



STATE OF NEW JERSEY  
**DEPARTMENT OF TRANSPORTATION**

# NJDOT Pavement Rehabilitation Strategies

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Principal Engineer

Pavement Management & Technology

# Pavement Rehab Goals

- Improve Pavement Condition
- Improve Ride Quality
- Improve Safety
- Extend Life
- Increase Structural Capacity
- Reduce Life Cycle Costs
- Increase Customer Satisfaction

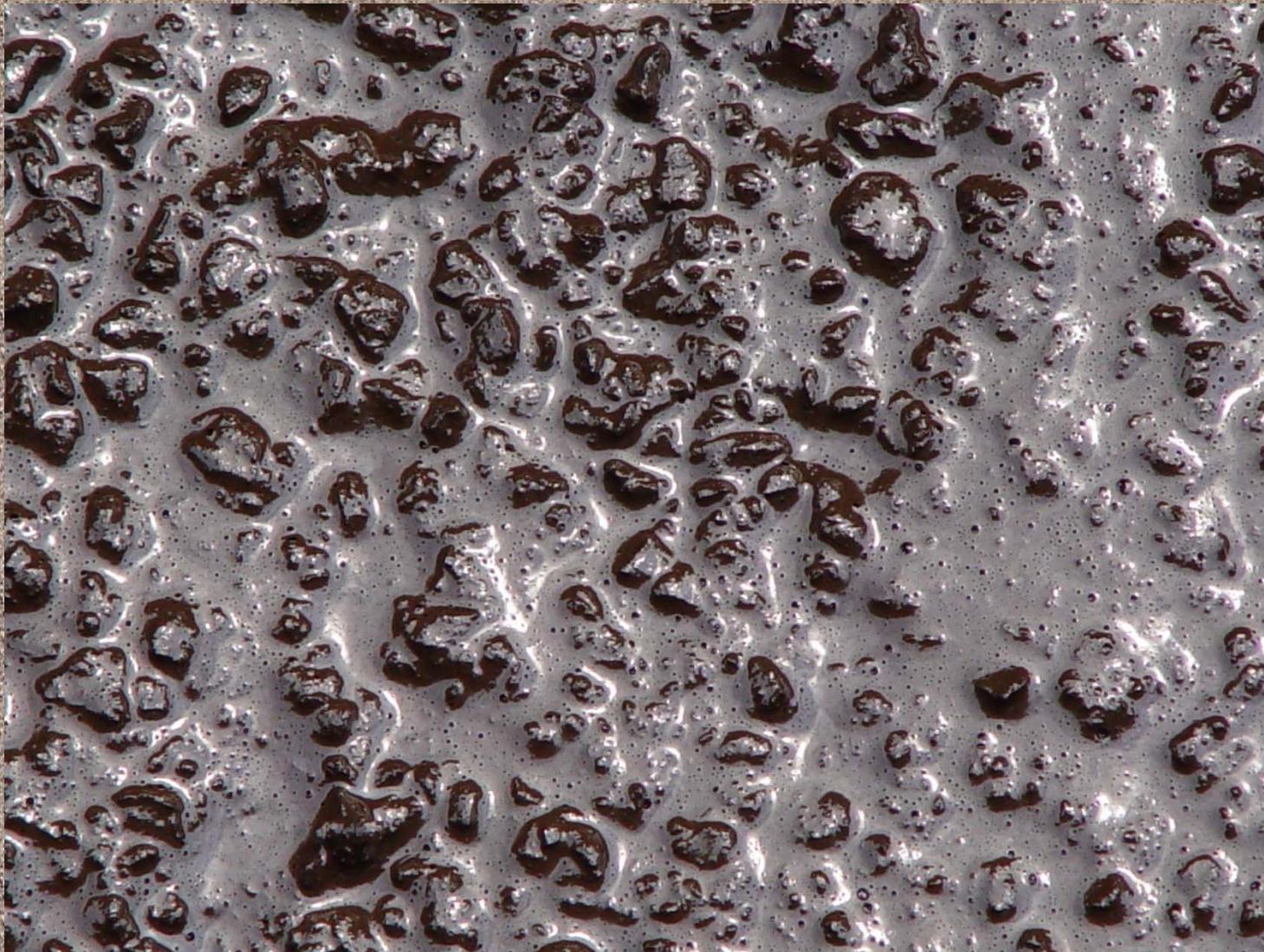
# Flexible Rehab Strategies

- Micro-surfacing
- Thin Overlays
  - HMA Friction Courses
  - Ultra-Thin Friction Course (Novachip)
  - High Performance Thin Overlay

