

2021 HOUSE TRANSPORTATION

HCR 3001

2021 HOUSE STANDING COMMITTEE MINUTES

Transportation Committee
Room JW327E, State Capitol

HCR 3001
1/7/2021

A concurrent resolution urging Congress to temporarily amend cargo carrying truck length and weight restrictions on state highways and interstates that are a part of the National Network to allow North Dakota and surrounding states to conduct a road train pilot program and to permanently amend the restrictions to allow road trains on the National Network highways and interstates if the pilot program is successful.

Chairman Ruby opened the hearing on HB 3001 at 9:00 AM. Roll call was taken-all members present.

Discussion Topics:

- Temporary allowance for pilot program for road trains on highways and interstates.
- Benefits of road trains.
- Wear and tear on roads vs rail.
- Safety on highways with road trains.

Chris Joseph, Legislative Council, introduced the bill with neutral testimony on HCR 3001. (9:03)

Matt Gardner, ND Motor Carriers Association, presented testimony #257 in support of HCR 3001. (9:09)

Emmery Mehlofff, ND Farm Bureau, testified in support of HCR.3001 (9:13)

Landis Larson, President of AFL-CIO, testified in opposition and submitted testimony #210 and read testimony from Jim Chase, **SMART-Transportation Division of the International Association of Sheet Metal, Air, Rail, and Transportation employees** #211. (9:15)

Wade Swenson, Dept. of Transportation, gave neutral testimony (#198) via ZOOM. (9:17)

Chairman Ruby closed the hearing on HCR 3001. (9:30)

Representative Jones moved amendment to change "move" to "meet" on Line 21. (9:30)

Representative Weisz seconded the motion.

Motion passed on a voice vote.

Representative Kading moved a DO PASS as AMENDED.

Representative Weisz seconded the motion.

Roll call vote was taken. (9:36)

Representatives	Vote
Representative Dan Ruby	Y
Representative Tom Kading	Y
Representative Rick Becker	Y

Representative Cole Christensen	Y
Representative LaurieBeth Hager	N
Representative Jared C. Hagert	Y
Representative Karla Rose Hanson	N
Representative Terry B. Jones	Y
Representative Emily O'Brien	Y
Representative Mark S. Owens	N
Representative Bob Paulson	Y
Representative Gary Paur	N
Representative Robin Weisz	Y
Representative Greg Westlind	Y

Motion passed. 10-4-0

Representative Kading will carry the bill.

Additional written testimony:

Gene Ladoucer (#59)

Chairman Ruby adjourned at 9:37.

Jeanette Cook, Committee Clerk

21.3005.02001
Title.03000

Adopted by the Transportation Committee

January 7, 2021

QJ
1/7/2021

PROPOSED AMENDMENTS TO HOUSE CONCURRENT RESOLUTION NO. 3001

Page 1, line 21, replace "move" with "meet"

Renumber accordingly

REPORT OF STANDING COMMITTEE

HCR 3001: Transportation Committee (Rep. D. Ruby, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (10 YEAS, 4 NAYS, 0 ABSENT AND NOT VOTING). HCR 3001 was placed on the Sixth order on the calendar.

Page 1, line 21, replace "move" with "meet"

Renumber accordingly



January 6, 2021

House Concurrent Resolution 3001
House Transportation Committee

Chairman Ruby members of the House Transportation Committee my name is Matt Gardner and I am here representing the North Dakota Motor Carriers Association(NDMCA). NDMCA supports HCR 3001.

The trucking industry is critical in transporting freight nationally and internationally. North Dakota trucking companies transport over 37,000 tons of freight per day. This industry provides over 28,000 jobs across the state but still face significant driver shortage. It is estimated that there is a 900,000 truck driver shortage in the US. With the consistent demand of moving freight by truck and the shortage of drivers it is important to look at alternative ways to move freight.

NDMCA supports the concept of road trains. Road train can move more freight with less drivers. NDMCA's concerns are the potential impacts on our road infrastructure and on safety.

NDMCA supports HCR 3001 if considerations to safety and infrastructure are considered. Here ends my testimony and I will answer any questions.



North Dakota AFL-CIO
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**Testimony of Landis Larson, ND AFL-CIO President
In Opposition of HCR 3001
January 7, 2021**

Chairman Ruby and members of the House Transportation Committee:

My name is Landis Larson, President of the North Dakota AFL-CIO. The North Dakota AFL-CIO is the federation of labor unions in North Dakota, representing the interests of all working people in our state.

I am testifying on behalf of the North Dakota AFL-CIO in opposition to House Concurrent Resolution 3001.

First and foremost, so-called “Road Trains” do not benefit working people, but only business. “Road Trains” increase the danger on the road, impacting working families while commuting to and from work, as well as those who put on many miles as part of their work duty. In North Dakota specifically, traffic fatalities already comprise a large number of deaths on the job, including some very close to our union family. All this while reducing road hours needed for those in the trucking industry to make ends meet.

