

Transportation Research Forum

Missouri Department of Transportation

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Management

March 17, 2009



Today's Topics - Draft

Value of Research

FHWA Role in Research & Technology

National Leadership

Long Term Research

Innovation Delivery

Accountability

Program Improvements

A horizontal banner at the bottom of the slide featuring a collage of images related to transportation infrastructure, including roads, bridges, and construction sites. The text "FHWA Research and Technology" is overlaid in a bold, blue, sans-serif font across the center of the banner.

FHWA Research and Technology

Research Successes

Traffic Research Laboratory Adaptive Control Systems (ACS) – Lite

*Reducing
Congestion*



Real time signal retiming

4 test cases

Saving \$90 - \$700K

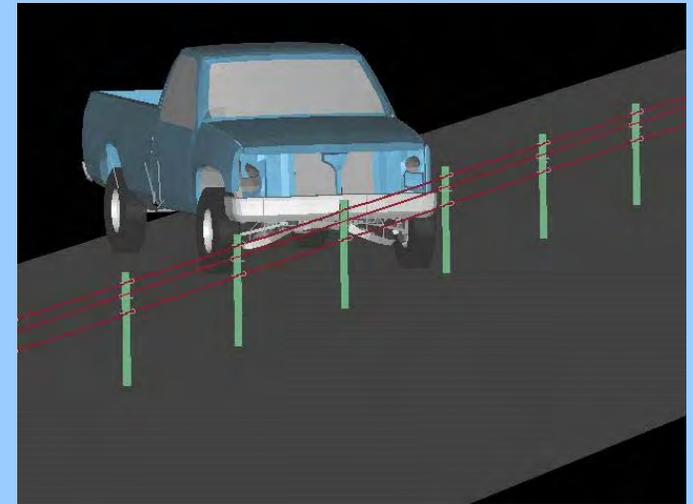
*Seimens, Peek, Eagle
Econolite, & McCain*

Research Successes

Saving Lives

Federal Outdoor Impact Laboratory (FOIL)

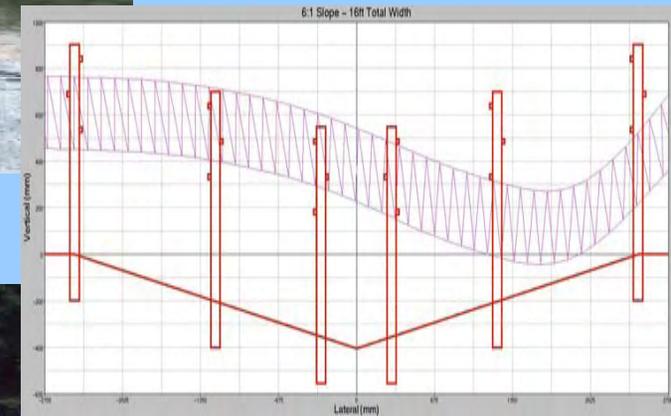
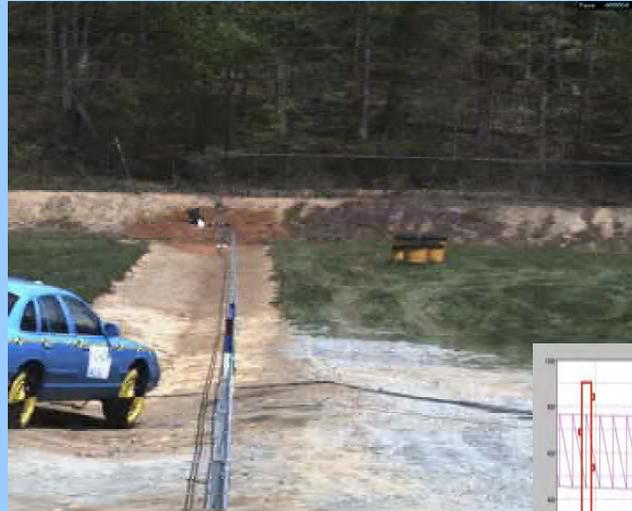
Redesign Cable Medium Barrier (NCDOT)



