Concrete Pavement Rehabilitation

PURPOSE

• Repair a Specific Distress
• Improve Ride Quality
• KCRC has approx. 28 Miles of Concrete Roads
Concrete Pavement Rehabilitation

- Full Depth
- Unbonded Concrete Overlay
- Joint Repair/Seal
- Diamond Grinding
- Slab Lifting/Stabilization
- HMA Overlay
Unbonded Concrete Overlay
White Topping

- 4” = 4’x4’ Joint Grid
- 6” = 6’x6’ Joint Grid
- Transverse Expansion joints every 500 ft.
Joint Repair/Sealing

Concrete Cracking
• Shrinkage
• Hairline
• Settlement
• Structural

Joint Spacing
• 2-3 times the thickness of Concrete
  • 6” Conc. = 12-18’ Joints

Crack Sealing
• Hot Poured Rubber
• Silicone
  • Load Transfer Restoration
• Dowel Bar Retrofit
• Crack Stitching
Diamond Grinding

• Improve Ride Quality
• Reduce Dynamic Loads
• Reduce Tire Noise
• Overlay Alternate
Slab Lifting/Stabilization

- High Density Polyurethane Foam
- Cementitious Grout or Flowable Fill
• Direct with Membrane
• Rubblization
• Crack and Seat
• Bond Breaker
Concrete Rubblizing
Concrete Pavement Challenges

- Typically High Volume Roads – U.S. Routes
- Phase Construction
- Maintaining Traffic
- Compromise Quality To Keep Traffic Moving
Proper Repair Methods?

HMA Repair Products and Techniques Don’t Work – Look Bad and Ride Bad