal law, to keep sometimes barely marginal railroads viable. Departing from that economic model and requiring smaller railroads to purchase dramatically more expensive locomotives would lead to the ruin of many short lines. The difference in capital costs for short lines between acquiring new versus used locomotives is not a few percentage points, it is an order of magnitude. The nature of short lines, that these costs must be spread over the fewer cars that short lines typically handle on a per mile basis, renders this path completely non-viable.

The regulation ignores the operational complexities created by mandating new technology

CARB's approach fails to recognize the levels of complexity that come with upgrading locomotives to progressive tiers. With each tier, maintenance intervals are shorter, maintenance activities are more elaborate, repairs become more costly and are borne by operators who are still building familiarity with their new technology.

The latest Tier 4 compliant locomotives—also the newest on the market—are dramatically more complex machines than the lower tier locomotives commonly found at short lines, in terms of the engines, electronic controls and monitoring systems. The step from Tier 3 to Tier 4 is notable for these impacts. Locomotive maintenance personnel require substantial additional training, more consumables and spares must be kept on hand, and fleets may even have to be sized differently to address lower-than-expected availability levels. CARB does not seem to have fully considered the effect of this dynamic—it will disproportionately impact smaller operators of locomotives with small maintenance shops.

The regulation evades any effort to recognize how it will uniquely affect small businesses

A longstanding body of law, including the Regulatory Flexibility Act of 1980 (RFA), as modified by the Small Business Regulatory Enforcement and Fairness Act of 1996 (SBREFA), requires that federal agencies exercise utmost care and discretion in evaluating how regulations they promulgate affect small businesses. While not bound by these laws, CARB has clearly ignored their wisdom in creating a prescriptive, costly, and complex new regulatory framework. Many small railroads are unable to comply with “one size fits all” requirements that are written with larger entities in mind. Each small railroad has a unique operating environment that can differ dramatically from others in terms of scale, market, operating characteristics, capital needs, and price sensitivity of shippers served. It is no wonder that the U.S. Small Business Administration's (SBA) Office of Advocacy has formally weighed in on CARB's authorization request to EPA, noting its harms and how it “will disproportionately impact small businesses in the locomotive sector as well as small entities who depend on the locomotive sector.”⁵

⁵ See April 22, 2024 letter from U.S. Small Business Administration to U.S. EPA.

THE BROAD HARM THE REGULATION WILL BRING

California short lines will face massive new costs with some forced to shutter

As noted above, CARB's regulation imposes new costs that come in the form of massive, mandated capital expenditures on locomotive fleet replacements and upgrades, and on an infeasible timetable.

A Class III railroad in California, as CARB notes in their regulatory analysis, can have cost of compliance with the new regulation as high as 42% of annual revenue for a short line.⁶ For more than a decade, the spread in cost between an older, lower-tier used locomotive in good condition and a brand-new unit has been dramatic—from a few hundred thousand dollars for used equipment contrasted with over \$4 million for a small-order purchase of a new Tier 4-compliant locomotive. The long-term financial planning of short lines has been constructed around the former; but with whiplash speed, to comply with CARB's regulation, short lines must jettison their time-tested economic model and focus on new, lavishly more expensive machinery than they need.

We estimate that between \$335 to \$427 million will be required to upgrade the short line freight locomotive fleet currently operating in California. We believe our state's short lines operate 172 locomotives that would need to be replaced. This cost over and above the normal cost is due to the difference in investment between repowering locomotives versus purchasing completely new locomotives. The cost would be even higher if zero-emission locomotives were required, because, for battery-electric powered locomotives, there is a high probability that small rail operations now using one or two diesel locomotives would require two or three battery locomotives, due to the recharging periods for the batteries requiring more time than simply refueling a diesel-electric locomotive. A small railroad would be required to provide back-up locomotives in case of an issue with the new zero-emission technology that takes it out of service. Unlike a larger railroad that to a degree may be able to reshuffle its locomotive assignments to cover for individual locomotive failures, small railroads do not have that ability and will be required to build in a back-up plan to provide service continuity to their customers.