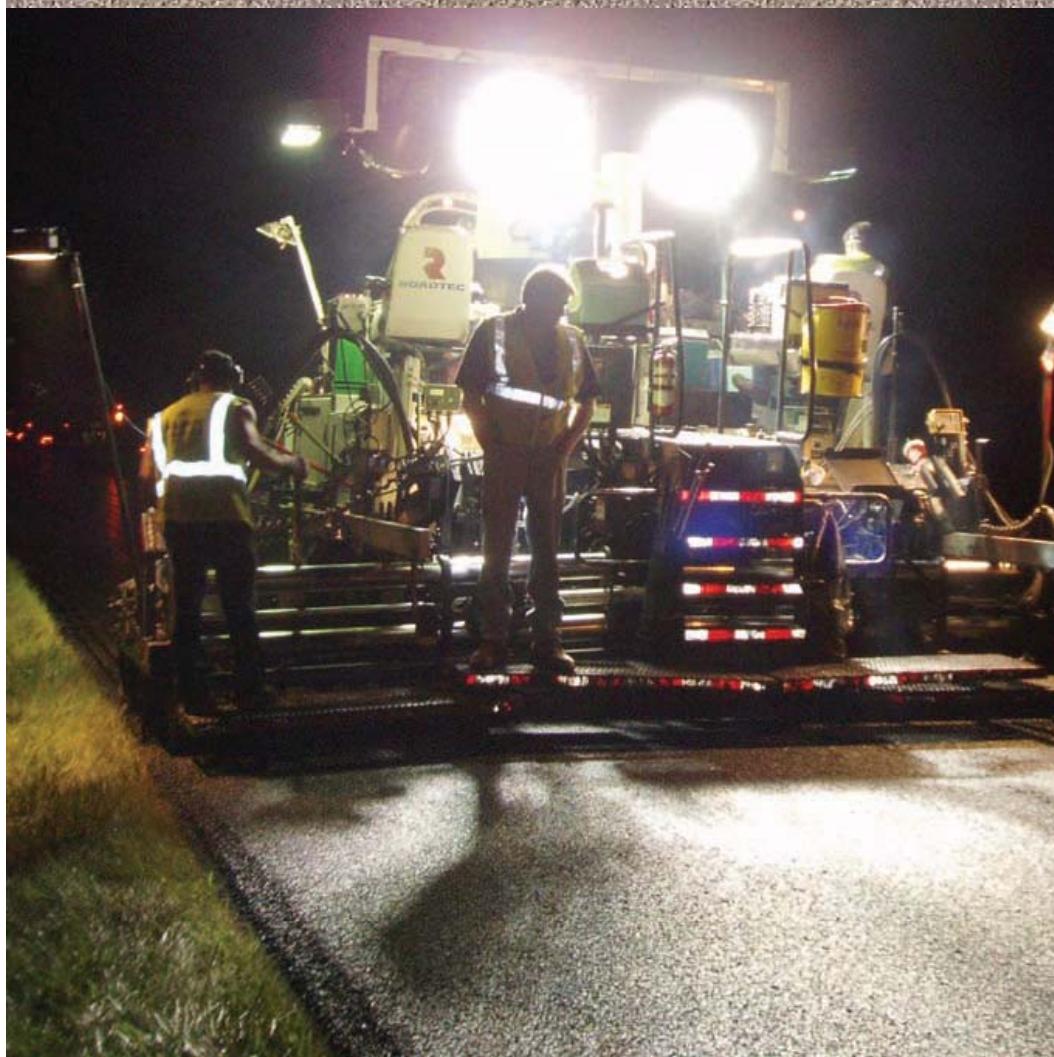
# Micro-surfacing



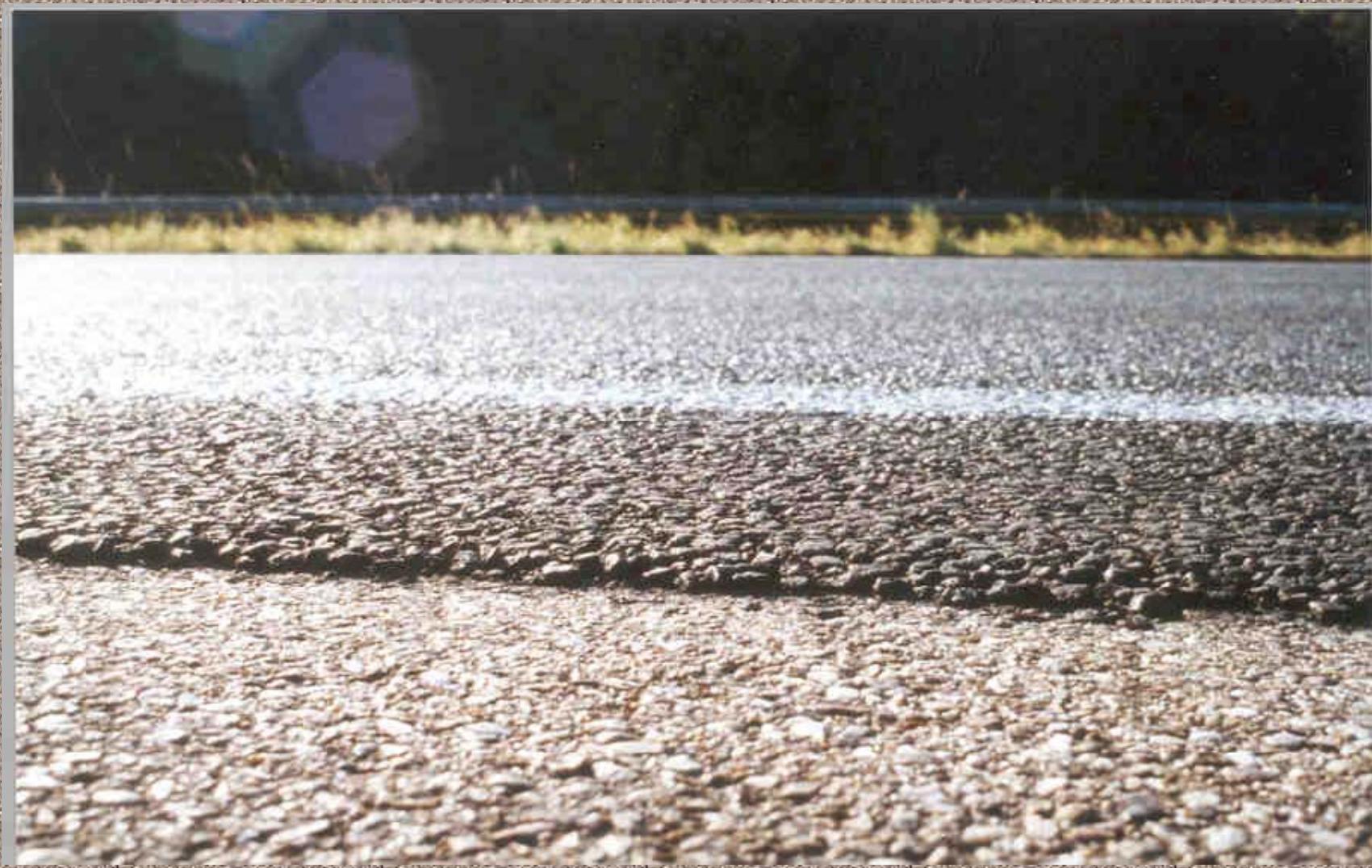
# Micro-surfacing



# Asphalt Rubber