



Reauthorization 2005

SAFETEA-LU



Pavements Research Development and Technology



Tommy L. Beatty, Director
Office of Pavement Technology

presented during the
North Central Asphalt User/Producer Group

NCAUPG

2006 Technical Workshop
and Conference





SAFETEA-LU

- Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users
- August 10, 2005
- \$244.1 Billion



<http://www.fhwa.dot.gov/safetealu/>





Presentation Outline

- Background
- Program elements
- Designations and earmarks
- Funding challenges





Background

- Surface Trans. Research, Development, and Deployment Program (STRRD)
 - Replaces STR and Technology Deployment Program
 - Includes all aspects of RD & T
 - Program focused on
 - Balance of applied and fundamental R&D
 - Emerging issues with national implications
 - All funds are directed to recipients or programs





Program Elements

- Stakeholder input
 - States, Academia, and Industry
- Competition and peer review
 - All grants, contracts or agreements
- Performance review and evaluation
 - Outcome based





Stakeholder input

- Possible TRB Pavement Technology Committee.
 - TRB committee to provide general input to the overall FHWA Pavements Program.
- Expert Task Groups (ETG's) established for more specific pavement technology areas.





Stakeholder input

- Asphalt ETG's
 - Binder
 - Mix and Aggregate
 - Pavement Design Modeling
- Continued support to the ETG's by the FHWA mobile asphalt testing labs
 - Binder and Mix Laboratory Trailers





Designations and Earmarks

- Designated Programs
 - Innovative Pavement Research and Deployment Program (IPRD)
 - Alkali-Silica Reactivity
- Earmarks
 - Asphalt Reclamation Study
 - Fundamental Properties of Asphalts
 - Asphalt Research Consortium
 - National Center for PCC Technology (ISU)





Other Related Programs

- FHWA Managed Programs
 - Long-Term Pavement Performance (LTPP)
 - Highways for LIFE
- Non-FHWA Managed Programs
 - F-SHRP





Innovative Pvmnt. Research and Deployment Program

- \$22.625 million per year
- Deployment goals
 - Innovative materials and designs
 - Accelerated construction techniques
 - Innovative design criteria and specs
 - New NDT and evaluation technologies
 - Evaluation of benefits
 - Technology transfer





Innovative Pvmt. Research and Deployment Program

- Research to improve NHS pavements
 - \$4.1 million for asphalt pavement
 - \$4.1 million for concrete pavement
 - \$4.1 million for alternative materials
 - \$2.45 million for aggregates



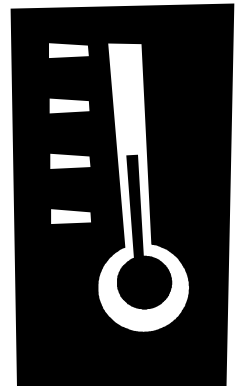
Innovative Pvt. Research and Deployment Program (cont.)

- \$4.1M for Asphalt Pavements (2006)
- Potential project areas to include
 - Superpave Performance Test (SPT)
 - Development of New Testing Tools
 - Moisture
 - Asphalt Modifiers
 - Design Gyration Levels
 - Intelligent Compaction



Innovative Pvt. Research and Deployment Program (cont.)

- \$4.1M for Alternative Materials (2006)
 - Warm Mix Asphalt (WMA) Technologies
www.fhwa.dot.gov/pavement/asphalt/wma.cfm
 - Innovative QA tools
 - Pavement Surface Characteristics
 - Recycled Material



Innovative Pvt. Research and Deployment Program (cont.)

- \$2.45M for aggregates (2006)
 - Simulation Imaging and Mechanics of Asphalt Pavements (SIMAP)
 - Properties of Aggregate Bases
 - Effect of Fillers on Asphalt Mixes





Asphalt Reclamation Study

- South Dakota School of Mines
- \$1.5 million for 2006 only





Fundamental Properties of Asphalt

- Fundamental properties of asphalts and modified asphalts
- Started in 1991
- Western Research Institute
- \$4.2 million per year





Asphalt Research Consortium

- Led by Western Research Institute
- Research
 - Flexible pavements
 - Extending life-cycle of asphalt
- \$7.5 million grant per year





National Center for PCC Technology

- Iowa State University
- R&D on concrete pavement technology
- \$10.0 million over five years





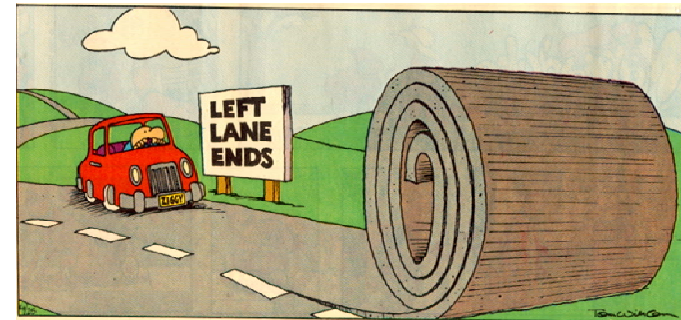
Long Term Pavement Performance (LTPP)

- Program to be completed by 2009
- Materials testing and data collection
- Funding increased to \$10.12 million per year



Highways for LIFE

- New program to accelerate adoption of new technology
- Performance standards
- 15 projects annually
- Increased federal share available
- Funded at \$15 million to \$20 million per year





F-SHRP

- New program to follow SHRP
- Renewal track includes pavement aspects
- Program managed by TRB
- Funded at \$51.625 million annually





Funding Issues

- SAFETEA-LU Title V funding
 - 196 million dollars.
- SAFETEA-LU Title V Earmarks
 - 234 Million Dollars
- Program is 16.4% over-allocated.
 - Reduction of all programs by 16.4%





Thank You



Tommy L. Beatty, Director Office of Pavement Technology
www.fhwa.dot.gov/pavement