

The Alarming Condition of Nebraska's Rural Bridges

“We Can't Do It On Our Own...”



L.R. 528 STUDY REPORT

Nebraska Legislature
Transportation & Telecommunications Committee
December 12, 2014

“We Can’t Do It On Our Own. . .”

The Alarming Condition of Nebraska’s Rural Bridges

Dear Nebraskans,

Building and maintaining infrastructure is a foundational responsibility of government. Modern and safe roads and bridges are key to supporting our state’s economy, especially the agricultural economy. While our more rural farm to market transportation system may not handle a high volume of people and vehicles, it does carry millions of dollars in agricultural products, including the food and fiber that makes Nebraska a major player in our global economy. Consider that it takes an estimated 2.2 million semitrailers to haul Nebraska’s production of corn, soybeans, wheat, sorghum and other grains from the field to storage bins or elevators!

A recent editorial published in the McCook Gazette highlighted the successful efforts of our Nebraska Department of Roads in regard to the good condition of our state highway system. For the second year in a row Nebraska ranked second in the nation in highway performance and cost effectiveness. Our high ranking (Number one) also continued in regard to rural Interstate pavement condition. Yet, in a recent report entitled, “Rural Connections: Challenges and Opportunities in America’s Heartland,” 19% of Nebraska’s 15,500 rural bridges were found to have significant structural deficiencies. That is the seventh highest percentage in the nation.

Legislative Resolution 528 was introduced to gather information about the overall condition of our county bridges and whether there are adequate resources available to maintain or replace these structures. The Transportation and Telecommunications Committee spent several days traveling rural roads and seeing firsthand the condition of these bridges. There are an estimated 40,000 to 60,000 county bridges constructed in the early to mid-1900’s that are now in need of significant repairs or complete replacement. Environmental factors, stream bed erosion and far heavier farm equipment and loads are exacerbating the problems.

Following the tour and site visits the committee held hearings to allow for public input. We heard that county officials are doing the best job possible keeping these bridges functional and safe in spite of diminishing financial resources and increasing regulatory constraints. Budget lids and levy restrictions, along with the elimination of state aid to cities and counties, require county boards to prioritize projects and at times make the difficult call to close a bridge. For the safety of children and the prosperity of future generations of Nebraska farmers and ranchers, it has become all too evident that an adequate funding source needs to be established so that bridges can be updated and modernized.

This will be a tall order to fill. It is estimated that to fix all of the rural bridges across our state it would cost several billion dollars. Counties cannot carry this responsibility alone.

*Sen. Annette Dubas,
Chair, Transportation and Telecommunications Committee*

Table of Contents

Part I: Introductory Letter -----	1
Part II: Nebraska's Bridge Problem -----	3
Part III: Available Resources -----	9
Part IV: Bridge Site Visits -----	12
Part V: Conclusions -----	14
Part VI: Media Coverage -----	15
Part VII: Sources & Appendix -----	24

**The Nebraska Legislature's
Transportation &
Telecommunications
Committee:**

Sen. Annette Dubas
Sen. Jim Smith
Sen. Lydia Brasch
Sen. Dan Watermeier
Sen. Galen Hadley
Sen. Beau McCoy
Sen. Charlie Janssen
Sen. John Murante

Staff: Anna Eickholt
Anne Hajek



COVER PHOTO & ABOVE: A CLOSED RURAL BRIDGE NEAR O'NEILL, NEBRASKA.

Part II: Nebraska's Bridge Problem

"I don't think it requires a long time in office to see that we are in a crisis state with our bridges and our infrastructure." - Pam Dingman, Lancaster County Engineer

A. The Condition of Bridges in Nebraska

Nebraska's rural infrastructure needs attention. The increased size and weight of agricultural equipment combined with the simple passage of time has put great stress on Nebraska's county bridges. An additional problem in some areas of Nebraska is the degradation of the water channel the county bridge spans, or in other words the process of water eroding the channel's banks and threatening the integrity of the bridge.

Bridges over 20 feet in length are required to be inspected every two years by the Nebraska Department of Roads. Some of those bridges are the responsibility of the State of Nebraska. Others are the responsibility of political subdivisions—Nebraska's cities and counties. The State of Nebraska has 3,522 bridges with a length greater than 20 feet that it is responsible for maintaining on the state highway system. Nebraska's cities and 93 counties have a total of 11,763 bridges that span longer than 20 feet. Bridges under 20 feet are not inspected and thus no accurate count exists, but the number would certainly be in the tens of thousands when considering both state and local bridges.

Bridges that have been inspected are placed into one of three categories: (1) Sound/Adequate, (2) Functionally Obsolete, and (3) Structurally Deficient. A functionally obsolete bridge is a bridge that does not properly accommodate traffic due to poor roadway alignment, waterway, insufficient width, low structural evaluation, or inadequate clearances. Such a bridge poses inconveniences to larger agricultural

Nebraska has the 7th highest percentage of structurally deficient rural bridges in the U.S.

equipment, school buses, and emergency vehicles. A structurally deficient bridge is one that is in relatively poor condition, or has insufficient load carrying capacity for modern design loadings. The insufficiency may be due to the original design or from degradation of structural properties due to deterioration. While not necessarily unsafe, these bridges may have limits posted for speed and weight.

Bridges on the Nebraska state system are in relatively good shape. Of the 3,522 state system bridges, just 66 are functionally obsolete (1.9%) and 191 (5.4%) are structurally deficient. Conversely the bridges that Nebraska's cities and counties are responsible for are in much poorer shape. Of the 11,763 city and county bridges, 906 (7.7%) are functionally obsolete and 2,373

Condition of Bridges over 20' in Length	State System	Local System
Sound / Adequate	3,265	8,484
Functionally obsolete	66	906
Structurally deficient	191	2,373
Total Bridges	3,522	11,763

SOURCE: NEBRASKA DEPARTMENT OF ROADS (SEPTEMBER 2014)

(20.2%) are structurally deficient. In fact, Nebraska fares very poorly in this regard when compared with other states. According to a July 2014 report from the transportation research group TRIP, Nebraska has the seventh highest rate of structurally deficient rural bridges in the country.

B. The Impact of Deteriorating Bridges on Nebraska

The alarming rate of obsolete and deficient bridges, especially in rural areas, should be concerning to Nebraskans and policy makers for several reasons. In the broadest terms county roads and bridges are the backbone of our state’s economy and quality of life. Rural infrastructure provides mobility and connectivity for hundreds of thousands of Nebraskans. County roads and bridges are crucial links from



SOME NEBRASKA BRIDGES ARE WIDE ENOUGH FOR A PICKUP, BUT NOT FOR MODERN FARM MACHINERY.

ranch to feedlot to packing house, from the manufacturing plant to the warehouse, from the corn field to the elevator, from the Interstate to the wind turbine site, and from urban areas to deer blinds and fly fishing streams.

Obsolete and deficient bridges also pose a threat to the state’s number one industry—agriculture. Nebraska’s corn, soybeans, wheat, cattle, and poultry, among other products, account for \$20 billion of the state’s economy. Efficiently getting those products out of the field, off the ranch, or delivered from the feedlot to market is a challenging puzzle and has a

direct bearing on Nebraska’s agricultural competitiveness relative to other states. According to the TRIP report, trucks across the country carry 91% of the ton miles for the movement of all fruit, vegetables, livestock, meat, poultry & dairy products, which represents a recent increased recent reliance on trucking for freight movement due in part to the abandonment of more than 100,000 miles of rail lines in recent decades.

The world-wide demand for food is only growing, according to experts at the University of Nebraska who have determined that the world will need to double food production by 2050. Rural bridge closures make achieving that challenge more difficult. “We had producers in our county, taxpayers, that were driving six miles to go around to get to another field because they didn’t have a bridge they could cross,” testified Colfax County Commissioner Jerry Heard at the West Point interim study hearing on L.R. 528.

Concerned about the state of infrastructure in Nebraska, Jay Rempe, Vice President of the Nebraska Farm Bureau testified at the Lincoln Public Hearing on L.R. 528 that “it would behoove the state to invest wisely in local infrastructure to help [the agricultural] industry thrive and be competitive in a

“Some people go 12, 10, you know, 10 miles out of their way to get around to the other side” – Saunders County Highway Superintendent Steve Mika

global marketplace, because we're going to have to build off that industry for our economic future.” Increased crop productivity and utilization of land in the past decades has led to the need for larger harvesting equipment and larger trucks for hauling it away. That heavier equipment put greater stress on rural bridges, some of which were built nearly a century ago. Another challenge is the width of modern farm machinery, which is growing just the same as the equipment weight. Some bridges are simply not wide enough for the new equipment to traverse. Thus Nebraska’s deteriorating infrastructure manifests itself in three ways: a bridge closed outright, a bridge that can only handle low weight vehicles, and a bridge that is not wide enough for modern farm equipment.

