

North Dakota Asphalt Conference

March 2-3, 2022

Mandan, ND

Before TLO

After TLO

**2022 ND
Asphalt
Conference**

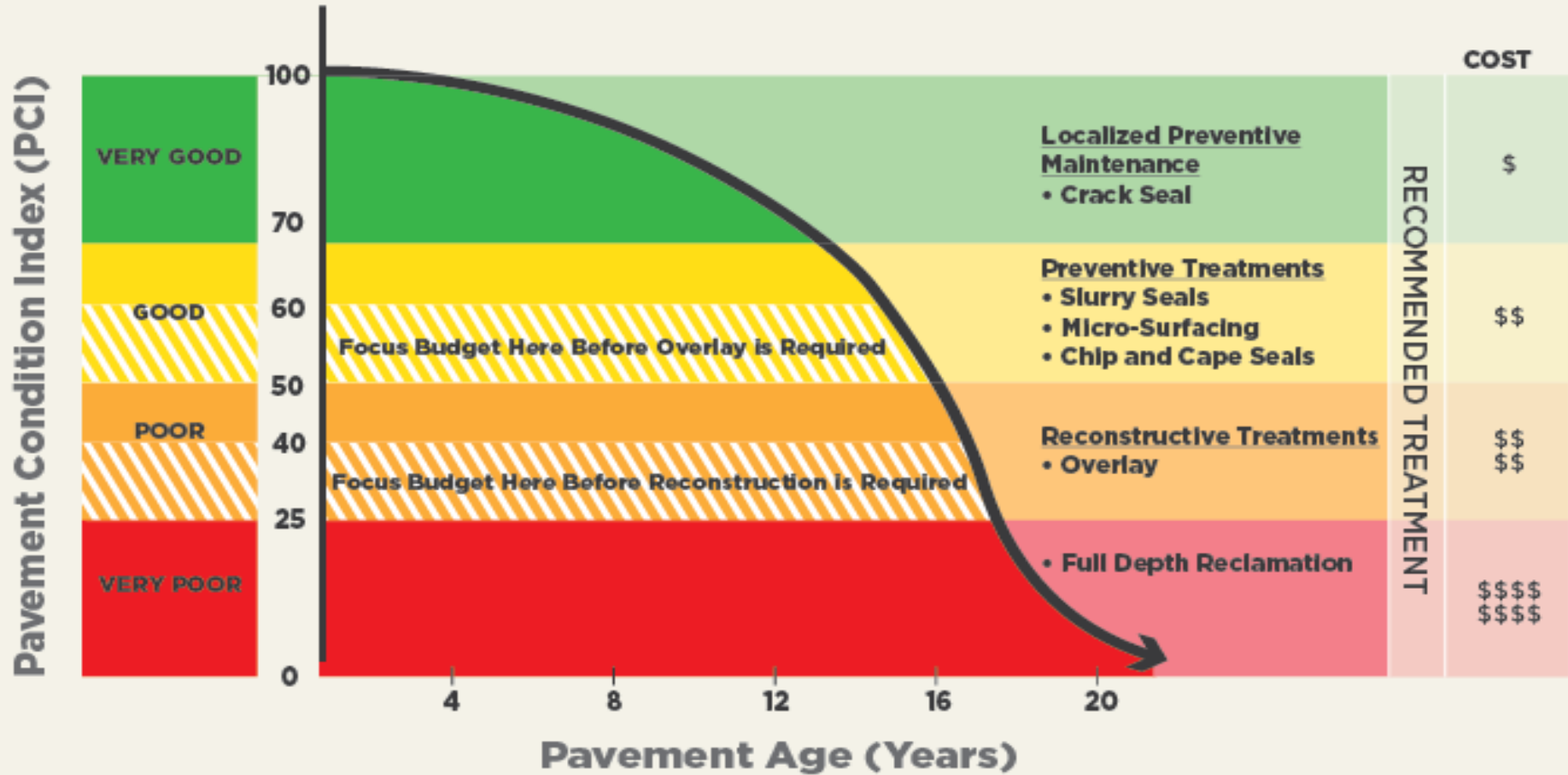
Welcome!