Secondly, “Road Trains” put an unnecessary strain on our already underfunded and crumbling infrastructure. It isn’t fair to taxpayers to foot the bill for an experiment that only benefits a few enterprises. We simply cannot put more load on our public transportation infrastructure without drastically increasing funding to maintain service standards, little alone investing in additional infrastructure that these “Road Trains” may require.

Lastly, private industry has invested heavily in rail infrastructure in our state, which is a much more appropriate method for the transport of goods and materials. Not only are railroads intended to carry such loads, they also have the benefit of supporting good railroad jobs that workers can raise a family on, circulate wages in their community, and retire with dignity.

I recommend a “Do Not Pass” on House Concurrent Resolution 3001.

Respectfully Submitted,
Landis Larson
North Dakota AFL-CIO President



Testimony of Jim Chase
In Opposition of HCR 3001
January 7, 2021

210

Chairman Ruby and members of the House Transportation Committee, my name is Jim Chase. I represent SMART-Transportation Division of the International Association of Sheet Metal, Air, Rail, and Transportation employees. SMART is the largest rail labor union in North America. Our membership includes conductors, engineers, switchmen, trainmen and yardmasters. I am a locomotive engineer for BNSF Railway at Mandan.

This written testimony is in opposition to House Concurrent Resolution 3001.

Over the years many states, either through official policy or by taking no action at all, have actually encouraged freight trucks to carry heavier and heavier loads. The wear and tear being generated by heavy trucks is worsening maintenance needs at a time when states are already underfunding road maintenance by billions of dollars. With the nation's truck traffic expected to increase dramatically over the next decade, it's a problem that will only get worse.

The nation's economy depends on trucking, but that method of shipment comes with a price. Engineers estimate that a fully loaded truck--a five-axle rig weighing 80,000 pounds, the interstate maximum--causes more damage to a highway than 5,000 cars. Some road planners say that the toll is even higher: it would take close to 10,000 cars to equal the damage caused by one heavy truck. When the trucks are overloaded, as quite a few of them are, the damage is exponentially worse. Increasing a truck's weight to 90,000 pounds results in a 42 percent increase in road wear. Pavement designed to last 20 years wears out in seven.

While the statement that track miles have decreased in the past in North Dakota is true, railroads have invested hundreds of millions of **private** dollars over the last decade into infrastructure, putting them in a position to move freight efficiently in the future and taking stress off our overburdened roadways.

Testimony of Jim Chase
In Opposition of HCR 3001
January 7, 2021

Here are some advantages of rail transport over road transport to consider:

1. **Rail transport is cost-effective.** Shippers who convert long-haul freight from road to rail can save from 10 to 40 percent. Rail has lower fuel costs compared to road transport, especially when shipping a high volume of freight.
2. **Shipping via train is more environmentally-friendly.** Trains burn less fuel per ton mile than trucks. According to the Association of American Railroads (AAR), freight railroads can move one ton of freight an average of 479 miles on a single gallon of fuel. On top of that, using rail transport over road transport can lower greenhouse gas emissions by 75 percent.
3. **Rail options provide access to capacity.** The driver shortage, Hours of Service restrictions, and current market demand can make it hard for shippers to find a truck when they need it without paying an arm and a leg. Since rail transport can be more efficient and doesn't have the same kind of limitations, this is a great way for shippers to find capacity.

In conclusion, heavier and longer trucks will have physical impact on roadways; therefore, the cost will ultimately end up being paid by the taxpayer. We have rail infrastructure in place to service the agriculture industry that is privately funded.

Additional infrastructure will be required for long road trains, including places to park, refuel trucks, and provide rest stops for Hours of Service that are currently not available for long road trains. Who will bear the costs for these needed improvements?

Currently road trains are used in remote areas of Australia where there is little vehicular traffic. There are many safety concerns associated with allowing road trains to operate on public highways that have yet to be resolved. Longer and heavier will equal increased stopping distances and difficulty in passing these longer truck trailers.

I urge a do not pass on House Concurrent Resolution 3001.

HOUSE TRANSPORTATION COMMITTEE
January 7, 2021 9:00 AM – 327E

North Dakota Department of Transportation
Wayde Swenson, P.E., Office of Operations Director

HCR 3001 – Road Train Pilot Program

Good morning Mr. Chairman and members of the committee. I'm Wayde Swenson, Office of Operations Director for the North Dakota Department of Transportation (DOT). I'm here today to give testimony on House Concurrent Resolution 3001.

I would like to bring to the committee's attention that Federal Motor Carrier Safety Administration has concerns that there currently is not a mechanism to test or license the driver or vehicle for "Road Train" truck combinations longer than the national standard of doubles or triples. This concern is not addressed in this resolution.

