



North Dakota Department of Transportation

Ronald J. Henke, P.E.
Interim Director

Doug Burgum
Governor

June 6, 2017

The Honorable Elaine L. Chao
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

ATCMTD GRANT APPLICATION SUPPORT FOR NDDOT BRIDGE LOAD TESTING PROJECT

The North Dakota Department of Transportation (NDDOT) is pleased to submit this application for 2017 ATCMTD grant funding for the NDDOT Bridge Load Testing Project.

This application specifically addresses the reduction of the number of bridges that are restricted for load carrying capacity throughout the state. A concentrated effort using diagnostic load testing technology and Non-Destructive Evaluation will allow NDDOT to accurately identify certain structures to become unrestricted, hereby shortening the travel time and distance to move agriculture and industrial products to markets.

During development of the North Dakota Freight Plan, adopted in April 2015, numerous stakeholders in both the public and private sector identified load restrictions as problematic for freight shipments (in the agriculture, oil, and wind energy industries). Some load restrictions have caused detours of many miles and hours for both industry and the traveling public.

If funded, NDDOT would contract with a consulting firm to perform this testing and provide efficiency in prioritization of bridge replacements. This project will ultimately aid safety in the state, remove costly freight impediments to industry, and increase the reliable shipment of goods.

We look forward to working with USDOT to implement this testing to ensure efficient structure analysis and freight shipments across North Dakota.

RONALD J. HENKE, P.E., INTERIM DIRECTOR

17/rjg/sas

COVER PAGE

Project Name	ND's Bridge Load Testing Project
Eligible Entity Applying to Receive Federal Funding	NDDOT
Total Project Cost (from all sources)	\$2,654,000
ATCMTD Request	\$1,327,000
Are matching funds restricted to a specific project component? If so, which one?	No
State(s) in which the project is located	North Dakota
Is the project currently programmed in the: <ul style="list-style-type: none">• Transportation Improvement Program (TIP)• Statewide Transportation Improvement Program (STIP)• MPO Long Range Transportation Plan• State Long Range Transportation Plan	No No No No
Technologies Proposed to Be Deployed (briefly list)	Diagnostic load testing technology and Non-Destructive Evaluation using strain transducers, deflection sensors, and tiltmeter rotation sensors.



NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

North Dakota Department of Transportation

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NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

North Dakota Department of Transportation

Application at a Glance

Project Title	North Dakota's Bridge Load Testing Project
Project Location	Various locations, North Dakota
Applicant Name	North Dakota Department of Transportation (NDDOT)
Applicant Type	State Government
Funding Request	\$1,327,000
Total Project Cost	\$2,654,000
Non-Federal Matching Support	50%
Project Classification	Advanced Transportation & Congestion Management Technologies Deployment Initiative
Brief Project Summary	NDDOT is working to reduce the number of load restricted bridges throughout the state. Diagnostic load testing technology and non-destructive evaluation will be used to identify structures where load carrying capacity may be increased in an effort to reduce travel time and distance to transport agricultural and industrial products to markets.
Applicant Name and Contact Info	Gary Doerr, PE Bridge Division, Structural Management Engineer North Dakota Department of Transportation 608 E. Boulevard Ave Bismarck, ND 58505-0700 O: (701) 328-4844 gldoerr@nd.gov

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

North Dakota Department of Transportation

I. Project Description

1. Introduction

The Bridge Division of the North Dakota Department of Transportation (NDDOT) performs load rating calculations for all bridges within the state, including locally owned structures. The NDDOT is proposing a project to use diagnostic load testing technology to load test bridges that have load ratings near legal load capacities but are restricted for weight because of the calculated load ratings. The expectation is that this technology will allow these structures to become unrestricted, hereby shortening the travel time and distance to move agriculture and industrial products to markets.

The technology that is being proposed uses instrumentation on the existing structural members that measure deflection and strain while moving a known load across the structure. The measured deflections and strains in the beams allow for the maximum allowable safe load calculations. This technology was used on a limited basis on two local bridges and, in these cases, the results increased load ratings on the structures that were restricting free movement of goods to markets.

American Association of State Highway and Transportation Officials (AASHTO) has created the Manual for Bridge Evaluation (MBE) which outlines the bridge inspection process and the process to load rate existing bridges for safe loads. The local structures to be evaluated with diagnostic testing are on structures where plans are no longer available. The individual member sizes have been measured, however, assumptions have been made on the material strength and how the loads are distributed from the deck to the beams. The other structures being proposed for this analysis are reinforced slab bridges on the state highway system. While plans are available, slab bridges typically perform much better than the rating calculations indicate, so we anticipate being able to increase the load rating on the slab bridges. Overweight permitted vehicles are detoured around these slab bridges because of the lower rating calculations even though they can safely carry legal highway loads.

