2013 HOUSE AGRICULTURE

HB 1342

2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee
Peace Garden Room, State Capitol

HB 1342
February 1, 2013
Job# 18158

☐ Conference Committee

Committee Clerk Signature Re Mae Kuch

Explanation or reason for introduction of bill/resolution:

Relating to a ten percent weight permit for certain vehicles

Minutes: Attachments #1 & 2

Chairman Dennis Johnson, Co-Sponsor: (See Attachment #1) This bill doesn't pertain to the winter permits. This is only looking at the harvest permits. Last year 3,064 harvest permits were issued.

The potato and beet farmers can run 10% anywhere during harvest. When we get to the grains, the 10% is only good for the first dump. For example, if you are hauling barley, go to the bin site, the last load at night we can load the 10% to take the next morning. We come back the next morning off the bin site we can't use our 10%. Did it come off the field or out of the bin? This law would make it legal whether it comes off the field or out of the bin.

I am not talking about a large amount of weight on roads. There would be fewer trucks on the road because it is on one truck.

Vice Chair John Wall: Is permitting left up to counties?

Chairman Dennis Johnson: It is through the highway patrol. I think it is $50 per month to get the 10% permit. The 10% is usually the first part of December into March depending on weather.

Dan Wogsland, North Dakota Grain Growers: We support this bill.

Chad Weckerly, North Dakota Farm Bureau: I also run a commercial trucking company. The 10% overload does not apply to every truck. The maximum legal load is 105,500 pounds. No permit can allow you to go above that. We work with enough growers and we feel it helps their productivity. When it is wet or foggy, they can take that load to market.

Chairman Dennis Johnson: It is also in the bill that we can't exceed 105,500.

Scott Rising with North Dakota Soybean Growers: We have tried to shore up infrastructure funding. The good news is that you applied for the permit. We are in support of this bill.

Representative Trottier: Does this apply to all roads?

Scott Rising: My understanding is, Yes.

Chairman Dennis Johnson: Roads are designated. No Interstate in North Dakota can run 10%. Certain county roads are up to the county commission. It would be state highways.

Scott Rising: The advantage to the permitting is telling us what we are allowed to do.

Bart Schott with North Dakota Corn Growers: We support this bill. If it is a road used from farm to market then there are no issues.

Neutral:

Ron Henke, North Dakota Dept. of Transportation: (See attachment #2) (10:00)

Chairman Dennis Johnson: This legislation is on harvest permits from July 15 to September 1. Now you can run anywhere with the frost permit. South Dakota can do this now. We aren't adding any weight to the road. We are already allowed to run the 10% off the combine. We are restricted on the reload.

Representative Headland: (16:00) Should we be changing the standards on weight limitations from gross weight to pounds/square inch? There is less damage to a road if you have enough bridge and enough axles. Even with a heavier load, a larger trailer lengthened out does less damage. The pounds/square inch is less.

Ron Henke: We do have a gross limitation and a pounds per inch limitation. Currently in law it is 550 pounds per inch width. You can have a bigger tire but you may not be able to haul more gross weight if that tire's 550 pounds per inch width gets exceeded.

In addition there are axle limits based on the combination. It is a combination of gross weight, axle weight, and pounds per inch to determine the damage on a road.
If you go to a triple axle, you can haul more because your pounds per inch width doesn't get exceeded. The amount of weight per axle is higher.

Representative Headland: You could also change the weight on the distance between axles.

Ron Henke: I believe you are correct.

Chairman Dennis Johnson: I have two trucks. One is a 5-axle semi and a semitractor pulling a pup with a 20-foot box. I licensed that for 84,000.

Representative Rust: The bill states July 15 to December 1. Your testimony states "our interpretation would allow the agriculture industry to exceed weight limitations by 10% form the movement of agriculture products from July 15 to March 7."

Ron Henke: If look down on the bill on line 14 and 15, there is a 2nd movement that goes from December 1 to March 7. We thought that would give you the ability to exceed that 10% up to March 7. It is for general movement of a product.

Captain Mehrer, Commander of the Motor Carrier Division for the Highway Patrol: (21:00)

For clarification, the permits the Highway Patrol issues for 10% winter time and the 10% harvest permit are good for state roads only.

We are looking at the two permits. We are combing them and allow them to be transported from the field to the initial storage and then to a secondary location. We take direction from the Dept. of Transportation. We are Neutral.

Chairman Dennis Johnson: We already can purchase the winter permit. The bill was introduced to address the harvest issue. That is a separate permit that you buy by the month.

Representative Belter: The current language would not be applied to sugar beets since they cannot be stored. Under current law, the potato industry would be allowed to haul to storage unload and reload and get the 10% permit. Correct?

Captain Mehrer: Yes.

Representative Trottier: To get it to the federal highway does that affect anything like potatoes?

Captain Mehrer: The 10% permit is not good on the interstate system.

Vice Chair John Wall: Closed the hearing.

2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee
Peace Garden Room, State Capitol

HB 1342
February 14, 2013
Job #18954

☐ Conference Committee

Committee Clerk Signature

Explanation or reason for introduction of bill/resolution:
(Committee Work)
Relating to a ten percent weight permit for certain vehicles

Minutes: You may make reference to "attached testimony."

Chairman Dennis Johnson: To review, this would make it possible so you could go second dump at the same 10% that you can utilize on the first dump to your destination with a harvest 10% overweight permit.

Representative Larson: Moved **Do Pass**

Representative Fehr: Seconded the motion

Representative Belter: What does "temporary" mean?

Chairman Dennis Johnson: "Temporary" is the harvest permit that is issued to a custom harvester or farmer for $50 per month or you can buy for the entire season. It goes from July to the first week of December and that is when you are eligible to get the frost permit which goes until March.

The potato growers and sugar beet farmers have this opportunity now and we are including small grains.

Representative Belter: It says from a temporary storage site. When I see "temporary", is it 6 months or two weeks?

Chairman Dennis Johnson: If you are going six months that would be past the harvest permit. You could use the frost permit to 10% over. The example I use, in our operation we have barley contracted 75 miles down the road. We can load the trucks up at night, they are licensed for 80,000. We can load them up to 88,000 off the field that night. During the day we are going into hopper bins. The next morning we can't load 88,000 out of those hopper bins. I have to haul 80,000 until we start harvesting again because it is from a second dump. Off the field you can haul 88,000 but you can't out of the hopper bin. It is a gray area.

Representative Belter: At our farm, with corn contracts, we dump at the drier side on our farm and a couple of weeks later we are hauling out. I think that is the purpose of this bill. I consider that a temporary site. You are harvesting in August but don't haul until October, is that going to create a question?

Chairman Dennis Johnson: If you still have the 10% sticker in October you are probably harvesting beans or corn. I have no issue with hauling your wheat out at 10% either because it is still harvest season.

As a custom harvester we are granted the 10% the entire harvest. It doesn't matter first dump or second dump. As a farmer, it is only good for first dump.

Representative Fehr: Does the term "temporary initial storage site" need to be defined? You are really meaning "very short term" like "overnight."

Chairman Dennis Johnson: I would say any storage you have is temporary. Most of that is moved within a year. If you want to take it out in April, you can't because you don't have the permits.

Representative Fehr: Your intention is to leave the term broader not as narrow as overnight.

Chairman Dennis Johnson: Yes. Temporary is the harvest season. Temporary is from July when you purchase the permit until December when the frost permits start.

Representative M. Nelson: We have people in our area who make their living hauling grain. Can they also get these 10% over permits?

Chairman Dennis Johnson: 10% is good for the custom harvester. The farmer can get the 10% because he is hauling off the field. The commercial trucker can get the 10% if he is working for a farmer hauling off that field.

Representative M. Nelson: Can he also get 10% hauling from a bin site?

Chairman Dennis Johnson: Right now nobody can.

Representative M. Nelson: He would also be eligible for this?

