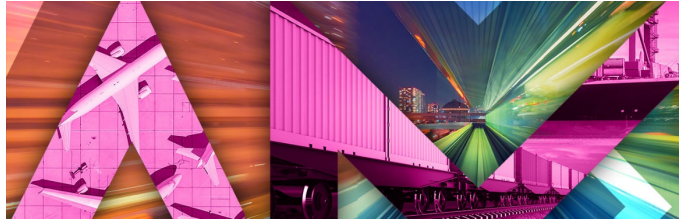




# Transportation Research Board (TRB) Annual Meeting Update

NDDOT Lunch & Learn  
February 28, 2019



# TRB 2019 Annual Meeting

## *Convening the Transportation Community for 98 Years*

- Washington, DC; January 13-17, 2019
- 13,000 Attendees (at least registered)

## Purpose

- Opportunity to share knowledge and perspectives with colleagues.
- Learn about the latest developments in transportation research, policy, and practice.

## Size & Scope

- 5000 Presentations
- 800 Sessions & Workshops
- +200 Committee, Subcommittee, & Task Force Meetings



# North Dakota Attendees

NDDOT Attendee	Travel Sponsor
Tyler Wollmuth	NDDOT
Rebecca Geyer	NDDOT
Chad Orn	NDDOT
Nancy Huether	Midwest Bridge Preservation Partnership
Amy Beise	National Road Research Alliance
Jeani Borchert	TRB Committee Member Scholarship
Karin Mongeon	University of Minnesota (Invited Panelist)
Clayton Schumaker	National Road Research Alliance
Matt Linneman	TRB State Representative

## Other ND Attendees

Jen Turnbow – KLJ

Andrew Wrucke – UGPTI/NDLTAP

NDSU & UND Professors & Researchers



# Lunch & Learn Presentations

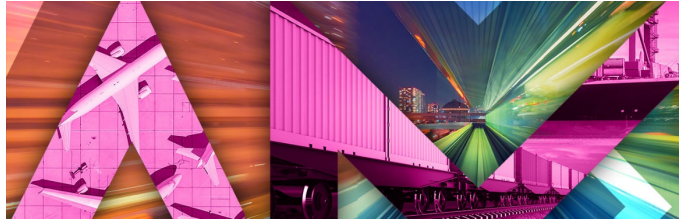
- Six Presenters
- Each Presenter will provide:
  - Implementable Ideas
  - Perspective on their TRB involvement/experience
  - Relationships or Connections Made
- Feel free to ask questions as we go





# Tyler Wollmuth

Bismarck District  
Construction Team Leader  
[twollmuth@nd.gov](mailto:twollmuth@nd.gov)  
(701) 328-6958



# Poster Presentation

Technology Transfer Poster Presentation – Tyler Wollmuth

Subject - NDDOT Transportation Innovation Program (TRIP)

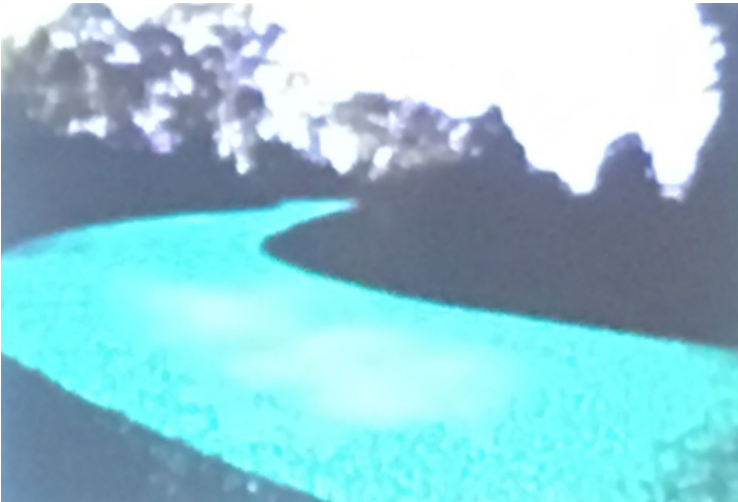
- Each poster presentation is scheduled for 1 hour 45 min
- 318 total spaces for posters
- Good opportunity to make contacts - bring business cards
- Most people look at heading and pictures





# Subjects I attended

- Cold In Place Asphalt Recycling
- Tack Coat Research and Recommendations
- State DOT Innovation Programs
- Advancing Asphalt Pavements
- Chip Seal Research
- Glow in the Dark Bike Paths
- Paving and Maintaining the Indy 500 racetrack



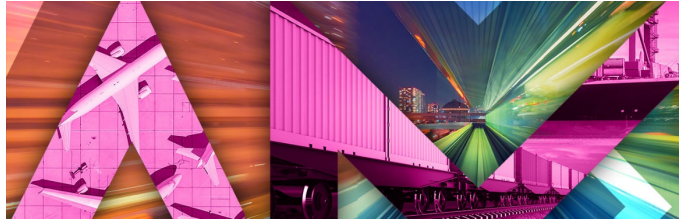




# Implementable Idea

- Tack Coat Usage on HMA Paving projects
  - Research indicates that most States should be applying more tack coat.
  - Research project concluded that 0.07 GAL/SY of tack coat is the appropriate amount to use between lifts of HMA and that 0.08 to 0.10 GAL/SY is the amount to use on gravel base or milled surfaces.
  - NDDOT currently uses 0.05 GAL/SY.
  - Also, the use of spray pavers showed favorable results.