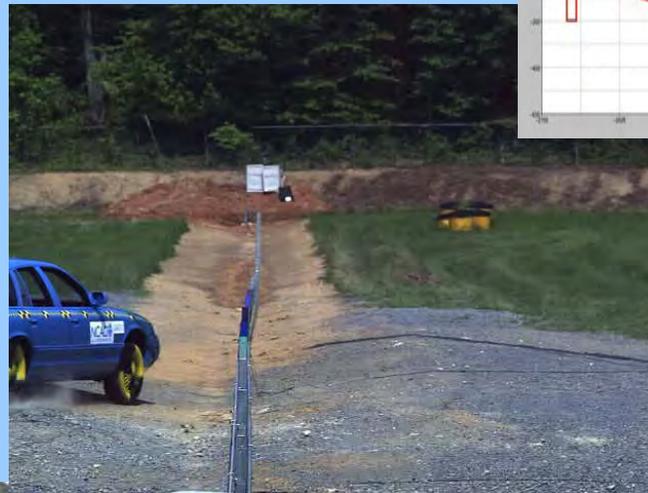
Lead to study on effective lateral placement of barrier

Cable Barrier Underride

Test 1 – Recreates the problem. Mid-sized sedan at 60 mph & 25 degree angle with a 3-strand cable barrier.



Test 2 – Shows the difference of a small (3 foot) difference in lateral placement at the same type of vehicle, speed & angle.



Research Successes



Saving Construction Costs

Hydraulics Laboratory

Woodrow Wilson Bridge – I-95

Redesign Substructure -- Reduce Scour - \$50M Savings

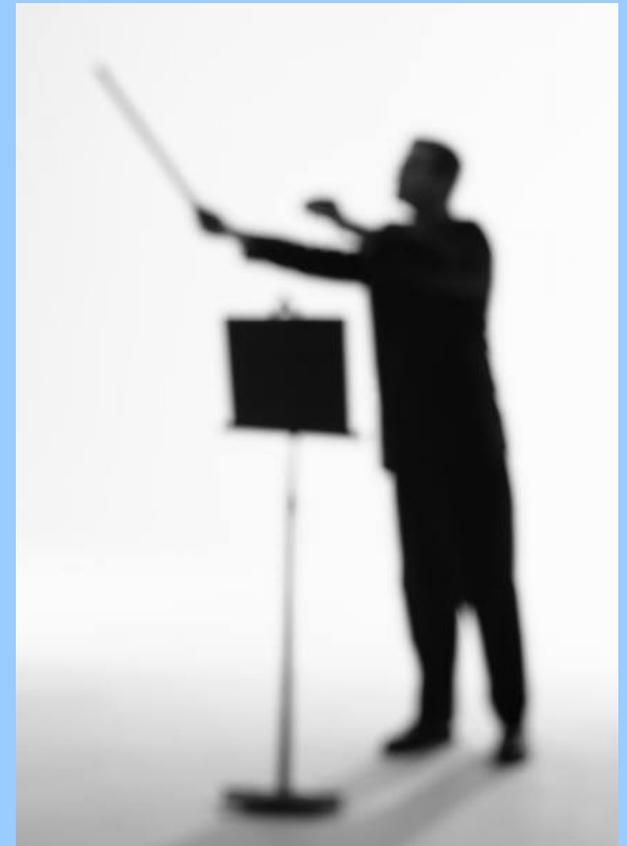
FHWA R&T Role

National Leadership

Long Term Research

Innovation Delivery

Accountability



FHWA Research and Technology

FHWA R&T Role-National Leadership

National Focus Areas

- Enhance System Performance***
- Reduce Traffic Congestion***
- Improve Highway Safety***
- Enhance Environmental Linkages***
- Maintain Infrastructure Integrity***
- Meet Freight, Logistics, and Global Challenges***
- Assess Policy, Financing, & Innovative Program Delivery***