2022 ND Asphalt Conference

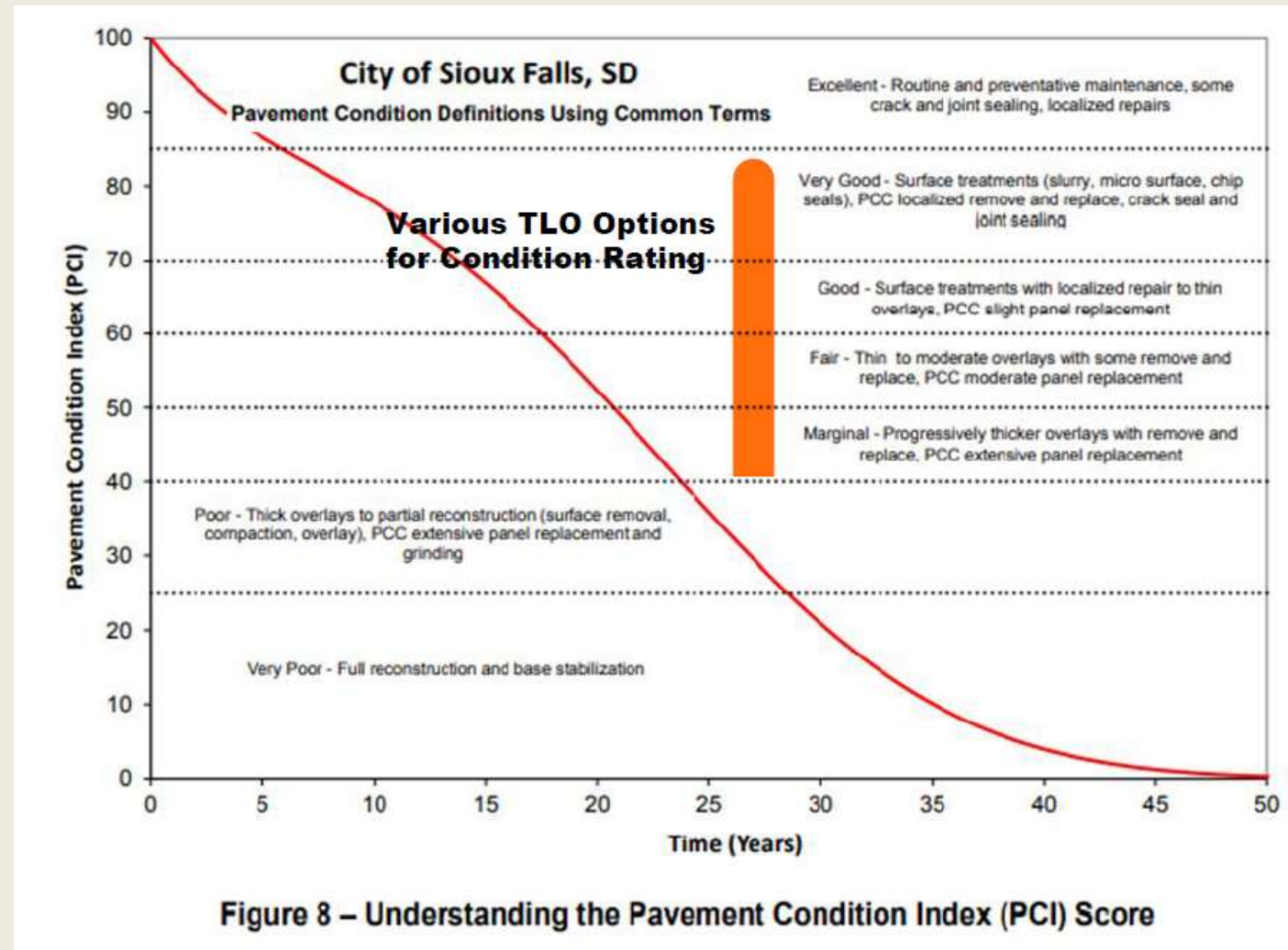
Conference Focus

- 1) Pavement Preservation
- 2) Give you some “takeaways” to take home with you
- 3) Networking
- 4) Not have to look and talk to people on in “little boxes” on your computer/tablet screens
- 5) Have Fun!