# Team ND Night

## Team ND Night at Founding Farmers DC

- Took 2 attempts because of a blizzard on the 1<sup>st</sup> attempt...even in DC we get snowed out.
- Founding Farmers is owned by ND Farmers Union Co-op
- Getting to know fellow NDDOT employees
- Social Interaction is a big part of meeting people at TRB





# Rebecca Geyer

Planning & Asset Management Division  
Planning & Rail Section Leader

[rgeyer@nd.gov](mailto:rgeyer@nd.gov)

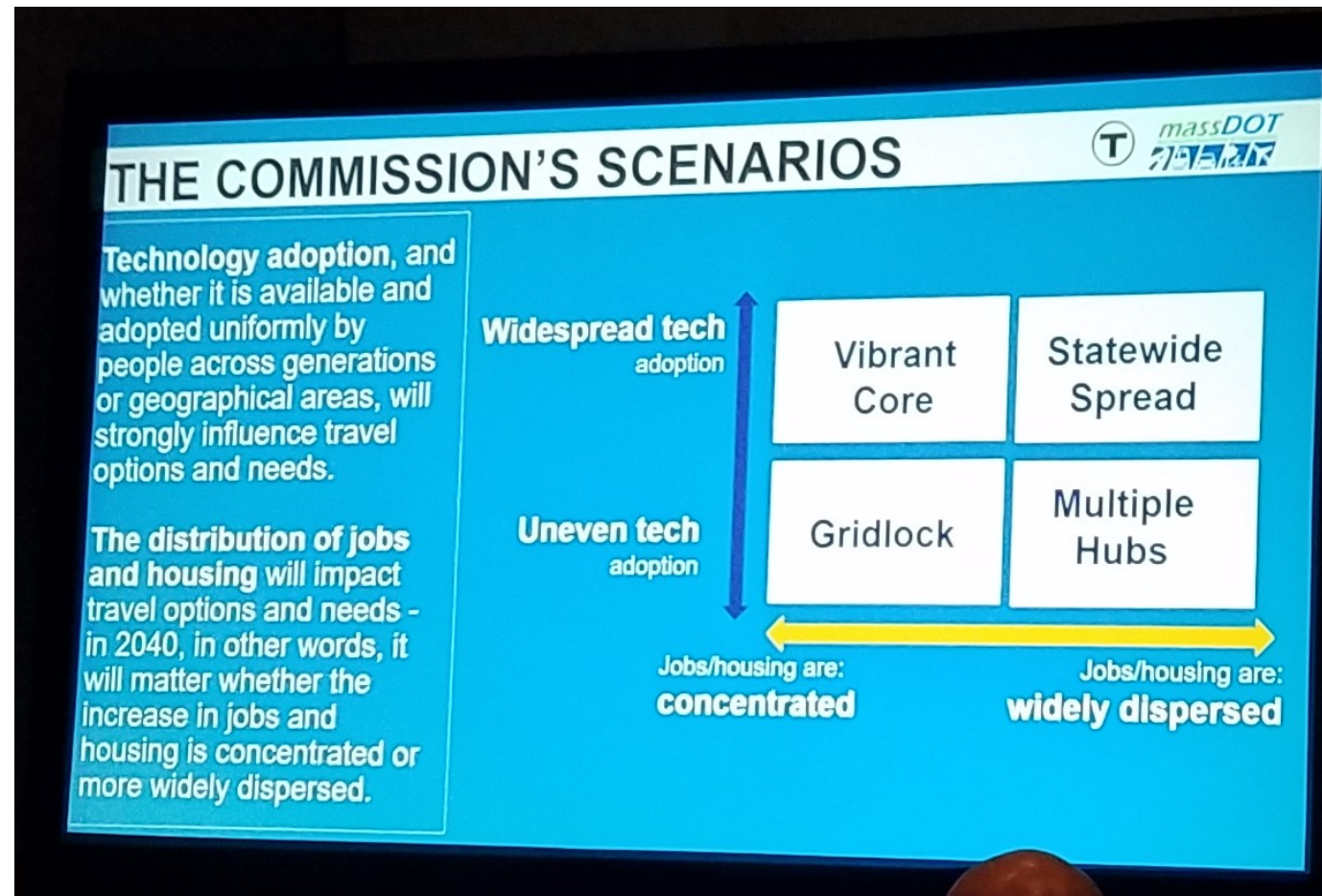
(701) 328-2675

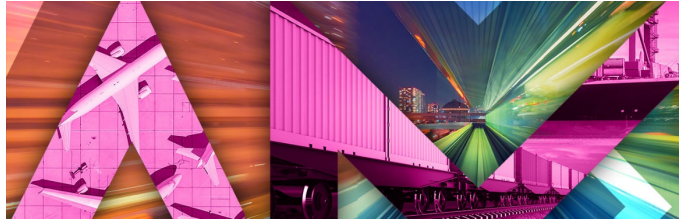




# Implementable Idea

- Planning for the Future means watching these trends:
  - Technology
  - Jobs/Housing





# Lectern Session Presenter

- Panel Presentation on Performance Measures
- Prep began in October 2018
- Email with Instructions 1 month prior
- Speaker Ready room
- Speaker Resource Page
- Lessons Learned