⁶ CARB Standardized Regulatory Impact Assessment (SRIA) at 95; ASLRRA notes this estimate may be low.

CARB makes unrealistic assumptions that short lines can pass on these new, mandated compliance costs to their customers. Many short line shippers are small to medium sized businesses themselves and most operate in sectors with razor-thin profit margins and intense competitive pressures; there is nothing to “pass on” that customers will not feel acutely as well. When short line customers are met with new higher rail shipping costs, they will be forced to turn to other means, like trucking, in response. A downward spiral would then commence, with many short lines seeing costs soar, customers flee or be forced to shutter, revenue nosedive, and bankruptcy or abandonment of lines as the end state.

CARB has included two provisions in the regulation ostensibly to reduce the burden on small businesses: the Alternative Compliance Plan (ACP) and the Small Business Hardship Extension. Both measures enable regulated railroads to delay compliance with some elements of the regulation for periods of time, but they entail substantial reporting burdens and neither addresses the basic challenge, that under the regulation, inevitably, and on approximately the same terminal timeline, short line railroads will be forced to make a massive investment in Tier 4 locomotives—or zero-emission locomotives, if ever practical and available—that will be many times the motive power investments that would have been expected to support their operations under the legal framework prior to the ruling. The costs imposed by the regulation will remain as insurmountable for small businesses under the Alternative Compliance Plan and with the Small Business Hardship Extensions structure as they would under normal compliance. In the case of the ACP, the locomotive operator must have control over non-locomotive assets that emit, and which can be controlled to attain equivalent emissions reductions. Few if any short lines have such assets.

For those railroads that do remain in business, safety will suffer, as they will be forced to shelve critical upgrades and maintenance, investing less in addressing the leading cause of derailments on short lines: outdated rail and track. CARB’s mandates will supplant those needs, jeopardizing the railroads’ operations. Sensible environmental upgrades will be halted, too, as intermediate EPA tier improvements that could result in significant reductions in emissions, like our investments in Tier 3 locomotives, would effectively be disincentivized by CARB in favor of maximalist targets.

With short lines gone, the state's supply chain and economy will suffer, and residents will encounter new health and safety hazards

Short lines represent about a third of California's rail network. With the new regulation placing those businesses on the brink and pushing some into bankruptcy, California's supply chain is in for a torrent of trouble.

Businesses will still have goods and freight to ship to market, but with fewer options available, customers will have to increasingly move products via large trucks and commercial motor vehicles. This can be four to five times more expensive than shipping by rail. With the trucking industry taking freight that previously moved by rail, the pressure upon short lines could continue further through "modal diversion." Even short lines that initially weather CARB's regulation will find a freight marketplace where they are slowly supplanted by trucking. With few short lines left, California could see companies flee the state in search of locations with better rail and shipping options.

Aware of this cascade of new costs and limited options for shipping their products, it is not surprising that 25 national and 50 state agriculture groups—from California and throughout the country—are on record opposing this regulation, deeming it a "significant danger to U.S. agriculture and the broader U.S. supply chain."⁷ The agriculture industry is joined by hundreds of other business groups, manufacturers, energy firms, defense groups and even the National Association of Counties. Like us, these groups all rightly predict the elimination of shipping options and the increased costs that will come with whatever shipping options remain—costs that will be passed on eventually to consumers, your constituents.

If the sticker shock of higher shipping costs were not enough, Californians could quickly see a staggering number of additional trucks on their roads. We estimate short lines ship about 260,000 carloads per year that could in large measure be forced onto roadways in California, and each rail carload is the equivalent of 3 to 4 trucks. One short line predicts the loss of just its rail traffic alone will put as many as 100,000 more trucks on California's roads per year.