Steve Mika, Highway Superintendent for Saunders County, explained the various facets of the problem well at the Lincoln public hearing on L.R. 528:

Well, if there was a bridge closed and you could drive clear around the section, you know, you're looking at four miles there, and that's the shortest. A lot of times it's worse than that. Some people go 12, 10, you know, 10 miles out of their way to get around to the other side. And even...so it depends on what they're trying to get to the other side with. There might be an open road but a low-tonnage bridge that prohibits them from going that direction, so they may even have to go further. I know it's changed a lot of farming operations where the way they get equipment around to one way or another.

C. Bridge Maintenance Efforts Undertaken By Counties

Nebraska’s counties understand full well the importance of infrastructure to rural Nebraskans and their businesses. “Counties must make sure roads are safe for kids to travel to school and for agricultural products to get from farm to market,” said Larry Dix, executive director of the Nebraska Association of County Officials, in a press release accompanying the TRIP report. Strained county budgets and limited taxing options, however, have prevented counties from making needed investments in county infrastructure. “It has become all too evident that an adequate funding source needs to be established so

that bridges can be updated and modernized,” continued Dix in the press release. “We can't do it on our own,” testified Colfax County Commissioner Jerry Heard at the West Point interim study hearing on L.R. 528, “. . . we need to do something and we need some help from the state.” Outside of a small level of federal transportation funds used by the state for county bridges, counties have effectively one stable source of funding for repairing and replacing county bridges: property taxes. Against a backdrop of increased personnel costs,



A RURAL BRIDGE IN OTOE COUNTY IS BEING REPLACED WITH THIS BOX CULVERT UNDER CONSTRUCTION.

unfunded state mandates, and a looming property tax crisis, counties are not able to appropriate as much money as is needed to keep county bridges from being closed or having weight limits posted. A recent Platte Institute study highlighted the onerous burden Nebraska property taxpayers are already under today. The study found that (1) property taxes as a share of personal income in Nebraska account for 3.98% of income, compared to the national average of 3.49%; (2) property taxes per capita in Nebraska are \$1,584 per person, above the national average of \$1,390; and (3) local property taxes as a share of local own-source general revenue account for 50.8% in Nebraska, compared to the national average of 47.4%.

Noting the importance of sound roads and bridges to its members, the Nebraska Cattlemen wrote in a letter submitted as part of the interim study that “with agricultural producers already paying a disproportionate share of the property tax burden in the state, exploring other options to pay for the maintenance and repair of bridges is essential.” The lack of resources is so acute that Hall County has been forced to “depave” roads in favor of using its limited infrastructure funds for bridge construction and repair instead of for road resurfacing. “The farmers and people who take products to market got used to having a paved road. We ‘depaved’ that road because it was cheaper to maintain as a gravel road for us because we couldn’t take care of it from an asphalt perspective,” testified Hall County Engineer Steve Riehle at the Lincoln public hearing on L.R. 528. Lancaster County took the opposite approach and stopped replacing any of its bridges. “If we were on a standard rotation of replacing our 297 bridges during their life span, we would replace approximately six a year. For the last 25 years, we replaced approximately three a year; for the last two, we’ve replaced none,” testified Lancaster County Engineer Pam Dingman at the Syracuse public hearing.



A NANCE COUNTY BRIDGE COLLAPSES UNDER THE WEIGHT OF AN AGRICULTURAL TRAILER IN 2014.

Following the 2008 bridge inspection, Saunders County closed over 100 of its bridges.

Rural roads and bridges are not just important to farmers and ranchers. School districts all over the state have had to figure out how to bus students to and from school buildings during the school year. During the interim study’s Otoe County bridge tour it was conveyed to participants that Syracuse Public Schools had one bus route last year that must end at a rural bridge that cannot safely carry the bus’s weight and

then wait for students to walk across the bridge after being dropped off in the morning and picked up in the afternoon at the bridge site by a car pool organized by parents. At the Lincoln public hearing on L.R. 528, Lancaster County Engineer Pam Dingman testified that in 2013 a school bus dropped a wheel through one of the county's rural wood-deck bridge and it took a wrecker to remove the trapped bus from the bridge. In Saunders County, bridges within mail routes and school bus routes are given priority to open up first or the parties "figure out a way to redo the mail and bus routes to keep those running," testified Highway Superintendent Steve Mika at the Lincoln public hearing. "And that's another aspect of it. The schools and the post office are saying they're spending extra fuel doing their job due to having to drive around. And that's an unexpected cost to them."

Contributing to the problem is the sheer number of bridges in Nebraska, particularly on the state's Eastern side. "Saunders County has the most bridges of any county in the state, with over 400 bridges of 20-foot length or longer," testified Saunders County Highway Superintendent Steve Mika at the Lincoln hearing. "We also have a large number of bridges that are 20-foot and less, close to 200 of those. At one point in time, back in '08, shortly after that they came out with new regulations for the bridge inspections we had over 100 bridges closed due to the inspections." Otoe County Commissioner Tim Nelsen testified at the Syracuse public hearing that his county has 292 bridges over 20 feet in length and "of those, to date



A SPRAYER IS TOO HEAVY FOR A RURAL BRIDGE IN OTOE COUNTY.

there's 25 closed. We average about four to five bridges closed a year and we average about three bridges being opened." Saline County Highway Superintendent Bruce Filipi testified at the same hearing that, "in Saline County we have roughly 246 bridges over what they call 20 foot, and we have another, probably, 450 that are under 20 foot." Of the bridges over 20 feet in length, "30 percent of them deficient."

Replacing bridges is expensive and is dependent on the site and the width and length of the bridge needed to span the

channel. Smaller bridges average \$300,000-\$350,000 apiece according to Saunders County Highway Superintendent Steve Mika. Larger ones can be multi-million dollar affairs, as seen first-hand by the participants in the interim study's Cuming County tour when visiting the Beemer Road Bridge that washed out during the Elkhorn River flooding in 2010 and cut off access to the town of Beemer for several months. Pawnee Highway Superintendent Chris Rauner testified at the Syracuse Public Hearing that counties simply do not have enough resources to address maintenance need of all their bridges:

We're a really small county, very low population, high agriculture. And of all those bridges, I've got 20 that are a fracture critical structure which is just a type of bridge that's got a critical component that if it goes down, the whole bridge can be closed. I've got 95 that are...have a load posting, a weight limit sign with them. And 72 that are scour critical which is the degradation of the streams and everything is washing out. And of those, 14 have all three of those criteria. And it's...given that half a million dollars I get per year, it's going to take me a long time to deal with all these problems.

D. Environmental Conditions

A key contributing factor to the bridge problem is soil degradation. “Degradation is the result of straightening of streams from the Missouri River all through the farm community over the last 100 years, and what it's created is a deepening of our channels,” testified Engineer Mark Mainelli at the Lincoln public hearing. “If the main river drops 5-10 feet, all the tributaries and side drainages that come into that



DEGREDDATION OF WOLF CREEK IS EVIDENT AS THE CHANNEL HAS DROPPED SIGNICANTLY BELOW A LARGE CULVERT UNDER COUNTY ROAD “I”, WEST OF SYRACUSE IN OTOE COUNTY.

waterway are going to want to do the same thing. So farm fields, small, minor tributaries that come in, they're also going to want to drop.” The drop in a channel in turn leads to widening of the channel, “so where we may have had a 70-foot bridge before, now we have a 300-foot bridge,” testified Mainelli.

Underlying the problem is that Nebraska soil is of a loess variety—a yellowish, very porous sediment that easily erodes and can sometimes form vertical bluffs. The damage from this erosion spans beyond having to build longer bridges over wider channels—farmers are also losing large amounts of their fields, testified Mainelli at the West Point public hearing, for “every foot [of] a drop a channel has, you got four foot of bridge length, you got four foot of ag land lost, and you have tons and tons and tons of soil that pollutes our waterways.” Degradation occurs throughout Eastern Nebraska: “My problem is erosion, erosion, erosion,” testified Richardson County Highway Superintendent Scott Huppert at the Syracuse public hearing. “The environmental disaster that's happening, that's demonstrated in this, is real and it's costing us as Nebraskans a lot of money,” concluded Mainelli at final hearing held on L.R. 528.



EROSION ELIMINATES PRODUCTIVE NEBRASKA CROPLAND.

Part III: Available Resources

A. County Budget & Levy Limitations

Despite the recognition by county boards and highway superintendents of the urgent need to repair functionally obsolete and structurally deficient bridges, county governments simply do not have the resources in hand today to devote to such purposes. In fact, counties are subject to both property tax levy (resource) and budget (spending) limits. Pursuant to Nebraska Constitution, Article VIII, section 5, counties may not levy property taxes which exceed 50 cents per one hundred dollars of valuation without an affirmative vote of the people. This maximum levy is defined further by Nebraska Revised Statutes section 77-3442, which sets out an allocation process. Of the 50 cents that can be levied by counties, five cents may be used only to fund the county's share of functions performed by inter-local agreements, effectively limiting the levy for most purposes to 45 cents. This 45 cents can be reserved entirely for county uses or up to 15 cents may be allocated to miscellaneous districts, such as fire districts and townships. Counties do generate some revenue from fees, but the amount frequently does not cover the cost of the service provided in exchange for the fee. Lastly, counties sometimes receive inheritance tax revenue. The inheritance tax is paid by the heirs of the decedent to the county of residence of the decedent. The tax rate depends on the closeness of the relationship to the decedent. All proceeds go to the county general fund. Because annual collections can vary widely based upon the size of estates, estate planning, and other factors, many counties use inheritance tax for special projects, like bridges or jails, or to buy down levy rates. As for spending constraints, counties are allowed annual expenditure growth of 2.5 percent over the prior year's restricted funds, plus an additional 1 percent upon approval of 75 percent of the county board. Additional increases are subject to voter approval. Expenditures for bridge and infrastructure repair and maintenance fall within these county budget limits unless the repair is needed because of a natural disaster or other emergency.

