NDLTAP Pavement Preservation Outreach Boots On The Ground

Gerard Feist NDLTAP

Tom Wood ASTECH Corp.

What Is Boots On The Ground?

- It is on site visits
- Open discussion on various topics
  - Discussion is tailored to wants and needs of attendees.
  - Can include pavement reviews
  - Discussions on equipment needs and operations
  - Safety
- Goals to share information on best practices for maintaining HMA pavements
- No Cost to you
- Current schedule western ND - May 10th thru May 20th

Leaders of Discussion

- Gerard Feist NDLTAP
- Rodney Ness Swanston Equipment
- Thomas Wood ASTECH Corp

Gerard Feist NDLTAP Asphalt Consultant, Gerard worked for Burleigh County in various roles specializing in crack sealing, patching, and paving. He brings a broad background and expertise in equipment operations and pavements.

BOTG

ON THE GROUND

NDSU | NDLTAP

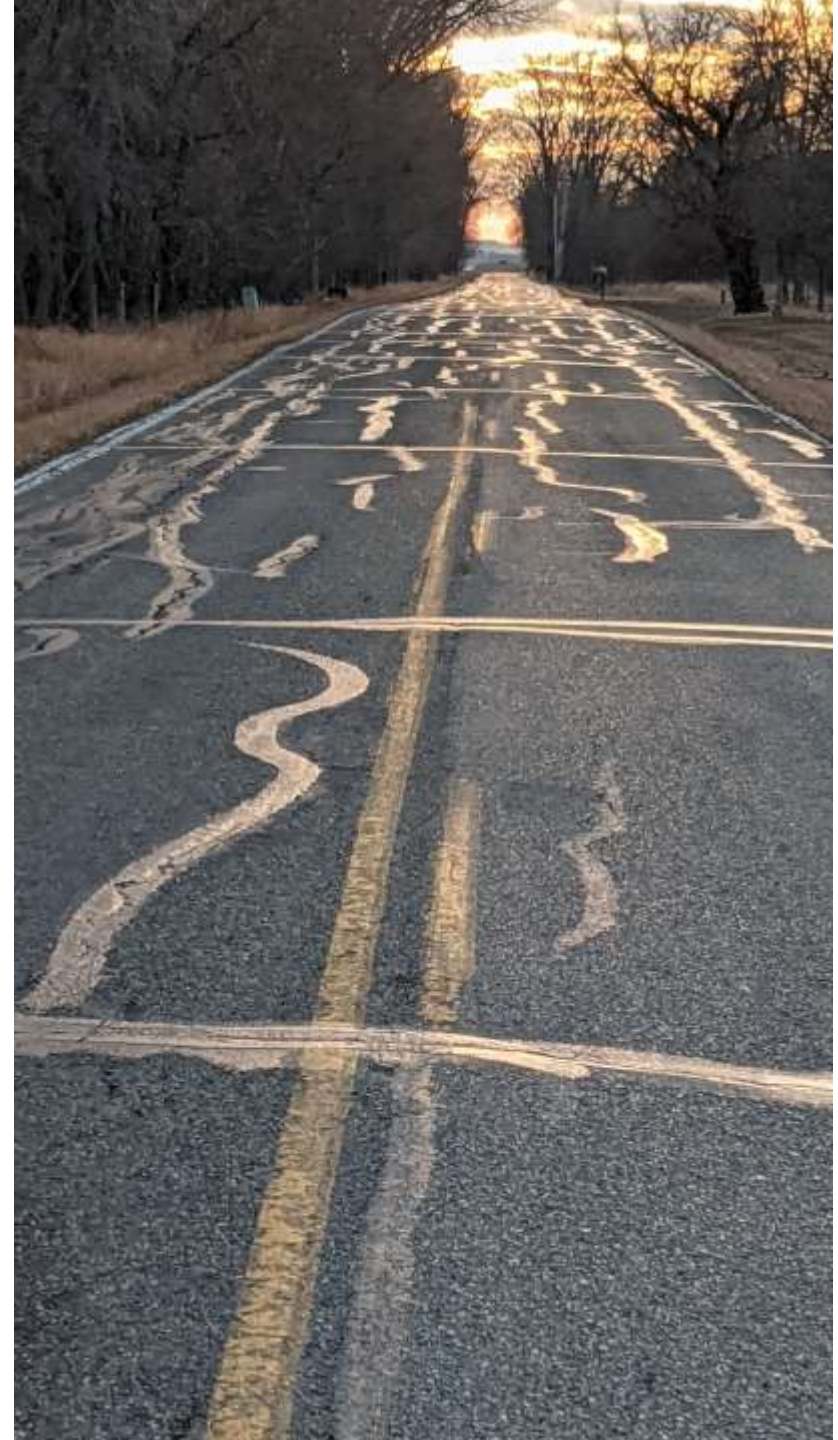
TRUCK
BULK
KIT
HART Health
SPOT ON
SAFETY
NDSU | NDLTAP
HART Health
WATER-JEL
BURN KIT
Sentry
R.E.D. BOOK
Recognize
Eliminate
Discuss
NOBODY
GETS HURT.
I AM!
DISTRESS
IDENTIFICATION
GUIDE
2016
EMERGENCY
RESPONSE
GUIDEBOOK
North Dakota
LTAP