Chairman Dennis Johnson: To my understanding he would be.

A Roll Call vote was taken: Yes 12, No 0, Absent 1.

Do Pass carries.

Representative Larson: Will carry the bill.

Date: 2/14/13

Roll Call Vote #: 1

2013 HOUSE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 1342

House **Agriculture** Committee

Legislative Council Amendment Number

Action Taken: ☒ Do Pass ☐ Do Not Pass ☐ Amended ☐ Consent Calendar

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Larson Seconded By Rep. Fehr

Representatives	Yes	No	Representatives	Yes	No
Chairman Dennis Johnson	X		Rep. Joshua Boschee	X	
Vice Chairman John Wall	X		Rep. Jessica Haak	X	
Rep. Wesley Belter	X		Rep. Marvin Nelson	X	
Rep. Alan Fehr	X				
Rep. Craig Headland	X				
Rep. Joe Heilman	AB				
Rep. Dwight Kiefert	X				
Rep. Diane Larson	X				
Rep. David Rust	X				
Rep. Wayne Trottier	X				

Total Yes 12 No 0

Absent 1

Floor Assignment Representative Larson

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1342: Agriculture Committee (Rep. D. Johnson, Chairman) recommends **DO PASS** (12 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). HB 1342 was placed on the Eleventh order on the calendar.

2013 SENATE TRANSPORTATION

HB 1342

2013 SENATE STANDING COMMITTEE MINUTES

Senate Transportation Committee
Lewis and Clark Room, State Capitol

HB 1342
3/14/2013
Recording job number 19914

☐ Conference Committee

Committee Clerk Signature

Explanation or reason for introduction of bill/resolution:
Relating to a ten percent weight permit for certain vehicles.

Minutes: Attached testimony 2

Chairman Oehlke opened the hearing on HB 1342

Representative Dennis Johnson, district 15, I am talking about permits authorizing a specific motor vehicle to exceed the weight limitations stated in subsections 1 and 2 by 10%. The permits provide only for the movement of agricultural products from the field of harvest to the point of initial storage site and from a temporary initial storage site to a commercial storage site, and for the collection and transport of solid waste, from July 15th to December 1st. There is a handout showing the number of trucks that would be affected. Attachment #1 Beets and potato trucks are allowed this 10% I am trying to include wheat, barley, beans and other green commodities. We are talking of about 1500 truck. It is an issue of fairness. The way the law is you can load 10% off your combine to the first dump, you can't reload on that first dump and go into town. I am trying to make it legal to go from either the combine to the elevator or from the bin site to the elevator on a second dump.

Mike Clemens, North Dakota Corn Growers Association, in support of this bill. We already have the permit in place.

Ron Henke, Office of Operations Director, North Dakota Department of Transportation (DOT), opposes this bill. Allowing increased weights for movement of agriculture products exposes the state's pavements to additional damage. Increased axle weight is the primary cause of pavement damage. See attached testimony #2.

Senator Sinner what is the normal life expectancy of the state highways we are talking about. By doing what we are doing do you expect that life to be decreased? By how much?

Ron Henke We look at ESAL (equivalent single axle load), which is an 18,000lbs load and, through our pavement software, we design pavements in the rural areas, not state highways, for 20 years. A projection of traffic and trucks is the main piece of the formula. The life cars take out of pavement is almost insignificant. The more trucks run on a road that much faster its life runs out. Assuming every truck running every time that we counted would be 10% over, it will to take the life out of that pavement a lot quicker.

Senator Sitte When so much of our infrastructure was built the trucks were smaller, as technology increases the size of the farm machinery and trucks increase, are you building roads to a higher standard?

Ron Henke We take traffic counts that will get into the formula. We take that into account when we rebuild the road.

Chairman Oehlke potatoes and sugar beets in the eastern part of the state roads are built to a higher standard

Ron Henke Those roads have higher traffic volumes for a longer time, more truck traffic, so they have more pavement base to accommodate because of more ESALs on that road. An inch of pavement 24 ft. wide costs $100,000 a mile. If we need two inches in some place that is $200,000, the more inches needed the more expensive.

Senator Sinner the standards are set by state?

Ron Henke: We do a 20 yr. life design, using a formula put out by the American Association of State Highway and Transportation Officials (AASHTO). Traffic is the main component and maintenance, wear, and weather have to be taken into account. The higher the standard the higher the cost. When we do traffic counts we also classify the vehicles.

Terry Trainor, Assistant Director of Policy & Programs, North Dakota Association of Counties we oppose this bill. On the House side this bill went through Agriculture not Transportation. The damage to the roads and the inability of the county commissioners to deal with some of that damage. Most county roads are not built to the standards of state highways. When state grants the 10% overload permit, it creates problems for the producers if the counties don't also go along with that. There is a uniform system across the production area… I think that long term this is poor public policy and we urge a do not pass.

Keith Magnusson representing the North Dakota League of Cities, opposed to this bill, the law as it stands now doesn't bring that much traffic into the city streets and roads not built to the standards of state highways. We have the problem of added heavy traffic damaging our roads.

Larry Syverson North Dakota Township Officers Association I am conflicted with this bill, the gravel roads on the townships are already suffering under the sugar beet trucks. It is a fairness issue, if you let them get away with that why not corn trucks? You don't always know what you are getting on a truck, I can see why they want the legal protection sometimes you underestimate what you do have, especially with heavy weight products

No additional testimony Chairman Oehlke closed the hearing

2013 SENATE STANDING COMMITTEE MINUTES

Senate Transportation Committee
Lewis and Clark Room, State Capitol

HB 1342
4/04/2013
Recording job number 20869

☐ Conference Committee

Committee Clerk Signature DEP

Explanation or reason for introduction of bill/resolution:
Relating to ten percent weight permit for certain vehicles

Minutes: Attached testimony."

Chairman Oehlke opened the discussion on HB 1342. He provided a summary of the bill and the testimony provided. There was significant opposition from the North Dakota Department of Transportation (DOT), the Association of Counties, League of Cities and the Townships Association. The problem is the road wear and tear, because of the weight of the vehicles, and who pays for it. There is already a ten percent exemption for overage.

Vice Chairman Armstrong moved **DO NOT PASS**

Senator Sinner Second

Discussion followed regarding road wear and tear.

Roll call vote: **Yes 6** **No** 1 Absent not voting 0

Carrier: **Chairman Oehlke**

Date: 4/04/13
Roll Call Vote #: 1

2013 SENATE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 1342

Senate **TRANSPORTATION** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☐ Do Pass ☒ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Armstrong Seconded By Senator Sinner

Senators	Yes	No	Senator	Yes	No
Chairman Dave Oehlke	✓		Senator Tyler Axness	✓	
Vice Chairman Kelly Armstrong	✓		Senator George Sinner	✓	
Senator Margaret Sitte	✓				
Senator Tim Flakoll	✓				
Senator Tom Campbell		✓			

Total (Yes) 6 No 1

Absent 0

Floor Assignment Senator Oehlke

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1342: Transportation Committee (Sen. Oehlke, Chairman) recommends **DO NOT PASS** (6 YEAS, 1 NAYS, 0 ABSENT AND NOT VOTING). HB 1342 was placed on the Fourteenth order on the calendar.

2013 TESTIMONY

HB 1342

#1

Johnson, Dennis E.

2/1/13
HB 1342

From: Henke, Ron J.
Sent: Friday, January 25, 2013 9:02 AM
To: Johnson, Dennis E.
Cc: Butts, Linda N.; Levi, Grant N.; Leftwich, Dave E.; Darr, Brad W.; Sitz, Linda D.; Emmer, Leanna M.
Subject: HB 1342

Representative Johnson,

Yesterday when we talked you asked for some information on farm truck. Below are the two questions that I captured from our conversation. The blue text is the information is what I believe you were looking for. Let me know if you need anything else.