2. Entity Entering Into Agreement

The NDDOT will be the entity that will enter into the agreement to complete this project. Approximately one-third of the structures are locally owned and maintained. The NDDOT will partner with the owners of these structures to participate in this project. An RFP process will be created to select a consulting service that will be able to perform the work with NDDOT oversight and project control.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

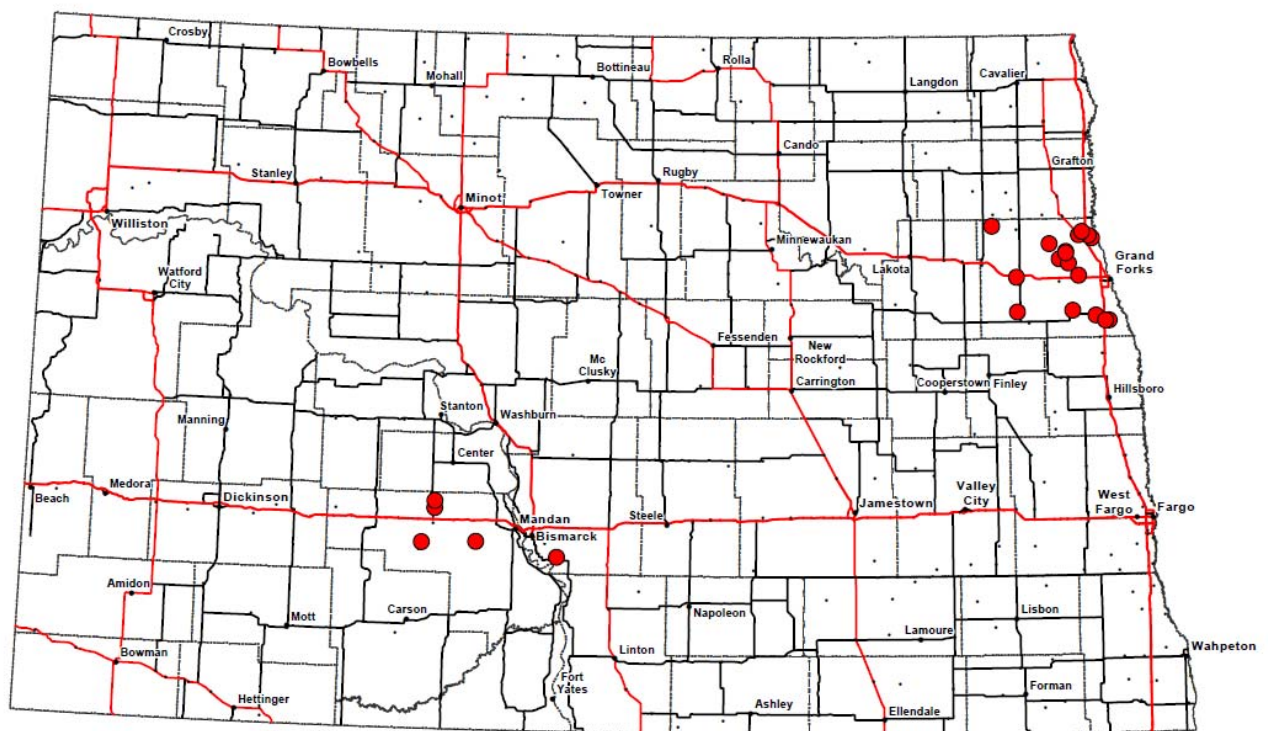
North Dakota Department of Transportation

The NDDOT will set up multiple project numbers for this project. Each local agency will have a project number to better assist us to assign costs to specific owners and their bridges. The state owns the majority of the structures in this program and will monitor the progress of the selected consultant.

3. Geographic Area

The local bridges are concentrated in 3 Counties within North Dakota. Grand Forks County is in the northeast area of the state while Morton and Burleigh Counties are in the central portion of the state. The map below shows the local bridge locations proposed for this project.