This concludes my testimony, and I am available to answer questions the committee may have. Thank You.



AAA-The Auto Club Group
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January 5, 2021

Representative Dan Ruby
State Capitol
600 E. Boulevard Ave.
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Chairman Ruby and Members of the House Transportation Committee,

AAA-The Auto Club Group (North Dakota) supports good public policy that grows our economy and will also support our principles of keeping roads safe and preserving the condition of roads and bridges. We are concerned, however, by the pilot project outlined in HRC 3001 that would allow trucks weighing 360,000 pounds and as long as 200 feet – the configuration called a “road train” -- to travel throughout North Dakota.

AAA has been opposed to heavier and longer trucks for a number of years. Studies have clearly shown that as weight and length are added, these vehicles become more dangerous to our members and the motoring public at large. In addition, our members, as taxpayers, will be in the position of paying for the road and bridge damage that this heavier and longer configuration would cause.

Our bridges here in North Dakota already rank 9th worst in the nation, by percentage, with 4,329 bridges in fair/poor condition. That is over 10 percent of all bridges statewide, according to the 2019 Federal Highway Administration report. The proposed road trains will only make the situation worse and increase the burden on taxpayers.

AAA’s responsibly, like that of our elected officials, is to put the safety of our state’s residents first. Asking our residents to share their roads with these mega-trucks in a pilot program represents an unacceptable level of risk.

For the reasons outlined above, AAA opposes HCR 3001.

Sincerely,

A handwritten signature in black ink that reads "Gene LaDoucer".

Gene LaDoucer
Public Affairs Director

AAA-The Auto Club Group (ACG) is a membership based, non-profit corporation operating in fourteen states and two US Territories. It is one of the largest American Automobile Association (AAA) clubs in the United States with approximately 14 million members. ACG provides travel, insurance, automotive, and financial services to its members. In North Dakota, AAA – The Auto Club Group serves more than 69,000 members and works to represent the interests of members and the traveling public in the state legislature.

2021 SENATE TRANSPORTATION

HCR 3001

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee
Fort Totten Room, State Capitol

HCR 3001
2/18/2021

A concurrent resolution urging Congress to temporarily amend cargo carrying truck length and weight restrictions on state highways and interstates that are a part of the National Network to allow North Dakota and surrounding states to conduct a road train pilot program and to permanently amend the restrictions to allow road trains on the National Network highways and interstates if the pilot program is successful.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [10:01]

Discussion Topics:

- Pilot program of Truck length & weight
- Federal Motor Carrier Safety
- Licensing of Drivers etc

Senator Luick introduce the resolution [10:01]

Senator O. Larsen oral testimony in favor [10:07]

Arik Spencer oral testimony in favor [10:20]

Emmery Mehlhoff ND Farm Bureau oral testimony in favor [10:22]

Wayde Swenson answers questions [10:25]

Senator O Larsen answers questions [10:25]

Dustin Assel Staff Attorney ND Legislative Council Neutral #6874 [10:28]

Wayde Swenson Office of Operations Director, NDDOT in favor #6859 [10:30]

Senator O Larsen answers questions [10:38]

Arik Spencer answers questions [10:42]

Additional written testimony:

Darren Schimke President Professional Fire Fighter of ND in opposition #6870

James M Chase State Legis Dir SMART Transportation in opposition #6853

Chair Clemens closes the public hearing [10:43]

Senator D. Larsen Motion do pass [10:49]
Senator Dwyer second [10:50]

Senators	Vote
Senator David Clemens	Y
Senator Robert Fors	Y
Senator Cole Conley	Y
Senator Michael Dwyer	Y
Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Motion passed 6-0-0 [10:57]
Senator Conley carries [10:57]

Chair Clemens adjourns the meeting. [11:00]

Sheldon Wolf, Committee Clerk

REPORT OF STANDING COMMITTEE

HCR 3001, as engrossed: Transportation Committee (Sen. Clemens, Chairman)
recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING).
Engrossed HCR 3001 was placed on the Fourteenth order on the calendar.



#6874 North Dakota Legislative Council

Prepared by the Legislative Council staff
February 2021

TESTIMONY - HOUSE CONCURRENT RESOLUTION NO. 3001 SENATE TRANSPORTATION (FORT TOTTEN ROOM- 10:00 AM) FEBRUARY 18, 2021

Chairman Clemens and members of the Senate Transportation Committee, good morning. For the record, my name is Dustin Assel. I am a staff attorney with the Legislative Council. I staffed the most recent interim Agriculture and Transportation Committee, which worked on, drafted, and recommended House Concurrent Resolution No. 3001 (2021), which is before you today. This testimony for House Concurrent Resolution No. 3001 (2021) is provided in a neutral capacity. I am here only to provide background and information regarding the recommendations of the interim committee.