Ron Henke
Director of Operations
Ph 328-4445

1. How many registered trucks would be affected or qualify?
   - Farm Single Unit – 38,619
   - Farm Truck Tractor – 1,206
   - Total – 39,825

2. How many permits are issued?
   - **2012**
   - Winter/harvest combination – 821 permits
   - Harvest – 3,064 permits
   - July 15 – November 30

   - Winter - 4,292 permits
   - December 1 – March 7

   - Total number of permits issued: 8173 permits.

   - **2011**
   - Winter/harvest combination – 528 permits
   - Valid July 15 – March 7

   - Harvest – 2,102 permits
   - July 15 – November 30

   - Winter - 3,898 permits
   - December 1 – March 7
   -
   - Total number of permits issued: 6,528 permits.

   - **2010**
   - Winter/harvest combination – 770 permits
   - Valid July 15 – March 7
   -
   - Harvest – 3,742 permits

- July 15 – November 30
-
- Winter - 4,758 permits
- December 1 – March 7
-
- Total number of permits issued: 9,270 permits.

#2

HOUSE AGRICULTURE COMMITTEE
February 1, 2013
10:30 a.m. – Peace Garden Room

North Dakota Department of Transportation
Ronald J. Henke, P.E., Director of Operations

HB1342

Mr. Chairman and members of the committee, I'm Ron Henke, Office of Operations Director at the North Dakota Department of Transportation (DOT). I want to thank you for giving me this opportunity to provide the committee with some information.

We understand and support the need to move commodities and promote economic viability of the state. We currently have a number of ongoing initiatives to accomplish that goal and as we work towards achieving it , we believe it is essential to ensure the state's large investment in the transportation system is protected.

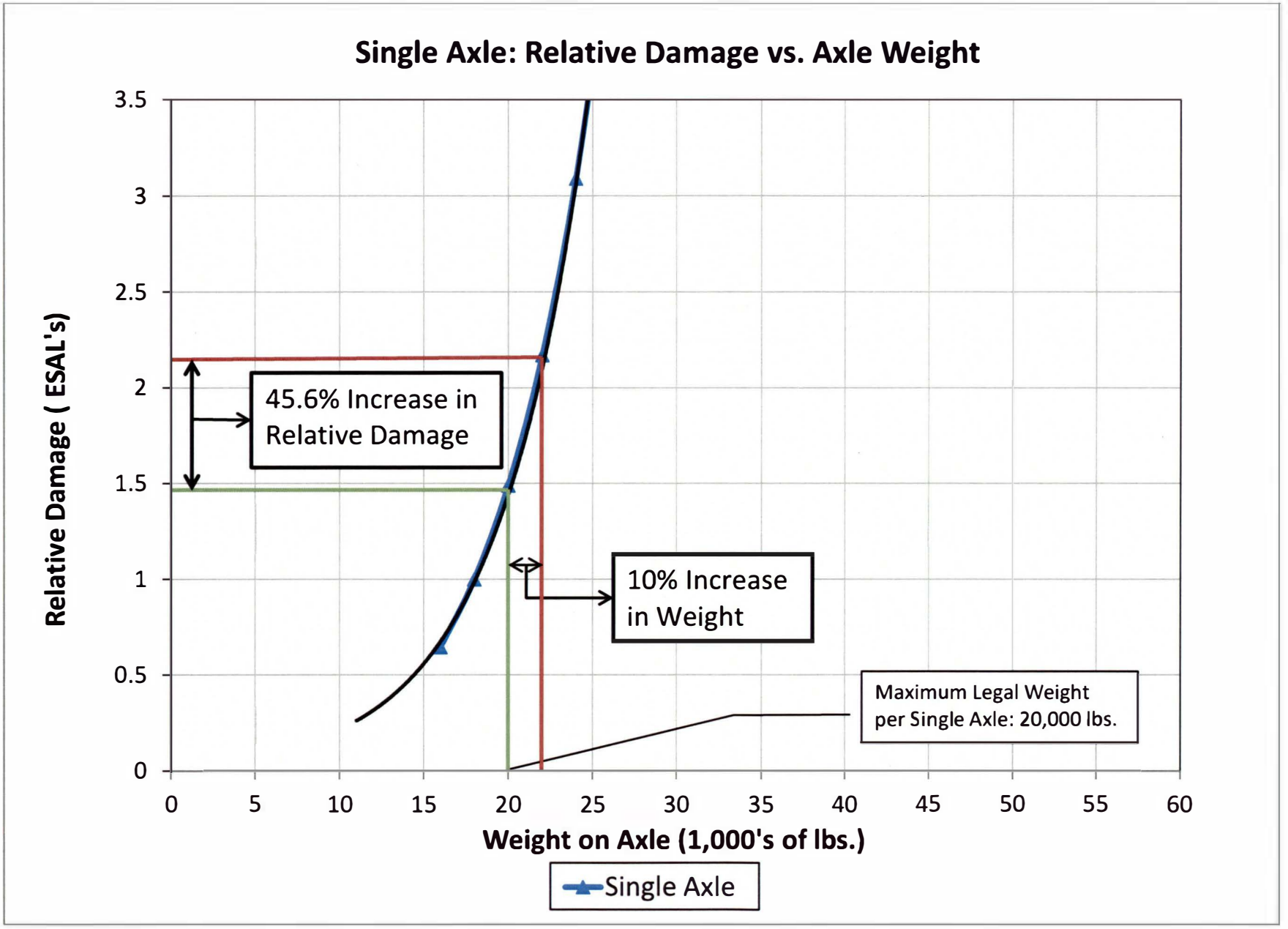
Section 39-12-05.3 subsection 4, by permit (harvest permit) allows the agriculture industry to exceed the axle weight limitations, outlined in state statute by 10 percent from July 15 to December 1, from the field of harvest to the point of initial storage. In addition to the harvest permit, a winter time permit can be obtained that allows axle weight limitations to be exceeded by 10 percent from December 1 to March 7, or until load restrictions are instituted. With these permits, agriculture products can be moved and are allowed to exceed weight limitations with some restrictions. Our interpretation of HB1342, if passed, would allow the agriculture industry to exceed weight limitations by 10 percent for the movement of agricultural products from July 15 to March 7. This most likely will result in heavier loads on longer trips.

