FHWA Pavements Program

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SCAPA Winter Conference
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Agenda

- FHWA Pavement Program vision/focus areas
- Pavement Performance Management
- Annual report on Innovation and Pavement Technologies
- Safety
Infrastructure Regulatory Update

- Patented and Proprietary Products Policy
- Indefinite Delivery/Indefinite Quantity (ID/IQ) Contracting
- Interstate Access
- Design Standards
- Broadband Deployment
- National Bridge Inspection Standards
FHWA Pavement Program

Mission

• Provide leadership and technologies for the delivery and management of safe, durable, cost effective, and sustainable pavements that meet our customers’ needs

Vision

• To optimize pavement design, construction, and maintenance to address environmental, traffic, safety, cost, and functional considerations.

Objectives

• Improve existing technologies and develop practices and tools for practitioners which improve longevity, safety, and sustainability of pavements.
• Address stakeholder needs by building strong research- and deployment-focused partnerships.
• Deliver technologies and tools to address stakeholder needs.
Pavement Program Focus Areas

- Quality Assurance
- Surface Characteristics
- Pavement Preservation
- Pavement Management
- Pavement Design and Construction
- Mobile Pavement Technology Centers
- Performance-Related Specification (PRS)
- Sustainability
MATC demonstrates new and under-utilized technologies in the field

• I-26 MM 60-75

• Open House Wednesday, January 29th

• Thank you to SCDOT OMAR and District 2 for hosting

Taking Pavement Technologies into the Field
Deploying innovative practices and methods is a shared mission of FHWA’s two mobile technology centers.
Performance Related Specifications

Specifications that describe how the finished product should perform over time

- Prescriptive
- Performance

- Method specifications
- End-result specification
- Quality assurance specification
- Performance-related specifications
- Incentive-based (e.g., time, traffic, quality)
- Post-construction performance (e.g., warranties, maintenance agreements)

Asphalt specifications have evolved from prescriptive method-based to end-result and performance-related specifications, passing more responsibility for quality to the contractor. Photo: ©NPTech.
Pavement Management

- Good: 40% Drop in Quality
- Fair: 75% of Life
- Poor: 40% Drop in Quality, 12% of Life

- Spending $1 on preservation here...
- Eliminates or delays spending $6 to $10 on rehabilitation or reconstruction here.
SC Transportation Asset Management Plan
### SCDOT’s 10 Year Asset Condition Performance Targets

<table>
<thead>
<tr>
<th>Pavements</th>
<th>2016 (Actual) % Good</th>
<th>2016 (Actual) % Poor</th>
<th>Ten-year Target % Good</th>
<th>Ten-year Target % Poor</th>
<th>Average 10-Year Allocation (in millions)</th>
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</thead>
<tbody>
<tr>
<td>Interstate¹</td>
<td>65%</td>
<td>11%</td>
<td>92%</td>
<td>3%</td>
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<td>Non-Interstate NHS</td>
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<td>45</td>
<td>72</td>
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<td>Non-NHS Primaries</td>
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<td>48</td>
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<td>Federal Aid Secondary</td>
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<td>52</td>
<td>40</td>
<td>35</td>
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<tr>
<td>Non-Federal Aid Secondary</td>
<td>15</td>
<td>55</td>
<td>25</td>
<td>45</td>
<td>121.0</td>
</tr>
</tbody>
</table>

¹ Interstate does not include I-95
² Non-Federal Aid Secondary does not include I-95
Innovation and Pavement Technologies

- Concrete clips – video series
- Pavement Design Policy Outreach
- Pavement Management Peer Exchanges
- Pavement Design Catalog
- Continuous Friction Measurement
- Precast Concrete Pavement
- Long-Life Pavement Strategies
- Guide to Sustainable Pavements
- Constructing and Inspecting Asphalt Pavement Projects
- Mobile Technology Centers

Pavement Surface Characteristics and Safety

- Friction
- Texture
- Durability
- Drainage
Safety is everyone’s business

Preliminary number of traffic fatalities in 2019 is 986.
- Almost 20 people each week
Buckle up
Put down the phone
Don’t Drink and Drive
Slow Down – Stick to the Speed Limit