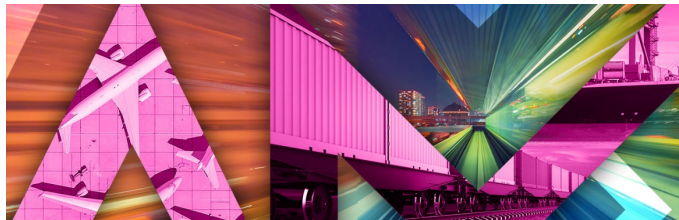




# Valuable Contacts Made

- Fellow Presenters & Former Colleagues
- Minnesota Night
- Iowa Night
- Other Networking Opportunities





# Chad Orn

Office of Project Development  
Director

[corn@nd.gov](mailto:corn@nd.gov)

(701) 328-4587

- 
- WINTER STORM GIA**
- SNOW STILL TO COME THROUGH TOMORROW**
- Map showing snowfall predictions for Winter Storm Gias across the Washington, DC area. Snowfall amounts are indicated by numbers and colors:
- 3" (Blue)
  - 4" (Blue)
  - 5" (Purple)
  - 6" (Purple)
  - 7" (Dark Purple)
  - 8" (Dark Purple)
- Key locations and highways shown include York, Frederick, Leesburg, Baltimore, Washington, DC, Manassas, and Waldorf. Major highways like I-95, I-495, and I-270 are also visible.
- OVERNIGHT ICE THREATENS NC & VA**
- The Weather Channel 8-22



# Resources

- Smartphone App
  - Workshop and Session descriptions
  - Maps – Convention Center is huge
  - Track classes attended (PDHs)
  - Can look at offerings grouped by subjects
    - Safety, Design, Environment, etc.
- Book provided during Registration



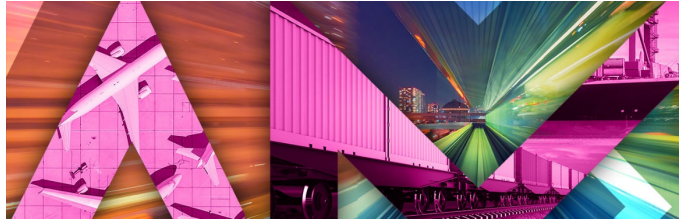




# The Program

- What I found interesting
  - Elaine Chao – US Secretary of Transportation
  - CEO Roundtables
  - Topics on Pedestrians, Crosswalks, Curves, Safety





# The Program

- What I found interesting cont.
  - Roundabout/Intersection Control Video Theatre
    - Continuous 5 hrs
    - Come and go as you please
    - Interactive session of various people presenting projects
    - Running videos and photos