Levy and spending limits prevent counties from making needed bridge repairs.

B. Nebraska's Use of Federal Transportation Funds for Bridges

The Nebraska Department of Roads currently makes available a portion of its federal transportation funds for Local Public Agency bridges in several different ways. Counties receive local and minor collector route funding, can apply for aid through the state's Major Bridge Program, and receive a share of buyback funding.

In recent history, Federal Highway bills included Highway Bridge Program (HBP) funds that were targeted for replacement and rehabilitation of bridges. HBP dollars have made up roughly 10% of the NDOR spending authority. These funds were distributed between the local and state systems, based on the percentage of deficient bridges on each system. A portion of these funds was sub-allocated for use on local

and minor collector routes, which are off the federal aid system. These sub-allocated funds have historically amounted to approximately \$3.8 million. The funding distribution historically has been as follows:

- Federal Spending Authority: \$250 million
 - Highway Bridge Program: \$25 million (10% of \$250 million Federal Spending Authority)
 - Local bridges: \$15 million (60% of deficient bridges are on the local system)
 - Bridges Off the Federal Aid System: \$3.8m

In 2011 NDOR entered into a Federal Funds Purchase Program (FFPP) agreement with Omaha, Lincoln, cities of the first class, and counties in which NDOR would buy the Federal HBP Funds normally used for bridges on the Federal Aid system. At the same time, NDOR established the Major Bridge Program for Large On-Federal-Aid-System bridges. The Department recognized that with the FFPP a Local Public Agency with a long bridge would have difficulty funding these larger structures. NDOR created selections and funding criteria for this situation and has directed \$2 million per year for the first selection period of 2014 through 2017. At this time, two of the projects are nearing completion and the four remaining are in development. The next selection will occur this coming winter. Beginning in 2013, NDOR programmed and delivered projects that used the FFPP funds. The first payment to the local agencies occurred in March, 2014.

In 2012 MAP-21 eliminated the Highway Bridge Program funding category and only provided the continuation of the sub-allocated amount for off-federal-aid system bridges. The remaining funds merged into other Federal Aid spending categories. These funds are eligible for use on bridges but not targeted for that use. NDOR entered into a supplemental agreement that provided for providing 10% of the Federal Spending Authority to the Local Public Agency for use on bridges.

Distributions of federal funds by NDOR (\$ millions)	FY 2013	FY 2014
Federal Spending Authority (\$ millions)	\$256.60	\$259.96
10% (per Supplemental Agreement)	\$25.66	\$26.00
60% Local Share	\$15.40	\$15.60
Less Off Fed Aid System (Bridge projects still funded with Fed \$)	(\$3.77)	(\$3.78)
Less Fracture Critical Bridge Inspections for Local Bridges	(\$1.41)	(\$0.20)
Less Under Water Bridge Inspections for Local Bridges	(\$0.50)	(\$0.0)
Less Quality Assurance for Local Bridge Inspections	(\$0.36)	(\$0.33)
Sub Total Available for Purchase	\$9.36	\$11.29
80% Buy Out Ratio	\$7.49	\$9.03
Less State Funds Major Bridge Program (MBP)	\$2.00	\$2.00
Buy Out Payment	\$5.49	\$7.03

C. County Bonding Authority for Infrastructure

County bridge construction and repair may be funded by bonds of various types. According to Nebraska Revised Statutes sections 23-397 and 23-398, during a general or special election, a proposal may be submitted to and approved by the voters of the county seeking to issue and sell general obligation bonds. Such election may be called either by a resolution of the county board or upon a petition submitted to the county board calling for an election, but in either case voter approval is required before bonds can be issued.

According to section 39-856, any county may issue revenue bonds to construct or to aid in the construction of an interstate bridge. Pursuant to Section 39-865, no vote of the people is required if the county board determines by a majority vote of its members to dispense with the election.

According to Section 39-835, boundary bridges can likewise be funded by bonds: “Any county, township, precinct, city or village in the State of Nebraska may issue bonds to construct or to aid in the construction of a highway bridge across any boundary river of the state.” In this situation, Section 39-836 requires that the question of bonding be submitted to voters at a general or special election. Such bonds cannot exceed 3.5% of taxable value of county, township, precinct, city or village.

According to Section 66-4,101, a county, city or village may issue bonds for the construction of roads and streets by pledging funds received from the Highway Allocation Fund.

Finally, a county or city can authorize bonds to aid in the construction of any railroad or other work of internal improvement in an amount up to 3.5 percent of the taxable valuation of the county or city. The question must be submitted to voters under section 10-401. A bridge across a river is a work of internal improvement, and county bonds voted to erect it are valid even though the entire bridge is within limits of county (*State ex rel. Peterson v. Keith County*, 16 Neb. 508, 20 N.W. 856 (1884)).



A JOHNSON COUNTY BRIDGE SPANS A CHANNEL WITH STEEP VERTICAL BANKS.

Part IV: Bridge Site Visits

"I mean, it's getting crazy out there. We need to do something. I don't know what the answer is. In my office, I get more farmers coming and screaming and yelling at me of why can't we do something about these bridges?" - Richardson County Highway Superintendent Scott Huppert

*Tour Notes from Committee Chair
Sen. Annette Dubas:*

In order to develop a keener understanding of the magnitude of the problems our counties are facing, the Nebraska Legislature's Transportation and Telecommunications Committee participated in a tour of county owned bridges. The tour included rural bridges in Cuming and Otoe Counties. Participants included county supervisors and commissioners, road superintendents and county road crew employees, engineers, state senators and many members of the print, radio, and television media.



THE TRANSPORTATION & TELECOMMUNICATIONS COMMITTEE AND MEMBERS OF THE OTOE COUNTY BOARD VISITED THIS AGING RURAL BRIDGE IN OTOE COUNTY.

This tour gave the committee a great opportunity to see the condition of the structures, the changes from erosion and other environmental issues that are presenting ongoing challenges and the negative impact to rural residents if there are no viable solutions. These bridges are necessary structures to ensure timely delivery of our agricultural products as well as transporting our young people to school.

We saw an example of the number of waterways that crisscross our state. The prevalence of these features explains, at least in part, why Nebraska ranks 16th in the nation for number of bridges. We also rank in the top five for states with the most miles of waterways. This only magnifies the need for bridges and culverts in every county across our state. Otoe County has approximately 300 bridges with about 25 to

During the 2014 interim, the Legislature's Transportation and Telecommunications Committee visited bridges in Otoe and Cuming Counties.

30 closed at any given time. Those bridges are inspected at least once every two years to determine if they can carry the legal weight. If it cannot bear that weight the bridge is posted with the capacity it can bear or closed if it is deemed unsafe. During 2008 Saunders County closed over 100 bridges, which added 4 to 12 additional miles to travel for residents, school buses and mail carriers to get to their destinations. Walking over and under the

bridges gave committee members a chance to see structures that could barely span the widening waterways, rusted girders, rotting timbers and concrete that is breaking apart. The problem is exacerbated because the majority of these bridges were all built around the same time, therefore they are all reaching the end of their service life in the same time frame. That puts added financial pressures on county officials. They shared that replacing just one of these structures runs into the hundreds of thousands of dollars.



THE TRANSPORTATION AND TELECOMMUNICATIONS COMMITTEE VISITED THIS BRIDGE SOUTH OF BEEMER THAT WASHED OUT DURING THE 2010 ELKHORN RIVER FLOOD, WHICH CUT OFF ACCESS TO THE TOWN FOR SEVERAL MONTHS.



THE DEPOSIT OF LOESS SOIL UNDER NEBRASKA IS VERY GOOD FOR CROP PRODUCTION, BUT IS EASILY ERODED.

Part V: Conclusions

1. An alarming number of our rural bridges—nearly 1 in 5—are structurally deficient.

According to the July 2014 TRIP report, Nebraska has the seventh highest rate of structurally deficient rural bridges in the country—19%. A structurally deficient bridge is one that is in relatively poor condition, or has insufficient load carrying capacity for modern design loadings. While not necessarily unsafe, these bridges may have limits posted for speed and weight.

2. Environmental factors and modern vehicles are stressing rural bridges, many of which were built in the first half of the twentieth century.

Much of Nebraska's infrastructure is simply old. Add in environmental factors like channel deepening and erosion and it is easy to see why bridges have a natural life cycle and need repair or replacement. There is an additional contributing factor: modern vehicles. Agricultural equipment (such as grain carts and combines), semi-trailers, school busses, and ambulances are all heavier today and put great stress and concentrated weight on bridges, that is if the bridge is still wide enough for the vehicle to use.

