Project Contributors

- Mike Gehring - ODOT
- Josh Sletten – UDOT
- Mike Johnson – Caltrans
- Todd Fraker – Dayton
- Sheila Cherry – Kwikbond
- Dick Dunne – Baker
- Quinn McGuire – Euclid
- Steve Frank – E-Bond
- James High – E-Chem

- Gregg Freeman - Kwikbond
- Eric Hill – Amer. Concrete Cutting
- Debbie Steiger – BASF
- Mike Stenko – Transpo
- Mike Geist – Polycard
- Ed Nagle – Nagel and Assoc.
- Brad Kamin - Sika
Project Objectives

- Identify the common field conditions that may require deck preservation treatments.
- Poll the WBPP States to see what products were being used.
- Identify key attributes for each treatment purpose
- Develop a product matrix that could be used by the States to select appropriate products.
The following field situations were identified where deck treatments may be warranted:

- Deck Cracking
- Deck Spalling
- Deck Delaminations
- Soffit Efflorescence
- Abrasion/Chain wear or loss of cover in general
- Loss of Friction
- Need for Grade Adjustment
Deck Sealing Product Manufactures used by WBPP States

- Liquid Concrete
- Euclid
- Sika
- Transpo
- E-Bond

- Dayton Superior
- Kwikbond Polymers
- E-Chem
- Polycarb
- Unitex
Selection Considerations

- How wide are my cracks?
- How much crack penetration is expected?
- How quickly do I need to restore traffic?
- What deck preparation is required?
- Is the product sensitive to moisture?
- Do I need strength or stiffness gains?
- How long will the treatment last?
- How much will it cost?
Deck Seal Attributes Collected

- Cost
- Expected Life
- Viscosity
- Time to Traffic

- Cold Weather Application
- Moisture Insensitivity
- Modulus
- Bond Strength
Key Attributes

- **Viscosity** - Lower viscosity products may be able to penetrate finer cracks.
- **Gel Time** – How long will the product have to penetrate into the crack before it sets.
- **Bond Strength** – capacity across the product concrete interface.
- **Modulus** - High = Rigid, Low = Flexible
Show Matrix
Next Steps

- Complete deck sealing product matrix
- Extend to other field observed conditions
- Combine with other partnership efforts.
- Looking for volunteers