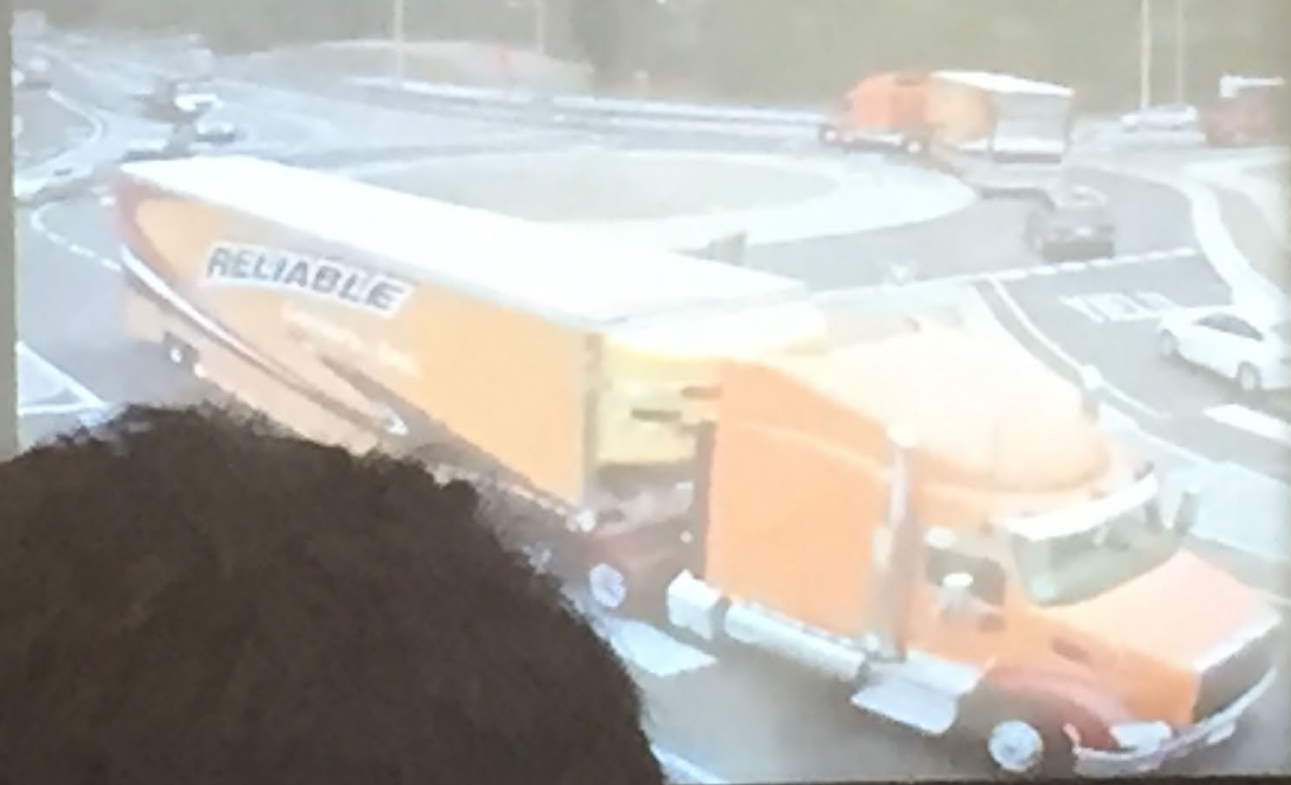




Google Earth

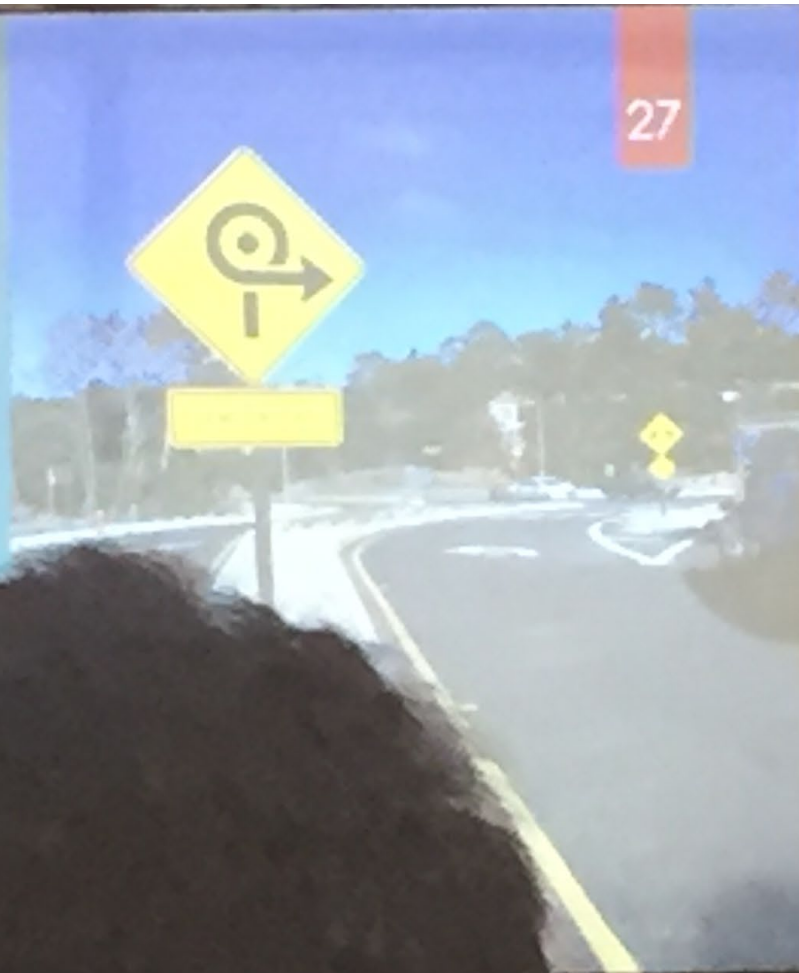


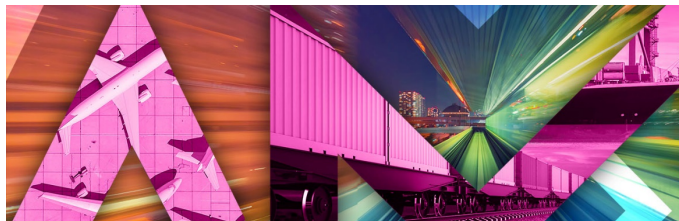
Successful Car Week Loading





"Take-a-Lap"  
Sign





# Nancy Huether

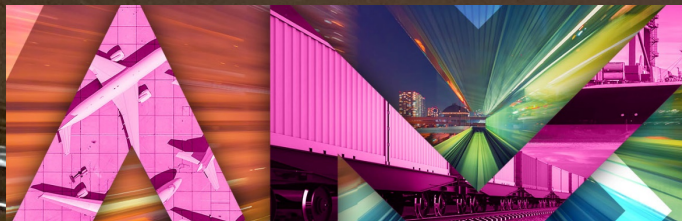
Bridge Division  
Structural Management Section Leader

[nmhuether@nd.gov](mailto:nmhuether@nd.gov)

(701) 328-4450

TRB Committee Member: *AHD35 - Standing Committee on  
Bridge Management*





# Washington DC Winter Storm



**3 inches of snow = 4 inches of salt and near complete shutdown**

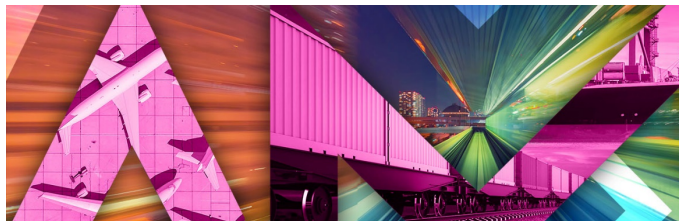


# AHD 35 – Bridge Management

- Member - 2018
  - Previous work with Committee Chair
- Committee Work
  - Review Research
  - Recommend New Research
- Subcommittees
  - AHD 35(1) – Safety and Security of Bridges
  - AHD 35(2) – Bridge LCCA
  - AHD 35(3) – SHM