3. County roads and bridges are the backbone of our state's economy and quality of life.

Rural infrastructure provides mobility and connectivity for hundreds of thousands of rural Nebraskans. County roads and bridges are crucial links from home to school, ranch to feedlot to packing house, from the manufacturing plant to the warehouse to the store, from the corn field to the elevator, from the Interstate to the wind turbine site, and from urban areas to deer blinds and fly fishing streams.

4. Nebraska's counties do not have adequate resources for needed bridge repairs.

Strained county budgets and limited taxing options have prevented counties from making needed investments in county infrastructure. Outside of a small use of federal transportation funds by the state for local bridges, counties have effectively only one stable source of funding for repairing and replacing county bridges: property taxes. Against a backdrop of increased personnel costs, unfunded state mandates, and an already above average property tax burden per capita, counties are not able to appropriate as much money as is needed to keep county bridges from being closed or having weight limits posted.

5. To avoid an undue burden on property taxpayers, Nebraska must provide more support and resources to counties in order to maintain and replace county bridges.

Nebraska's rural economy is unquestionably the key to the health of the overall Nebraska economy. Thus deteriorating infrastructure is not just a matter of local concern. A typical Nebraska county receives bridge funds from the state's allocation of federal transportation funds of less than one hundred thousand dollars per year to assist with bridge repairs that cost between several hundred thousand to several million dollars, per bridge. **Nebraska state policy makers must provide greater financial resources to counties for this specific purpose.**

Part VI: Media Coverage

40,000 to 60,000 of Nebraska's older county bridges need repairs, but funds limited

Omaha World-Herald, September 24, 2014

By David Hendee

WEST POINT, Neb. — Nebraska's powerhouse agricultural economy has thousands of weak links that threaten to limit its potential and reduce the quality of life for rural residents, state officials were told Tuesday.

The problem is an estimated 40,000 to 60,000 county bridges — designed from the 1930s to 1960s — that are showing significant signs of wear and tear from rampaging streams and traffic loads that the original builders could not have imagined.

State and county officials got firsthand views of the problem during a tour of rural Cuming County organized by the Better Nebraska Association. The group is an association of road contractors, engineers, material suppliers and others advocating for appropriate funding for infrastructure construction and maintenance.

The touring officials saw bridges that barely spanned degraded channels and wide ravines. They saw rusting steel girders and deteriorating concrete.

Nineteen percent of Nebraska's rural bridges were rated as structurally deficient — the seventh-highest rate in the nation — in a report this summer by TRIP, a national nonprofit transportation group based in Washington, D.C.

The bridges are considered safe but might not adequately accommodate current traffic volumes and vehicle sizes and weights. Some also might have limits for speed and weight.

The report rated only the 15,285 bridges longer than 20 feet. It did not take into account at least 40,000 shorter spans.

State Sen. Annette Dubas of Fullerton, who attended the tour, said the condition of rural bridges doesn't command public attention but is critically important.

"Almost all of these bridges were put in at the same time, and all are needing attention now," she said.

Dubas said that counties are replacing bridges with culverts where possible but that the financial challenges remain steep.

"Our local officials are taking the responsibility, but the state has some responsibility in the whole mix, too," she said.

Dubas is chairwoman of the Legislature's Transportation and Telecommunications Committee. The panel opens hearings next week on the condition of county bridges and funding issues.

Dubas acknowledged that the Legislature's decision a few years ago to eliminate aid to cities and counties in order to balance the state's budget had a hard impact on counties, especially those with limited property tax revenue.

“We didn’t make it easier for our local governments to operate,” she said. “I think that’s an issue that should be revisited.”

The Build Nebraska Act drives some road and bridges funding to cities and counties.

The 2011 state law earmarks a quarter cent of the state’s 5.5-cent sales tax into a fund for new highways and bridges. The measure is expected to generate \$1.3 billion in new revenue through 2033 — or about \$65 million a year — for road and bridge projects.

Sixty percent of the proceeds go to high-priority projects; 25 percent is targeted for state expressways. The remaining 15 percent is split between Nebraska cities and counties for local projects.

County officials are aware of the need for safe county roads and bridges, said Larry Dix, executive director of the Nebraska Association of County Officials.

“We understand the burden we have,” Dix said in an interview during the tour. “We’re almost to the point of no return with replacing and repairing infrastructure with all the pressure it puts on property taxes. We know it’s a problem. We’re going to have to fix it, but there’s not the money to do it right away.”

John Ross of Bancroft, a Cuming County supervisor, said semitrailer truckers regularly alert the county of problems hauling feed to farms or harvested grain out to market because of deficient bridges.

“They come to us and say they’ve got no way to get to this farmer,” Ross said.

Ross said that county officials try to update maps and pinpoint problem bridges but that documenting bridges’ weight rating, length and width takes time.

The U.S. Department of Agriculture reported in 2010 that rural transportation systems are a key factor in food costs. Detours caused by closed or weight-restricted bridges increase farm transportation costs. The study found that farmers could lose five cents per bushel for each detoured load of grain.

It takes more than an estimated 2.2 million semitrailer loads — assuming 26 tons of grain per load — to haul Nebraska’s production of corn, soybeans, wheat, sorghum and other similar crops from harvested fields to storage bins on farms or in towns, according to a Nebraska soybean industry study.

Bridges sometimes fall apart. Three timber bridges built in the 1930s and ‘40s collapsed in south-central Nebraska’s Adams County in 2003. County officials issued a stern warning to drivers of heavy trucks and machinery to adhere to posted weight limits.

Mark Mainelli, president of a Lincoln civil engineering company that works with about a third of Nebraska’s counties on bridge issues, said the continued degradation of stream beds and aging bridges couple to make repairs and replacement more expensive.

“It’s looming,” he said. “Many of these bridges are coming to a premature end of their life span.”

The tour continues Wednesday in Otoe County.

Nebraska's rural bridges are in desperate need of repairs, officials say

Lincoln Journal Star, September 25, 2014

By Algis J. Laukaitis

SYRACUSE -- Bob Engelbrecht grew up with the old bridge that links his farm with his dad's up the road.

When he as a boy, the bridge was shorter and spanned a shallower Wolf Creek.

"It's gotten a lot deeper," Engelbrecht said Wednesday.

Today, Wolf Creek resembles a small canyon with steep banks that look like cliffs. Flood waters flow under the bridge through a metal culvert big enough to squeeze in a pickup.

And Engelbrecht, 63, worries that if nothing is done to fix the bridge and the bank erodes more, the span will cave in.

"It would be a real headache if the bridge would ever go out," he said.

Engelbrecht and his dad, Howard, would have to drive an extra five miles or more on gravel roads to buy supplies and get their crops to town, and they'd be unable to get to farm equipment at each other's places.

The bridge between their farms is far from the only one in Otoe County in bad shape.

"There are about 300 bridges in Otoe County, and 25 to 50 bridges are closed at any time," said Otoe County Commissioner Tim Nelsen. "We are fighting a losing battle."

Nelsen was a part of a media tour on Wednesday that called attention to the growing problem of deteriorating county bridges in Nebraska. A similar tour was held in Cuming County on Tuesday.

"What you're seeing here, you're going to see in all 93 counties," said Larry Dix, executive director of the Nebraska Association of County Officials.

A recent report by TRIP, a national nonprofit research group based in Washington, D.C., found that 19 percent of Nebraska's rural bridges were rated structurally deficient in 2013, the seventh highest in the nation.

Nebraska has about 15,500 bridges owned by the state, counties and cities. It has the 16th most bridges in the nation.

Every one of those bridges is inspected once every two years, and inspectors determine how many tons each can support safely.

"If a bridge can't carry a legal load, we will post it," state bridge engineer Mark Traynowicz said during a recent interview. "Our bridges are safe."

The TRIP report needs to be put in perspective, he said.

"They count a 20-foot bridge in Nebraska the same as the Golden Gate Bridge or any length of bridge, and that is what makes Nebraska look bad," Traynowicz said.

The Legislature's Transportation and Telecommunications Committee, chaired by Sen. Annette Dubas of Fullerton, is doing an interim study to address the county bridge infrastructure problem. Hearings are scheduled for Syracuse, West Point and Lincoln in the coming weeks.

One of the key study goals, Dubas said, is to find a way to get more financial help to counties to fix deteriorating bridges. She said the problem has been getting worse since the Legislature eliminated state aid to counties in 2012.

"The state needs to be a partner with local government," Dubas said Wednesday.

All 93 Nebraska counties must share the \$26 million in federal money that comes to the state to help repair rural roads and bridges.

Otoe County's share this year was \$265,000, which officials said is not enough to address the problem. Otoe County Commissioner Nelsen said the price tag for replacing the bridge near the Engelbrecht farms is estimated at \$800,000 alone. The county plans to use inheritance tax money to cover some of the cost, he said, but the county's total annual road budget is about \$1 million.

The tour of bridges was held on the same day Gov. Dave Heineman praised Nebraska's highway system, which was ranked second in the nation for overall performance and cost-effectiveness in a report by the Reason Foundation, a think-tank based in Washington, D.C.