The resolution was introduced by the Legislative Management at the request of the 2019-20 interim Agriculture and Transportation Committee. Section 2 of Senate Bill No. 2176 (2019) directed a study of the feasibility and desirability of creating a road train pilot program. The study included consultation with the department of transportation, highway patrol, agriculture commissioner, industrial commission, department of commerce, the upper great plains transportation institute, and the governor. The study was also required to include an assessment of the federal regulations impacting road train operations, the economic impact of permitting road train operations in the state, and the costs associated with implementing a road train pilot program.

During the course of the study, the interim committee learned that road trains are trucking vehicles consisting of two or more connected trailers or semitrailers linked and hauled by a single operating prime mover or tractor unit in the front. Australia and several countries in Europe are using road trains as a way to move large amounts of freight and counteract a current shortage of CDL (commercial)-licensed truck drivers. The United States Department of Transportation Federal Highway Administration is responsible for certifying state compliance with federal standards regarding commercial motor vehicle (CMV) size and weight to preserve the nation's infrastructure and keep vehicles moving efficiently on the highways.

Federal and state law places limits on the size and weight of motor vehicles allowed on the national network of highways. Cargo carrying length and weight on the national network are subject to federal limitations of approximately 100 feet and 80,000 gross pounds, depending on the truck configuration, and exceptions. North Dakota has grandfathered provisions, in Chapter 39-12 which allow trucks up to 110 feet and 105,500 pounds depending on truck configuration and roadway used. There is also a limited transportation network in the state which authorizes vehicles up to 129,000 pounds on certain routes.

During the course of the interim committee's work on this topic, the committee received testimony indicating a road train pilot program may be a viable solution to the issue in the state regarding increased freight demands, a shortage of CDL drivers, and decreasing railroad availability by moving more freight with bigger trucking loads. The committee also received testimony from representatives of the Department of Transportation and the Highway Patrol regarding how an intrastate and interstate road train pilot program would operate, state and federal approvals required, concerns, and recommendations. The testimony indicated there are issues with attempting to implement a pilot program at this time because there are no mechanisms which allow trucks which are longer and heavier than those allowed under federal law to be operated on the national network due to federal restrictions on truck weights and lengths on the national network of highways. The testimony further indicated a pilot program could not currently be conducted on the national network using longer and heavier trucks unless federal restrictions are lifted or changed. The testimony indicated there is potential to allow longer and heavier trucks on state highways not connected to the national network and which do not receive any federal funding. However, according to the testimony, most of the roadways that could be authorized to allow longer and heavier trucks in the state are two-lane highways with no shoulders, and because safety is a concern, a pilot program would be most beneficial on major roadways, which all are on the national network. There was also a concern with using heavier trucks on bridges which use a specific formula to calculate maximum weights based on truck length and axle configurations.

The committee noted federal approval would be required in order for the state to be allowed to operate a pilot program which allows longer and heavier truck configurations on the national network than what are currently allowed by federal law.

With the previously discussed background in mind, the interim committee recommended House Concurrent Resolution No. 3001 to urge congress to temporarily amend the weight and length restrictions on the national network to allow the state to conduct a road train pilot program, and to permanently amend the restrictions if the pilot program is successful.

Mr. Chairman, that concludes the information I have prepared for you today on this resolution.

SENATE TRANSPORTATION COMMITTEE
February 18, 2021 10:00 AM – Fort Totten

North Dakota Department of Transportation
Wayde Swenson, P.E., Office of Operations Director

HCR 3001 – Road Train Pilot Program

Good morning Mr. Chairman and members of the committee. I am Wayde Swenson, Office of Operations Director for the North Dakota Department of Transportation (DOT). I am here today to give testimony on House Concurrent Resolution 3001.

I would like to bring to the committee's attention that Federal Motor Carrier Safety Administration has concerns that there currently is not a mechanism to test or license the driver for "Road Train" truck combinations longer than the national standard of doubles or triples. The ability to test or license drivers is not addressed in this resolution.

This concludes my testimony, and I am available to answer questions the committee may have. Thank you.

#6870

Professional Fire Fighters of North Dakota

Darren Schimke, President | 218-779-4122 | dschimke@wiktel.com

2-17-21

Senate Transportation Committee,

Mr. Chairman and members of the Transportation Committee,

My name is Darren Schimke, President of the Professional Fire Fighters of North Dakota (PFFND). I represent 415 professional firefighters across our great state. We appreciate the opportunity to provide testimony in opposition of HCR 3001.

The PFFND understands that HCR 3001 is only requesting Congress to temporarily amend restrictions to conduct a road train pilot program on National Network highways and interstates. The PFFND strongly believes that during this study, and afterwards, if approved, road trains will pose undue safety hazards to firefighters, EMT's and paramedics while on these highways responding to emergency scenes and while on said scenes treating motor vehicle accident victims and/or individuals experiencing a medical emergency while traveling. We base our opinion on actual incidences and near misses that have been witnessed throughout our State by our members. We respond and do all types of "work" on these highways, the shoulders and ditches. This work consists of vehicle fires, patient extrication, vehicle accident treatments and medical emergencies.

