

UGPTI COUNTY ASSET INVENTORY TOOLKIT

KICKOFF WEBINAR



Dale Heglund, Brad Wentz, Tim Horner
Upper Great Plains Transportation Institute

Today's Agenda:

- Introduce UGPTI Team and County Steering Committee Team & Other Attendees (Dale Heglund)
- Purpose of the Steering Committee (Dale)
- History of Past Studies (Tim Horner)
- Review Past Interactive Maps (Tim)
- Initial objectives of Roadway Inventory Tool
- Demonstration of "Beta/Draft" Roadway Inventory Tool (Brad Wentz)
- Discuss additional items needed by each county
- Discuss/Schedule Next meeting (August 26th and Possible Face to Face Meeting) (Dale)

Steering Team

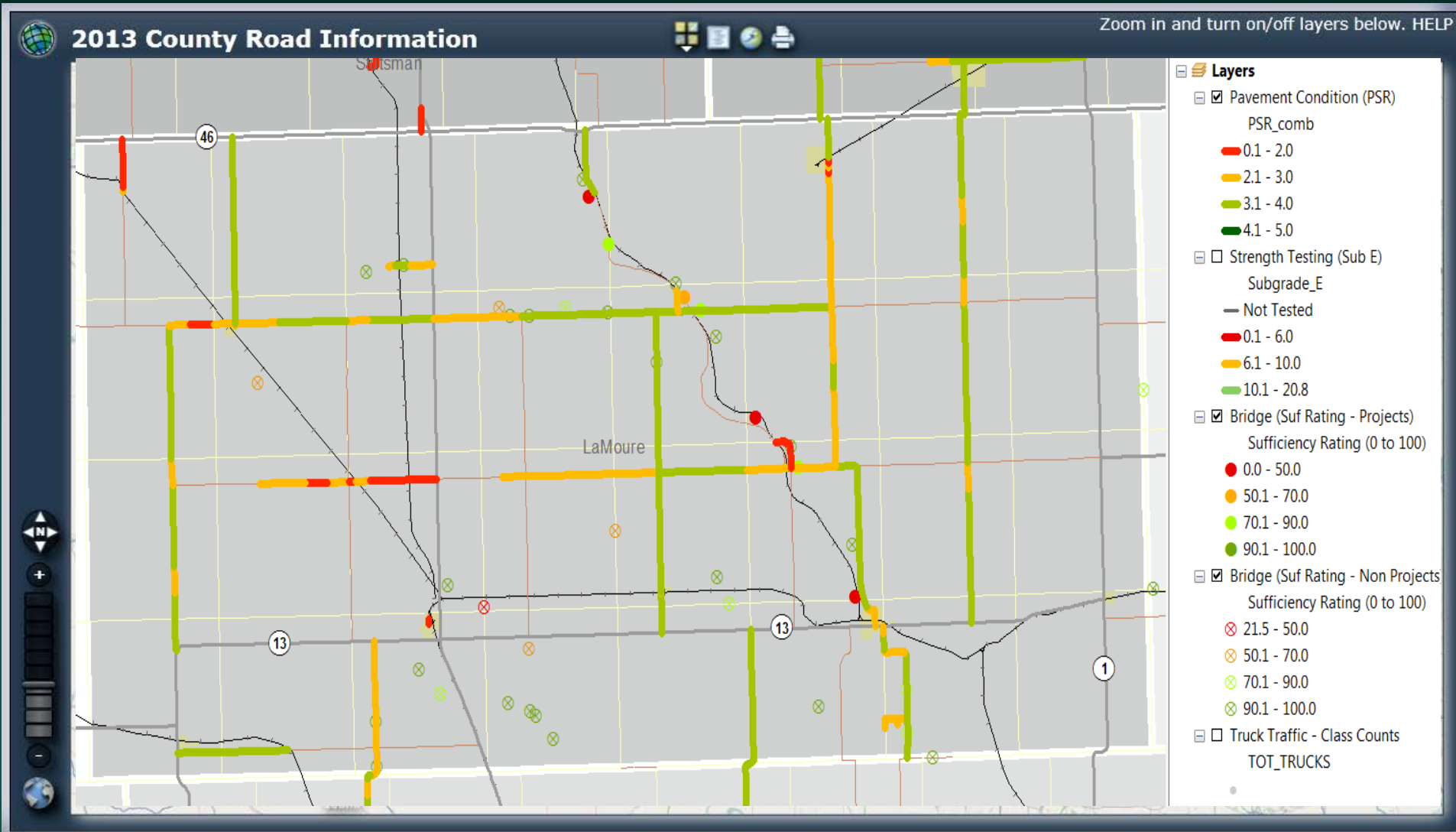
- Sharon Lipsh - Walsh
- Shirley Murray - Sheridan
- Dana Larsen - Ward
- Ken Miller - Mercer
- Todd Miller - Stark
- Tom Soucy - Cass
- Jana Heberlie – Mountrail
- Kevin Fieldsend - Ramsey
- Dan Schriock - Burleigh
- Tyler Michel - Stutsman