CAUTION
STAY BACK
50 FEET

DURA PATCHER

G 19623

UD TRUCKS
G 19623



NO
PARKING
LIMIT
35

Rodney Ness, Swanston Equipment Representative, 31 years at Burleigh County with various roles from equipment operator to road superintendent. Rodney is committed sharing his vast experience's so that attendees can safely and efficiently maintain their pavements.

Goals

- Encourage sharing of information from old timers and new workers
- Help eliminate having to recreating the wheel
- Build strong network between agencies to share information
- Help agencies with maintaining their pavement network using strategic program of pavement preservation methods

How To Take Part In Boots On The Ground?

- Contact Dale Heglund
  - dale.heglund@ndsu.edu
  - 701/318/6893

Pavement Preservation

- "a program employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety and meet motorist expectations." Source: FHWA Pavement Preservation Expert Task Group. Sep 12, 2005
- It involve doing the right thing to the right road at the right time
- The goal is to keep good roads good longer
- Pavement Preservation is cost effective

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The RSL- service life enhancement since intervention - for all treatments from two agencies (MnDOT and NDDOT) appear to be relatively close to each other, except for the BOC substrates overlaid with micro-surfacing (Table 5.1). However, this could be explained through the t-tests performed on BOC substrates overlaid with micro-surfacing data sets, in which results showed the observed difference between the sample is convincing enough to say that the two data sets (MnDOT and NDDOT) differ significantly.

Table 5.1 Weibull parameters obtained for various treatments overlaid on different substrates.

Type of Treatment	Type of Substrate	Threshold Time to Failure, *tn*	Failure Mode, *p*	Remaining Service Life, *11.*
UTBWC	BOB'	0	Wear-out failures	/ n"\
	BOC'	2		/ 8 \
Chip Seals	BOB	0	Wear-out failures	9
	BOC'	0		8
	BAB	0,2		8-10
Micro-surfacing	BOB	0,2	Wear-out failures	10 - 11
	BOC	0		\ 9 - 15 2 J
	BAB	0		\ 8 - 9 /

[1]NDDOT does not have substrates that have been overlaid with this type of treatment.

[2]Significant difference observed between two data sets from t-test analysis.

The likelihood of disparities may stem from multiple factors, such as an insufficient amount of data points and limitations in performance data that lead to reduced accuracy in the estimation of remaining service life, etc.