Nebraska has ranked No. 2 overall two years in a row, and Nebraska has been in the top 10 for several years. This year, only Wyoming ranked higher overall.

Dubas and Sen. Dan Watermeier of Syracuse joined Otoe County officials on the tour coordinated by the Better Nebraska Association, a group of contractors, engineers, suppliers and the trucking industry.

Spokesman Chris Hawkins said fixing all the rural bridges across the state would cost \$1 billion to \$2 billion, and that doesn't count bridges less than 20 feet in length.

Keeping Nebraska's highways in good condition is important, Dubas said, but county bridges are vital to rural areas, especially to agriculture and thus to the state's overall economy.

On a stop near the town of Otoe, Nelsen pointed out two bridges that can no longer support the weight of a school bus. Students living on farms north of the bridge have to carpool to another bridge on a main road leading to town, walk across the bridge and then board a school bus, he said.

"It's a commissioner's nightmare to have somebody go over a bridge in poor condition and be killed," Nelsen said. "It's our worst nightmare."

Otoe County Describes "Losing Battle" During Better Nebraska Association Bridge Tour

Big Apple Radio, September 25, 2014

State Sen. Annette Dubas and local leaders stressed the importance of funding sources for the state's rural roads and bridges during an Otoe County tour on Wednesday morning.

Dubas, chairman of the Legislature's Transportation Committee, introduced a resolution authorizing a study of rural road conditions.

She reacted to the first stop in Otoe County, where high water is undermining a giant culvert beneath old Highway 2 between Syracuse and Unadilla.

Dubas: "This certainly makes the statement for why we need to have this study and why the state needs to be much more aware of the issues that county government officials are having to deal with as far as taking care of their infrastructure."

Otoe County Commissioner Tim Nelsen agreed with Dubas that a long-term funding solution is needed.

Nelsen: "In Otoe County alone we have about 290 bridges, of which 24 are closed at the present time. We generally will open two or three bridges every year and we end up closing four or five bridges a year."

The federal government allocates \$25 million to Nebraska and that money is divided between 90 counties depending on their number of bridges.

Up to 27 percent of the state's 60,000 bridges are obsolete or structurally deficient.

Nelsen said counties are fighting a losing battle.

Nelsen: "The number of bridges we're closing is greater than the number we're opening each year. We're not going to be able to continue on this slippage rate and still maintain the county roads. We have to figure out a long-term funding mechanism for the county."

State Sen. Dan Watermeier, also a member of the transportation committee, joined the tour.

He said the study will provide information lawmakers need in the search for solutions.

Watermeier: "I can't say that we're going to be, necessarily, looking at appropriations in this next legislative session, but we're certainly going to be actively looking at all our options.

It's going to come down to partners with the federal government."

The tour also included the county's longest bridge near roads I and 24 and an ailing bridge between Otoe and Avoca.

Rural Bridges In Nebraska In Bad Shape

KOLN/KGIN 10/11 news, September 25, 2014

Many of us drive on bridges every day and don't think twice about how structurally sound they are. But according to a report by TRIP, a national transportation research group, Nebraska ranks 7th for the condition of its rural bridges.

A group of local leaders toured three rural bridges in Otoe County on Wednesday to get a hands-on look at the problem.

"We're in desperate need of help," said Otoe County Commissioner Timothy Nelsen.

Nelsen knows how bad these bridges are.

"It's the commissioner's worst nightmare with bridges that are in poor condition having somebody hurt or killed on a bridge," said Nelsen.

A small mix of state senators and local leaders are seeing this problem first hand.

"This is infrastructure, that's a basic responsibility of government, we're talking about farm to market roads that definitely impacts our economy from one end of the state to the other," said state senator Annette Dubas from Fullerton.

The problem is, there's not enough money in the budget to help fix all 300 bridges in Otoe County.

"There's no way you can tax your way out of it," said Nelsen.

Also adding to the intensity of the problem is a lot of the bridges were built around the same time, over 100 years ago.

"We're facing the fact that all of them are needing replaced right now, there's really no ability to stagger things which makes it even more of a pressing issue because so much needs to be done right now," said Dubas.

Many of the problems the rural bridges face in Otoe County is the ag land degradation. But without any room in the budget, fixing these bridges is a bust. "It's a losing battle," said Nelsen.

"Often you drive underneath them and you want to drive in another direction," said Mark Mainelli, president of Mainelli Wagner and Associates.

Senator Dubas says one of the ways to get these bridges repaired is to bring more money back into Nebraska counties. State senators voted to cut state aid to county governments in 2011.

In Nebraska, there's over 2,000 bridges in the worst stage which is considered structurally deficient.

State officials take look at county bridges

West Point News, September 25, 2014

State and county officials saw some of what Cuming County has to offer Tuesday during an afternoon visit.

Their main objective was to see and hear about a problem several Nebraska counties are facing – how to find money to replace aging bridges.

The tour was organized by the Better Nebraska Association, which is made up of engineers, road contractors, material suppliers and others.

As noted in an earlier West Point News story, almost 20 percent of the bridges in Nebraska are structurally deficient and in need of repair or replacement, according to a recent report from TRIP, a national transportation research group.

In Cuming County, that percentage is closer to 25 percent, based on the report. That has forced county officials to juggle finances in an effort to update and upgrade some of the problem bridges in the county.

In Cuming County, 41 of the 401 bridges are structurally deficient, and another 60 are functionally obsolete. That doesn't mean the bridges are unsafe to drive over, said Mark Mainelli, an engineer and President of Mainelli, Wagner & Associates, Inc.

Officials, experts address road and bridge woes in Otoe County

Nebraska City News-Press, Syracuse Journal-Democrat, September 26, 2014

By Sandy Parmenter

In a state and county already burdened with a multitude of substandard roads and bridges, news of impending cuts to the Highway Trust Fund has local officials scrambling to find ways to continue to maintain roads and bridges and make repairs or replacements as the need arises.

Senators, lobbyists, county officials and representatives, people from the fields of engineering and construction, and members of the media met in Syracuse on Sept. 24 to take a tour of just a few of the bridges in Otoe County. The tour was intended to highlight the need to get more of the money earmarked for roads and bridges down to the county level, where it is desperately needed.

Nebraska receives approximately 25 million from the federal government and splits that between 90 of its 93 counties. Otoe County's portion of that is about \$265,000, and Otoe County has over 300 bridges. Culverts alone cost \$6,000-\$10,000 each, and bridge replacements can easily start at \$60,000 and cost up to \$1,000,000 or more.

According to Otoe County Commissioner Tim Nelsen, "at any one time we may have 25-50 bridges in Otoe County closed." He elaborated later that they might manage to open three bridges in a year, but would also close another four or five in that same period. "We're fighting a losing battle," Nelsen said, "we can't scratch the surface of what needs to be done."

Senator Annette Dubas, Chairperson of the Transportation and Telecommunications Committee, introduced a resolution to perform an interim study to examine issues surrounding financing the maintenance and replacement of county bridges and she and Senator Dan Watermeier, another member of that committee, paid close attention to what the local officials were showing them and telling them about the dire need for repairs or replacement to area bridges.

Both were flabbergasted when Nelsen spoke about a whole township that has to carpool their children to local bridges and let the children walk across the bridges to board the school bus because the bridges aren't safe for the buses to cross.

Members of the tour were shown what happens when a stream or river decides to change its path, and the tendency of the local Loess soil to collapse and slough away. At the first bridge on the tour, that sloughing was obvious and a huge hole had appeared.

The second bridge toured was an example of a replacement bridge. It cost \$900,000, of which the County paid \$200,000, and the rest came from FEMA money. Nelsen told the group that when the bridge was first built in 1888, it was 24 feet long, and the current replacement was 220 feet long, a prime example of the changes wayward flow and erosion and sloughing could create.

The final bridge was made up of three sections, the first being built around 1880, the second in the 50s, and the last around 1990. The whole structure was unsound and needed replacement, but Jon Brinkman, Lead Supervisor of Roads, admitted that at an estimated replacement cost of \$400,000 to \$550,000, it was not included in the one-year plan. Brinkman said there were currently around six bridges in the one year plan, some of which would get federal funding, and some would not. Bridges have to be prioritized and work done when the money is there.

The politicians discussed ways to bring all of the information they received on the trip to state and national attention. A further gathering was planned for Sept. 29 at 1:30 p.m. in the Syracuse Public Library, with the hope that Otoe County residents who were directly affected by the condition of the county's bridges would come share their stories and information.

Legislative Committee Hears Testimony on Bridge Needs

KWBE, October 8, 2014

By Doug Kennedy

It's a problem many counties in Nebraska face. How to replace hundreds of substandard county bridges, to ensure farmers and others can get products to market. The issue all boils down to money, or lack of it.

The Nebraska Legislature's Transportation Committee heard testimony on an interim study of the problem, Tuesday.

Saunders County Highway Superintendent Steve Mika says his county has over 400 bridges of 20 feet or longer, the most of any county. More than 100 of them had to be closed following new bridge inspection rules issued in 2008.

Mika says the county has slowly been able to replace bridges, but still has 19 closed on major county roads, about a dozen on minimum maintenance roads. In some cases, bridges can be replaced with large box culverts.