Time	Title	Presentation Time (min)	By
8:00 AM	Call to order and introductions	5	Başak Bektaş
8:05 AM	Approval of 2019 Meeting Minutes	5	
8:10 AM	Announcements	5	
8:15 AM	TRB Activities Update	10	James Bryant, Max Perchanok
8:25 AM	Subcommittee Reports	15	Paul Thompson, Harry Capers, John Duke
8:40 AM	Communications Coordinator Report	5	David Masceri
8:45 AM	AASHTO T-18 Update	5	?
8:50 AM	TSP2 Update	10	Ed Welch
9:00 AM	AASHTO Maintenance Committee (MaC) Update	10	Jeff Milton
9:10 AM	Presentation NCHRP 12-104, Guidelines for Improving the Quality of Element-Level Bridge Inspection Data	25	Glen Washer
9:35 AM	Presentation: BMVI Network of Experts	10	Ralph Host
9:45 AM	Break	15	
10:00 AM	Potential Presentation	20	
10:20 AM	FHWA UPDATE	20	Derek Constable
10:40 AM	Status update on FHWA's Long-Term Bridge Performance (LTBP) Program	10	Jean Nehme
10:50 AM	Discussion on AHD35 TSP	20	Başak Bektaş
11:10 AM	Committee Research Coordinator Update and Research Discussion	20	Ehsan Minae
11:30 AM	New Business	20	All
11:50 AM	Adjournment		