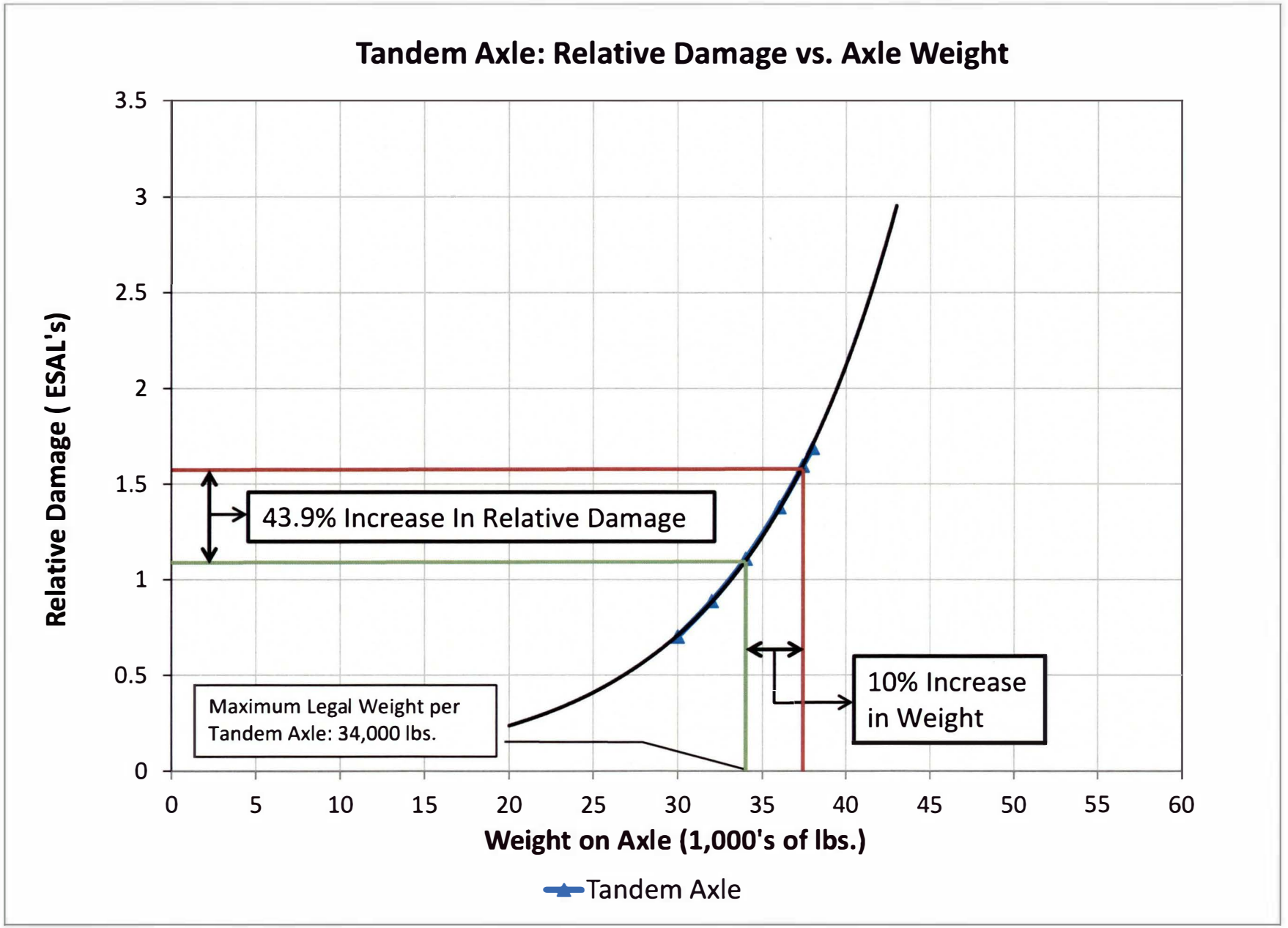
We do feel it is important to share with you what the impacts of HB1342, if passed, would be on the state's transportation system. By allowing increased weights for further movement of overweight agriculture products, we are exposing the state's pavements to additional damage. Increased axle weight is the primary cause of pavement damage.

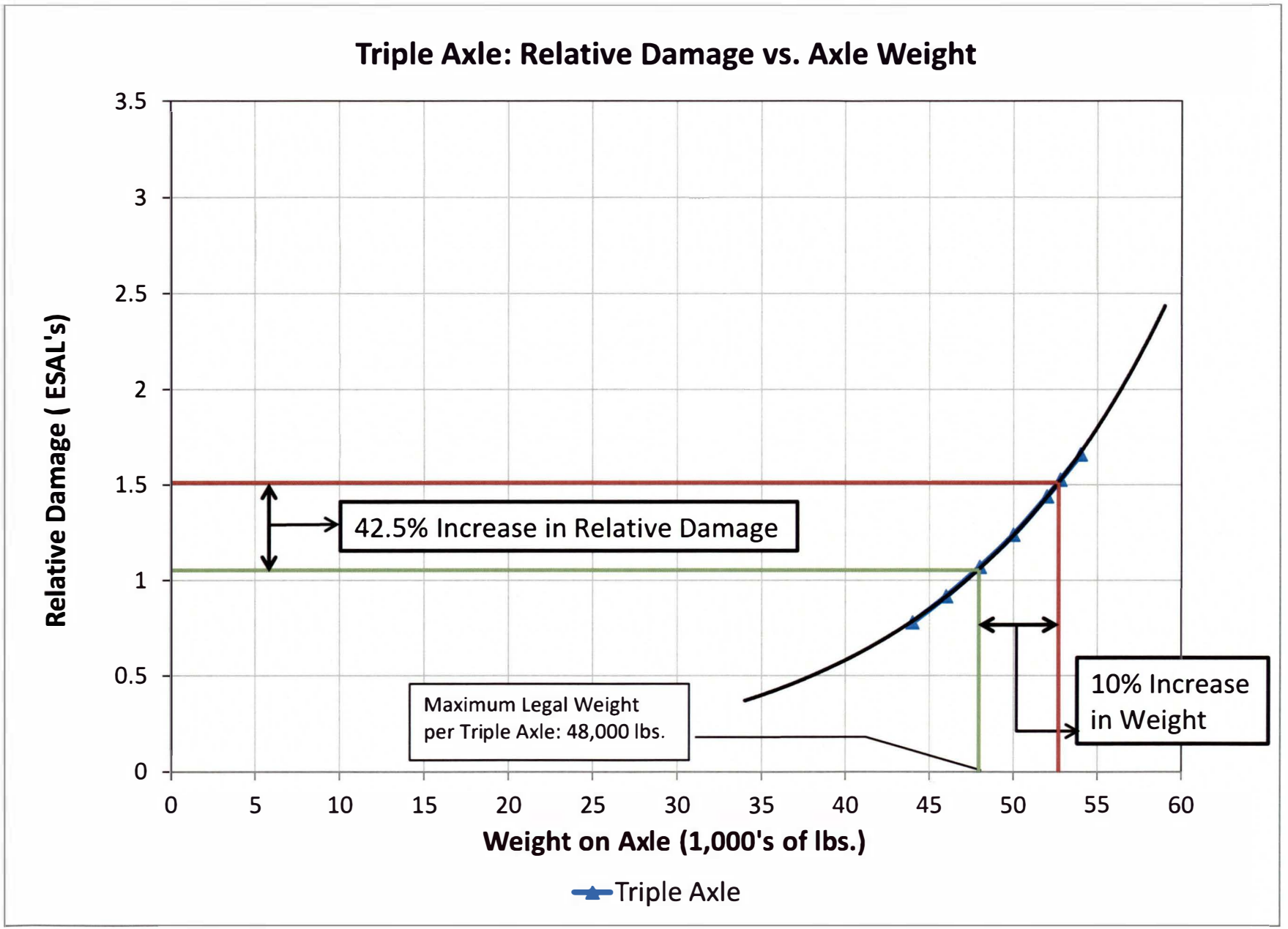
Every axle passing over a highway consumes a portion of the pavement's life. With each pass of a load, the pavement experiences forces that eventually lead to the deterioration of the pavement. Extensive testing over the last fifty years has shown that the amount of pavement life consumed by heavy axles greatly exceeds the amount of life consumed by lighter axles. In fact, the relationship is exponential, which means that just a small increase in axle load leads to an ever increasing damage rate to the pavement. For example, as illustrated in a South Dakota Local Transportation Assistance Program report (see attached);

- a legal 20,000 pound axle load consumes a thousand times more pavement life than a 2,000 pound automobile axle,
- a 22,000 pound axle load consumes 46 percent more pavement life than a 20,000 pound axle load.

We believe it is important for the committee to have this information as it makes policy decisions. This concludes my testimony.