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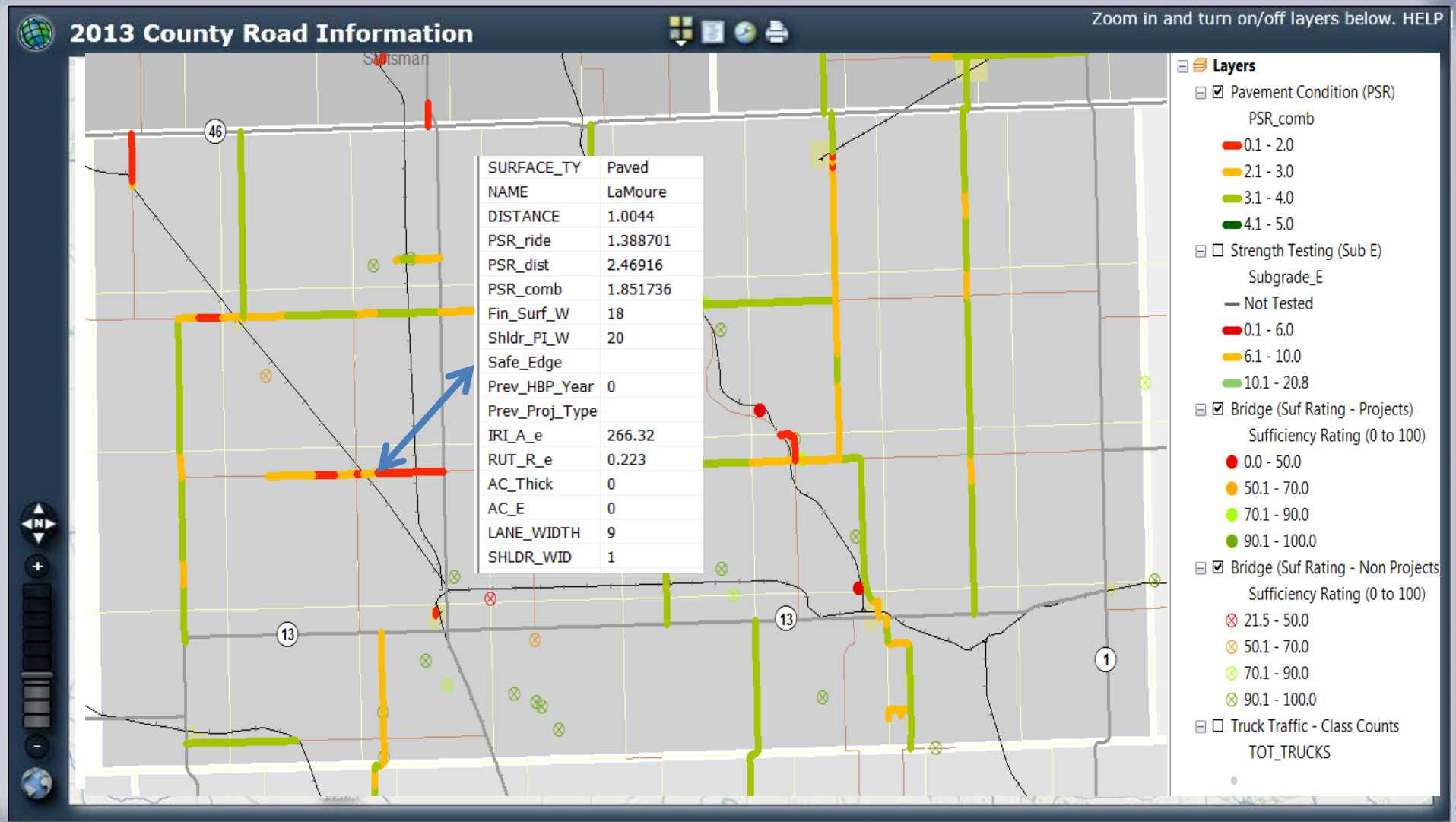
- Infrastructure Needs Studies History
 - 2007: NDDOT
 - 2009: NDDOT Level of Service Study
 - 2010: ND Association of Oil and Gas Producing Counties/ND Commerce Department
 - 2011-13: North Dakota Legislature
 - 2013-15: North Dakota Legislature
 - 2015-17: North Dakota Legislature