Open Graded Friction Course



# Ultra-Thin Friction Course (Novachip)

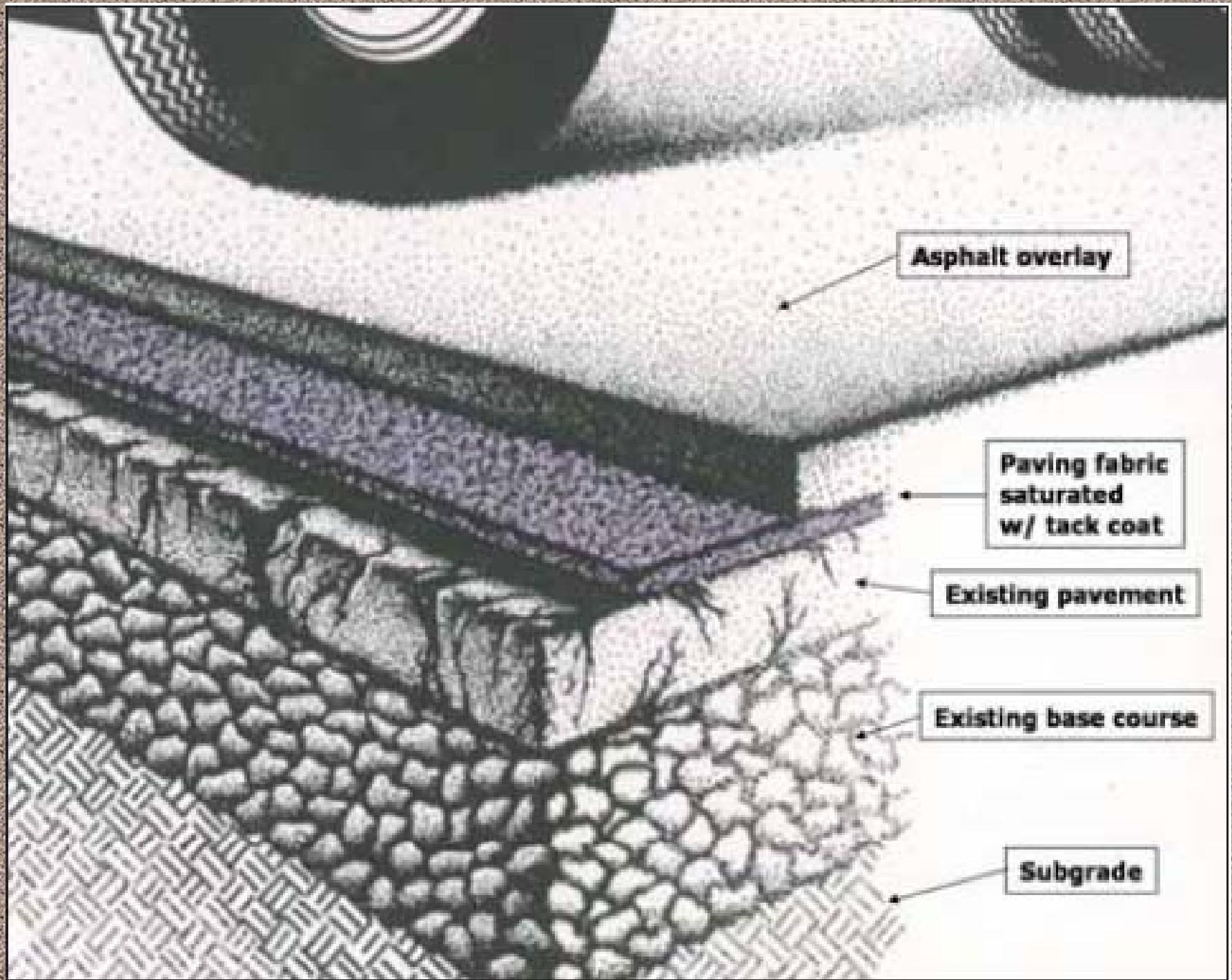


# High Performance Thin Overlay



# Flexible Rehab Strategies

- Mill and HMA Overlay
- Mill, Construct Paving Fabric & HMA Overlay
- Stone Matrix Asphalt SMA