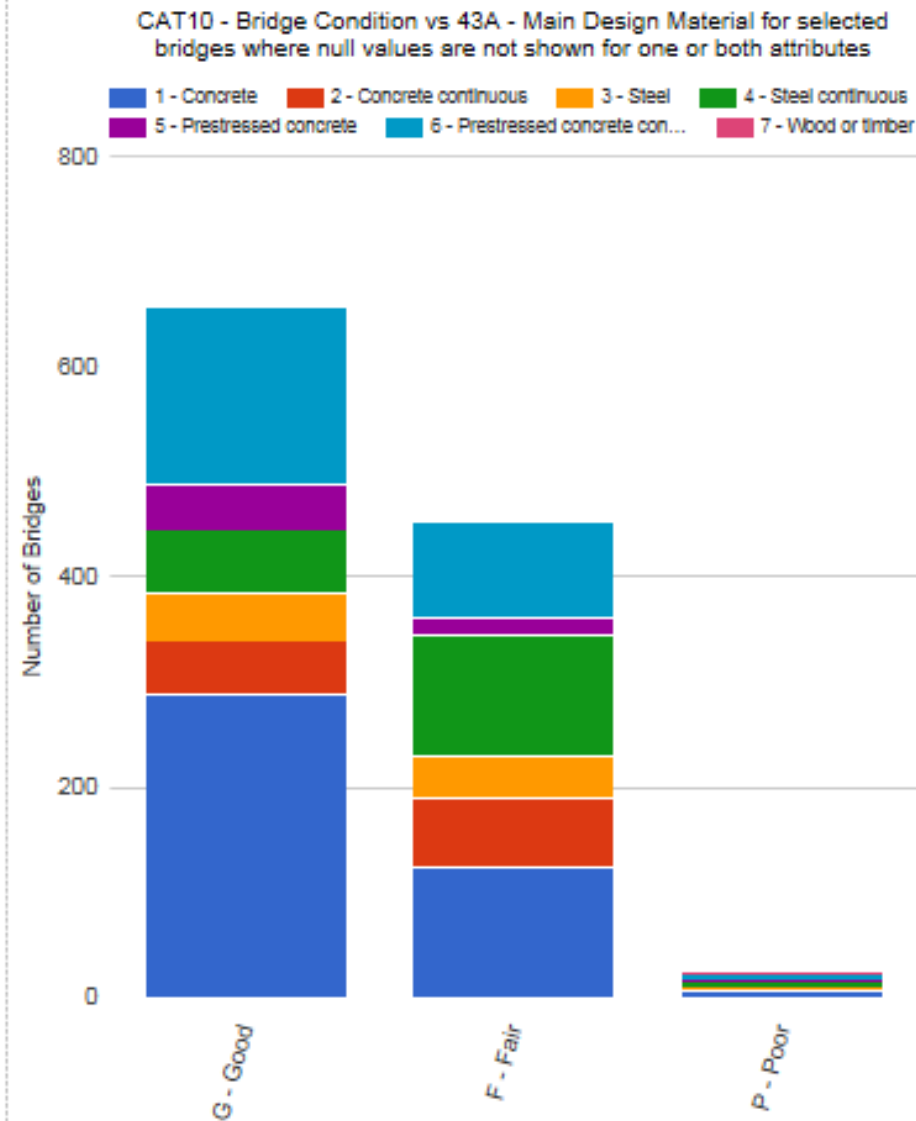
# LTBP/InfoBridge

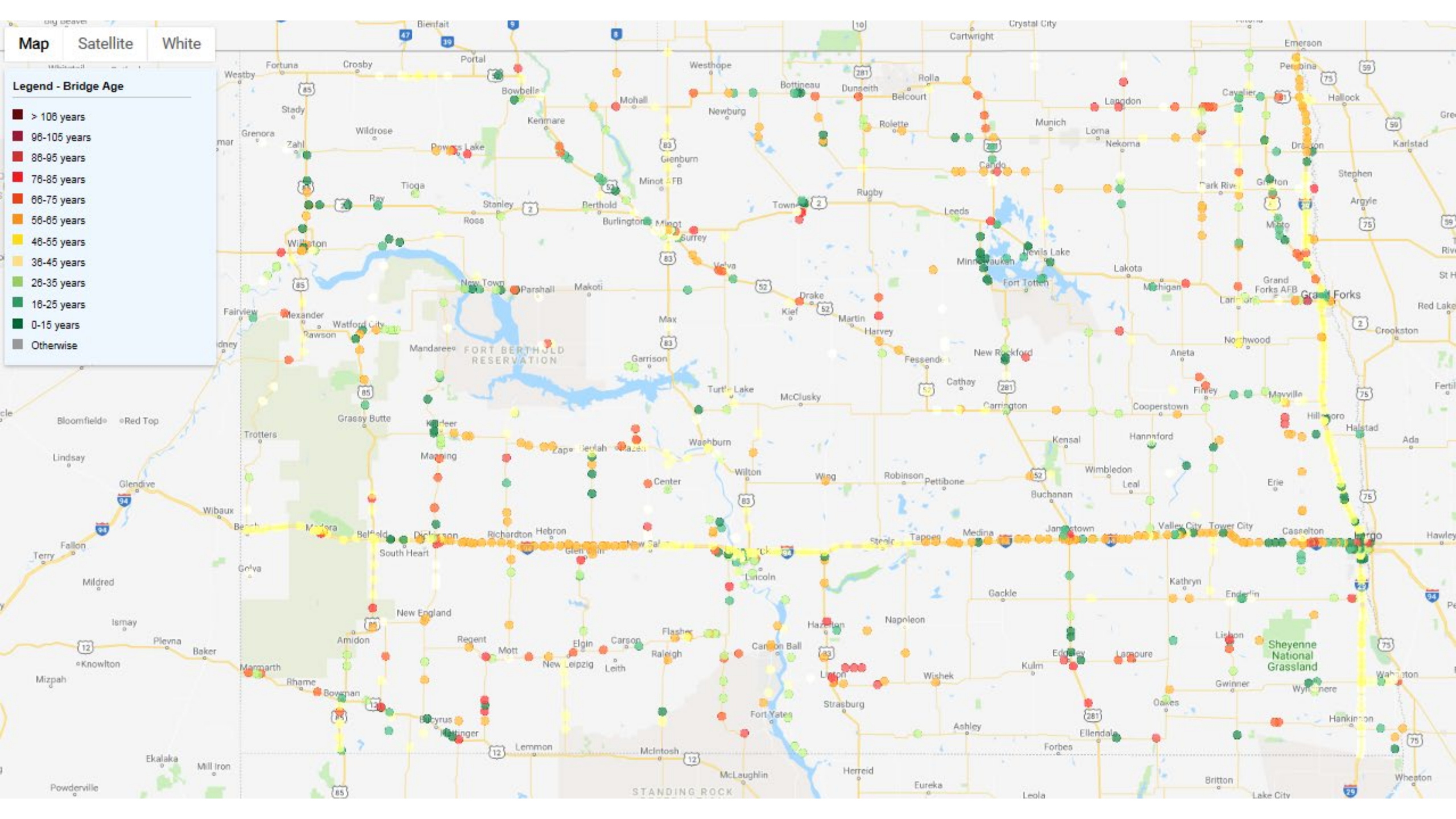


U.S. Department of Transportation  
Federal Highway Administration



- Rolled out @ TRB
- References all FHWA NBI Data
  - Open to all users
  - Includes Historical Data
  - Will include additional info from LTBP
- <https://infobridge.fhwa.dot.gov/Home>







# Networking/Relationships

- Researchers

- Rutgers CAIT – RABIT, the BEAST, THMPR
  - Proposed Demo in ND – Summer 2019
- U of Missouri – Columbia
  - Element Inspection Research
  - Infrared Research



RUTGERS



- Other State DOT's



- Sharing Information, Experiences, Practices

- FHWA



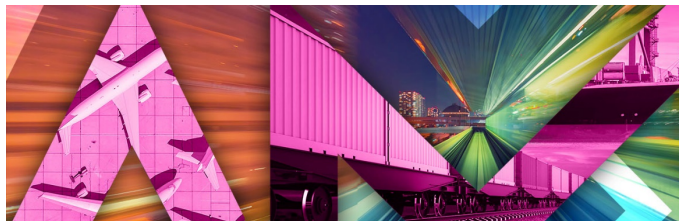
- Building Relationships, Understanding

- MWBPP, AASHTO MaC, BrM User Group, ASNT



THE AMERICAN SOCIETY  
FOR NONDESTRUCTIVE TESTING®





# Amy Beise

Materials & Research Division  
Research & Pavement Design Section Leader

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(701) 328-6921

TRB Committee Nominee: *AFP50 - Standing Committee on Seasonal Climatic Effects on Transportation Infrastructure*

NCHRP Panel Chair: *7-27 – An Update of the Green Book Design Vehicles*





# National Road Research Alliance

NRRA  
National Road Research Alliance





# National Road Research Alliance

**Collaborate**



**Regional  
Research**



**National  
Research**



**Implementation  
Efforts**



# National Road Research Alliance

## 8 Agency Members



North Dakota  
Minnesota  
Wisconsin  
Michigan  
Iowa  
Illinois  
Missouri  
California