Local Bridge Load Testing Locations



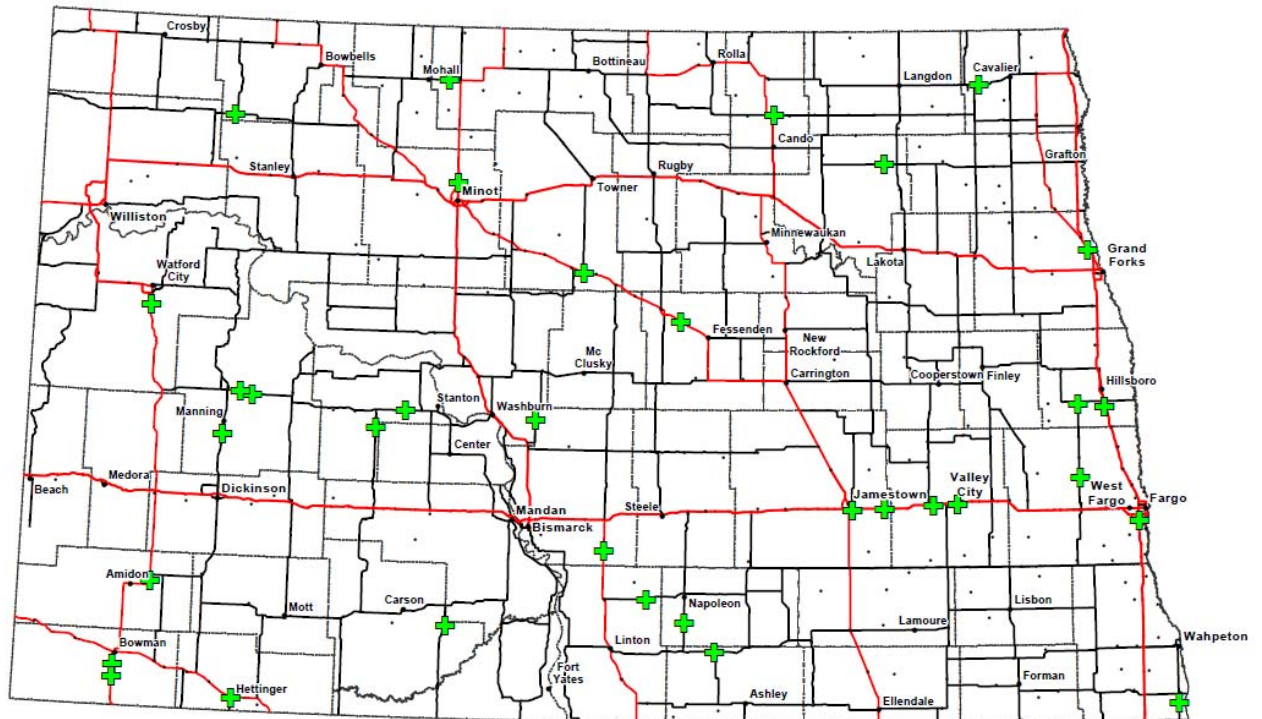
The state owned structures are located across the state on highways that are designated as a route for 129,000 lb. vehicles as well as local non-designated highways. The map below shows the location of the state structures being proposed for use of this project.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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Approximately half of the slab bridges are on the designated interregional routes that will carry the increased legal load of 129,000 lbs. on the NHS and Interstate Highway System.

State Slab Bridges with Inventory Rating < Legal Load



4. Issues and Challenges

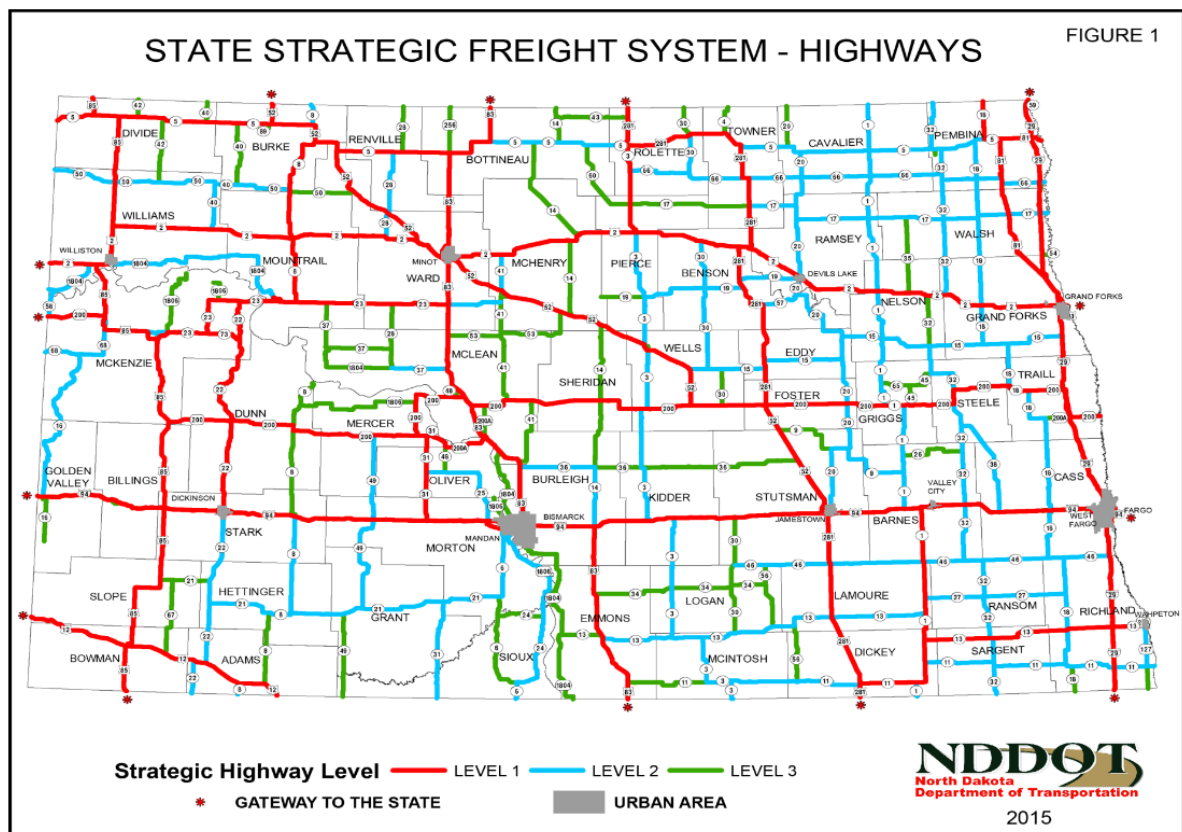
While a few mile detour may not seem like a huge issue, additional miles create more fuel consumption, emissions and time to the haulers. Using these bridges with lighter than legal loads creates more trips which leads to a similar increase in fuel, emissions and time. The most direct route is the most efficient as long as legal loads can be hauled. Achieving the goal of creating the most direct routes saves time, fuel, reduces emissions and creates the most efficient transportation system for transporting agricultural, manufacturing, and other goods. More than 27 million truck miles within ND are traveled on detour routes annually because of lower capacity bridges. This conservative estimate is based upon detour lengths and average annual truck traffic. North Dakota's Upper Great Plains Transportation Institute (UGPTI) performed a study noting that the cost to operate a semi on a paved road is \$2.18/mile. Eliminating these detour miles would equate to an estimated annual savings in trucking costs of \$58.9 million.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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5. Transportation Systems Included in Project