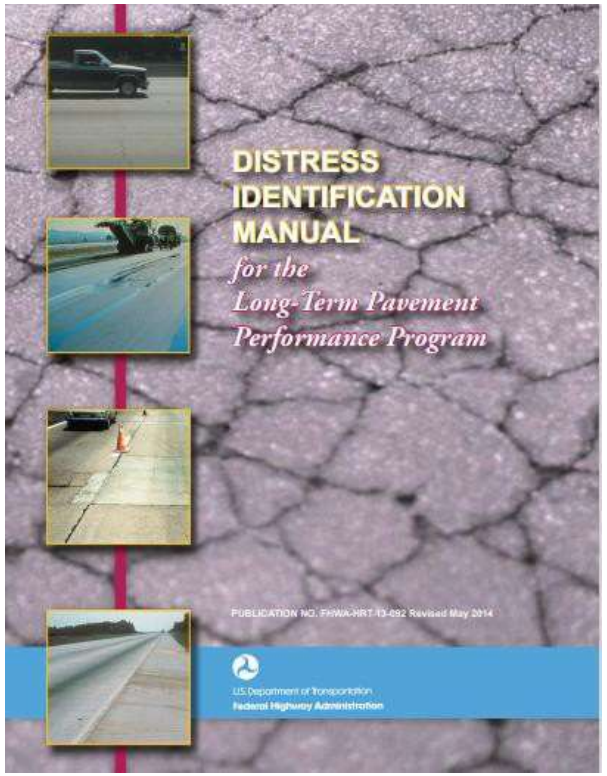
Regardless of substrate types, UTBWC has an RSL of 8 to 13 years; chip seals have an RSL of 8 to 10 years; micro-surfacing has an RSL of 8 to 11 years (excluding BOC data, which showed significant disparity between the means of the two data sets from t-test analysis). All treatments have a pattern of wear-out failures, which are an indication that the treatments are effective in providing life extensions as the cause of failures is not random.

Keys to Successful PPP

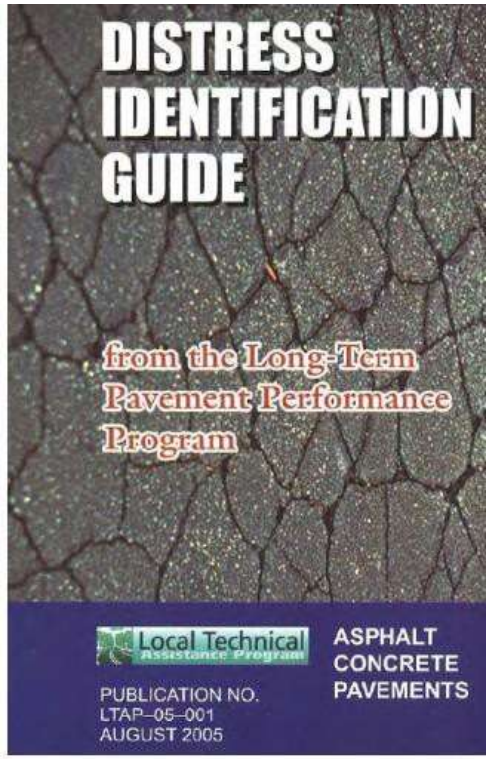
- Understand what's going on your pavements
- Have a pavement management program
  - Rates pavements
  - Predicts future conditions
  - Help with development of budgets
  - Can answer what it options
- If you don't measure it, you can't manage it!
- Keeping update on latest developments and methods
- Training of current and new employees
- Paying attention to small details and the big issues will not happen

Available Tools

FHWA Distress Manual



UGPTI Distress Guide



Pavement Road Resource Association (PRRA)

What is PRRA?

- The Pavement Preservation & Recycling Alliance provides a collective space to bring industry and agency together for the advancement of sustainable, eco-efficient, and innovative pavement applications.

Dan Wegman

Questions?

Gerard Feist

Rodney Ness

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JOHN DEERE design,

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Nice to know that when a New Generation Tractor does need servicing or parts, both are "on deposit" and instantly available at a nearby John Deere dealer's. To a busy farmer, that's as good as money in the bank.

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Standard: ☐ 3010 ☐ 4010 ☐ 5010

Special: ☐ Hi-Crop ☐ Grove and Orchard ☐ Crawler Utility: ☐ 1010

Name _____ R.R. _____

☐ Student

Town _____ State _____

Thanks

Thomas Wood

Pavement Specialist

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