FHWA R&T Role-National Leadership

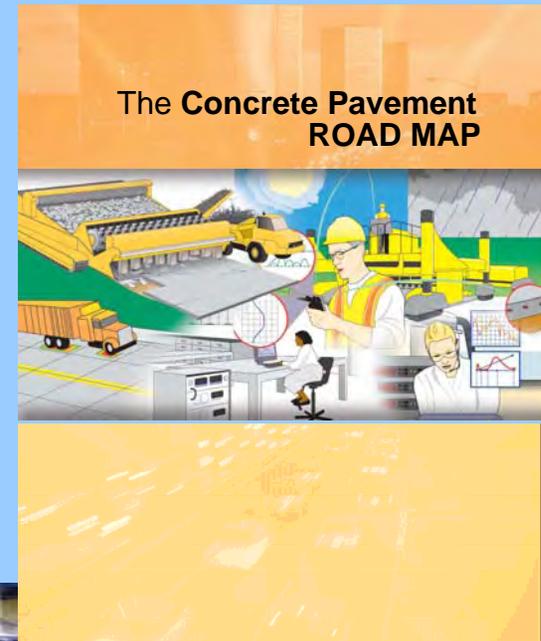
National Policy

USDOT Coordination

***Nationally Coordinated Highway Research
Agenda***

FHWA R&T Niche

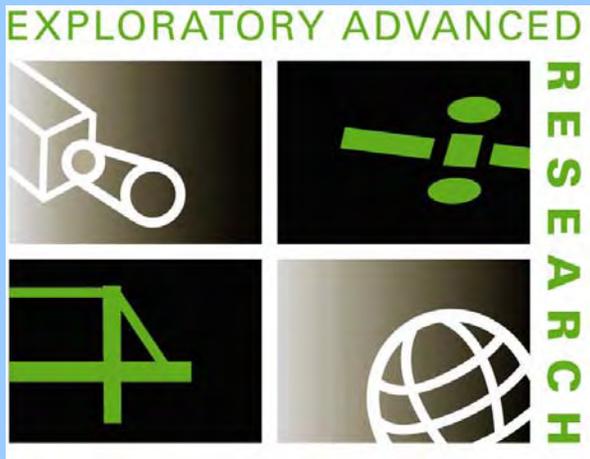
***Example: Concrete
Pavement Roadmap***



FHWA Research and Technology

FHWA R&T Role

Long Term Research

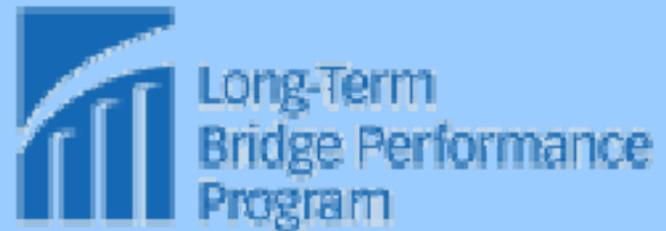


Exploratory Advanced Research

- *15 projects awarded*
- *\$24M investment*
- *BAA Round under review*

Long Term Research Programs

- *Pavement Performance*
- *Bridge Performance*



FHWA Research and Technology

FHWA R&T Role Innovation Delivery



***Putting Research into
Practice***

- Director of Technical Services

Market Ready Technologies & Innovations

SHRP2 – FHWA Lead for Implementation



FHWA R&T Role Accountability

R&T Performance Measures

- Output and Outcome results



- Life Cycle Approach
phases of delivery***
- What is TFHRC
doing?***

R&T Program Improvements



Statewide Planning and Research Program

- Peer Exchange Revisions*
- Research Discipline Support*

Transportation Pooled Fund Projects

- New Program Users Manual*
- Project Owner has Control over Finances*

R&T Now

Telling the R&T Story

Questions?

For more information

www.fhwa.dot.gov/crt