CATCH STREETS BEFORE THEY FAIL



The “Paradigm Shift” in Pavement Preservation: Engineered TLO’s Triggered Further Up the Performance Curve



Interesting Transportation Facts - ND

- Roads and highways are the backbone of our economy, allowing North Dakota motorists to travel 8.8 billion miles annually and moving a significant portion of the \$199 billion worth of commodities shipped to and from the state each year. But conditions on the system are deteriorating, as the need for transportation improvements far outpaces the amount of state and federal funding available.
- Vehicle travel in North Dakota dropped by 32% in April 2020 due to the Covid-19 pandemic (as compared to the same month the previous year) but rebounded to 8% above November 2019 levels by November 2021.
- The design, construction, and maintenance of transportation infrastructure in North Dakota supports approximately 13,000 full-time jobs across all sectors of the state economy. Approximately 215,000 full-time jobs in North Dakota in key industries like tourism, retail sales, agriculture and manufacturing are completely dependent on the state's transportation network

Interesting Transportation Facts – ND (con't)

- A total of 17% of North Dakota's major roads are in poor or mediocre condition. Driving on deteriorated roads costs North Dakota motorists \$261 million a year – \$469 per driver – in the form of additional repairs, accelerated vehicle depreciation, and increased fuel consumption and tire wear.
- A total of 11% of North Dakota's bridges are rated in poor/structurally deficient condition, meaning there is significant deterioration to the major components of the bridge. A total of 46% of the state's bridges are at least 50 years old, an age when many bridges require significant rehabilitation or replacement.

Interesting Transportation Facts – ND (con't)

- Since 2000, vehicle travel on North Dakota's roads increased 36% and the state's population increased 19%.
- The replacement value of the existing North Dakota transportation system (roadways) is conservatively estimated at \$9.5 trillion!!

FREE Webinar
March 8 / 2:00 PM EDT

This webinar is aimed at helping local decision-makers, pavement managers, and pavement engineers understand how moisture can accelerate flexible pavement damage. Attendees will hear different case studies of flexible pavements across the U.S. that have been subjected to high moisture while being able to withstand climatic changes.



The Resilience of Flexible Pavements Following Flooding and Freeze-Thaw Events

PARTICIPANTS WILL:

- 1 Understand how moisture impacts pavement performance
- 2 Evaluate design characteristics which can help flexible pavements be resilient to flooding and freeze/thaw
- 3 Learn from case studies of flexible pavements which have performed in extreme climate conditions

Speaker
Dr. Imad Al-Qadi
 Visiting Professor of Engineering,
 Director of Research International,
 Research & Engineering Laboratory (REL),
 and the Founding Director of the State
 Center for Transportation (SCT)

Speaker
Dr. Erol Tutumluer
 Visiting Professor of Engineering,
 Department of Transportation Engineering,
 at the University of Texas at Dallas
 (UT Dallas) (UTD)




Webinar Registration

Topic **Resilience of Flexible Pavements Following Flooding and Freeze-Thaw Events**

Time Mar 8, 2022 02:00 PM in [Eastern Time \(US and Canada\)](#)

Description

Moisture may accelerate flexible pavement damage in various ways, including reducing strength and modulus of unbound layers and subgrade and increasing asphalt concrete rutting, frost heave, cracking due to swelling of expansive soils, and stripping. This webinar presents cases of flexible pavements across the U.S. that have been subjected to high moisture due to inundation or spring thaw cycles. The cases would demonstrate that flexible pavements could be successfully constructed to withstand climatic changes if appropriately designed and constructed despite being subjected to high moisture conditions.

Attendees will:

- Understand how moisture impacts pavement performance
- Evaluate design characteristics which can help flexible pavements be resilient to flooding and freeze/thaw
- Learn from case studies of flexible pavements which have performed in extreme climate conditions



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NDDOT Ride Quality Awards - 2021

Place	Project #	PCN	Contractor	# of Attempts	Total Miles	Average MRI
1 st Place	NH-4-083(141)237	21988	Mayo Construction	2	31.1	31.8
2 nd Place	NH-5-021(016)000	18244	Northern Improvement	2	29.8	33.1



On with the conference!

And don't forget to :

1-Visit and thank our exhibitors

2-Thank our sponsors

3-Discuss topics and timing for future NDAC's with
Planning Committee Members