

GOAL

PRESENT AN OVERVIEW OF NEEDS AND A SUGGESTED MEANS TO MEET THESE NEEDS

BRIDGE NEEDS ARE A STAND ALONE NEED

- Bridges are a need
- Bridges are the weakest link in our County / Township infrastructure system
- We don't like washboards, potholes and poor roads but we can live with them today.
 - We can't work with low load limit or no bridges



MCHENRY COUNTY

Complete loss of access to land by vehicle over 8 ton

Paved road rated at 105,500 with a 14 ton bridge

Two bridges on each side of this one rated at 40 ton



WEIGHT
LIMIT
10
TONS

Hazard sign with yellow and black diagonal stripes and a white circular symbol.



**WEIGHT
LIMIT
4
TONS**





BRIDGE INSPECTIONS



- Bridge inspections are mandatory
 - \$3,000 to \$5,000 / bridge
 - State spent about \$3,000,000 during last inspection

Bottineau County

- 118 Total bridges rated in the county
- 27 bridges rated poor or less
- 31 bridges not even in inventory because they have less than a 20' span

WHERE ARE THESE BRIDGES?

- Forecasted replacement needs 2022 - 2041
 - 5 counties with no bridge replacement needs
 - 25 counties with 1 to 5 bridges in need of rehabilitation or replacement
 - 12 counties with 6 to 19 bridges in need of rehabilitation or replacement
 - 11 counties with 20 or more
 - Highest counties in the study were Morton 66, Walsh 63, Traill 55, Grand Forks 51



WHAT ARE SOME ESTIMATED COSTS



Hydrology Study \$7,000
to \$15,000



Box Culverts to replace
bridges \$400,000 to
\$800,000



Bridge replacement \$1
to 1.5 million / bridge



Bridge repair variable

PAST HISTORY OF FUNDING

- Counties have been allocated Federal Funds for bridge work every three to four years
- More recently state appropriated \$25 million to counties through ARPA
- Some counties have utilized Prairie Dog Funding to meet needs

PROBLEMS WITH HISTORICAL FUNDING

- Not enough
- Cost share can be prohibitive for some counties
- One shot appropriations
 - Counties unable to do long term planning and studies

CONSIDERATIONS TO HOW MUCH FUNDING

- How much work can be done in biennium
 - Inflation concerns
 - Federal dollars have been increased nationwide to address infrastructure
 - Already employment shortages throughout the US
 - In person meetings with Counties and Engineers have supported their ability to expend \$100 million / biennium without causing hyper inflation due to lack of labor and resources
 - Limitations include
 - 3 bridge contractors currently in ND
 - Number of engineers / firms available
 - Time involved to do proper studies – engineering, hydrology, easements, mitigation

WHAT DO WE WANT TO FUND?

- Bridge Replacement
 - New Bridge Construction
 - Replacement with culverts or other structures when possible
- Bridge Repair



COUNTY AND TOWNSHIP BRIDGE NEEDS

- Upper Great Plains Transportation Institute 20 Year Study
 - Identified \$688 million in needed bridge replacements
 - \$27 million in preventative maintenance needs
 - Total needs of \$715,572,342.40

LEGISLATIVE LANGUAGE

- State funding needs to be zero local match
- Stream over ten years to allow for long term plans and efficiency
- Allocated to each county as a percent of their identified needs in the most recent UGPTI study
 - For counties with fewer bridge needs their appropriation will need to be allocated based on a project cost rather than an annual percent
 - DOT evaluate these needs on a county-by-county basis and grant funding to individual projects

STATE DOT INVOLVEMENT

- Allocate funds to DOT and have them distribute to counties based on formula
 - Advantages
 - Clearing house for allocating to counties with fewer needs
 - Oversight of a statewide benefit
 - Leverage with federal funds to decrease the amount needed from state
 - Potential disadvantages of Federal match
 - Perception of loss of local control
 - Time delay in funds being allocated while waiting for federal match
 - Potential need for local match if Federal funds are used
 - Potential for Federal guidelines being used in allocation formula
 - Ex. 6 mile recommendation

A photograph of a concrete structure, possibly a bridge or a dam, with a large red text overlay that reads "QUESTIONS". The structure is made of concrete and has a dark, possibly painted, section in the middle. There are some pipes or conduits visible on the top surface. The background shows bare trees and a clear sky. In the foreground, there are tall, dry reeds or grasses. On the right side, there is a yellow and black striped warning sign.

QUESTIONS