

Bridge Inspection & Load Rating



2020 Local Government Summit
Bryon Fuchs, PE
NDDOT

History

➤ NDDOT

- Completing inspections on state and local bridges (>20.0' in length) since the Bridge Inspection Program began
 - NDDOT internal staff
- In 2020, moved to Consultants for all locally owned bridges and some state-owned bridges with NDDOT staff managing the contracts
- NDDOT is still inspecting the majority of the state-owned bridges

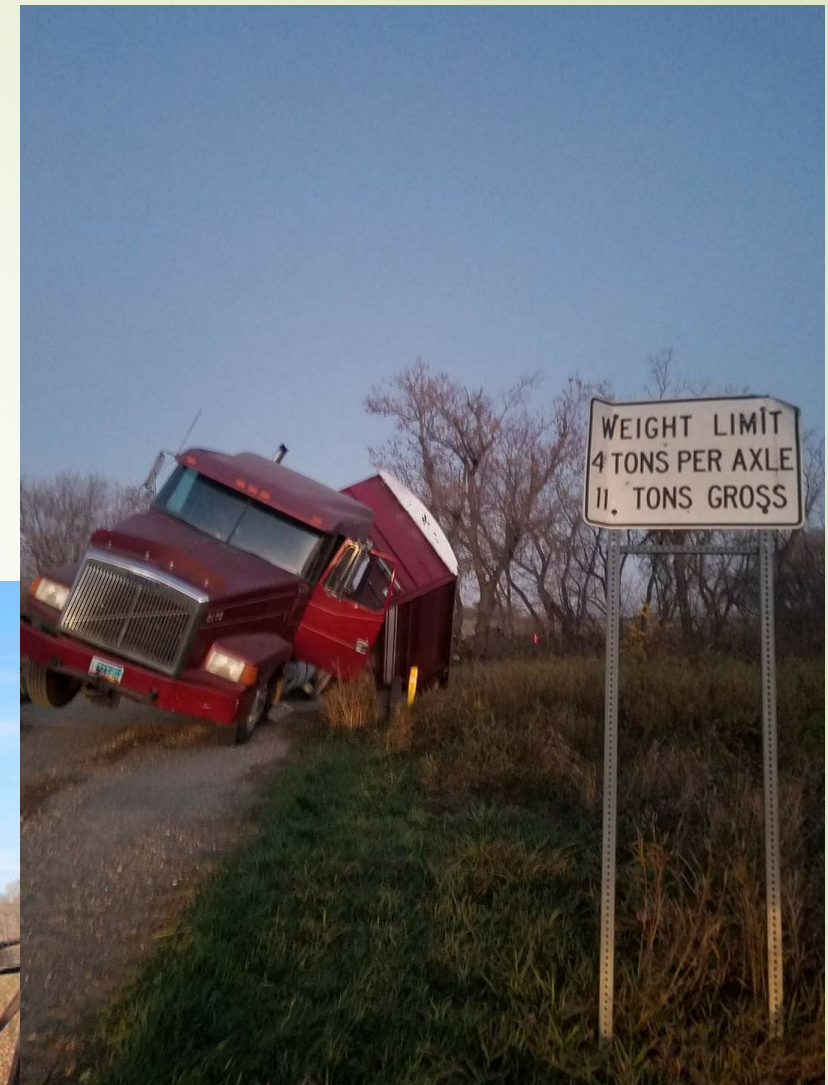
Why we invest so much time, effort, and funds for Inspections/Load Rating?