# Paving Fabric



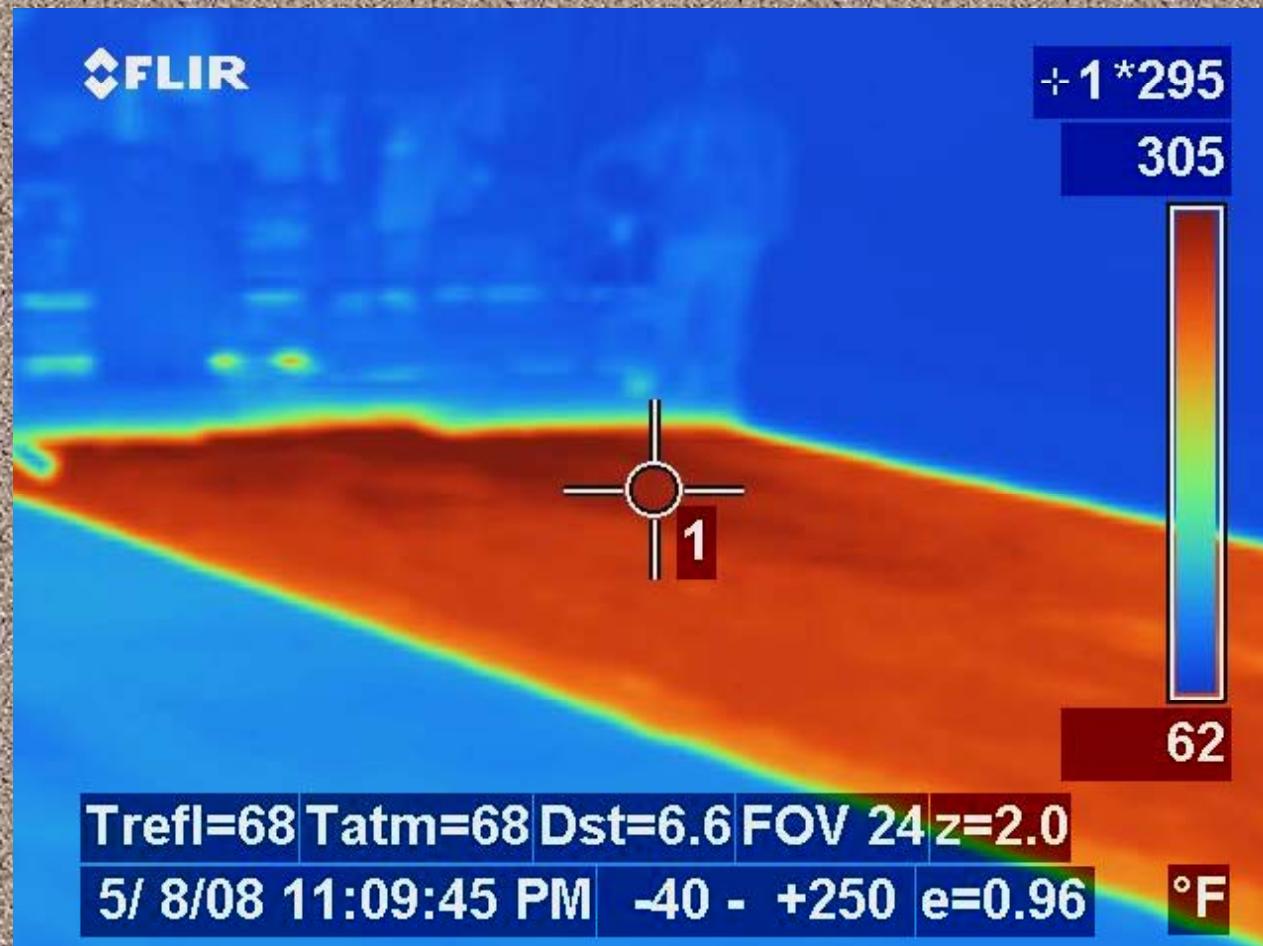
# Paving Fabric



# SMA 9.5mm Surface Course



# SMA 9.5mm Surface Course



# Concrete Pavement Rehab Strategies

- Slab Stabilization
- Partial Depth Repair
- Full Depth Repair
- **Dowel Bar Retrofit and Crack Stitching**
- Diamond Grinding
- Joint Resealing and Crack Sealing