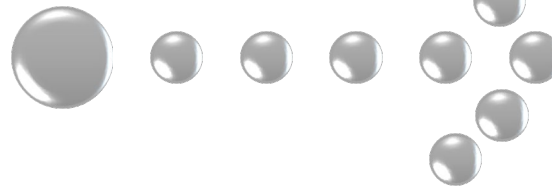
## 50+ Associates



Consultants  
Industry  
Associations  
Academia



Common  
Goals



# Implement





# National Road Research Alliance



**Flexible**



**Rigid**



**Geotech**



**Preventive  
Maintenance**



**Intelligent  
Construction  
Technologies**



**Tech  
Transfer**

**Executive Committee**



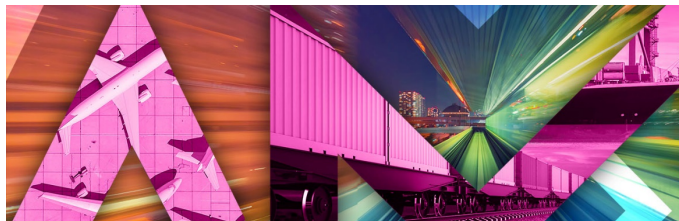
# Why TRB?

**CONTACTS**

**VS**

**CONNECTIONS**





# Sign up for MyTRB

[www.mytrb.org](http://www.mytrb.org)



Free Webinars



Access Information



Friend Committees

Get Connected  
Today





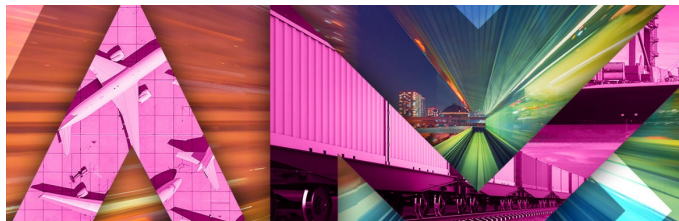
# Implementable Idea

**TRB Committee Involvement**

**NCHRP Project Panel**

**Technology Sharing**





# Matt Linneman

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Materials & Research Engineer

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TRB State Representative



# Implementable Ideas



**Rolling Density Meter for Asphalt Paving**



**Hydraulic Inspection Vehicle Explorer (HIVE)**



# Poster Presentation – US 85

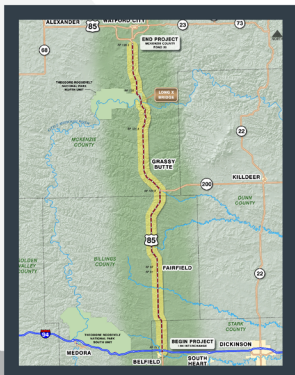
**Authors:** Mikayla J. Boche  
KLJ Michael P. Huffington  
KLJ Matthew G. Linneman  
NDDOT Jennifer J. Turnbow  
KLJ

**Session:** 1430, Current Issues in Environmental Analysis in Transportation  
**Session Location:** Hall A / Convention Center  
**Session Time:** Tuesday, Jan 15, 2019 8:00AM - 9:45AM  
**Paper:** 19-04/57  
**Posterboard Location Code:** A191

## > US HIGHWAY 85 ENVIRONMENTAL IMPACT STATEMENT: A CASE STUDY IN STAKEHOLDER ENGAGEMENT

As one of the few north-south paved roadways accessing the Bakken Formation oil play in western North Dakota, US Highway 85 is a unique and regionally-significant travel corridor. Between 2010 and 2014, average daily traffic volumes more than doubled along this stretch of highway, creating demand for an improved transportation facility capable of addressing social and economic issues within the area.

### PROJECT LOCATION MAP



North Dakota

### FIVE MAIN CHALLENGES



**1.**  
**Traffic Volume/Safety**  
**3,300 - 12,025**  
AADT



**2.**  
**Corridor Size**  
**62 MILES**



**3.**  
**Project Setting**  
**> 2 MILES**  
Theodore Roosevelt National Park  
**> 10 MILES**  
Little Missouri National Grasslands



**4.**  
**Diverse Stakeholders**  
**> 2** lead agencies  
**> 3** cooperating agencies  
**> 17** participating agencies



**5.**  
**Historic Long X Bridge**  
**>** Potential adoption agreement in place for 250-foot span; contingent upon FHWA's EIS decision

### DRIVING SUCCESS VIA UNIQUE STAKEHOLDER ENGAGEMENT



- 1. Coordination/Pre-Coordination with Stakeholder Groups:**
- Lead, cooperating, and participating agencies
  - City, county, and community leaders
  - Special interest groups
  - Landowners
  - Tribal Consultation Committee



- 2. Wildlife Considerations & Special Efforts**
- Wildlife crossings
  - Providing habitat protection/prohibiting construction activities during designated time periods
  - Stakeholder field meetings



- 3. Utility Coordination**
- 34 utility companies
  - Utility coordination memorandum
  - Six early and specific coordination meetings



- 4. Historic Bridge Adoption**
- One of a few historic bridges of this size to potentially have a successful adoption
  - Potential adoption currently in place



- 5. Tribal Consultation Committee\***
- Fort Peck Assiniboine and Sioux Tribes
  - Turtle Mountain Band of Chippewa Indians
  - Mandan, Hidatsa, and Arikara Nation
  - Spirit Lake Sioux Nation
  - Sisseton-Wahpeton Oyate
  - Standing Rock Sioux Tribe
  - Northern Cheyenne Nation
  - Crow Nation
  - Lower Sioux Indian Community
  - Santee Sioux Nation
  - Wahpeton Band of Dakota
  - Omaha Tribe of Nebraska