- Safety is #1!
- Mobility
- Movement of freight (agriculture, oil, etc.)
 - Vital link in the transportation network
- Emergency Services
- Asset Management

North Dakota's Recent Bridge Collapse's



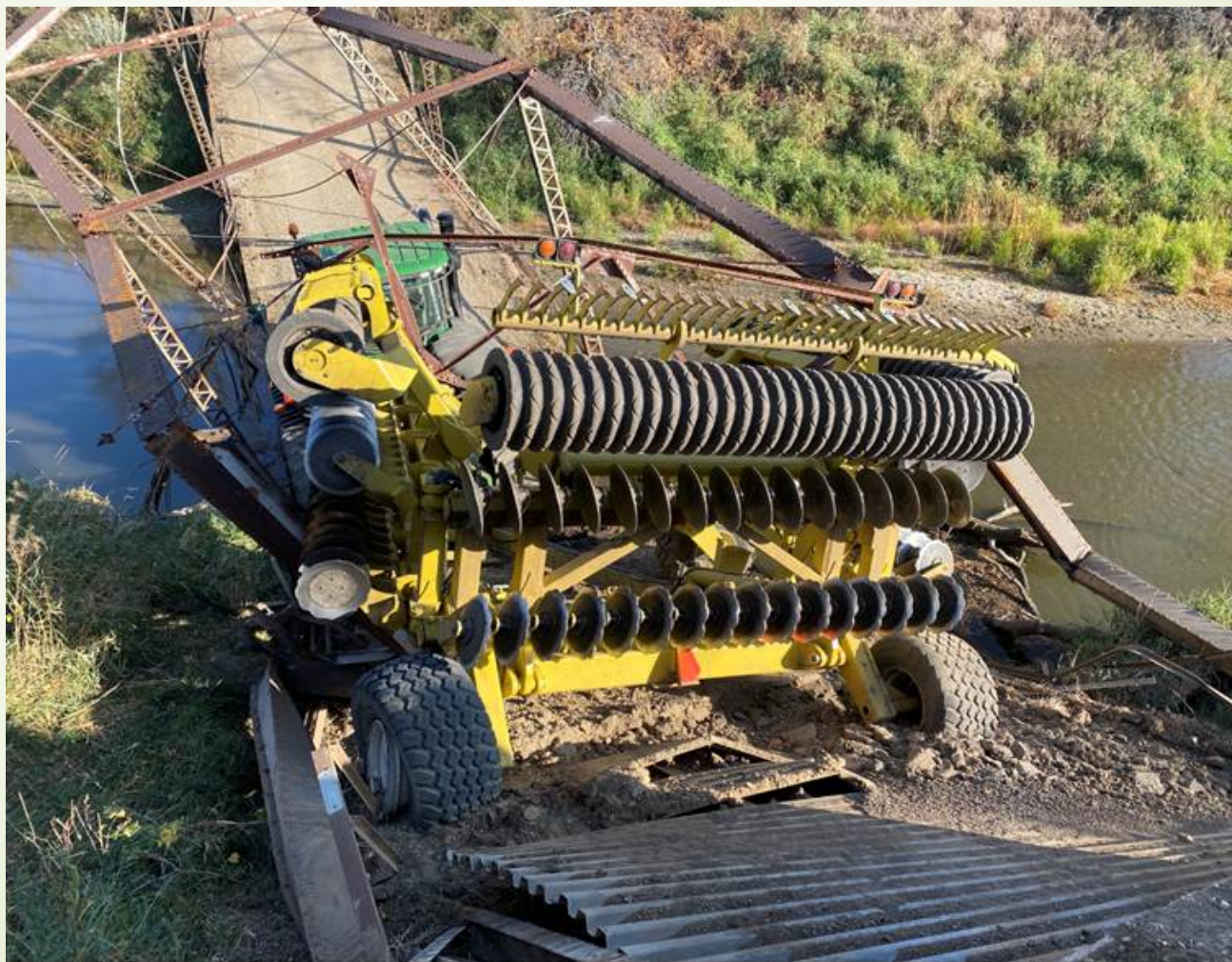
North Dakota's Recent Bridge Collapse's