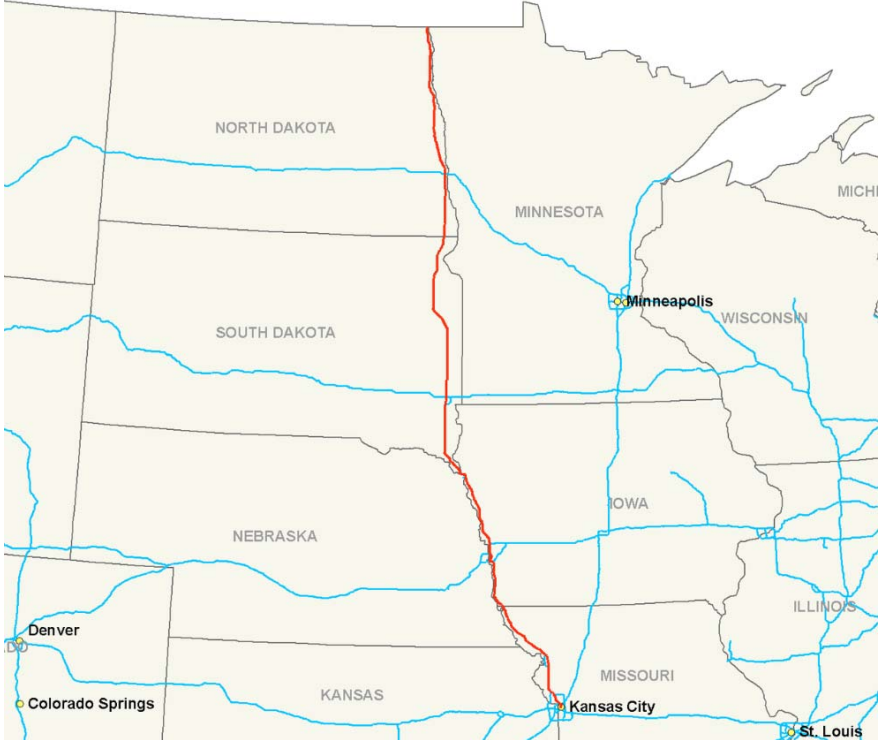

North Dakota's State Strategic Freight System identifies three levels of highways that move freight statewide and connect to neighboring states and Canadian provinces. The map below from the ND State Freight Plan, adopted in 2015, shows the route levels for freight movements within the state as well as to other states and Canada through identified Gateways, indicated by an asterisk (*). All three counties partnering with NDDOT on this project contain Freight Level 1 routes and those are top priority level for freight movements.



The Interregional Highway System is designed to transport goods within as well as outside of the state, region, and U.S. Some of the highways on the Interregional System include:


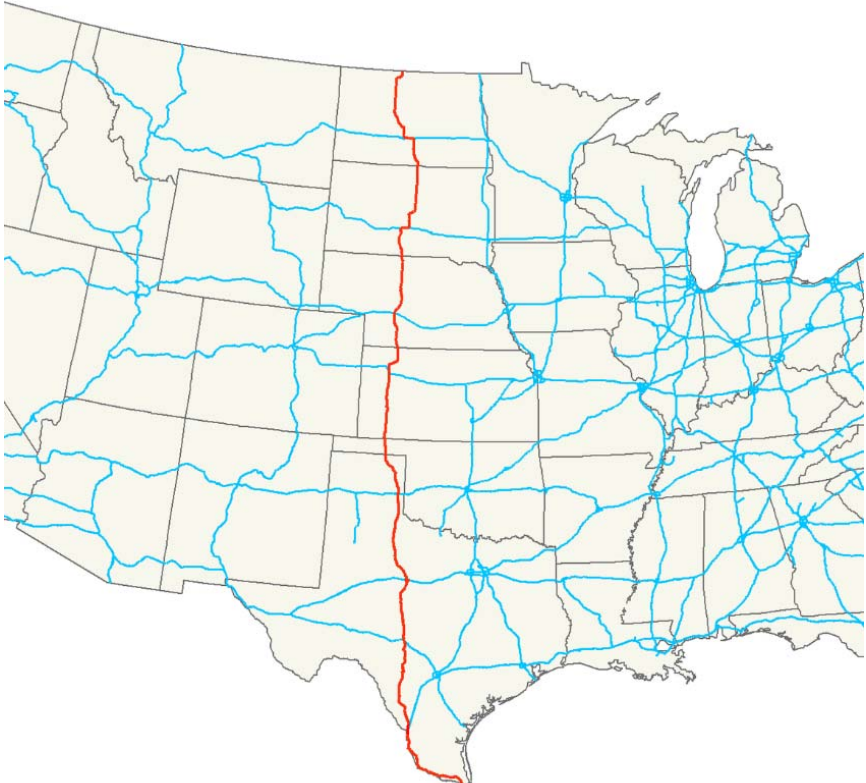
NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