On-line Interactive Map – Pavement Condition

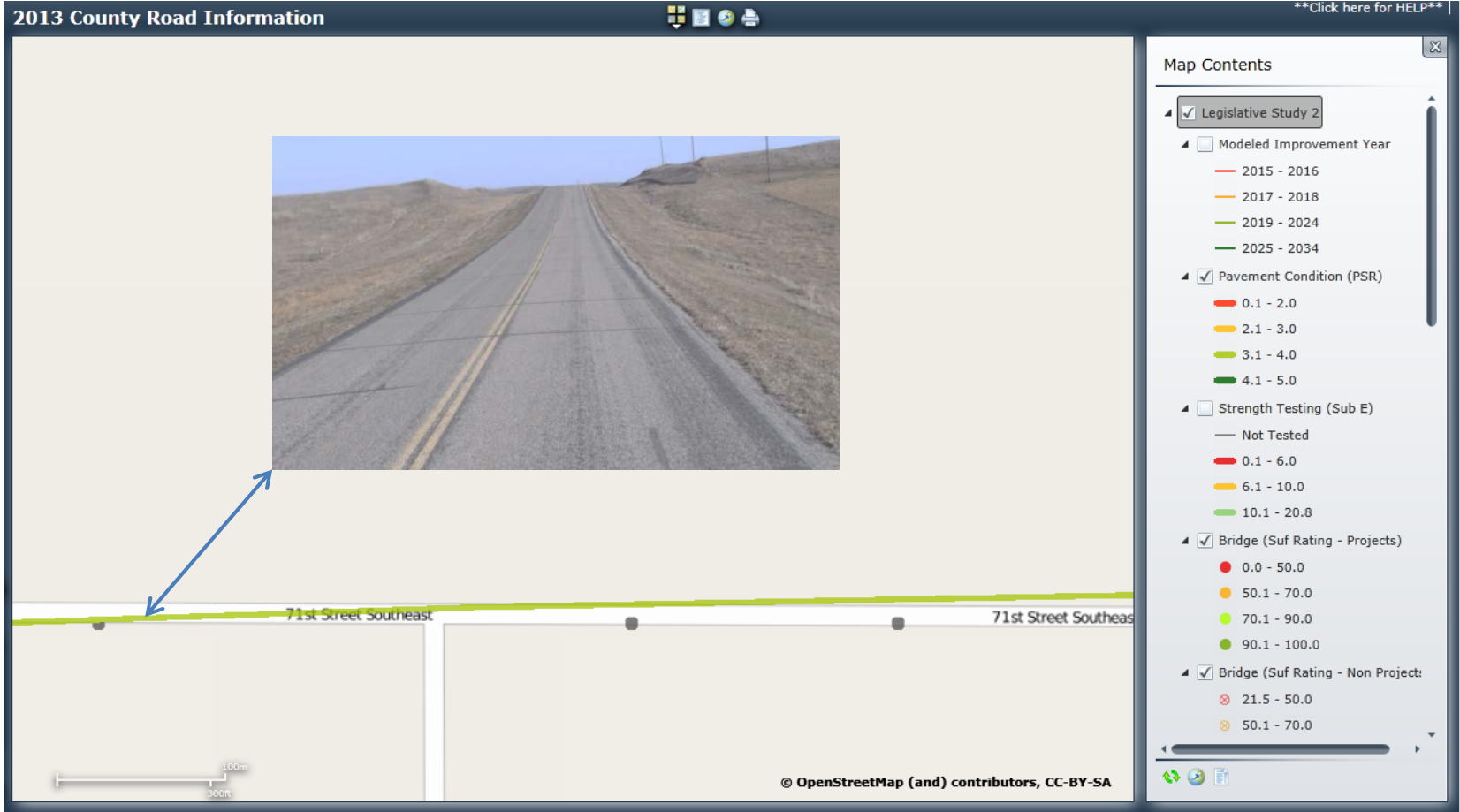


On-line Interactive Map - Pavement Condition



On-Line Interactive Map

2013 County Road Information **Click here for HELP**



Map Contents

- Legislative Study 2
 - Modeled Improvement Year
 - 2015 - 2016
 - 2017 - 2018
 - 2019 - 2024
 - 2025 - 2034
 - Pavement Condition (PSR)
 - 0.1 - 2.0
 - 2.1 - 3.0
 - 3.1 - 4.0
 - 4.1 - 5.0
 - Strength Testing (Sub E)
 - Not Tested
 - 0.1 - 6.0
 - 6.1 - 10.0
 - 10.1 - 20.8
 - Bridge (Suf Rating - Projects)
 - 0.0 - 50.0
 - 50.1 - 70.0
 - 70.1 - 90.0
 - 90.1 - 100.0
 - Bridge (Suf Rating - Non Project)
 - 21.5 - 50.0
 - 50.1 - 70.0

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Local Roads Asset Inventory Toolkit

- UGPTI Advisory Council Advanced the Concept of Road and Bridge Asset Management Tool Development
- 2015 Legislature Appropriated Funds for an Asset Management Initiative.
 - Intended to focus on providing tools for local governments to preserve and maintain roads and bridges.



Local Roads Asset Inventory Toolkit

- Initial Steps:
 - Establish an Advisory Group of County Representatives.
 - Try to get regional representation
 - Ask NDAoC to participate as well
 - Focus on building data inventory important to county road managers
 - Build so it links to on-line mapping built for past study

Local Roads Asset Inventory Toolkit

- Building Data Inventory Examples:
 - Initial Items to Develop:
 - Web/Map based input system
 - Paved Roadways Data Set
 - Gravel Roads Data Set
 - Bridges
 - Explore Adding Minor Structures (less than 20 ft.)
 - Other critical infrastructure items

Asset Inventory Tool Objectives

- Easy to use software – free
- Map based – Google Maps
- Web browser based – any platform
 - Mobile/touchscreen capable with GPS
- Linear Referencing or compatible with...