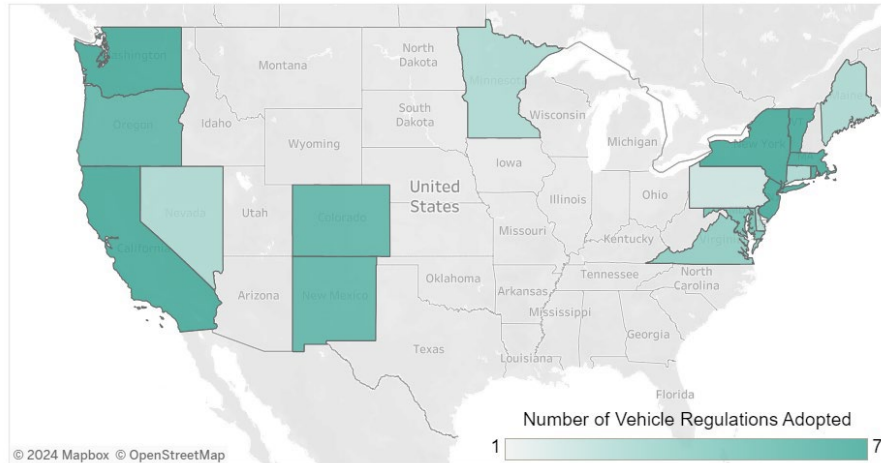
⁷ See, e.g., letters from U.S. Chamber of Commerce, National Association of Manufacturers and hundreds of agriculture and industrial groups. Docket at <https://www.regulations.gov/document/EPA-HQ-OAR-2023-0574-0001/comment>

With more trucks dominating California's public roadways, the state's residents will be greeted with more greenhouse gas emissions in the near term, as even CARB's ambitious regulatory timeline, assuming it survives judicial scrutiny, only suggests that the truck fleet will reach zero emissions in 2045. Moreover, Californians will breathe in particulate matter, also known as particle pollution, generated from billions of microscopic pieces of shredded tires that will be generated from all the trucks newly traversing their towns and communities, on roadways they share with big trucks. Heavier trucks—many weighing in at 80,000 pounds—will shorten the lifespan of public roads and bridges throughout the state. Finally, the greatest concern is one of safety. More trucks on roadways invite the risk of more crashes and collisions with passenger vehicles.

Even a completely electrified trucking industry would still produce many of these new harms. Regardless of any possible rapid adoption of electric trucks in California, these vehicles will still generate particulate matter emissions from tire wear, and electric trucks will still impose wear and tear on pavement and bridges. Their safety threat is not mitigated in any way by their fuel source, rather, it may only be compounded as trucks grow heavier to accommodate massive battery packs. Electric trucks are considerably heavier than diesel trucks, reducing the payload. So yet even more electric trucks (or heavier trucks) will be required to absorb the modal diversion resulting in more road damage and safety concerns.

The impacts will ripple out nationwide

Due to the integrated, interconnected nature of the freight rail network and the freight economy, other states will experience these impacts. Should EPA authorize this regulation, other states that could move quickly to replicate it, which would threaten short lines around the nation. The map below illustrates states that have adopted some or all of California's criteria pollutant vehicle emissions standards under section 177 of the Clean Air Act.



CAA Section 177 States

Considering this demonstrated past propagation of California requirements for emissions standards, it is reasonable to expect numerous other states to consider enacting new regulations on locomotive emissions modeled on the CARB regulation. States that are favorable to additional emissions mandates could be willing to take the California defense of this regulation at face value and proceed promptly to adoption.

As we speak, EPA is considering CARB’s authorization request. The effect of the spread of the CARB regulation would be to build a disconnected patchwork of state regimes for locomotive emissions that would prevent the movement of locomotives across state borders, even when on the same railroad, creating geographically captive fleets. This would impact Class I railroad operations fundamentally, but also Class II and III railroads as many small railroads also have lines that cross state borders, and, regardless, all railroads and rail customers depend on the smooth flow of interstate commerce. Such a potential propagation of the CARB regulation, following the scale and pattern illustrated above, would dramatically multiply the financial burden projected for California short lines across hundreds of small railroads and thousands of locomotives.

WHAT CONGRESS CAN DO

Call on EPA to deny CARB’s request

The Clean Air Act requires EPA, following certain administrative procedures, to authorize California to adopt and enforce standards relating to the control of emissions from non-

road engines and vehicles otherwise not prohibited under the Clean Air Act if California determines that its standards will be at least as protective of public health and welfare as applicable federal standards. EPA is required to reject such standards, however, if they are (1) arbitrary and capricious; (2) unnecessary to meet compelling and extraordinary conditions; or (3) inconsistent with certain provisions in the Clean Air Act.