North Dakota Department of Transportation

Route	Description
Interstate 29	<ul style="list-style-type: none"> Main north south corridor from Kansas City, MO to the Canadian border at Pembina, ND. 
Interstate 94	<ul style="list-style-type: none"> Northernmost east-west Interstate Highway connecting the Great Lakes and Intermountain regions of the U.S. This route runs from Detroit, MI to Billings, MT where it connects with Interstate 90 and continues to Seattle, WA. 



NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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Route	Description
US 2	<ul style="list-style-type: none"> Disconnected US highway from Everett, WA through Duluth, MN to St. Ignace, MI and Rouses Point, NY to Houlton, ME. 
US 83	<ul style="list-style-type: none"> One of the longest north-south routes in the U.S. from Canada to Brownsville, TX on the Mexican border. 
US 85	<ul style="list-style-type: none"> CanAm Highway from Canada through the mountain-northern plains to El Paso, TX at the Mexican border.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

North Dakota Department of Transportation

Route	Description
	
US 281	<ul style="list-style-type: none"> Longest north-south route from the International Peace Gardens at the Canadian border to Brownsville, TX at the Mexican border. 

The state highway system includes some of the slab bridges not on the interregional system. This system is used to transport goods from the interregional system to the end-use location.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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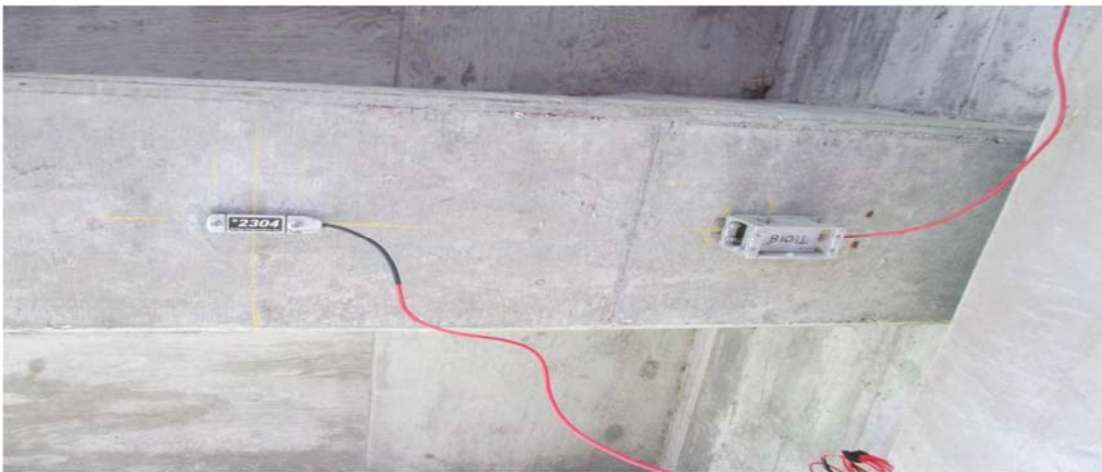
The local county systems included in the project are mainly farm-to-market roads that producers use to transport their agricultural products to local markets.

6. Deployment Plan

NDDOT plans to create an RFP and use quality based selection to hire a consulting firm that will perform the field analysis and result calculations on a bridge by bridge basis. Coordination with bridge owners will be handled by the consultant to fit their schedule as it falls within the NDDOT timelines. Bridges will be grouped geographically and by type to provide efficiency while providing better coordination with bridge owners. The NDDOT will remain active in this project by monitoring progress and results. As the responsible agency for all bridge load ratings within the state, the NDDOT will utilize this information for the potential increase of load limits on our transportation system.

During the field testing phase, the superstructure will be instrumented with a combination of strain transducers, deflection sensors, and tiltmeter rotation sensors (See Figure 1). Once the structure is instrumented, controlled load tests will be performed with a 3-axle dump truck along three lateral positions. Data obtained from the load tests will then be evaluated for quality and subsequently used to verify and calibrate a finite-element model of the structure.

Figure 1 showing strain transducer and rotation sensor near girder end (typical).