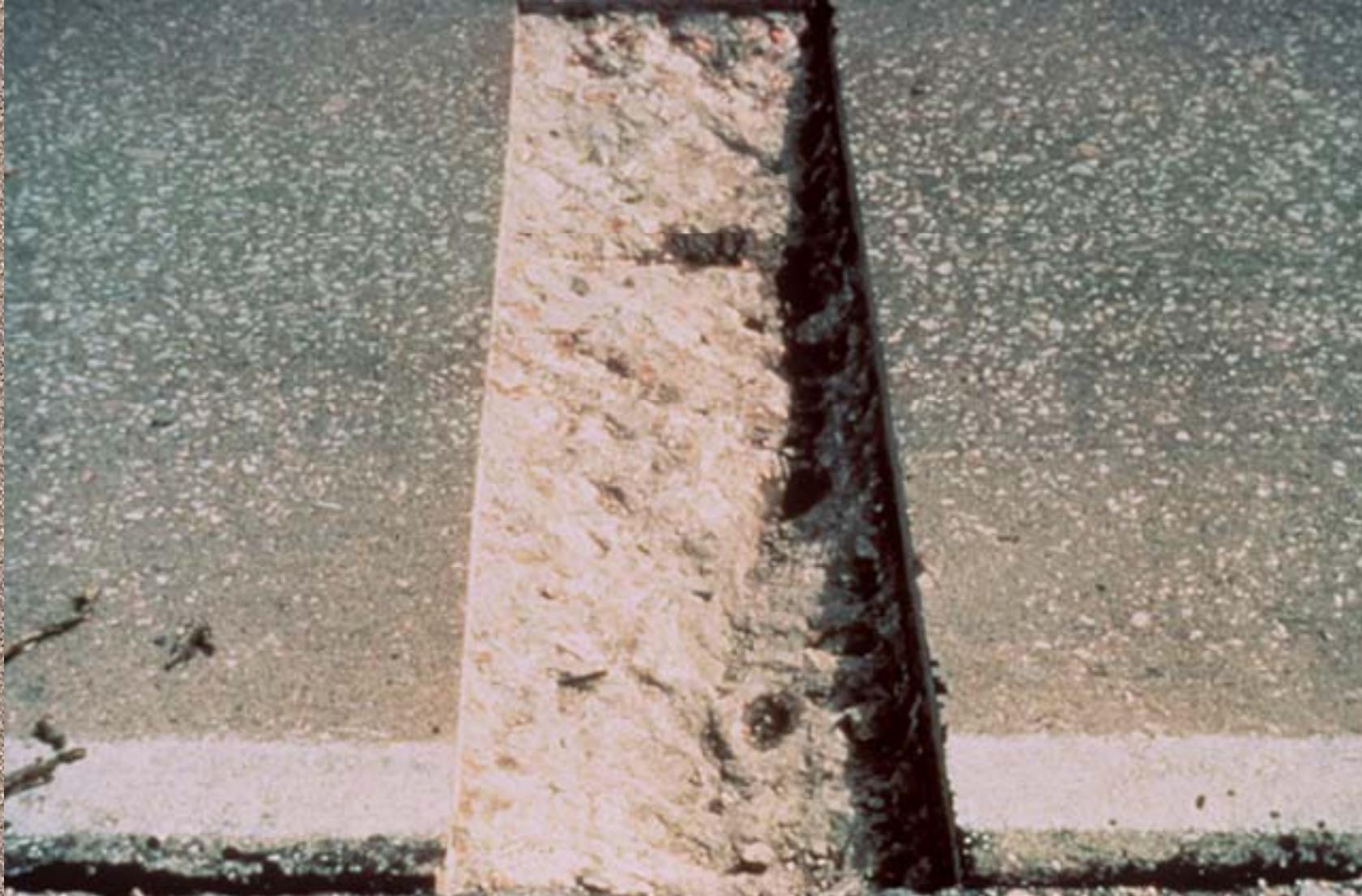
# Slab Stabilization, Polyurethane Grout