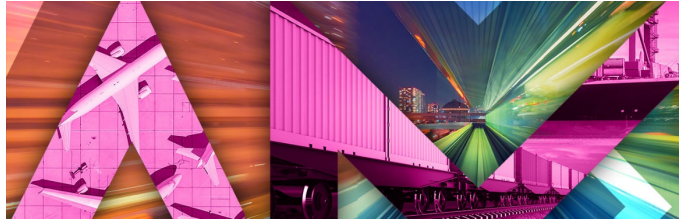
\* Tribes not signatory of the Programmatic Agreement were also welcome to participate in meetings



- 6. GIS Story Mapping**
- A visual composite of maps, text, and images to enhance conceptualization of the 62-mile corridor

Stakeholders play a significant role in successful project completion, especially when a project impacts thousands of people, local public agencies, and special areas of interest. It is imperative that DOTs be intentional and utilize innovative methods to build rapport with interested parties prior to the start of a project and maintain that rapport throughout project duration.

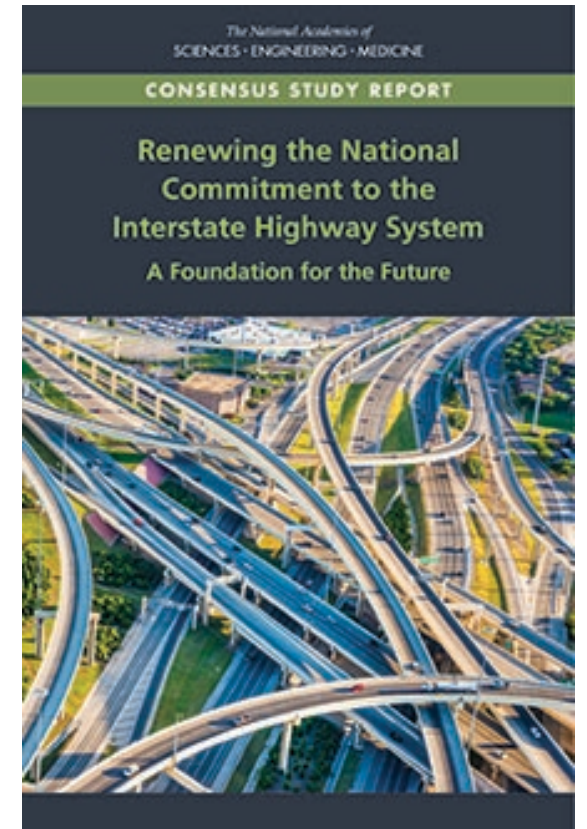




# Interstate Study Report

## *Renewing the National Commitment to the Interstate Highway System*

- Study requested by Congress
- Recommends legislation to:
  - Reconstruct deteriorated pavements and bridges
  - Adding capacity (physical and demand management)
  - Increasing resilience
  - “Right Sizing”
  - Funding
  - Plan for connected and autonomous vehicles
  - Address greenhouse gas emissions





# AASHTO & TRB Perspective

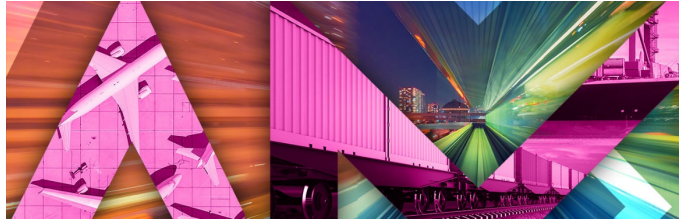
- AASHTO Committee on Materials & Pavements (COMP)
  - Mid-year Meeting
  - Many attendees that are involved with both groups
- TRB State Representative
  - Luncheon at Annual Meeting – Input from States
  - State Partnership Visit – In ND this Spring/Summer





# AM Online

- NDDOT Employees & Attendees have access to the papers and presentations (in March): <http://amonline.trb.org>
- Example: RAP Chip Seal by Pennsylvania DOT
  - Sized Recycled Aggregate Pavement (RAP) chips seals have similar performance to virgin aggregate
  - Need an additional roller for effective seating of the aggregate
  - Limited to roads with and ADT of 1000 or less
  - Approximately 30% cost savings

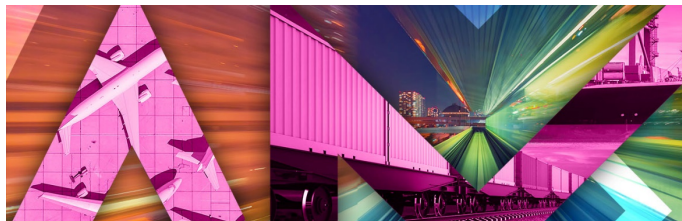


# Opportunities

## Get involved

- Friend a Committee
- Join a Committee
- Submit a paper
- State Partnership Visit
- Talk to attendees

***If you get involved the opportunities will find you.***



# Questions?







# Upcoming Meetings

**March 28<sup>th</sup> - Corrugated Metal Pipe**

**April 25<sup>th</sup> - USACE**

**May 30<sup>th</sup> - Borrow Process**

<https://www.dot.nd.gov/lunchandlearn.htm>