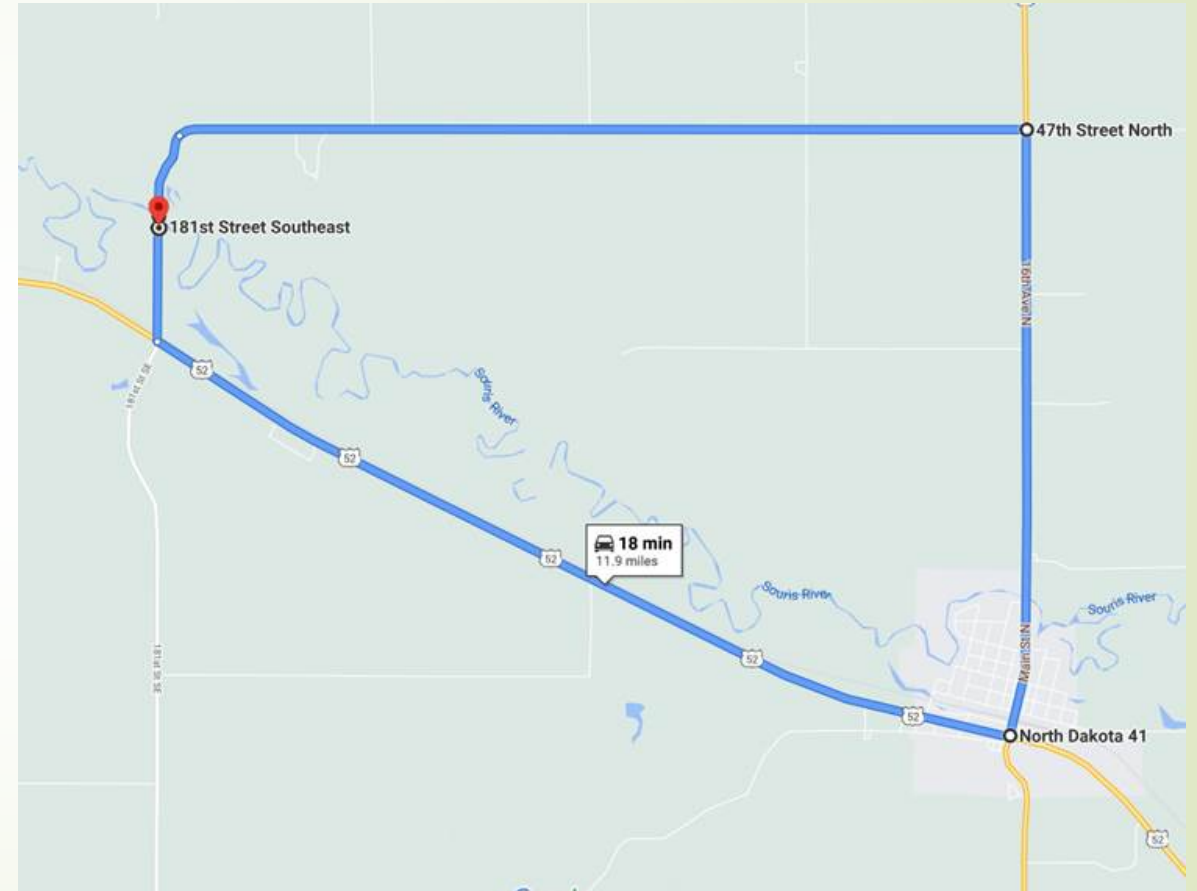
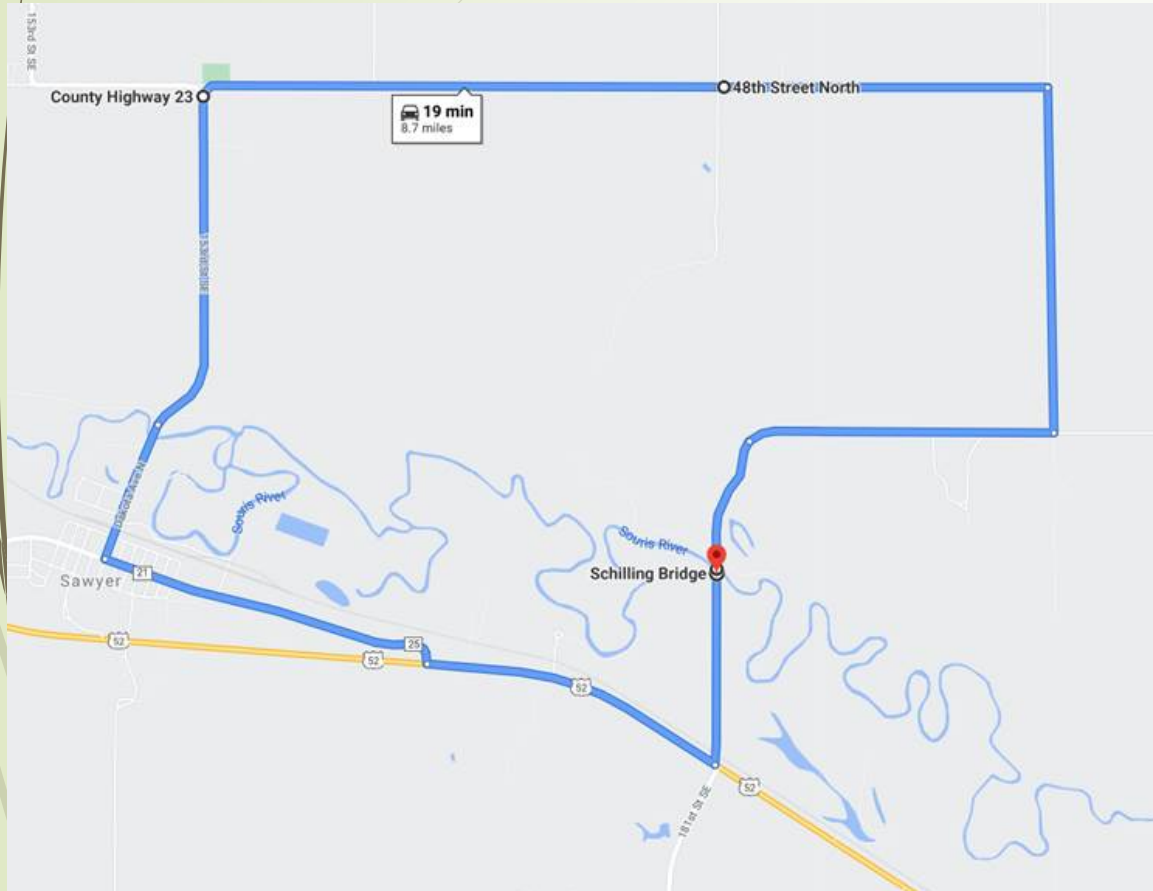
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Mobility