# Slab Stabilization, Polyurethane Grout



# Partial Depth Repair After Saw Cutting and Chipping



# Partial Depth Repair with Portland Cement Concrete



# Partial Depth Repair with TechCrete (Crafco Product)



# Full Depth Concrete Repair

**Cast In Place**



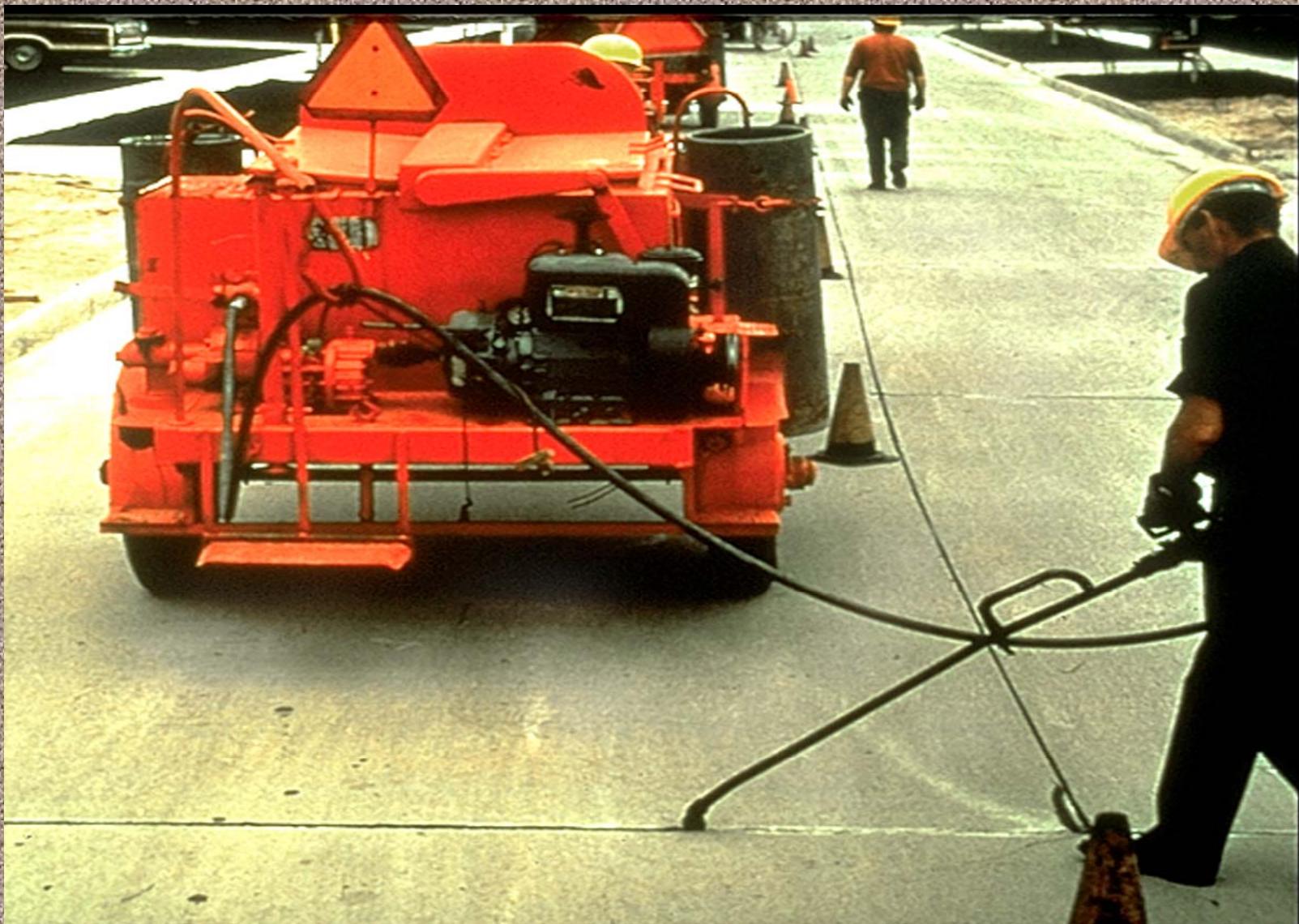
**Precast and Dropped In**



# Diamond Grinding



# Joint Resealing

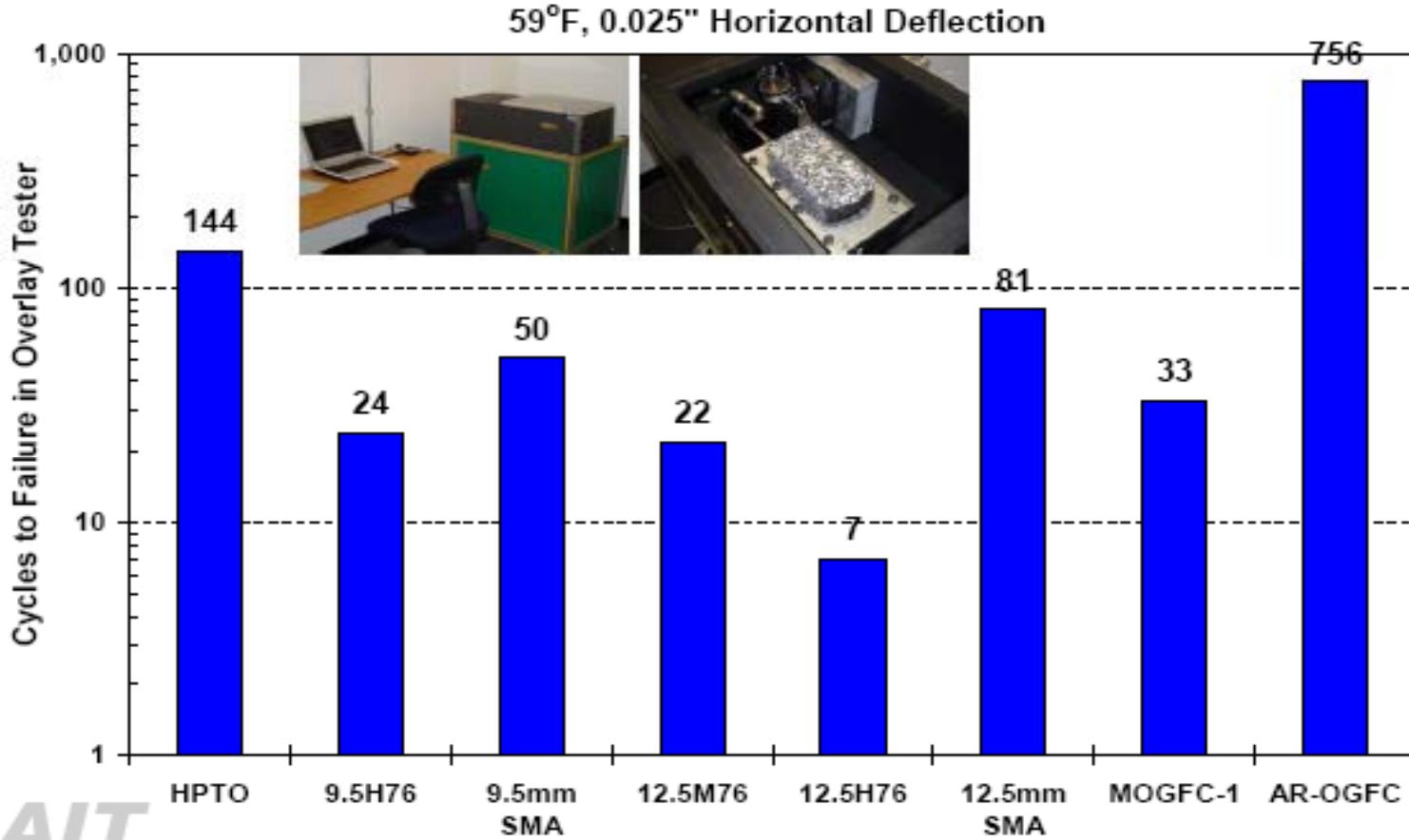


# Composite Pavement Rehab Strategies

- Slab Stabilization
- Full Depth Repairs with HMA
- Use of Better Mixes
  - AROGFC
  - HPTO
  - SMA
  - Reflective Crack Relief Interlayer (RCRI)
  - XFB or Rosphalt 50

# Overlay Tester Results

## NJDOT Surface Course Mixes



# Composite Pavement Rehab Strategies

- Rubblization and HMA overlay

# Thank you. Questions?

## Contact Info.:

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