All members of the PFFND are employed with Departments that have the National Network highways and interstates running through or near them or are at least part of their respective response areas. This does not include the departments that provide patient transports. These transports take our members not only throughout North Dakota but also into Montana, South Dakota and Minnesota. An example would be Williston ND Fire/Ambulance conducting a patient transport from Williston, ND to Rochester, MN.

We are not implying that the operators of road trains would be causing accidents throughout our State. In fact, we believe that these operators are some of the best drivers in the country. The fact is, circumstances present themselves and accidents occur. Our State is considered rural by some but we are not as large and barren as the Australian Outback where these road trains are more common. What we do have is more highway traffic then some of the Outback. Some of our National Network highways are the main thoroughfare through cities and towns. Additionally, our wind and snow conditions can be quite treacherous for large vehicles. Again, it's not necessarily the road train operators; it's others that may try to pass these long vehicles through snow dust, heavy winds or just while climbing up a good old North Dakota mountain not knowing what is coming up on the other side.

We respectfully request your consideration of a Do Not Pass recommendation regarding HCR 3001.

Thank you, Darren Schimke

JIM CHASE
State Legislative Director

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Testimony of Jim Chase
Before the Senate Transportation Committee
In Opposition to House Concurrent Resolution 3001
February 18, 2021

Chairman Clemens and honorable members of the Senate Transportation Committee, my name is Jim Chase. I represent SMART-Transportation Division of the International Association of Sheet Metal, Air, Rail, and Transportation employees. SMART is the largest rail labor union in North America. Our membership includes conductors, engineers, switchmen, trainmen and yardmasters; I am a locomotive engineer for BNSF Railway at Mandan.

This written testimony is in opposition to House Concurrent Resolution 3001. HCR 3001 urges Congress to temporarily amend cargo carrying truck length and weight restrictions on state highways and interstates that are a part of the National Network to allow North Dakota and surrounding states to conduct a road train pilot program and to permanently amend the restrictions to allow road trains on the National Network highways and interstates if the pilot program is successful.

Many concerns are unresolved in this resolution, in particular, the increased stress (and associated costs) on our roads and bridges and the safety of the traveling public who will be forced to interact with road trains in our state.

Under HCR 3001, trucks would have no limits on weight and length other than they could not exceed the maximum weight per axle and length permitted now. Engineers estimate that the current interstate maximum, a five-axle rig weighing 80,000 pounds, causes more damage to a highway than 5,000 cars. When the trucks are overloaded, as quite a few of them are, the damage is exponentially worse. Increasing a truck's weight to 90,000 pounds results in a 42 percent increase in road wear. Pavement designed to last 20 years wears out in seven.

Road trains are currently used only in remote areas of Australia where there is little vehicular traffic, and they do not have the extreme weather challenges that we do in North Dakota.

If you've passed or been passed by freight companies pulling triple trailers in North Dakota, you know they sway under normal weather conditions. Now imagine passing even longer, heavier truck trailer combinations in windy or stormy weather. In addition, as temperatures rise in the summer, the oil in blacktop roads comes to the top, creating conditions mimicking ice which require increased stopping distances.

Additional infrastructure will also be required for long road trains, including places to park these over-sized rigs, refuel, and provide rest stops for Hours of Service that are currently not available for long road trains. Who will bear the costs for these needed improvements?

The nation's economy depends on trucking, but every method of shipment comes with a price. Heavier and longer trucks will make our roads and highways less safe for the general public and will have a very significant physical impact on our public roadways, with all costs ultimately being paid by taxpayers. I urge a do not pass on HCR 3001.

“Road Trains”



The size of these behemoth trucks will mean added dangers to our roads

Study after study has shown that adding more weight and length to a truck makes it more dangerous. Safety Concerns include: braking problems, longer stopping distances and, when there is a crash, the crash becomes more severe, leading to more deaths and serious injuries.

- **Dramatically higher crash rates:** The United States Department of Transportation (USDOT) found in its 2016 report to Congress that heavier trucks had anywhere from 47 percent to 400 percent higher crash rates in limited state testing.¹ There were 632 large-truck crashes in North Dakota in 2018. Unfortunately, 30 people lost their lives in those crashes, a 7% increase over the prior year.²
- **More severe crashes.** The severity of a crash is determined by the velocity and mass of a vehicle. If its weight increases, so does the potential severity of a crash.³ Any increase in crash severity increases the likelihood of injuries becoming more serious or resulting in fatalities.

