Introduction

- Benefits of pavement preservation are well known:
  - Life extension
  - Lower treatment cost
  - Reduced user cost
  - Improved safety
  - Sustainability

NCAT's Research

- Pavement Preservation Group (PG) Study has been monitoring performance since 2012
- "Traditional" treatments + variants
- More options to find best fit

PG Study Sections

- Cold, wet, freeze
- Hot, wet, no freeze
- US 300, treated 2015
- US 80, treated 2013
- US 31, treated 2016
- 390 St, treated 2021
**PG Study Sections**

**CHIP SEALS**
- Single layer
- Double layer
- Triple layer
- Single layers with crack sealing
- Fibermat
- Scrub seals

**MICRO SURFACES**
- Single layer
- Double layer
- Single layers with crack sealing
- Fibers
- HIMA

**THIN OVERLAYS**
- Virgin aggregates
- RAP/RAS
- OGFC
- UTBWC
- HIMA
- COLD RECYCLING
- FDR
- CIR
- CCPR

*Each with foamed asphalt and emulsion*

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**Notable Observations**

**CHIP SEALS AND MICRO SURFACING**
- The more you do, the more you get
  - Multiple layers
  - Crack sealing
  - Treatment combinations (Cape seals)

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**Scrub Seal**

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**Fibermat Chip Seal**
Notable Observations

CHIP SEALS AND MICRO SURFACING

- Treatments can work under different conditions
- Don't immediately rule out based on traffic or climate

BUT...

- Be cautious
Notable Observations

THIN OVERLAYS

- Recycled materials – use wisely
- Polymers – target problem areas
- Open-graded, gap-graded – potential added benefits

VIRGIN THINLAY

50% RAP

5% RAS
Notable Observations

COLD RECYCLING

- Great option, even under high traffic conditions
- 1" wearing surface holding up so far

Overall...

- Target GOOD pavements
- There's always some benefit even if pavement is in poor condition
- Not cost-effective

Overall...

- Life extension may be higher than typically reported
- Good materials
- Good designs
- Good treatment selection
- Good construction
Final Thoughts

- Many cost-effective alternatives available
- Better network health is within reach
- For more information visit: www.ncat.us

Thank you!

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