During the structural investigation, all available geometric data will be recorded and compared with any previously collected data. Additionally, beam details including the location and sizes of both the stirrups, Post-Tension (PT) ducts, and the deck reinforcement

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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will be determined using GPR techniques (See Figure 2). All of the information obtained from this investigation will then be compiled into As-Inspected drawings.

Figure 2 showing GPR scan along bottom of a girder (typical).



Although much of the crucial information will be determined from structural investigation, it may still be necessary to make some educated estimates on certain parameters critical in the calculations of the structure's capacity; namely the design material properties and the number of PT wires in each duct. Using design and fabrication information obtained from structural plans from a similar structure (e.g., same bridge type built in the time frame in the same geographic area), it may be assumed that a bridge was designed for a specific loading and that the design was based on certain methodologies.

7. Regulatory, Legislative, or Instructional Environmental Challenges

This project does comply with accepted practices in the American Association of State Highway and Transportation Officials' Manual for Bridge Evaluation (MBE). While

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formulas and calculations provide safe capacities of the bridge systems, assumptions are made on many inputs into the load rating formulas. Assumptions include:

- Strength of steel
- Strength of reinforcing steel
- Strength of concrete
- Load distribution to various members and;
- Interaction between separate elements within the bridge

The diagnostic load testing combines all of the interactions, determines assumptions and shows how the bridge actually reacts to a specific loading. A more realistic capacity can be determined based on the as-constructed mechanics and interactions of the individual bridge members.

The NDDOT does not anticipate any Legislative challenges with this project.

Environmental impacts will be significantly reduced if load ratings can be increased by reducing fuel usage as well as vehicle emissions associated with the 27 million truck miles traveled as a result of truck detours. Another environmental benefit will be eliminating the impacts caused by the unnecessary removal and replacement of bridges. In addition, the environmental impacts associated with disturbances to the streambed is avoided as well as the production of the materials necessary to construct a new bridge.

8. System Performance Improvements

The anticipated results of this project will reduce the number of miles traveled, emissions produced, and misdirection of travel. A more efficient transportation system for moving agriculture and industrial commodities will help reduce costs to the eventual consumer as well as costs to the producers of those items.

Reducing capacities of bridges by posting with load limit signs creates a huge maintenance issue for the bridge owner. Signs are routinely vandalized, removed or destroyed and need repair or replacement to correctly identify the safe load capacity of the structure. If the restrictions can be removed, these maintenance costs can be spent on other more critical items such as maintenance of the bridges to keep them in good condition. The NDDOT spends many hours annually inspecting, notifying owners of deficiencies in posting signage, and following up on the accuracy of the posting signage across the state. With fewer posted structures, time can be spent on inspection of the bridge condition and safety rather than the condition of signs.

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9. Safety, Mobility, and Environmental Benefit Projections

By reducing the total distance traveled, safety will be increased by reducing the interaction of large and small vehicles. The more direct route will be used rather than the detour route which adds time and length to every trip. A shorter trip reduces fuel consumption as well as reduces emissions from those vehicles. The interregional corridors within the state of North Dakota are designed for a safer interaction to the large and smaller vehicles. Keeping large permit vehicles on these routes increases safety to both the haulers and the smaller vehicle traveling public.

The perceived risk associated with structures being permanently damaged from overloads due to signs being removed or vandalized would be eliminated if it's determined that the load restrictions can be removed.

Mobility is increased by the option of using the shortest route rather than a longer less direct route to transport goods to market or to the end users.

10. Vision, Goals and Objectives of the Technology Deployment

One county utilized this technology on a very limited basis on 2 local bridges in 2012. The success of that pilot project has urged the NDDOT to try this technology on other bridge types in an attempt to reduce the number of posted bridges and increase the allowable capacity on some of the state mainline structures.

NDDOT will use this project as a way to determine the success rate to eliminate the postings on various types of structures. If the success rates are quite high or show a predictable pattern, more structures may be identified for a follow-up project to further reduce posting in other counties across the state.

11. Partnering with Private or Public Agencies

NDDOT does not believe the best use of this technology would be for the state to own this equipment. This type of technology and interpretation of the results should be left up to those who do the work daily instead of intermittently. The learning curve has been completed by those consultants who routinely perform this work and should be considered the experts in dealing with this technology.

The ND Soybean Council has expressed an interest in assisting the NDDOT in reducing the number of bridges that are restricted for load within the state. Other agencies who are also interested would be the ND Corn Growers and ND Wheat Producers. All of the farm organizations are also interested in the most efficient way to get products to markets.

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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The last legislative session in North Dakota included a bill to increase the legal load (with enough axles) to 129,000 lbs. While this increase will be limited to the state's Interregional System, some of the bridges on that system haven't been designed for this loading. This technology may be used to determine if some of the questionable bridges should be replaced earlier rather than later or if they are performing better than the calculated load rating would indicate. This project will look at several state structures on these routes. An attempt to get a correlation between the calculated ratings and the actual performance in slab bridge structures may allow NDDOT to justify a factor of increase for slab bridges in general within the state.