¹ USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

² Federal Motor Carrier Safety Administration; 2018. Analysis & Information- Crash Statistics

³ Ibid.

Heavier trucks tend to have a higher center of gravity because the additional weight is oftentimes stacked vertically. Raising the center of gravity increases the risk of rollovers.⁴

- **Increased wear and tear.** Increasing the weight of trucks causes additional wear and tear on key safety components. The 2016 USDOT study found that trucks weighing over 80,000 pounds had higher overall out-of-service (OOS) rates **and 18 percent higher brake violation rates** compared to those at or below 80,000 pounds.⁵ This is especially important because a 2016 study by the Insurance Institute for Highway Safety found that trucks with any out-of-service violation are 362 percent more likely to be involved in a crash.⁶

Heavier trucks would destroy our bridges

The North Dakota State University Upper Great Plains Transportation Institute, at the request of the North Dakota Department of Transportation, studied the impacts of trucks weighing up to 129,000 pounds and as long as 121 feet, significantly smaller than the road train proposal.⁷ The study found:

- Increasing truck weight limits to 129,000 pounds would incur as much as \$2.26 billion in statewide bridge replacement, with \$1.26 billion occurring on county and local bridges—these cost estimates do not account for the current bridge backlog to adequately support 80,000-pound trucks.
- The study found that the current bridge backlog to adequately support trucks weighing 80,000 pounds is \$163 million for state bridges, and \$449 million for county and local bridges.
- The study found that approximately 21,000 county and local intersections may need to be upgraded to accommodate the increased turning radii needed for longer tractor-trailers, costing between \$130 million and \$306 million.
- 462 of the 4,329 bridges in North Dakota are rated in poor condition,⁸ ranking North Dakota 9th worst in the nation with over 10 percent of its bridges in poor condition.

Heaviest trucks would shift to our local roads

To make matters worse, these massive trucks will be going through our local communities, the very places where our families live, work and play. In North Dakota, from 2013-2017, an average of 52 people per one million population were killed annually in crashes involving a large truck, the highest rate in the nation.⁹ Introducing these massive trucks on state and local roads will only increase these dangers.

⁴ USDOT; 2000. Comprehensive Truck Size and Weight Study

⁵ USDOT; 2016. Comprehensive Truck Size and Weight Limits Study, Final Report to Congress

⁶ Insurance Institute for Highway Safety; 2016. Crash Risk Factors for Interstate Large Trucks in North Carolina

⁷ North Dakota State University Upper Great Plains Transportation Institute; 2016. North Dakota Truck Harmonization Study

⁸ Federal Highway Administration; 2019. Bridge Condition by Highway System.

⁹ TRIP; October 2019. America's Rolling Warehouses: Opportunities and Challenges with the Nation's Freight Delivery System.

NEW STUDY SHOWS MAJOR DIVERSION OF FREIGHT FROM RAIL TO ROADS IF BIGGER TRUCKS ALLOWED

July 2020

A new study, commissioned by the Coalition Against Bigger Trucks, was just released showing major diversion of freight traffic from rail to truck if longer and heavier trucks are allowed by Congress. This study shows some **“... scenarios will reduce intermodal traffic by 20-25 percent and railroad carload traffic by as much as 20 percent. More disruptive scenarios could reduce both intermodal and certain carload traffic by nearly 60%.”** The author of the study is Mark Burton, Appalachian Transportation Institute, Marshall University. Previously, Burton was the Director of Transportation Economics, Research Associate Professor at the University of Tennessee-Knoxville. He has over 40 years of experience in freight economics and has authored numerous articles and other publications on rail and truck movement of goods.

This study will be an important resource in the ongoing debate in Congress and state legislatures as these bodies consider the issue of truck size and weight. A core argument for proponents of bigger trucks is that heavier and longer trucks will mean fewer trucks on the road, thereby making our roads safer and causing less damage to roads and bridges. This study confirms bigger trucks mean more trucks on our roads, creating more dangers for American motorists and further stressing our already inadequate infrastructure system.

Additional background

- Current federal law limits the size of two trailers tethered together, so-called twin trailers or double trailers, to no more than 28 feet in length per trailer. Federal law limits the weight of any single trailer to no more than 80,000 pounds on the interstates.
- Each year, lawmakers are pressured to raise the limits for the weights and lengths of trucks that travel public highways. Doing so would lower truck costs and thereby benefit a relatively small subset of the nation's freight shippers and provide greater profits for some of the largest trucking companies.
- However, the downsides to changing the federal limits are serious:
 - Relaxing weight and size limits would lead to increased crash-related casualties, unaffordable wear and tear on highways and the diversion of freight traffic from congestion-reducing, environmentally friendlier non-highway alternatives to all-highway truck routings.
 - Increasing truck size and weight limits would slash the use of intermodal truck-rail freight shipping which is contrary to national transportation policies that seek to promote the efficient use of rail and truck transportation partnerships.
 - The most aggressive changes to truck size and weight standards could be ruinous to rail carriers and to the public sector policies designed to mitigate the growth of truck-related harms.