- Compatible with existing interactive map
- County independent data editing
- Initial data to support Needs Study

Demonstration of “Beta/Draft Roadway Inventory Tool

Brad Wentz

Discuss Additional Items Needed by Each County

Dale Heglund

Asset Inventory Tool Data Items

- Construction History Layer
 - Last Project Surface
 - Project Type, Surface Type, Year, Last project surface depth, Total surface depth, LP \$/mile.
 - Base
 - Type, Depth, Year, Subgrade Strength
 - Cross Section
 - Lane Width, rt shoulder total, rt shoulder paved, Curbs, Inslope Ratio, Safety Edge

Asset Inventory Tool Data Items

- Maintenance History Layer
 - Seal Coat
 - Type, Year, Cost per mile, Previous year 1 and 2.
 - Crack Seal
 - Type, Year, Cost per mile, Previous year 1 and 2.
 - Patching
 - Type, Year, Cost per mile, Previous year 1 and 2.

Asset Inventory Tool Data Items

- Ownership/Load Limits
 - Ownership
 - Owner, Functional Class, Maintenance, Roadway Type
 - Load Limits
 - Seasonal Limit, Seasonal Gross Weight, Year Round Limit, Year Round Gross Weight

Asset Inventory Tool Data Items

- Minor Structures
 - Structure
 - Type, Material, Span Length, Cell Size, Cell Length, number of Cells, Year installed, Cover Depth, Aprons
 - Condition
 - Erosion, Roadway, Waterway Flow, Overall Structure, Rating Date
 - Signing
 - Posted Weight Limit, Sign Type, Bridge end markers.

Local Roads Asset Inventory Toolkit

- Future Possible Steps:
 - Pavement Deterioration/Cost Analysis Tools
 - Predict Future Pavement Condition
 - Gravel Cost Tracking Tools
 - Bridge Planning/Costing Tools
 - Jurisdictional Tracking
 - Roadway and ROW Ownership
 - Maintenance Responsibility
 - Others as suggested by advisory group

Discuss/Schedule Next meeting (August 26th) and Possible Face to Face Meeting)

Dale Heglund



Adjourn