Movement of Freight

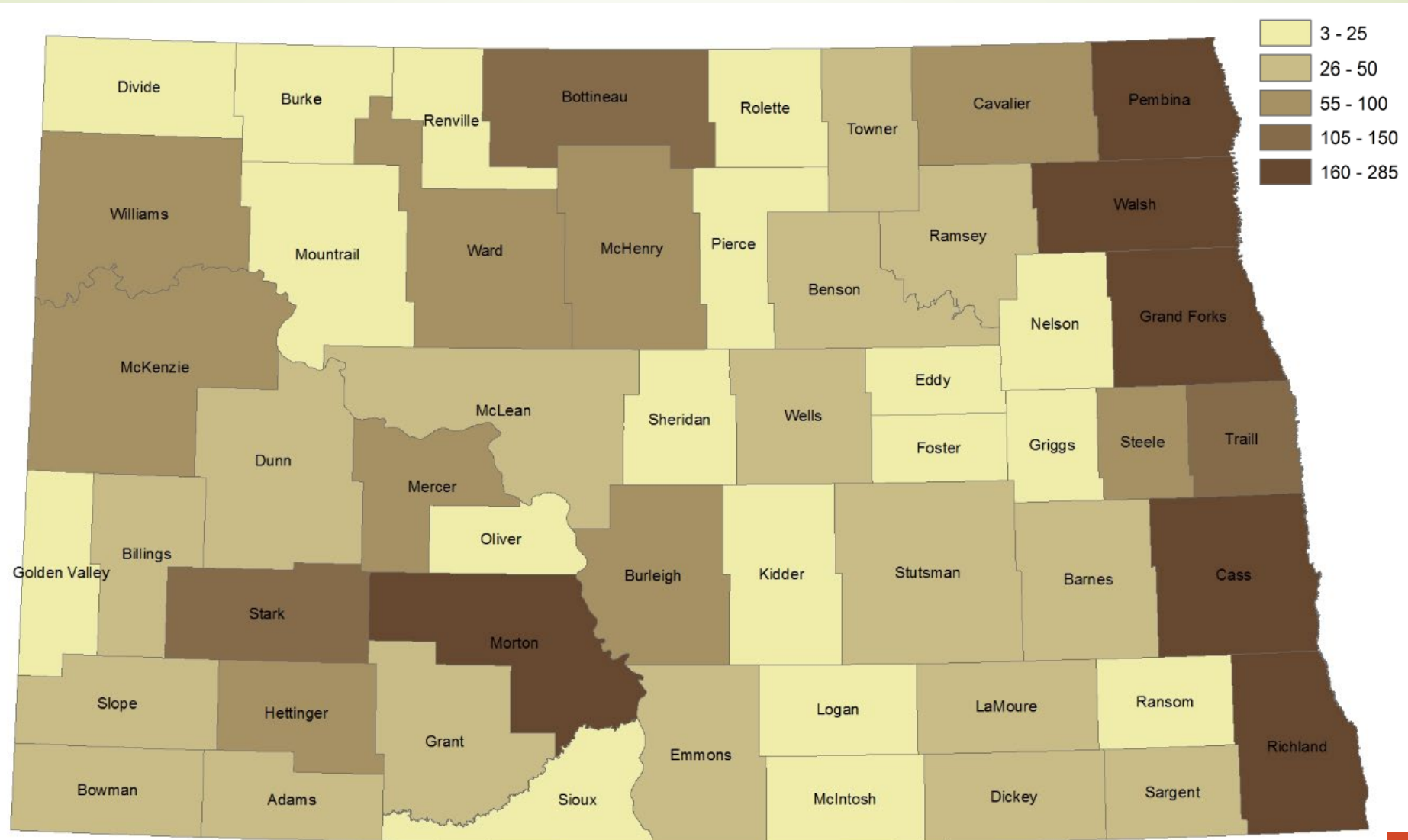
“Each year, North Dakota’s freight system moves approximately \$173 billion worth of freight. From 2016 to 2045, freight moved annually in North Dakota is expected to increase 128 percent by value (inflation-adjusted dollars), the second highest increase in the nation.”

Taken from a News Release published on 10-3-2019 by TRIP (National Transportation Research Nonprofit), can be found at <https://tripnet.org/reports/north-dakota-freight-news-release-10-03-2019/>