Additional details on the new study

- The new study used decades of actual truck and rail pricing and demand data, including data as recent as 2019, to estimate the shipper and carrier response to various truck size and weight scenarios over a period of five

years. The study estimates these impacts for both intermodal and carload freight traffic.

- The new study evaluated the diversion impacts of six different truck configurations: 91,000 pound single trailer trucks with six axles; 97,000 pound single trailer trucks with six axles; 80,000 pound double 33 ft trailer trucks; 91,000 pound double 33 ft trailer trucks; 97,000 pound double 33 ft trailer trucks; and 120,000 pound double 33 ft trailer trucks.
- The new study did not attempt to estimate the likely increase in rail operating and capital costs that would result from changes to container and/or trailer dimensions.

Findings

The diversion volumes vary significantly by truck configuration. For example, an increase in allowed total gross truck weights from 80,000 to 91,000 pounds (but with no change in trailer length) is estimated to result in the diversion of 2.6 million annual railroad carloads and 1.8 million intermodal units. Alternatively, an increase of truck weights to 120,000 pounds combined with twin 33-foot trailers leads to a predicted diversion of 7.5 million annual rail carloads and 8.5 million diverted intermodal shipments. The diversion estimates for each configuration can be found in the table below.

Rail Traffic Diversions (net loss after 5 years)				
Configuration	Intermodal	% of Total	Carload	% of Total
91,000 lbs. - Single	1,841,320	12.7%	2,654,986	20.4%
97,000 lbs. - Single	3,042,936	20.9%	4,287,168	33.0%
80,000 lbs. Double 33s	2,857,553	19.6%	29,724	0.2%
91,000 lbs. Double 33s	3,691,558	25.3%	2,654,986	20.4%
97,000 lbs. Double 33s	4,668,003	32.1%	4,287,168	33.0%
120,000 lbs. Double 33s	8,507,972	58.4%	7,517,974	57.8%

Environmental Impacts of Longer and Heavier Trucks

Prepared by CABT, January 2021

Policymakers are tasked with addressing severe environmental problems that are central to climate change. Transportation is the largest contributor of greenhouse gases, and within the freight sector, trucking represents the majority of harmful emissions. A major issue surrounding transportation policy is the most efficient way to move freight and the goods people need in their everyday lives, with some calling for longer and heavier trucks as the solution. Proposals include increasing the weight limit of trucks from 80,000 pounds to 91,000 pounds and the length of double trailers from 28 feet to 33 feet, also known as “double 33s”. As we work towards addressing climate change, allowing bigger trucks would represent a significant step backwards.

Proponents of these bigger trucks claim significant environmental benefits but rely on the false premise that bigger trucks mean fewer trucks. This simplistic view ignores the complex dynamics of shipping rates and shipper choices. Once accounted for, we see a dramatic shift of both intermodal and carload freight away from the rails to our roads. In terms of both fuel use and emissions, rail is far more environmentally friendly on a ton-mile basis.¹

Recent research on the subject found that proposals for bigger trucks could lead to an increase of as much as 600 billion ton-miles of truck traffic, resulting in an additional 4.27 billion gallons of fuel burned and 55.58 million tons of carbon emissions.

Diversion

The fundamental issue at hand is that of diversion from other modes of transportation, particularly rail. Increasing truck size and weight shifts the economics of shipping, leading to large amounts of freight diverted from the rails to our roads.

Bigger truck proponents rely on the argument that “bigger trucks mean fewer trucks”, utilizing flawed data from the USDOT that theorized minimal diversion. There are two ways to derive diversion estimates. The USDOT utilized a deterministic model, relying on restrictive assumptions about the relationships between carrier costs, the resulting shipping rates and the choices of shippers. Our research uses actual available data to estimate the responsiveness of modal choice to changes in the price of transportation alternatives. These elasticity estimates are used to simulate the effect on traffic shares under the new rate structure.

Our data-driven econometric estimates identify large amounts of diverted freight associated with proposals allowing double 33s and increasing the national weight limit to 91,000 pounds.²

¹ American Association of Railroads; 2020. *Freight Rail and Preserving the Environment*.

² Mingo, Roger D; December 2020. *Another Look at FHWA’s Analysis of Twin 33 and Six-axle Single Combination Vehicles in the 2015 Comprehensive Truck Size and Weight Study*

Table 1 – Summary of Carload Traffic Diversions

Gross Truck Weight (Pounds)	Configuration	Estimated Cross-Price Elasticity	Estimated Unit Cost Change	Total Diverted Carloads at 5-Years*	Percentage of Subject Carloads**
80,000	Twin 33-Foot	0.411	-16.0%	29,724	0.2%
91,000	Single 53-Foot	0.301	-15.0%	2,654,986	20.4%
97,000	Single 53-Foot	0.301	-25.7%	4,287,168	33.0%
120,000	Twin 33-Foot	0.301	-52.7%	7,517,974	57.8%

* Reflects cumulative annual total of diverted carload traffic after five-year period.