Executive Director for the Nebraska Association of County Officials, Larry Dix says counties do as much as they can to keep bridges and roads open, at a time when public sentiment against higher property taxes is growing.

Nebraska Farm Bureau Governmental Relations Vice President Jay Rempe says there's no easy answer. He said having a good infrastructure is critical for the agriculture industry in Nebraska.

Rempe says the Farm Bureau continues to hear from members about bridges being closed and the difficulty they pose.

Mark Mainelli of Mainelli-Wagner Engineers is an engineering consultant for several counties. He estimates the cost to replace or upgrade all substandard bridges could run over two-billion dollars in Nebraska.

Mainelli says a big problem is degradation of river or stream channels and the ultimate effect on counties downstream, who pay a higher cost for bridge replacements.

Shaky future for Nebraska bridges

Lincoln Journal Star Editorial, October 6, 2014

Credit the Better Nebraska Association for giving state and county officials a first-hand look at some of the state's problem bridges.

Tours organized by the group in Otoe and Cuming counties drew attention to the difficulty road officials face in keeping pace with the need to repair and replace bridges that might have been built half a century or more ago.

Nebraska has a bigger chore than many of its neighbors. Among all the states, it has the 16th most bridges.

It's also falling behind. Governing.com reported this summer that based on Federal Highway Administration data Nebraska is one of nine states that posted an increase in the number of structurally deficient bridges since the dramatic collapse of a bridge in Minneapolis that killed 13 people in 2007.

Admittedly, the term "structurally deficient" does not equate to dangerous. State Bridge Engineer Mark Traynowicz pointed out that bridges are inspected every two years. Signs are posted if a bridge cannot carry a legal load.

Nonetheless, deteriorating bridges are a drain on the state's economy. A 2010 study by the U.S. Department of Agriculture found that farmers lose about five cents per bushel when they have to detour to deliver grain.

The state of Nebraska stepped up to do its part when it approved the Build Nebraska Act in 2011 that provides new funding by designating a quarter-cent of the state sales tax for highways and bridges.

The federal government, however, increasingly has been an unreliable partner. Congress has not boosted the federal gas tax since 1992, and federal funding has not kept up with rising costs.

The Highway Trust Fund almost ran out of money this summer before Congress approved a temporary fix that injected \$10.8 billion into the trust fund. The money should cover road-building needs through May of next year.

(It should be pointed out that about 40 percent of the funding was borrowed money. So add the cost of interest to the short-term fix.)

Otoe County Commissioner Tim Nelsen said that about 25 to 50 of the 300 bridges in the county are closed at any one time.

“We are fighting a losing battle,” Nelsen said. He added that a county commissioner’s worst nightmare is that someone might be killed because of a bridge in poor condition.

Congress needs to get its priorities in order. Spending on public infrastructure is at a 20-year-low in the United States as a percentage of GDP. The battle to maintain bridges is one that Nebraska and other states cannot afford to lose.

Part VII: Sources & Appendix

“Property Taxes in Nebraska: Past, Present, Future”, Platte Institute (October 2014)

<http://www.platteinstitute.org/Library/DocLib/Property-Taxes-in-Nebraska-Past-Present-and-Future.pdf>

“Rural Connections: Challenges and Opportunities in America’s Heartland”, TRIP (July 2014)

http://www.tripnet.org/docs/Rural_Roads_TRIP_Report_July_2014.pdf

“Technology, Teamwork and Stewardship Vital in Meeting 2050 Global Food Need”, P. Stephen Baenziger, University of Nebraska–Lincoln Professor of Agronomy and Horticulture

<http://sdn.unl.edu/technology2012>

Hearing Transcripts, Nebraska Legislative Resolution 528 (2014)

http://www.nebraskalegislature.gov/bills/view_bill.php?DocumentID=23593

ONE HUNDRED THIRD LEGISLATURE

SECOND SESSION

LEGISLATIVE RESOLUTION 528

Introduced by Dubas, 34.

PURPOSE: The purpose of this resolution is to study issues surrounding financing the maintenance and replacement of county bridges. This study shall include, but not be limited to, an examination of the following issues:

- (1) The overall condition of county bridges;
- (2) Whether adequate resources exist to maintain and replace county bridges; and
- (3) Available and potential funding sources, financing tools, and contracting options for maintenance and replacement of county bridges.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE ONE HUNDRED THIRD LEGISLATURE OF NEBRASKA, SECOND SESSION:

1. That the Transportation and Telecommunications Committee of the Legislature shall be designated to conduct an interim study to carry out the purposes of this resolution.

2. That the committee shall upon the conclusion of its study make a report of its findings, together with its recommendations, to the Legislative Council or Legislature.



3000 Connecticut Ave., NW, Suite 208 • Washington, DC 20008 • Phone: (202) 466-6706 • tripnet.org

For Immediate Release

Thursday, July 10, 2014

Report available at: www.tripnet.org

Contact: [Rocky Moretti](mailto:Rocky.Moretti@tripnet.org) (202) 262-0714

[Carolyn Bonifas Kelly](mailto:Carolyn.BonifasKelly@tripnet.org) (703) 801-9212

TRIP office (202) 466-6706

NEBRASKA’S RURAL BRIDGES AMONG MOST DETERIORATED IN U.S.; STATE’S RURAL TRANSPORTATION SYSTEM IN NEED OF MODERNIZATION TO BETTER SUPPORT ECONOMIC GROWTH

Eds: This report contains data for all 50 states for rural fatality rates, the number of rural fatalities, the percentage of rural roads in poor condition and the percent of deficient rural bridges.

Washington, D.C. - America’s rural heartland is home to nearly 50 million people, and its natural resources provide the energy, food and fiber that support the nation’s economy and way of life. But, a new report finds that the nation’s rural transportation system, which is critical to the nation’s booming agriculture, energy and tourism sectors, is in need of modernization to address deficient roads and bridges, high crash rates and inadequate connectivity and capacity. The report, “[Rural Connections: Challenges and Opportunities in America’s Heartland](#),” was released today by [TRIP](#), a national non-profit transportation research group based in Washington, D.C. It defines Rural America as counties that lack an urban area of at least 50,000 in population or lack a large commuting flow to an urban county.

	STATE	Percent Rural Roads in Poor Condition	STATE	Percent Deficient Rural Bridges	STATE	Fatality Rate Rural/All Other Roads
1	Connecticut	35	Pennsylvania	25%	South Carolina	3.99 / 0.68
2	Rhode Island	33	Rhode Island	25%	Florida	3.35 / 0.95
3	West Virginia	33	Iowa	22%	West Virginia	2.8 / 0.99
4	Hawaii	32	South Dakota	21%	Texas	2.76 / 1.03
5	Michigan	32	Oklahoma	20%	Arkansas	2.71 / 0.87
6	Kansas	30	Hawaii	19%	Tennessee	2.68 / 0.95
7	Oklahoma	29	Nebraska	19%	Arizona	2.66 / 1.11
8	Maine	28	North Dakota	17%	Kentucky	2.64 / 0.78
9	Mississippi	25	Maine	16%	California	2.61 / 0.63
10	Arkansas	23	Louisiana	16%	Pennsylvania	2.6 / 0.91
11	Missouri	23	Missouri	15%	Oklahoma	2.52 / 0.92
12	Washington	22	New Hampshire	15%	Hawaii	2.48 / 0.89
13	New Mexico	21	Mississippi	14%	North Carolina	2.44 / 0.64
14	Alabama	21	North Carolina	14%	Montana	2.4 / 0.95
15	Vermont	21	New Jersey	14%	North Dakota	2.33 / 0.77
16	Alaska	20	Wyoming	14%	Kansas	2.26 / 0.74
17	New Hampshire	18	New York	14%	South Dakota	2.21 / 0.74
18	Virginia	18	Michigan	14%	Ohio	2.15 / 0.63
19	Wisconsin	17	West Virginia	13%	New York	2.13 / 0.59
20	Pennsylvania	17	California	13%	Indiana	2.09 / 0.56

The report found that rural bridges in Nebraska have significant deficiencies. In 2013, 19 percent of Nebraska’s rural bridges were rated as structurally deficient, the seventh highest rate in the nation.

The TRIP report also found that traffic crashes and fatalities on rural roads in Nebraska are significantly higher than all other roads in the state. In 2012, non-Interstate rural roads in Nebraska had a traffic fatality rate of 1.67 deaths for every 100 million vehicle miles of travel, more than two-and-a-half times higher than the fatality rate on all other roads in Nebraska of 0.65 deaths per 100 million vehicle miles of travel.

“Nebraska’s 93 counties are mindful of the need for safe county roads and bridges,” said Larry Dix, executive director of the Nebraska Association of County Officials. “Counties must make sure roads are safe for kids to travel to school and for agricultural products to get from farm to market. It has become all too evident that an adequate funding source needs to be established so that bridges can be updated and modernized. Together with the State we must resolve this funding issue for the safety of children and the prosperity of future generations of Nebraska farmers and ranchers.”