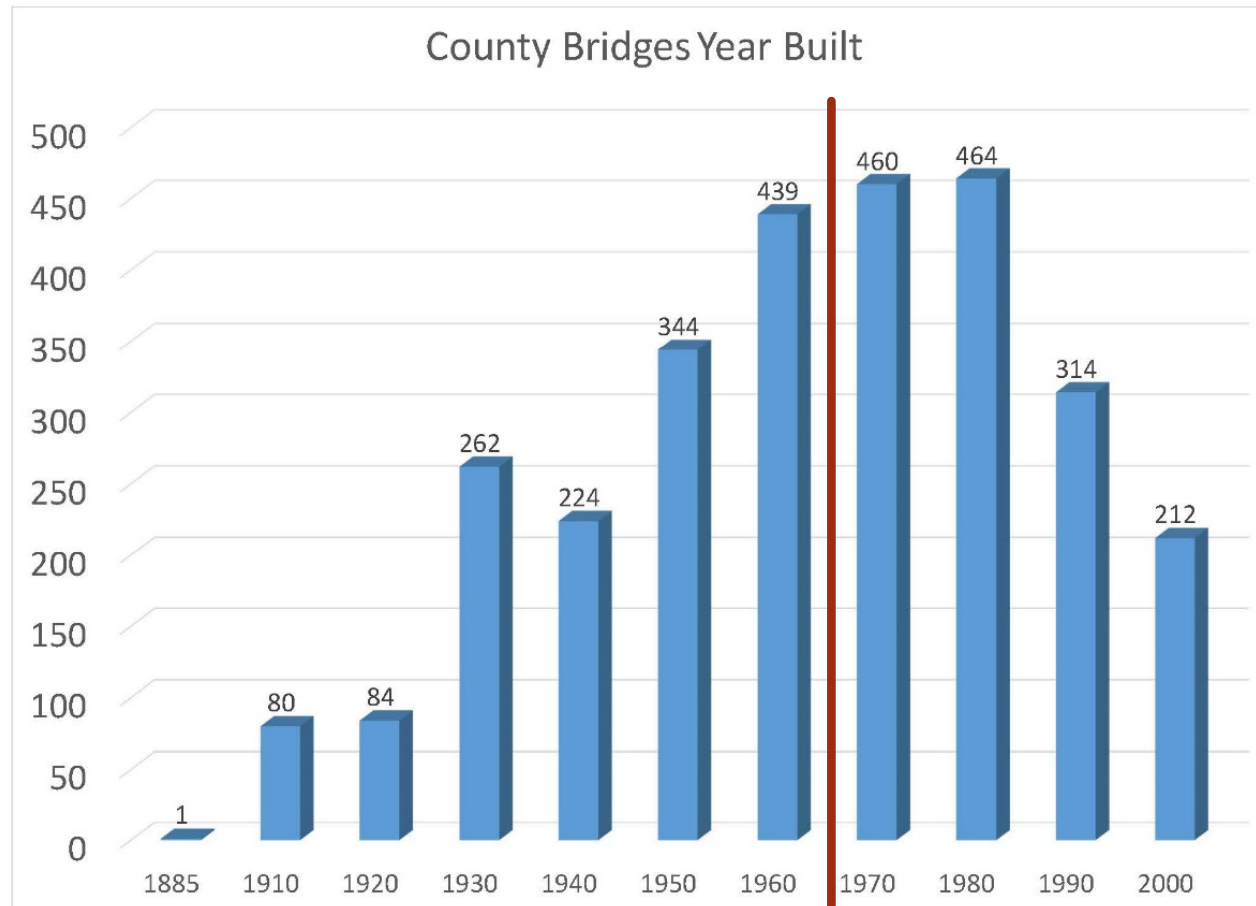
Emergency Services



Asset Management



Asset Management



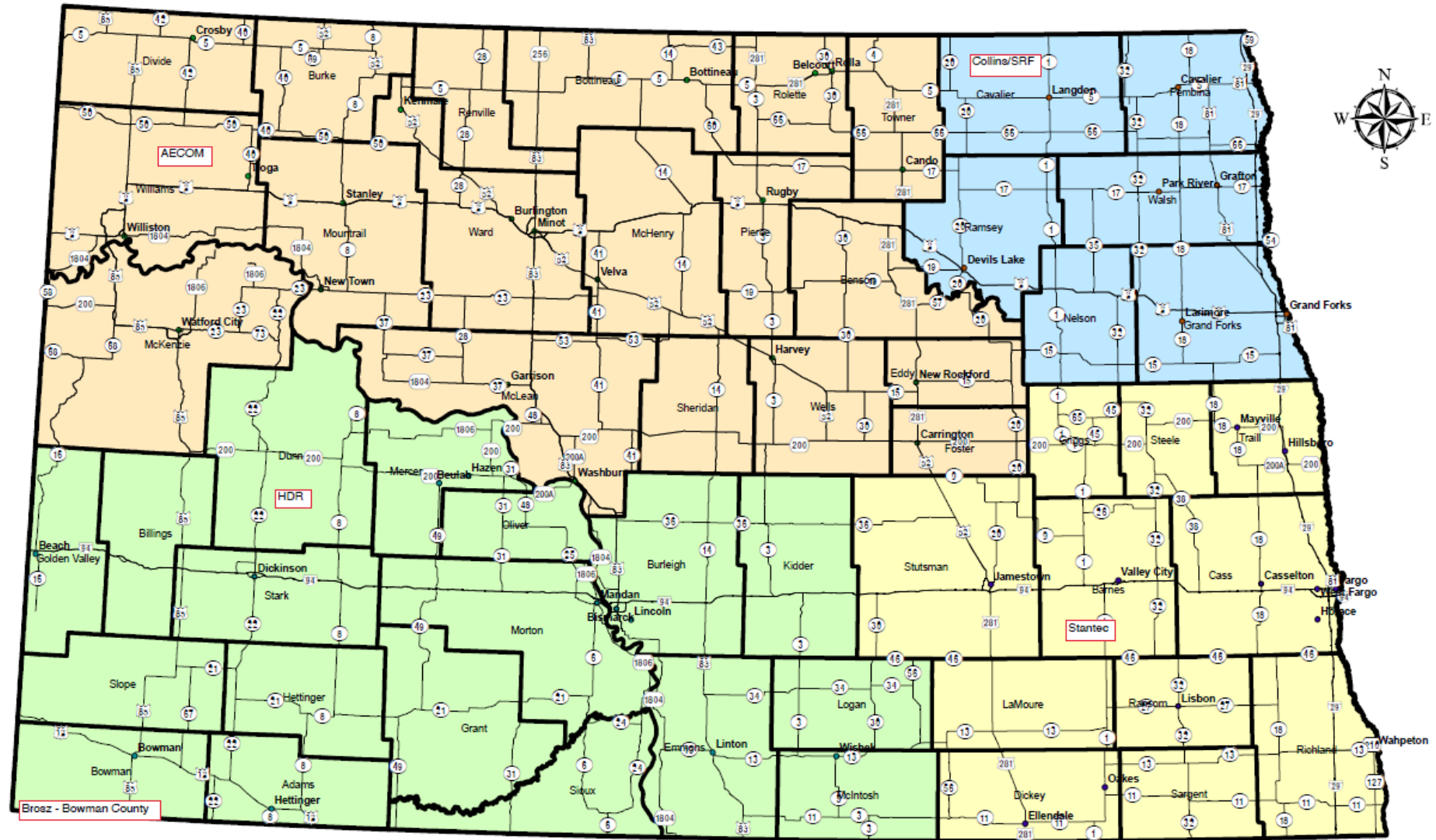
Asset Management

- Approximately 3,100 bridges (=> 20') owned by a County or City
- Bridges are expensive and Large Asset for any agency
 - Dickey County – 38 bridges, \$40 million
 - Bottineau County – 118 bridges, \$60 million
 - Williams County – 59 bridges, \$35 million
 - Grand Forks County – 285, \$169 million

**Value of bridges vary based type and size of bridges

So Where are we at?

Consultant Regions



So Where are we at?

- 2020 Bridge inspection cycle has been completed
 - Critical findings – closures and load postings
 - 30-days to post
 - Closures are supposed to be done immediately
 - Repairs, new construction, replaced
 - Structural Inspection Notification form
 - Submit immediately when bridge is done, **not at the end of the year!!!!**
 - May get a new bridge #
 - New bridges will get a new Bridge #!!
- Load ratings are starting to come in
 - Load postings as a result of this on a monthly basis
 - Operating rating may no longer be the max posting allowed

So Where are we at?

- All Load ratings for new bridges need to be done by the designer
 - Needs to be done prior to opening to traffic
 - Started with the Oct 2020 bid opening or locally funded bridges in 2020
- Starting to look at 2021 Bridge inspection cycle
 - Let us know about removals, replacements, planned repairs, etc.

InspectX Demo

- InspectX
 - Full name and phone #