Single Axle: Relative Damage vs. Axle Weight
Relative Damage (ESAL's)
3.5
3
2.5
2
1.5
1
0.5
0
0
5
10
15
20
25
30
35
40
45
50
55
60
Weight on Axle (1,000's of lbs.)
45.6% Increase in Relative Damage
10% Increase in Weight
Maximum Legal Weight per Single Axle: 20,000 lbs.
Single Axle


Tandem Axle: Relative Damage vs. Axle Weight
Relative Damage (ESAL's)
3.5
3
2.5
2
1.5
1
0.5
0
0
5
10
15
20
25
30
35
40
45
50
55
60
Weight on Axle (1,000's of lbs.)
43.9% Increase In Relative Damage
Maximum Legal Weight per Tandem Axle: 34,000 lbs.
10% Increase in Weight
Tandem Axle


Triple Axle: Relative Damage vs. Axle Weight
Relative Damage (ESAL's)
3.5
3
2.5
2
1.5
1
0.5
0
0
5
10
15
20
25
30
35
40
45
50
55
60
Weight on Axle (1,000's of lbs.)
42.5% Increase in Relative Damage
Maximum Legal Weight per Triple Axle: 48,000 lbs.
10% Increase in Weight
Triple Axle

The Link to Highway Safety

Truck weight enforcement is not only a matter of economics, but also a matter of public safety. Illegal loads not only make roads

rougher, but also create deep ruts that can fill with rainwater or ice, making driving more dangerous for everyone.

Frequently Asked Questions

People occasionally ask whether weight restrictions could be relaxed without increasing road damage. Common questions are:

- Can trucks reduce speed rather than reduce load? This question often arises in the spring, when load restrictions are needed to protect pavements weakened by the spring thaw. Unfortunately, even though some local agencies still try to avoid load limits by reducing speed limits, this practice does not work. In fact, road damage increases significantly when heavy vehicles are driven more slowly.
- *If a truck's gross weight is legal, why do axle weights matter?* This question is sometimes raised by persons cited for overweight axle or axle group violations, even though the total (gross) weight of their vehicle did not exceed the legal limit. However, pavement damage from two axles—one light and one heavy—actually exceeds the damage from properly loaded axles. The extra damage created by the overloaded axle exceeds the reduced damage created by the lighter one.
- *If agricultural vehicles with low-inflation tires can safely carry heavy loads in fields, why can't they operate loaded on highways?* Even though vehicles like chemical applicators and grain carts can transport very heavy loads in fields, they seriously damage gravel and paved roadways when loaded beyond legal limits. The roadway surface is damaged because the vehicles' lugged tires concentrate the load into small contact areas. The pavement's underlying layers fail because they cannot withstand the total load imposed upon them. These loads also pose a serious problem for bridges, especially on county and township roads.

The trucking industry will always be an integral mode of transportation for the City of Sioux Falls. Without trucking, every facet of our economy would suffer. Therefore, we must continue to do everything possible to achieve the greatest benefit from our investment in the transportation system. A primary way of ensuring our state highways and local roads do

The Need for Responsible Hauling

State and local governments' responsibility to provide mobility and safety cannot be accomplished if illegally loaded vehicles prematurely consume the life of roads and bridges. Providing a system that is economical, comfortable, and safe depends not only on the government's investment of time, effort, and money, but also on the responsible behavior of highway users.

The vast majority of haulers in South Dakota do operate legally. Of the nearly 600,000 vehicles weighed each year, only about 3,000—one half of one percent—are cited for overweight violations. Of those cited, only about 600 are severely enough overweight to be assessed civil penalties exceeding $100.

While a small number of haulers knowingly operate illegally, their disregard for weight limits creates costly damage that other, responsible taxpayers must pay for. Controlling the irresponsible behavior of these intentional violators is impossible without effective enforcement and prosecution.

Recent efforts to control illegally overweight vehicles have clearly begun to reduce the rate of grossly overweight loads. In 2000, 8.6% of overweight vehicle citations were for loads more than 10,000 pounds over the legal limit. The rate decreased to 6.0% in 2001, and 5.9% in 2002. Overall, the incidence of grossly overweight loads has dropped by nearly a third since more stringent penalties and enforcement were enacted.

Relaxing weight regulations and enforcement would erase the progress that has been made to protect the public investment in state and local roads. In the words of Ted Eggebraaten, Brookings County Highway Superintendent, "If we lose the control we have with the new overweight laws in place, it will only add to our problems with roads and bridges. Brookings County would not be able to keep up our road system maintenance if the control is taken away." The Department of Transportation also considers sound weight enforcement essential to its mission to "provide a transportation system to satisfy the diverse mobility needs" of travelers, shippers, and haulers in South Dakota. Especially in a time of limited funding, protecting the existing highways from unnecessary damage is clearly the wisest course of action.

SDDOT Briefing

Truck Weights and Highways

Illegally overweight vehicles damage South Dakota roads, shorten road life, and increase costs to both the trucking industry and taxpayers. During the past several years, the South Dakota Legislature has enacted laws to protect state and local highways from damage caused by illegally overweight vehicles:

- In 1996, the Legislature limited the maximum weight allowed on axles (other than steering axles) to 500 pounds times the total width, in inches, of all tires mounted on the axle. This action ensured that the weight carried on axles fitted with single tires (as opposed to conventional dual tires) would not exceed pavements' load capacity.
- When the Legislature raised the state fuel tax in 1999, it also increased civil penalties for overweight trucks to safeguard the public's investment. The graduated penalty schedule discourages intentional violations that most severely damage roads and bridges, but imposes more modest fines for lesser, unintentional overweights.

Pounds Overweight	Civil Penalty per Pound
1,000-3,000	$0.05
3,001-4,000	$0.15
4,001-5,000	$0.225
5,001-10,000	$0.375
> 10,000	$0.75

- To protect the public investment in local roads and bridges, the Legislature enacted a law requiring the Department of Transportation to monitor how diligently counties prosecute overweight violations and, if necessary, to withhold funding from counties that fail to act responsibly.

The South Dakota Department of Transportation supports all of these legislative actions, which have improved awareness and compliance with truck weight regulations. Fewer vehicles are operating seriously overweight, preventing needless damage to roads and bridges and saving taxpayers millions of dollars.

It is important for those responsible for funding, building, and maintaining highways to understand the reasons behind truck weight regulations and to be able to explain them when shippers, haulers, business contacts, and personal acquaintances inquire about them.

South Dakota Supports Trucking

South Dakota values the trucking industry and its contribution to the economy and well being of the state. Nearly everything we own, eat, use, grow, or manufacture is carried by truck on at least part of its journey.

Because of the importance of trucking, the South Dakota Legislature and other branches of state government have historically adopted rules and procedures that help the industry to operate competitively:

- To ease regulatory burdens, the Department of Revenue has joined the International Fuel Tax Agreement and the International Registration Plan. Both enable motor carriers to register in just South Dakota but operate in all states and provinces. Efforts are underway to provide online IRP and IFTA services to the trucking industry.
- Unlike most states, South Dakota does not impose absolute gross weight limits on trucks. Instead, it allows essentially unlimited gross weight, provided the load is supported by enough tires and axles to prevent road and bridge damage.
- South Dakota grants tolerances for hauling agricultural loads. Loads from field to farm are allowed to weigh 10% more than the normal weight limit, while loads from farm to market are allowed 5% more than normal.
- To help truckers comply with weight regulations, the Highway Patrol will, without charge, weigh vehicles and instruct haulers on proper loading.
- Together with the Department of Revenue and the Highway Patrol, the Department of Transportation has developed an automated permitting system that allows truckers to obtain permits online and quickly identifies safe routes for movement of oversize and overweight vehicles.
- To reduce delays and improve traffic safety, the Department of Transportation will replace the port of entry at North Sioux City with a new facility near Jefferson in 2003. Through use of in-motion weighing and vehicle transponders, the new port will allow truckers with good safety records and legal weights to bypass the port, saving valuable hours of operating time.

The Need to Be Legal

Why are truck weight regulations so important? It's really a matter of dollars and cents, because roads and bridges have to be designed, built, and maintained to carry heavy axle loads. The heavier the axle loads, the more expensive roads and bridges become. The costs listed in the following table show that constructing roads is very expensive; building them to carry large numbers of overweight vehicles would make them even more expensive.