** Denominator = all carload traffic within selected commodity groups.

Table 2 – Summary of Intermodal Traffic Diversions

Gross Truck Weight (Pounds)	Configuration	Estimated Cross-Price Elasticity	Estimated Unit Cost Change	Total Diverted Intermodal Units at 5-Years*	Percentage of Subject Intermodal Units**
80,000	Twin 33-Foot	0.476	-16.0%	2,857,553	19.6%
91,000	Single 53-Foot	0.476	-15.0%	1,841,320	12.7%
91,000	Twin 33-Foot	0.476	-11.3%	3,691,558	25.3%
97,000	Single 53-Foot	0.476	-25.7%	3,042,936	20.9%
97,000	Twin 33-Foot	0.476	-15.3%	4,668,003	32.1%
120,000	Twin 33-Foot	0.476	-34.4%	8,507,972	58.4%

* Reflects cumulative annual total of diverted intermodal traffic after a five-year period.

** Denominator = all intermodal traffic.

The double 33 foot configuration could cause a 19.6% diversion of intermodal traffic to truck. A weight increase to 91,000 pounds was associated with a 20.4% diversion of carload units and a 12.7% diversion of intermodal loads.

Unlike data used by proponents of bigger trucks, our data relies on an empirical approach utilizing decades of actual pricing, providing a more accurate prediction of shipper responses. Taking this more thorough examination into account, it is clear that bigger trucks do not mean fewer trucks, and in fact lead to a net increase in total vehicle miles traveled by heavy vehicles. The data shows that for the 91,000-pound configuration, total large truck vehicle miles traveled would increase by 17.49 billion, representing a 10.7% overall increase. For double 33s, there would be an increase of 2.18 billion miles in travel by large trucks.

Fuel Use

With more accurate diversion data, we can calculate the amount of fuel needed to haul diverted freight by plugging correct variables into existing USDOT calculations.

Rail transportation is inherently more fuel efficient, averaging 492 ton-miles per gallon³. Truck transportation averages 121 ton-miles per gallon.⁴

The resulting fuel use and subsequent emissions by trucks carrying diverted loads is as follows⁵:

Fuel/Emission Changes by Configuration	91K	Twin 33
Fuel Change (Billion Gals)	3.53	0.74
Carbon Emissions (Million Tons)	37.49	18.09

³ CSX; 2020. *The CSX Advantage: Fuel Efficiency*.

⁴ Bureau of Transportation Statistics; 2020. *Combination Truck Fuel Consumption and Travel*. Calculation assumes an average 20-ton freight capacity.

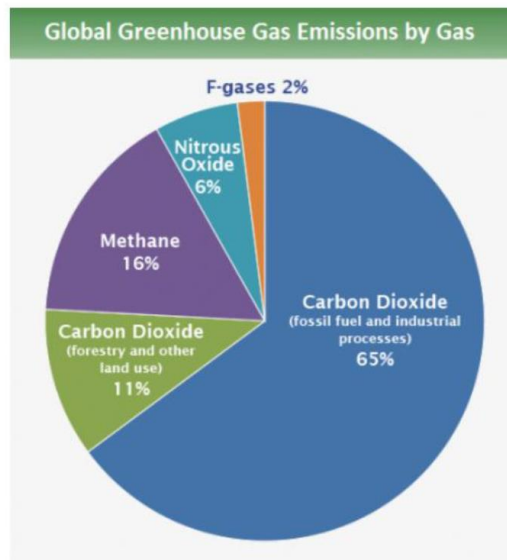
⁵ Mingo, Roger D; December 2020. *Another Look at FHWA's Analysis of Twin 33 and Six-axle Single Combination Vehicles in the 2015 Comprehensive Truck Size and Weight Study*

Emissions

Transportation represents the largest share of greenhouse gas emissions by industry⁶ and must be at the focal point of our efforts to combat climate change.

The increased emissions stemming from the diversion of freight from our rails to our roads is deeply concerning. A weight increase to 91,000 pound trucks would lead to an additional 37.49 million tons of carbon emissions stemming from truck freight. Adoption of double 33s would result in an additional 18.09 million tons of carbon dioxide emissions.

Carbon dioxide is responsible for 76% of all greenhouse gas emissions⁷ and must be the focus of our efforts to combat climate change.



⁶ United States Environmental Protection Agency; 2020. *Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990-2018*

⁷ Intergovernmental Panel on Climate Change; 2014. *Climate Change 2014: Mitigation of Climate Change*