We firmly believe CARB's In-Use Locomotive Regulation fails this standard, and, along with the Class I railroads and thousands of affected stakeholders, we are actively engaged with EPA conveying the clarity of our case and urging the agency to reject California's request. We are appreciative of all on this panel and in Congress who have formally asked for a denial of the request. Your efforts could help sideline this new regulatory effort. EPA's review is ongoing. By calling on the EPA to deny CARB's request, you are asserting proper federal primacy over the national freight network, in general rejecting an unworkable and inefficient patchwork of state-by-state rail regulations and stopping this infeasible counter-productive California regulation from becoming the de facto new national regulation.

Continue to partner with our industry to advance emissions-reducing technology

An additional problem with CARB's mandate is that there is nowhere near enough public or private sector funding to allow short line railroads to quickly and comprehensively adopt even currently existing technology that could lead to lower emissions across all in-service locomotives. CARB has also drastically overstated federal and state funding opportunities that short lines could avail themselves of in efforts to comply; by our estimate, federal and state programs are hundreds of millions of dollars short of what would be necessary just for locomotive operations in California.

Nonetheless, there are important resources that can continue to help our industry move in the direction we all want to go—a rail network that has an even smaller emissions footprint than it has today and is an even more attractive option for the surface transportation of freight. These efforts include the USDOT's CRISI program (noted above), which can provide funding for short lines to upgrade locomotives for emissions purposes, and the other R&D efforts and demonstration projects noted above. Under the Infrastructure Investment and Jobs Act (IIJA), Congress has the authority to appropriate up to a billion dollars each year to CRISI for the next two fiscal years. Full funding will help further that aim, as well as other safety and reliability

goals. We also urge support for the EPA’s Clean Ports program and its Diesel Emissions Reduction Act program. We continue to support varied R&D efforts with federal agencies with jurisdiction of these matters, including efforts with US DOT and DOE to research alternative fuels, battery electric locomotives and hydrogen fuel cells. For example, we support DOE’s Decarbonization of Off-Road, Rail, Marine, and Aviation Technologies (DORMA) program. We urge Congress to strongly support this and similar efforts in Fiscal Year 2025.

Railroads, however, cannot be held responsible for ensuring dramatic advances in industries far outside of our control, such as those manufacturing battery power solutions. We support, and urge Congress to support, efforts at the DOE and the USDOT, aimed at the basic research and development necessary to advance the industries and technologies that will be necessary for rail and other hard-to-decarbonize industries to use to dramatically reduce our environmental footprint, such as batteries, hydrogen, and renewable diesel fuels.

Support the rail industry

Compared to the other options, rail is the more sustainable way to move goods and freight over land, a more cost-effective option for all manner of businesses, and a proven way to improve safety on public roads. By supporting this industry, you do great service to your constituents—and simultaneously help advance the goal we share with CARB: achieving cleaner air. There are a multitude of ways we encourage you to support freight rail: advancing efforts like CRISI to ensure short lines can stay safe, reliable and efficient; avoiding excessive subsidization of less-environmentally friendly shipping alternatives like trucking by allowing heavier trucks or allowing the trucking industry to avoid paying its fair share for use of the highway system; and ensuring that federal and state regulations make good sense and meet a true need.

CLOSING

The EPA should deny CARB’s authorization request for its In-Use Locomotive Regulation. Not only does it mandate the use of locomotives with technology not currently commercially available, but CARB has also publicly acknowledged that the massive compliance costs may be too much for some short line railroads in California to bear—they would be forced to cease operating because of their inability to comply with an impossible regulation. This would have serious, negative impacts on the freight rail network, the U.S. supply chain, the

environment, and highway safety. This regulation will have noticeable impact to your constituents in elevated pricing of goods, and loss of jobs because of the shuttering of railroads and shippers unable to obtain efficient transportation options.