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Interstate 4-lane highway—concrete	$1,900,000
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Thin asphalt overlay—24' wide	$112,000
Gravel base & surface--28' wide	$107,000

Every axle passing over a highway consumes a portion of the pavement's life. With each application of load, the pavement experiences compression and bending that eventually lead to rutting and cracking. Extensive road tests over the past fifty years have shown that the amount of pavement life consumed by heavy axles greatly exceeds the amount of life consumed by light axles.

Axle Weight (pounds)	Pavement Life Consumed†
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† all loads compared to a legal 20,000-pound axle

Two important concepts are evident from this table:

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- Second, the amount of life consumed rises much faster than the axle weight. For a seemingly modest 10% increase in weight (from a legal 20,000-pound axle to an overweight 22,000-pound axle), the amount of consumed life soars by nearly 50%. A 20% overweight consumes more than twice as much pavement life as the legal load.

Damage to Bridges

Damage from illegally overweight loads is not confined to pavements. Bridges prematurely age, just as pavements do, when subjected to illegal loads. If the loads are great enough, they can actually destroy a structure.

An example from Tripp County is pictured, but it is not the only case. In the past two years alone, six county bridges had to be completely replaced because of damage from illegally overweight trucks:

- Two bridges in Moody County had to be replaced at a total cost of $692,000;
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These illegally overweight loads not only cost counties more than $1.1 million, but also deprived other road users of convenient access to their homes and farms. In each case, the board of county commissioners had to declare an emergency and close the road until a new structure could be built.

As costly as these cases were, they represent only a portion of the bridge damage attributable to illegally overweight loads. Many other structures have certainly been damaged, but in ways that are not yet apparent.

ATTACHMENT #1 page 1

From: **Ron J. Henke** rhenke@nd.gov
Subject: HB 1342
Date: January 25, 2013 9:01 AM
To: Dennis E. Johnson djohnson@nd.gov
Cc: Linda N. Butts lnbutts@nd.gov, Grant N. Levi glevi@nd.gov, Dave E. Leftwich dleftwic@nd.gov, Brad W. Darr bdarr@nd.gov, Linda D. Sitz ldsitz@nd.gov, Leanna M. Emmer lemmer@nd.gov

Representative Johnson,

Yesterday when we talked you asked for some information on farm truck. Below are the two questions that I captured from our conversation. The blue text is the information is what I believe you were looking for. Let me know if you need anything else.

Ron Henke
Director of Operations
Ph 328-4445

1. How many registered trucks would be affected or qualify?
   - Farm Single Unit – 38,619
   - Farm Truck Tractor – 1,206
   - Total – 39,825

2. How many permits are issued?
   - **2012**
   - Winter/harvest combination – 821 permits
   - Harvest – 3,064 permits
   - July 15 – November 30

   - Winter - 4,292 permits
   - December 1 – March 7

   - Total number of permits issued: 8173 permits.

   - **2011**
   - Winter/harvest combination – 528 permits
   - Valid July 15 – March 7

   - Harvest – 2,102 permits
   - July 15 – November 30

   - Winter - 3,898 permits

- December 1 – March 7
-
- Total number of permits issued: 6,528 permits.

- 2010
- Winter/harvest combination – 770 permits
- Valid July 15 – March 7
-
- Harvest – 3,742 permits
- July 15 – November 30
-
- Winter - 4,758 permits
- December 1 – March 7
-
- Total number of permits issued: 9,270 permits.

SENATE TRANSPORTATION COMMITTEE
March 14, 2013
10:30 a.m. – Lewis and Clark Room

North Dakota Department of Transportation
Ronald J. Henke, P.E., Director of Operations

HB1342

Mr. Chairman and members of the committee, I'm Ron Henke, Office of Operations Director at the North Dakota Department of Transportation (DOT). The Department of Transportation is opposed to HB 1342.

We understand and support the need to move commodities and promote economic viability of the state. But, we believe it is essential to ensure the state's large investment in the transportation system is protected.

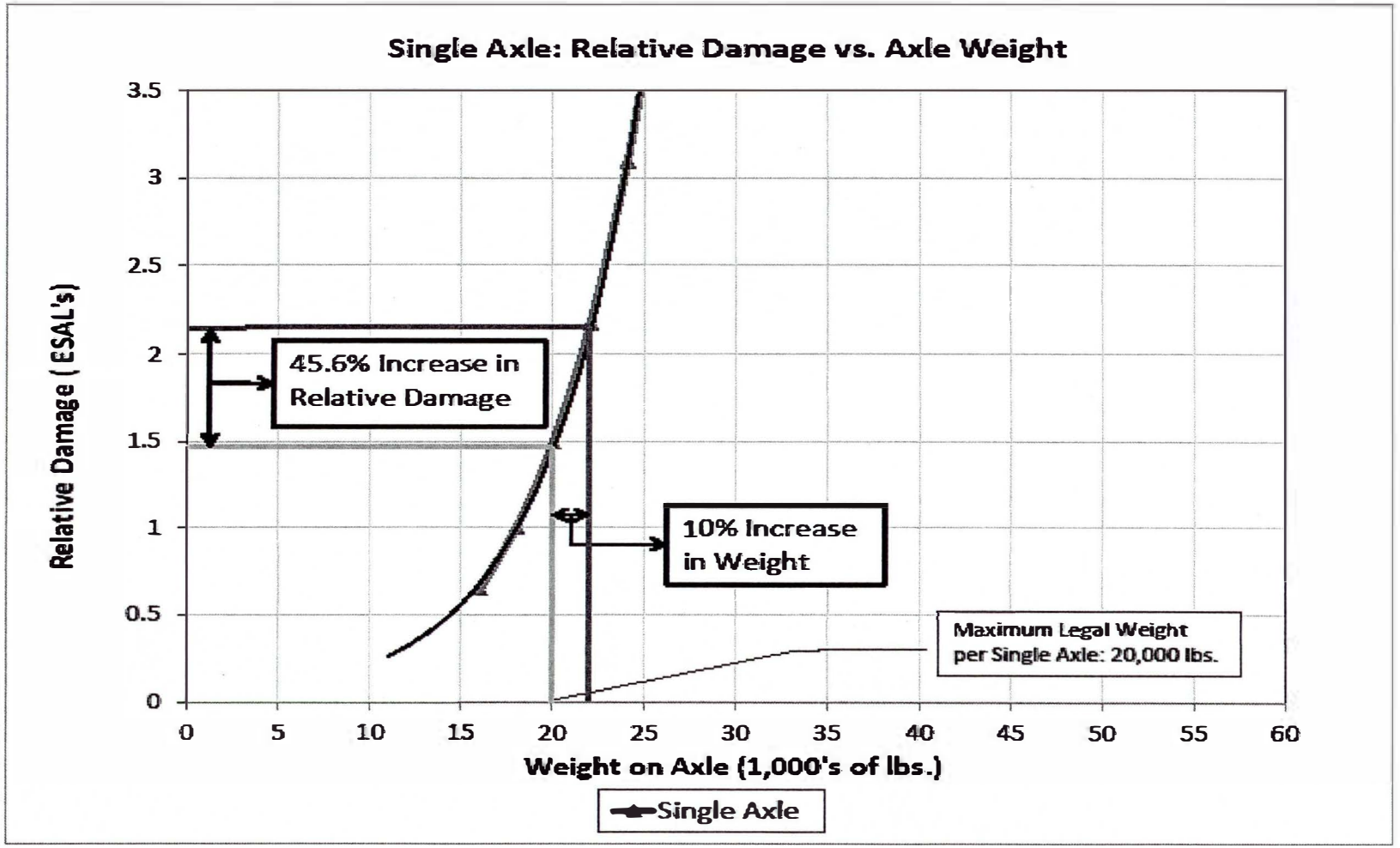
By allowing increased weights for further movement of overweight agriculture products, we are exposing the state's pavements to additional damage. Increased axle weight is the primary cause of pavement damage.