12. Leveraging & Optimizing Existing Local & Regional Technology Investments

The NDDOT provides federal funding to local governmental agencies to improve and maintain their systems. This technology will allow this funding to stretch further by partnering with local agencies to reduce the number of structures that must be replaced on the local and state systems. Other structures will be able to be funded and these structures will be able to become un-restricted for loads.

13. Project Schedule & Technology Deployment

The project will include field instrumentation, testing, analysis and final reporting for each of the bridge sites. After the award in the fall of 2017, the NDDOT would develop the RRP and select a consultant during the winter of 2017-2018. The field work would be completed in the summer of 2018 with final results and reports expected in early 2019. Annual reports and a follow-up project review and report would be written after final results from the consultant and would be expected to be completed in the summer of 2019 to be used in the determination of the value and continued use of this technology.

Deliverable	Approximate Due Date	Section 508 Compliant?
Kick-off Meeting – Conduct a kick-off meeting with DOT at mutually-agreed-upon location.	Within 4 weeks after award.	No
Develop RFP for consultant to perform site testing and analysis	6-8 weeks after grant award	

NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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Deliverable	Approximate Due Date	Section 508 Compliant?
Award Contract to successful Consultant	March after grant award to begin work during summer construction season	
Monthly Progress Reports – submit progress reports to document activities performed, anticipated activities, and any changes to schedule or anticipated issues.	Monthly	No
Report to the Secretary – submit a report describing the deployment and operational costs compared to the benefits and savings, and how the project has met the original expectations projected in the deployment plan.	Annually beginning one year after grant award.	Yes
Consultant delivers completed reports on each bridge regarding final load rating	Quarterly at a minimum as field work is completed	

II. Staffing Description

1. Organizational Staff to Manage Project



NORTH DAKOTA'S BRIDGE LOAD TESTING PROJECT 2017 ATCMTD APPLICATION

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2. Primary Point of Contact

The primary point of contact will be Gary Doerr, P.E. of the Bridge Management Section of the Bridge Division. The Bridge Management Section maintains the records for all bridges in the state, load rates structures, assists the Districts in bridge preservation, approves over-weight permits over state bridges and reviews shop drawings for all state structures. Refer to contact information below:

Gary Doerr, PE
Bridge Division, Structural Management Engineer
North Dakota Department of Transportation
608 E. Boulevard Ave
Bismarck, ND 58505-0700
O: (701) 328-4844
gldoerr@nd.gov

III. Cost projection

1. Field Work and Analysis on Bridges

State Structures	\$1,080,000
County Structures	\$ 840,000
Administration	\$ 384,000
Contingencies	<u>\$ 350,000</u>
Total Project	<u>\$2,654,000</u>
Grant	\$1,327,000
Local/State	\$1,327,000

HEIDI HEITKAMP

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United States Senate

WASHINGTON, DC 20510

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GOVERNMENTAL AFFAIRS
INDIAN AFFAIRS
SMALL BUSINESS AND ENTREPRENEURSHIP

June 9, 2017

The Honorable Elaine L. Chao
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

I write to express my support for the application submitted by the North Dakota Department of Transportation (NDDOT) for 2017 Advanced Transportation and Congestion Management Technologies Deployment Initiative (ATCMTD) grant funding for the NDDOT's Bridge Load Testing Project.

NDDOT is working to reduce the number of bridges that are restricted by load carrying capacity throughout the state. By using diagnostic load testing technology and non-destructive evaluation, NDDOT will work to identify certain structures where the carrying capacity could be increased without having to make additional structural improvements. Using these methods of testing, NDDOT would be able to more accurately determine what the actual load carrying capacity is and may allow for increasing the load limits on certain structures, thereby shortening the travel time and distance to move agriculture and industrial products to markets.

If funded, NDDOT would contract with a consulting firm to perform this testing and provide efficiency in prioritization of bridge replacements. Rural bridge projects like this provide a critical investment in rural America and greatly benefit our agricultural industry, which has seen its farm income decline in recent years and is facing continued low commodity prices.

Again, this project carries with it my support, and I hope you will consider NDDOT's application favorably. Please feel free to contact my office if I can provide any additional information. I would also greatly appreciate if you kept my office informed about the status of this request.

Sincerely,



Heidi Heitkamp
United States Senate

C: Ron Henke, PE, Interim NDDOT Director

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220 EAST ROSSER AVENUE
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JOHN HOEVEN
NORTH DAKOTA

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United States Senate

WASHINGTON, DC 20510

June 9, 2017

COMMITTEES:
AGRICULTURE
APPROPRIATIONS
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GOVERNMENTAL AFFAIRS
INDIAN AFFAIRS

The Honorable Elaine Chao
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

RE: ATCMTD Grant Application Support for NDDOT Bridge Load Testing Project

Dear Secretary Chao:

I am writing to express my support for the application submitted by the North Dakota Department of Transportation (NDDOT) on behalf of its Bridge Load Testing Project to the 2017 Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Program, administered by the U.S. Department of Transportation.

