North Dakota Asphalt Conference
April 6-7, 2010

FHWA Update

Wendall L. Meyer
Division Administrator
FHWA North Dakota Division
Discussion Areas

- FHWA Briefly
- Federal Funding
- FHWA’s Role
- Administrator’s Focus
  - Every Day Counts
FHWA: Who are we?

- **Money**: About $40B Federal Highway Funds
- **Legislated Mission**: “…provide for a strong and vigorous national economy…” 23 USC 101(b) (and associated regulations)
- **What we aspire to**: Improve Mobility on our Nation’s Highways Through National Leadership, Innovation, and Program Delivery.
- **What the public expects**: Safety and fiscal integrity, emergency response…
Surface Transportation Act Reauthorization Process

Administration bill introduced in Congress.

24 MONTHS

FIRST 4 YEARS

9-12 MONTHS

6-8 MONTHS

4-6 MONTHS

Once each bill is approved, a conference committee works to resolve the differences between the two bills. When the conference committee reaches agreement, a single bill is submitted to both the House and Senate for final passage.

Once approved, each bill is "reported out" to the full membership of both the House and Senate. Voting on both bills follows any further debates and amendments.

Men and DOT draft legislative proposal.

1 MONTH

SEPTEMBER 30

Once passed, the bill is sent to the President for final approval.
Critical Issue: Funding

- Transportation Reauthorization
  - SAFETEA-LU expired September 30, 2009
  - Extension until December 31, 2010 (HIRE Act)
- FY2010 Appropriations Act
  - About $41 billion
  - North Dakota’s obligation limitation about $205 million
Critical Issue: Funding

- **Recovery Act**
  - North Dakota received approximately $170 million
    - 100 percent obligated
    - 45 percent expended
    - Approximately 214 direct jobs created or sustained

- **HIRE Act** - President signed the bill on March 18, 2010.
  - The HIRE Act includes an extension of surface transportation programs through December 31, 2010, restoration of the SAFETEA-LU rescission, and tax incentives for job creation. It does not provide additional funding for transportation infrastructure like that provided in the Recovery Act.

- **Emergency Relief**
  - FY2010 funding allocation on March 31 to North Dakota in the amount of about $103 million
FHWA: Our Role Today

A Partner

- In “A Federally Assisted, State Administered Program”

- Implement Laws and Regulations
- Financial Oversight and Eligibility
- Federal Goals
- Trust

Value Received

Stewardship

Oversight
FHWA: Our Role has Evolved

From activity approval on all projects

To delegation of environment, design, and construction

To an emphasis in program-level oversight
Every Day Counts

- Going Greener initiative (internal)
- Shortening Project Delivery (external)
- Accelerating Technology and Innovation Deployment (external)
Accelerating Technology and Innovation Deployment

- Accelerated Bridge Construction
- Adaptive Control Software Lite (ACS Lite)
- Asset Management Tools
- Green Pavement Technologies
- Roadway Departure Prevention Technologies
Green Pavement Technologies

Provides cost effective solutions for reducing our highways’ carbon footprint and preserving natural resources.

- Reduce emissions,
- Use of existing, aged highway materials and recycled materials,
- Effective use of locally available marginal materials.
Growing Demand, Sustainability, and Maintaining Quality and Performance

- Federal, State, and local transportation agencies face growing demand for materials needed to maintain and rehabilitate roads.
  - Industry is turning to reclaimed materials as an alternative to virgin materials and as a quality ingredient in paving mixtures.

- There is an urgency towards “Green” technology and sustainable pavements due to innovative paving technologies and stricter environmental regulations.

- The challenge facing highway agencies is using alternative methods, technologies, and materials while maintaining quality, well-performing pavement infrastructure.
Green Pavement Technologies

- High Reclaimed Asphalt Pavement
- Warm Mix Asphalt
So Where Are We Now?

State of Deployment & Market Readiness
Defining High RAP

- Reclaimed Asphalt Pavement
- Removed and/or reprocessed pavement materials containing:
  ~ binder (5%)
  ~ aggregates (95%)

High RAP is defined as more than 25% RAP by weight of mix.
State of Deployment
Reclaimed Asphalt Pavement

States that **Permit**
more than 25% RAP

States that **Use**
more than 20% RAP

The nationwide average use of RAP is 12%. 
States that have increased RAP...

- 23 States now have experience with high RAP mixes
- 11 States have experience with high RAP and Warm Mix Asphalt mixes
Warm Mix Asphalt Benefits

- **Environmental benefits**
  - Reduced fossil fuel consumption
  - Reduced emissions, greenhouse gas emissions

- **Other benefits**
  - Extend paving season
  - Ability to store mixture longer
  - Longer window of opportunity for compaction
  - Increased recycling rates
Warm Mix Asphalt

Allows for production and placement of asphalt pavement material at lower temperatures

- Latent Heat of Vaporization
- Drying
- Heating
- Vaporization

Cold Mix

Half-Warm Asphalt

WMA

HMA

Temperature, °F

Fuel/Ton
State of Deployment
Warm Mix Asphalt

- First public demo in US in 2004
- WMA projects have been completed in 40 States
- At least 10 States have adopted permissive specifications
Areas with Warm Mix Trial Projects
Savings as Compared to Conventional Hot Mix Asphalt

Thank You!

Wendall L. Meyer  
Division Administrator  
Federal Highway Administration  
North Dakota Division  
1471 Interstate Loop  
Bismarck, ND 58503  
Phone: 701-250-4204  
Email: NorthDakota.FHWA@dot.gov

Buckle Up, Every Trip, Every Time