“More than 46 million Americans live in rural and less densely populated areas of the country where their primary mode of transportation is a personal vehicle,” stated Kathleen Bower, AAA Vice President, Public Affairs. “Motorists expect and deserve safe, well maintained roads and bridges no matter if they are traveling on the Interstates or rural roads. Congress must act quickly to provide a sustainable solution for the federal Highway Trust Fund to ensure that states can continue to make necessary infrastructure investments that will benefit all travelers.”

The report also finds that the development of major new oil and gas fields in numerous areas as well as increased agricultural production are placing significantly increased traffic loads by large trucks on non-Interstate rural roads, which often have not been constructed to carry such high load volumes. The average travel per-lane mile by large trucks on major, non-arterial rural roads in the U.S. has increased by 16 percent from 2000 to 2012.

“America’s rural transportation system is an integral component to the success and quality of life for U.S. farmers and ranchers,” said Bob Stallman, president of the American Farm Bureau Federation. “Adequate roads and bridges are necessary to deliver our agricultural bounty to markets at home and abroad. As we see additional growth and opportunities in rural America, we must work together to take advantage of those opportunities and to ensure that infrastructure supports and enhances our rural communities.”

The Federal surface transportation program is a critical source of funding for rural roads. But a lack of adequate funding of the federal program may result in a significant cut in federal funding for the country’s roads, highways and bridges. The impact of inadequate federal surface transportation revenues could be felt as early as this summer, when the balance in the [Highway Account of the Federal Highway Trust Fund](#) is expected to drop below \$1 billion, which will trigger delays in the federal reimbursement to states for road, highway and bridge projects, which would likely result in states delaying numerous projects.

Nationwide federal funding for highways is expected to be cut by almost 100 percent from the current investment level for the fiscal year starting October 1, 2014 (FY 2015) unless Congress provides additional transportation revenues. This is due to a cash shortfall in the Highway Trust Fund as projected by the [Congressional Budget Office](#). In Nebraska, this could mean a cut of \$288 million for highway and transit improvements if a lack of adequate revenue into the Federal Highway Trust Fund is not addressed by Congress.

“So many of our industry’s manufacturing facilities and their workers are located in rural America, where they depend on safe and efficient roads for their livelihoods,” said Rick Patek, group president of Astec Industries and 2014 chairman of the Association of Equipment Manufacturers (AEM). “As Congress weighs how to extend the Highway Trust Fund, they would be well-advised to read this report and consider the effects of their actions on rural roads.”

The TRIP report finds that the U.S. needs to adopt transportation policies that will improve rural transportation connectivity, safety and conditions to provide the nation's small communities and rural areas with safe and efficient access to support quality of life and enhance economic productivity. To accomplish this, the report recommends modernizing and extending key routes to accommodate personal and commercial travel, implementing needed roadway safety improvements, improving public transit access to rural areas, and adequately funding the preservation and maintenance of rural transportation assets.

“The safety and quality of life in America's small communities and rural areas and the health of the nation's economy ride on our rural transportation system. This backbone of the heartland allows mobility and connectivity for millions of rural Americans. The nation's rural roads provide crucial links from farm to market, move manufactured and energy products, and provide access to countless tourist and recreational destinations,” said Will Wilkins, executive director of TRIP. “But, with long-term federal transportation legislation stuck in political gridlock in Washington, America's rural communities and economies could face even higher unemployment and decline. Funding the modernization of our rural transportation system will create jobs and help ensure long-term economic development and quality of life in rural America.”



"Working for Nebraska beef producers - pasture to plate."

October 6, 2014

Transportation and Telecommunications Committee
Nebraska Legislature
Room 1110, State Capitol
Lincoln, NE 68508

Chairman Dubas and Members of the Transportation and Telecommunications Committee:

Nebraska Cattlemen appreciates the opportunity to submit written comments on LR 528, the interim study regarding financing the maintenance and replacement of county bridges.

Nebraska Cattlemen members certainly recognize the importance of structurally sound roads and bridges for transporting livestock and other agricultural commodities to market. With agricultural producers already paying a disproportionate share of the property tax burden in the state, exploring other options to pay for the maintenance and repair of bridges is essential. We understand county governments have many programs to support, so increased funding streams other than increases to property taxes would be preferable.

Nebraska Cattlemen looks forward to participating in the discussion related to funding and maintenance of county bridges as it moves forward.

Thank you for the opportunity to offer comments on LR 528. If you have any questions please do not hesitate to contact Nebraska Cattlemen.

Sincerely,

A handwritten signature in black ink that reads "Jeff Rudolph". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Jeff Rudolph
Nebraska Cattlemen, President

NEBRASKA RURAL COMMUNITY SCHOOLS ASSOCIATION

Senator Dubas and members of the Transportation Committee:

The Public Hearing regarding bridge conditions in Nebraska is, of course, about what school buses and residents travel daily in all rural school districts. As a former school superintendent, each summer included a discussion among school officials toward building bus routes and communicating with families of students. County officials in charge of bridges and roads were always consulted during the process and then notified of the actual route lines after routes were built. Inevitably, there would be concerns expressed regarding width, weight limit, and general condition of local area bridges. Changes were always possible during the year.

I was always thankful that county officials could be counted on for accurate information and advice. They, of course, were watching their roads and bridges carefully on behalf of all who might use them. As we all know, residents and school districts count on the bridges, but it is the counties that are charged with that function.

School districts are required to ensure access, whether they own a bus system, lease a bus system, or pay mileage in lieu of a bus system. But in addition to the school day, residents and students are also traveling to school events after hours, when night makes country roads and bridges a little more difficult to navigate.

When a bridge is deemed substandard for loaded bus weight and/or size, the school simply does not use that bridge in accordance with law. When a bridge is closed, the road becomes out of service on one or both sides of the bridge. While bus routes are adjusted, normally, the routes become longer, take additional time and cost, and in a worst case scenario, cause an additional school van or bus to be put on the route system.

But, as important as bus routes, many students, parents, and other residents are also trying to access school and activities in their own vehicles, including school permit users. Safety is always of primary focus for everyone.

I am not privy to each school district's circumstance, but expect that the issues of closed and substandard bridges occur in all counties to some degree.

We encourage the Committee to review the circumstances as best you can, toward supporting county efforts so we do not fall behind the problem.

I am unable to attend the hearings, therefore this message to the Committee.

Thank you for undertaking the study. Jon

Dr. Jon Habben, Executive Director
Nebraska Rural Community Schools Association (NRCSA)
455 S. 11th St. Suite B
Lincoln, NE 68508

[402.440.4378](tel:402.440.4378) phone

[402.476.7740](tel:402.476.7740) Fax

www.nrcsa.net

Photo: 1
Site #1
C006631830

Description

Outlet of Structure
 taken November
 2008.



Photo: 2
Site #1
C006631830

Description

Outlet of Structure
 taken November
 2012.



Photo: 3
Site #1
C006631830

Interior Culvert
 looking North.



Photo: 4
Site #1
C006631830

Description

Southeast corner of
 Structure noting
 embankment erosion.



Photo: 5
Site #2
C006602530

Description

Structure before replacement – one lane. Photo taken 2007.



Photo: 6
Site #2
C006602530

Description

Structure after replacement – two lane.



Photo: 7
Site #2
C006602530

Description

Structure before replacement. Photo taken 2007.



Photo: 8
Site #2
C006602530

Description

Structure after replacement.



Photo: 9
Site #3
C006623520

Description

Looking North at Bridge.

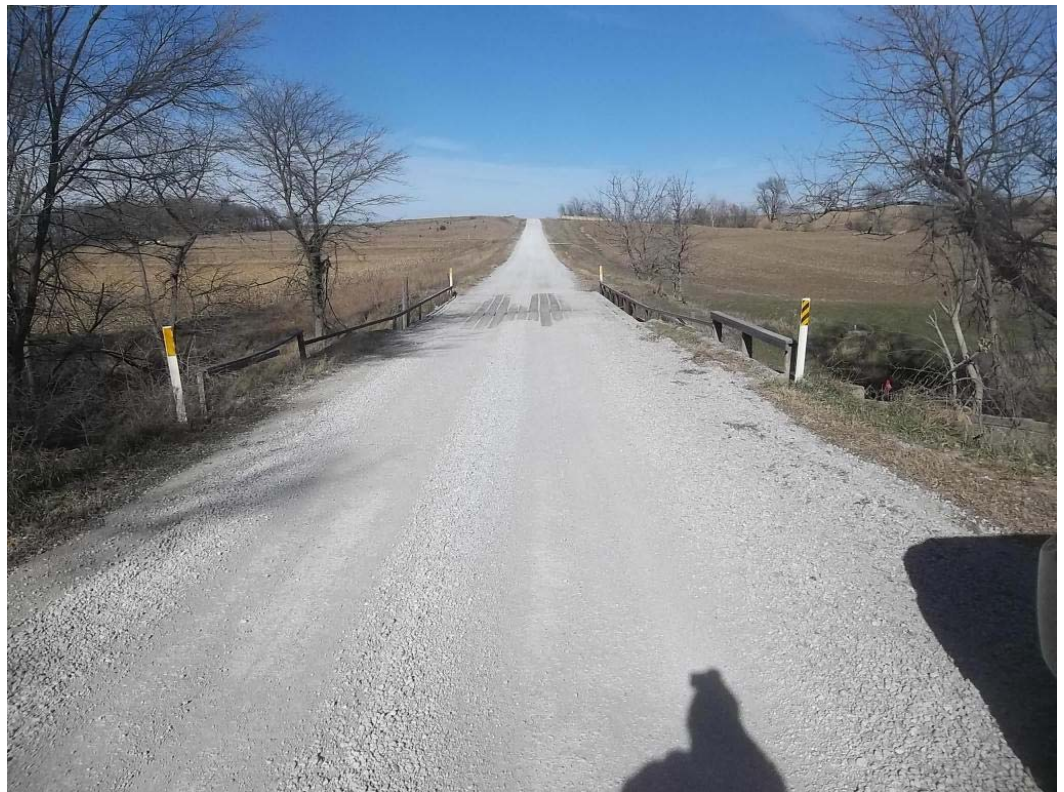


Photo: 10
Site #3
C006623520

Description

Looking West at Bridge opening.