Every axle passing over a highway consumes a portion of the pavement's life. With each pass of a load, the pavement experiences forces that eventually lead to the deterioration of the pavement (see attached graphs).

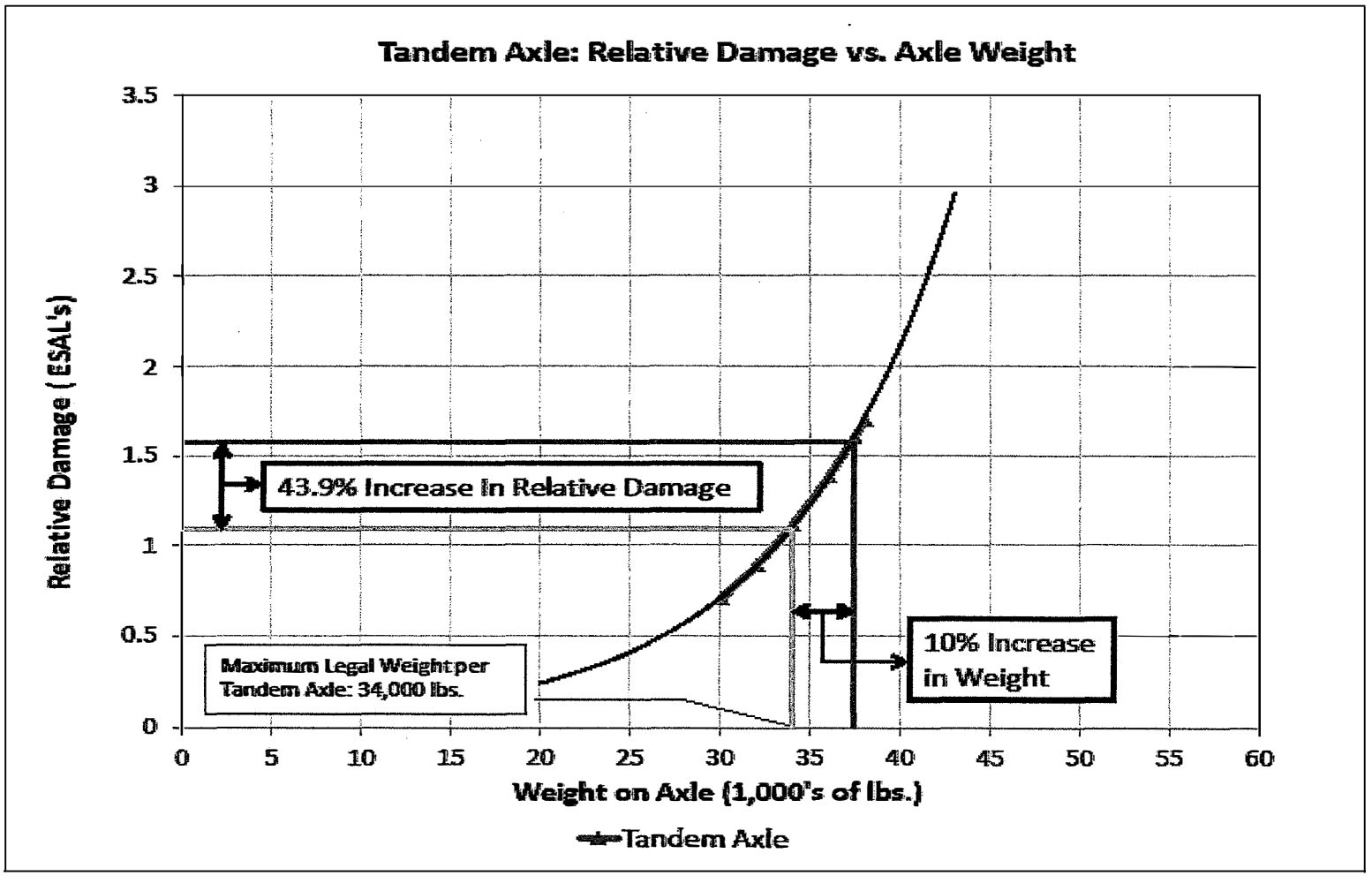
Extensive testing over the last fifty years has shown that the amount of pavement life consumed by heavy axles greatly exceeds the amount of life consumed by lighter axles. In fact, the relationship is exponential, which means that just a small increase in axle load leads to an ever increasing damage rate to the pavement. For example, as illustrated in a South Dakota Local Transportation Assistance Program report (see attached);

- a legal 20,000 pound axle load consumes a thousand times more pavement life than a 2,000 pound automobile axle,
- a 22,000 pound axle load consumes 46 percent more pavement life than a 20,000 pound axle load.

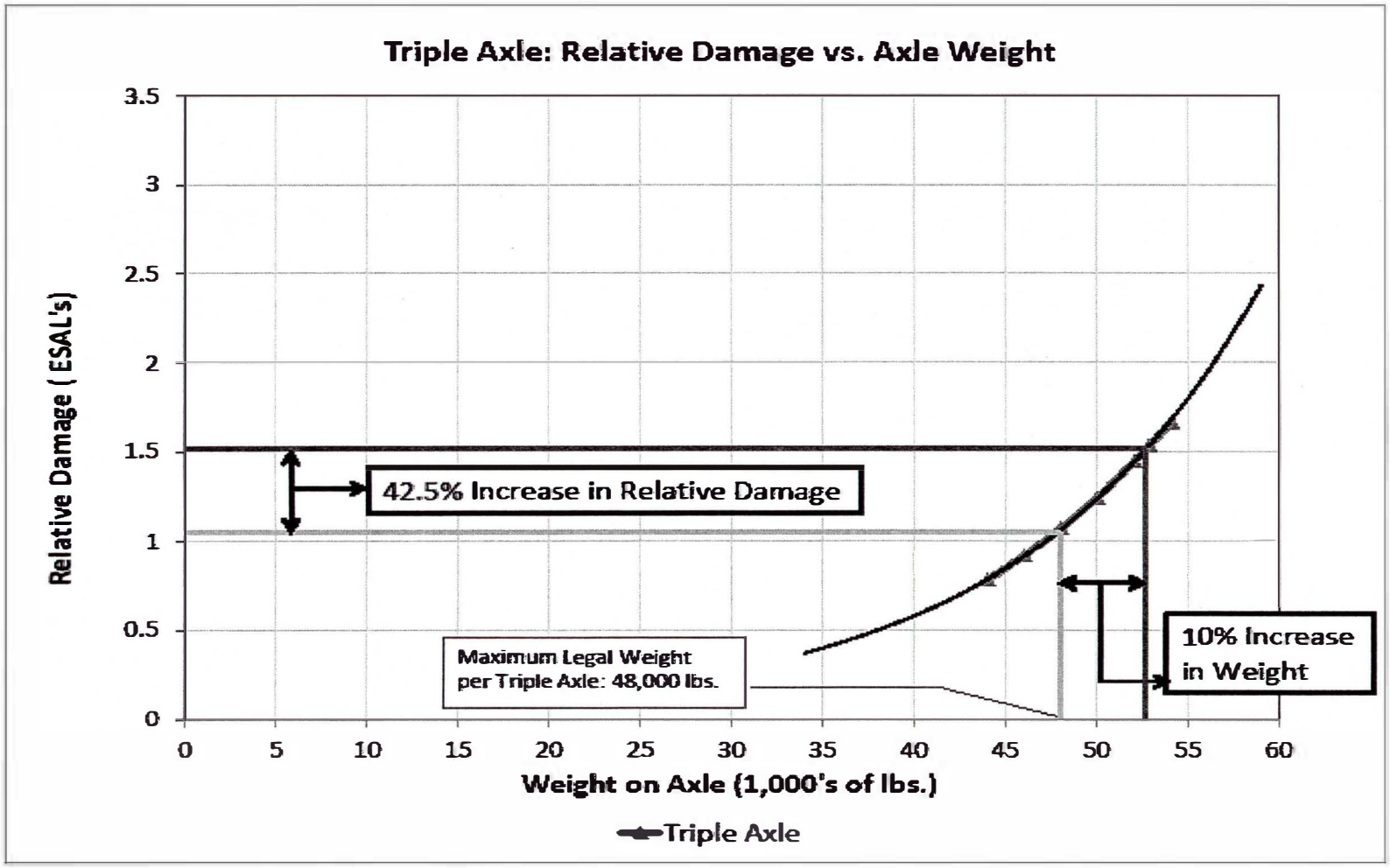
This concludes my testimony.



