National Pavement Infrastructure

- 160,000 miles in NHS Pavement Network
- 500+ million tons of Hot Mix Asphalt produced annually
- 25+ million cubic yards of concrete produced annually

- Nearly 50 yr old empirical approach to pavement design
- Pavement design lives are not being achieved in many cases
- Work zones are a serious impact to mobility
- Material price increases
- Competing Priorities
Pavement & Materials Program

Provide the Leadership and Technologies for the Delivery of Long Life Pavements that:

-- Meet Customer Needs,
-- Are Safe,
-- Cost Effective,
-- Long Lasting, and
-- Effectively Maintained.
Pavement & Materials Focus Areas

1. Design and Analysis
2. Materials and Construction Technology
3. Pavement Management and Preservation
4. Surface Characteristics
5. Construction and Materials Quality Assurance
6. Environmental Stewardship
Focus Areas

1. **Pavement Design and Analysis**
   - Long life pavement design
   - ME-PDG
   - Life Cycle Costs
   - Modeling
   - Rehabilitation evaluation/design

2. **Materials and Construction Technology**
   - Material characterization and testing
   - Material behavior
   - Construction test methods
   - Innovative construction techniques (i.e. Intelligent Compaction)
Focus Areas

3. *Pavement Management and Preservation*
   - Pavement Management
   - Pavement Preservation
   - Preventive maintenance and rehabilitation effectiveness

4. *Pavement Surface Characteristics*
   - Smoothness/Rideability
   - Friction
   - Noise
   - Splash and Spray
# Focus Areas

## 5. Construction and Materials Quality Assurance
- Material quality assessment
- Risk management
- Laboratory accreditation
- Certification programs
- Assuring quality with different project delivery mechanisms

## 6. Environmental Stewardship
- Recycling
- Use of alternate materials
- Warm mix asphalt
- Green Highways program
Planning & Prioritizing Work

- We Can’t Do Everything
- Focus on “First Things First”
- Drive Priorities from Focus Area Needs
- Priority Assessment
  - Customer Needs/Input
  - Level of Effort/Complexity
  - Benefit/Effectiveness
FHWA Pavements Program Team

- **Internal**
  - Office of Pavement Technology
  - Office of Asset Management
  - Office of Infrastructure R&D – Pavements
  - Resource Center-Pavement & Materials TST
  - Federal Lands & Division Offices
FHWA Pavement Program Team

- External
  - State DOT’s
  - AASHTO
  - TRB/NCHRP
  - Industry
Bringing it Together......

- FHWA Internal Focus Area Teams
- FHWA Pavement Forum
- AASHTO Committees and Sub-Committees
- TRB Pavement Executive Committee
- Expert Task Groups
THANK YOU......

U.S. Department of Transportation
Federal Highway Administration