Photo: 11
Site #3
C006623520

Description

South abutment deterioration.

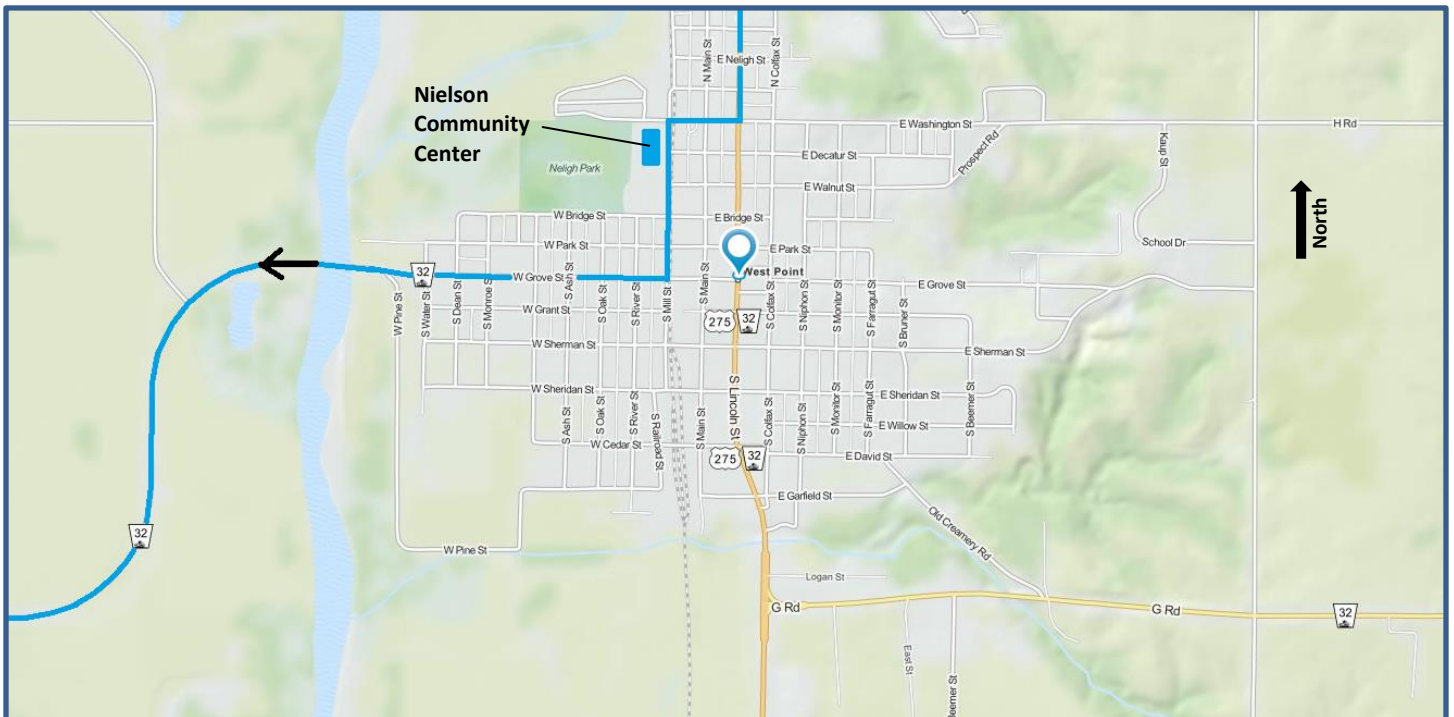


Photo: 12
Site #3
C006623520

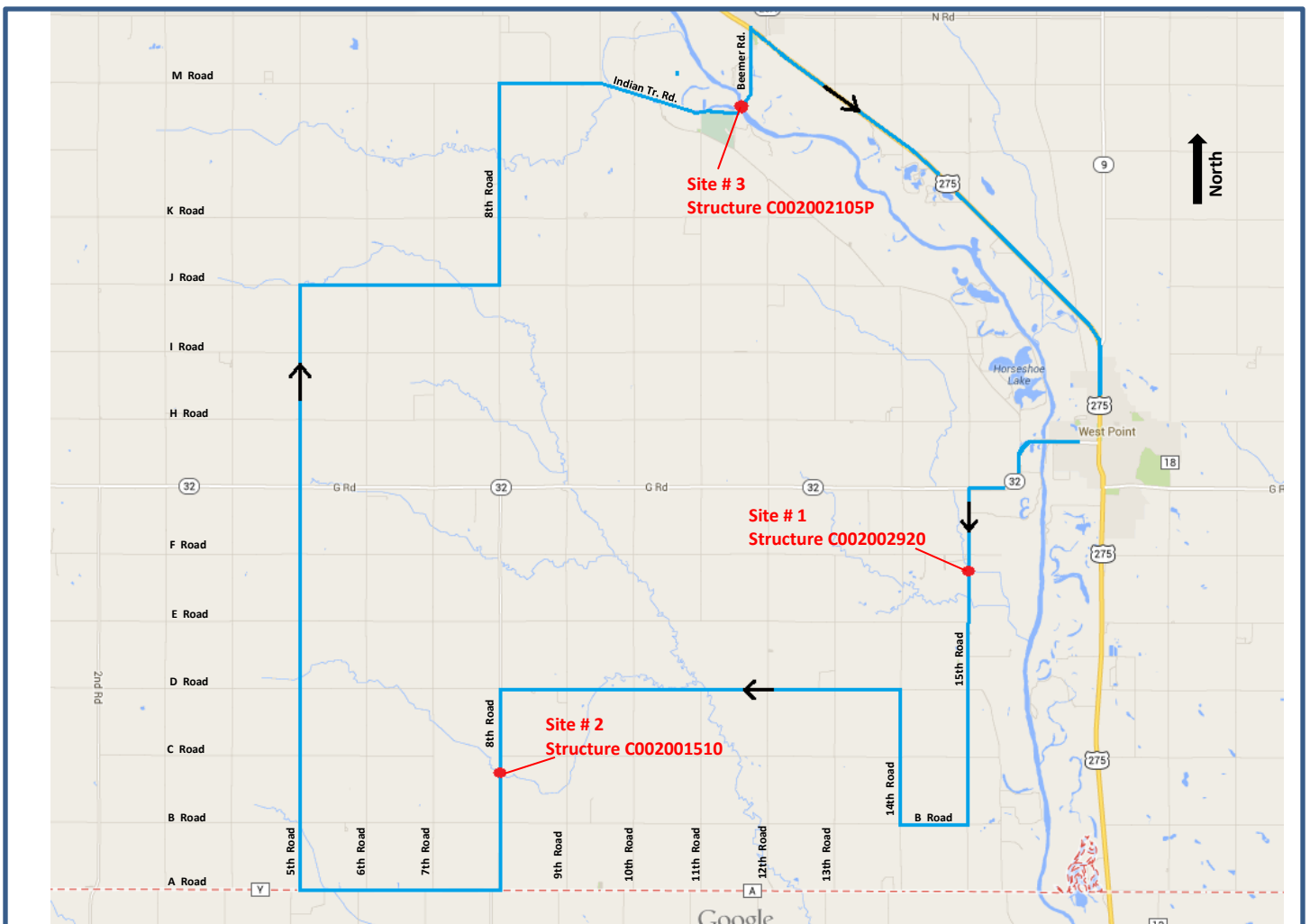
Description

Erosion at Southeast wing.





Map 1: West Point, Nebraska



Map 2: Cuming County, Nebraska

Photo: 1
Site #1
C002002920

Description

Looking East at
 Bridge Opening.



Photo: 2
Site #1
C002002920

Description

West portion of the
 South Abutment
 featuring extended
 backwall.



Photo: 3
Site #2
C002001510

Bridge Span looking
South at the East
exterior girder.



Photo: 4
Site #2
C002001510

Description

South Abutment.



Photo: 5
Site #3
C002002105P

Description

Looking Northeast at Structure.



Photo: 6
Site #3
C002002105P

Description

Looking Northeast at Pier 1, also showing basic superstructure of the bridge.



Photo: 7
Site #3
C002002105P

Description

South Abutment.