ATTACHMENT # 2 Page 2



ATTACHMENT # 2 Page 2



ATTACHMENT # 2 page 4

The Link to Highway Safety

Truck weight enforcement is not only a matter of economics, but also a matter of public safety. Illegal loads not only make roads

rougher, but also create deep ruts that can fill with rainwater or ice, making driving more dangerous for everyone.

Frequently Asked Questions

People occasionally ask whether weight restrictions could be relaxed without increasing road damage. Common questions are:

- Can trucks reduce speed rather than reduce load? This question often arises in the spring, when load restrictions are needed to protect pavements weakened by the spring thaw. Unfortunately, even though some local agencies still try to avoid load limits by reducing speed limits, this practice does not work. In fact, road damage increases significantly when heavy vehicles are driven more slowly.
- *If a truck's gross weight is legal, why do axle weights matter?* This question is sometimes raised by persons cited for overweight axle or axle group violations, even though the total (gross) weight of their vehicle did not exceed the legal limit. However, pavement damage from two axles—one light and one heavy—actually exceeds the damage from properly loaded axles. The extra damage created by the overloaded axle exceeds the reduced damage created by the lighter one.
- *If agricultural vehicles with low-inflation tires can safely carry heavy loads in fields, why can't they operate loaded on highways?* Even though vehicles like chemical applicators and grain carts can transport very heavy loads in fields, they seriously damage gravel and paved roadways when loaded beyond legal limits. The roadway surface is damaged because the vehicles' lugged tires concentrate the load into small contact areas. The pavement's underlying layers fail because they cannot withstand the total load imposed upon them. These loads also pose a serious problem for bridges, especially on county and township roads.

The trucking industry will always be an integral mode of transportation for the City of Sioux Falls. Without trucking, every facet of our economy would suffer. Therefore, we must continue to do everything possible to achieve the greatest benefit from our investment in the transportation system. A primary way of ensuring our state highways and local roads do

The Need for Responsible Hauling

State and local governments' responsibility to provide mobility and safety cannot be accomplished if illegally loaded vehicles prematurely consume the life of roads and bridges. Providing a system that is economical, comfortable, and safe depends not only on the government's investment of time, effort, and money, but also on the responsible behavior of highway users.

The vast majority of haulers in South Dakota do operate legally. Of the nearly 600,000 vehicles weighed each year, only about 3,000—one half of one percent—are cited for overweight violations. Of those cited, only about 600 are severely enough overweight to be assessed civil penalties exceeding $100.

While a small number of haulers knowingly operate illegally, their disregard for weight limits creates costly damage that other, responsible taxpayers must pay for. Controlling the irresponsible behavior of these intentional violators is impossible without effective enforcement and prosecution.

Recent efforts to control illegally overweight vehicles have clearly begun to reduce the rate of grossly overweight loads. In 2000, 8.6% of overweight vehicle citations were for loads more than 10,000 pounds over the legal limit. The rate decreased to 6.0% in 2001, and 5.9% in 2002. Overall, the incidence of grossly overweight loads has dropped by nearly a third since more stringent penalties and enforcement were enacted.

Relaxing weight regulations and enforcement would erase the progress that has been made to protect the public investment in state and local roads. In the words of Ted Eggebraaten, Brookings County Highway Superintendent, "If we lose the control we have with the new overweight laws in place, it will only add to our problems with roads and bridges. Brookings County would not be able to keep up our road system maintenance if the control is taken away." The Department of Transportation also considers sound weight enforcement essential to its mission to "provide a transportation system to satisfy the diverse mobility needs" of travelers, shippers, and haulers in South Dakota. Especially in a time of limited funding, protecting the existing highways from unnecessary damage is clearly the wisest course of action.

SDDOT Briefing

Truck Weights and Highways

Illegally overweight vehicles damage South Dakota roads, shorten road life, and increase costs to both the trucking industry and taxpayers. During the past several years, the South Dakota Legislature has enacted laws to protect state and local highways from damage caused by illegally overweight vehicles:

- In 1996, the Legislature limited the maximum weight allowed on axles (other than steering axles) to 500 pounds times the total width, in inches, of all tires mounted on the axle. This action ensured that the weight carried on axles fitted with single tires (as opposed to conventional dual tires) would not exceed pavements' load capacity.
- When the Legislature raised the state fuel tax in 1999, it also increased civil penalties for overweight trucks to safeguard the public's investment. The graduated penalty schedule discourages intentional violations that most severely damage roads and bridges, but imposes more modest fines for lesser, unintentional overweights.

Pounds Overweight	Civil Penalty per Pound
1,000-3,000	$0.05
3,001-4,000	$0.15
4,001-5,000	$0.225
5,001-10,000	$0.375
> 10,000	$0.75

- To protect the public investment in local roads and bridges, the Legislature enacted a law requiring the Department of Transportation to monitor how diligently counties prosecute overweight violations and, if necessary, to withhold funding from counties that fail to act responsibly.

The South Dakota Department of Transportation supports all of these legislative actions, which have improved awareness and compliance with truck weight regulations. Fewer vehicles are operating seriously overweight, preventing needless damage to roads and bridges and saving taxpayers millions of dollars.

It is important for those responsible for funding, building, and maintaining highways to understand the reasons behind truck weight regulations and to be able to explain them when shippers, haulers, business contacts, and personal acquaintances inquire about them.

ATTACHMENT # 6 pages

South Dakota Supports Trucking

South Dakota values the trucking industry and its contribution to the economy and well being of the state. Nearly everything we own, eat, use, grow, or manufacture is carried by truck on at least part of its journey.

Because of the importance of trucking, the South Dakota Legislature and other branches of state government have historically adopted rules and procedures that help the industry to operate competitively:

- To ease regulatory burdens, the Department of Revenue has joined the International Fuel Tax Agreement and the International Registration Plan. Both enable motor carriers to register in just South Dakota but operate in all states and provinces. Efforts are underway to provide online IRP and IFTA services to the trucking industry.
- Unlike most states, South Dakota does not impose absolute gross weight limits on trucks. Instead, it allows essentially unlimited gross weight, provided the load is supported by enough tires and axles to prevent road and bridge damage.
- South Dakota grants tolerances for hauling agricultural loads. Loads from field to farm are allowed to weigh 10% more than the normal weight limit, while loads from farm to market are allowed 5% more than normal.
- To help truckers comply with weight regulations, the Highway Patrol will, without charge, weigh vehicles and instruct haulers on proper loading.
- Together with the Department of Revenue and the Highway Patrol, the Department of Transportation has developed an automated permitting system that allows truckers to obtain permits online and quickly identifies safe routes for movement of oversize and overweight vehicles.
- To reduce delays and improve traffic safety, the Department of Transportation will replace the port of entry at North Sioux City with a new facility near Jefferson in 2003. Through use of in-motion weighing and vehicle transponders, the new port will allow truckers with good safety records and legal weights to bypass the port, saving valuable hours of operating time.

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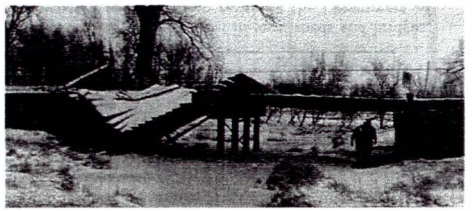

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