As you certainly understand, our nation's infrastructure is vital not only to public safety, but also the growth of our economy. While Congress and the White House work toward a legislative package to revitalize our nation's infrastructure, states continue their efforts to seek out innovative ways to repair and improve the country's transportation system.

To this end, NDDOT is working to reduce the number of bridges that are restricted for load carrying capacity throughout the state. The department will undertake a concentrated effort using diagnostic load testing technology and Non-Destructive Evaluation to accurately identify structures that may become unrestricted. This would shorten the travel time and distance to move agricultural and industrial products to market, ultimately aiding safety in the state, removing costly freight impediments to industry, and increasing the reliable shipment of goods.

Accordingly, I hope NDDOT's application receives the full and fair consideration it deserves. Thank you for your time and attention. Please keep me informed of the review process, and feel free to contact my office with any updates or inquiries you may have for me.

Sincerely,



John Hoeven
U.S. Senator



BURLEIGH COUNTY HIGHWAY DEPARTMENT

8100 43rd AVE NE
BISMARCK, ND 58503
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FAX 701-204-7749
www.burleighco.com

June 9, 2017

Ms. Elaine L. Chao, Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

RE: ATCMTD Grant Application Support for NDDOT Bridge Load Testing Project

The County of Burleigh strongly supports the NDDOT Bridge Load Testing Project for which the North Dakota Department of Transportation is requesting 2017 ATCMTD grant funding.

This project is intended to assist in reducing the number of bridges that are restricted for load carrying capacity within the state of North Dakota. NDDOT is proposing to use diagnostic load testing technology and Non-Destructive Evaluation to test bridges that have load ratings near legal load capacities but are restricted for weight because of the calculated load ratings. The expectation is that this technology will allow these structures to become unrestricted, hereby shortening the travel time and distance to move agriculture and industrial products to markets.

If funded, NDDOT would partner with us to contract with a consulting firm to perform field analysis and result calculations on a bridge by bridge basis. Our County's bridges would be grouped geographically and by type to provide efficiency in prioritization of bridge replacements. These improved bridges will aid safety in the state, remove costly freight impediments to industry, and increase the reliable shipment of goods.

Thank you for your consideration of this important project and please feel free to contact me if I can provide anything further.

Page 2
June 9, 2017

Sincerely,

A handwritten signature in black ink, reading "Douglas R. Schmitt". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Commissioner

Burleigh County, ND

CC: Ron Henke, PE, Interim NDDOT Director



Grand Forks County
Highway Department

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June 6, 2017

Ms. Elaine L. Chao, Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

RE: ATCMTD Grant Application Support for NDDOT Bridge Load Testing Project

The County of Grand Forks strongly supports the NDDOT Bridge Load Testing Project for which the North Dakota Department of Transportation is requesting 2017 ATCMTD grant funding.

This project is intended to assist in reducing the number of bridges that are restricted for load carrying capacity within the state of North Dakota. NDDOT is proposing to use diagnostic load testing technology and Non-Destructive Evaluation to test bridges that have load ratings near legal load capacities but are restricted for weight because of the calculated load ratings. The expectation is that this technology will allow these structures to become unrestricted, hereby shortening the travel time and distance to move agriculture and industrial products to markets.

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Thank you for your consideration of this important project and please feel free to contact me if I can provide anything further.

Sincerely,

A handwritten signature in black ink, which appears to read "Cynthia Pic". The signature is written in a cursive, flowing style.

Grand Forks County Commission Chair
Cynthia Pic

CC: Ron Henke, PE, Interim NDDOT Director



MORTON COUNTY

STATE OF NORTH DAKOTA

Dawn R Rhone
County Auditor

Commissioners:

Cody Schulz, Chairman
Bruce Strinden, Vice Chairman
James Boehm
Andy Zachmeier
Ron Leingang

June 5, 2017

Ms. Elaine L. Chao, Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

RE: ATCMTD Grant Application Support for NDDOT Bridge Load Testing Project

The County of Morton strongly supports the NDDOT Bridge Load Testing Project for which the North Dakota Department of Transportation is requesting 2017 ATCMTD grant funding.

This project is intended to assist in reducing the number of bridges that are restricted for load carrying capacity within the state of North Dakota. NDDOT is proposing to use diagnostic load testing technology and Non-Destructive Evaluation to test bridges that have load ratings near legal load capacities but are restricted for weight because of the calculated load ratings. The expectation is that this technology will allow these structures to become unrestricted, hereby shortening the travel time and distance to move agriculture and industrial products to markets.

If funded, NDDOT would partner with us to contract with a consulting firm to perform field analysis and result calculations on a bridge by bridge basis. Our County's bridges would be grouped geographically and by type to provide efficiency in prioritization of bridge replacements. These improved bridges will aid safety in the state, remove costly freight impediments to industry, and increase the reliable shipment of goods.

Thank you for your consideration of this important project and please feel free to contact me if I can provide anything further.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Henke".

Chairman
Morton County Commission

CC: Ron Henke, PE, Interim NDDOT Director