

**Research, Technology and Education
Provisions
of
SAFETEA-LU**

**JUST THE FACTS, BUT...
WHAT DO THEY MEAN?**

**Denny Judycki
Presentation to the Standing Committee on Highways
September 17, 2005**





Research Title Philosophy and Principles

- Recognizes R&D are critical to developing and maintaining transportation system
- Notes historic under-investment in R&D
- Encourages stakeholder input, competition and peer review as basic principles to guide R&D
- Facilitates the development of partnerships
- Recognizes role of FHWA's TFHRC in conducting Federal highway research activities





Authorized Funding for RT&E Programs

Program	FY-2005	FY-2006	FY-2007	FY-2008	FY-2009
Surface Transportation Research, Development and Deployment	\$196.4M (+\$42.6M)	\$196.4M	\$196.4M	\$196.4M	\$196.4M
Training and Education	\$26.7M (+\$7.2M)	\$26.7M	\$26.7M	\$26.7M	\$26.7M
Bureau of Transportation Statistics	\$27M (-\$4.5M)	\$27M	\$27M	\$27M	\$27M
University Transportation Research	\$69.7M (+\$44.8M)	\$69.7M	\$69.7M	\$69.7M	\$69.7M
Intelligent Transportation Systems Research	\$110M (+\$6.6M)	\$110M	\$110M	\$110M	\$110M
Total	\$429.8M	\$429.8M	\$429.8M	\$429.8M	\$429.8M

Note: ITS Deployment receives \$122 million under SAFETEA-LU, but only in FY 2005.





Surface Transportation Research, Development and Deployment (STRDD) Designated Programs (FY-06-09)

- **Exploratory Advanced Research - \$14 M (FY 05-09)**
- **F-SHRP - \$51.25 M**
- **Surface Transportation Environment and Planning Cooperative Research - \$16.875 M**
- **National Cooperative Freight Research - \$3.7 M**
- **Centers of Transportation Excellence - \$3.75M**





STRDD Designated Programs (cont.)

FY-06-09

- **Surface Transportation Congestion Relief Solutions - \$9.0 M**
- Long Term Bridge Performance Program - \$7.7 M
- **Long Term Pavement Performance - \$10.1 M**
- Steel Bridge Testing & High-Performance Steel Bridge Program - \$5.3 M
- **Fundamental Properties of Asphalt - \$4.2 M('05-09)**





STRDD Designated Programs (cont.) FY-06-09

- **Innovative Pavement Research and Deployment Program - \$22.6 M**
- Innovative Bridge Research and Deployment Program - \$13.1 M
- **Safety Innovation Deployment Program - 12.7 M**
- Advanced Travel Forecasting (TRANSIMS) - \$2.6 M





Training and Education Initiatives (FY-06-09)

- National Highway Institute: \$9.6 M (FY 05-09)
- Local Technical Assistance Program: \$11.1M (FY 05-09)
- Garrett Morgan Program: \$1.2 M
- Eisenhower Fellowships: \$2.2 M (FY 05-09)
- Transportation Education Development: \$1.9 M
- Freight Planning Capacity Building: \$0.9 M
- Surface Transportation Congestion Relief Assistance Training: \$0.7 M
- Transportation Scholarship Program
- State Core Programs to Support Training and Education





Bureau of Transportation Statistics

- Funded at \$27 M per year (FY 05-09)
- Focus on collecting, analyzing and disseminating data to support transportation decision-making
- Maintains National Transportation Library
- Establishes an Advisory Council on Transportation Statistics
- Requires a Transportation Statistics Annual Report to Congress
- Establishes National Ferry Database





University Transportation Research

- Funds University Transportation Centers (UTCs) to advance transportation research and expand the workforce of transportation professionals
- Establishes and funds
 - 10 National UTCs: \$20 M (FY 05); \$35 M (FY 06-09)
 - 10 Regional UTCs: \$10 M (FY 05); \$20+ M (FY 06-09)
 - 10 Tier I UTCs: \$10 M (FY 05-09)
 - 22 Tier II UTCs: \$11 M (FY 06-09)
 - Program Administration: \$0.4 M (FY 05-09)





ITS Research Priorities

- Funded at \$110 Million Per Year (FY 05-09)
- Defines Priority Areas for ITS Research and Development:
 - Enhance Mobility & Productivity
 - Utilize Interdisciplinary Approaches
 - Address Traffic, Incident, or Transit Management or Toll Collections, Traveler Information or Highway Operations Systems
 - Incorporate Research on the Impact of Environmental, Weather, or Natural Conditions on ITS Systems
 - Enhance Safety
 - Facilitate Integration of Intelligent Infrastructure, Vehicle, and Control Technologies





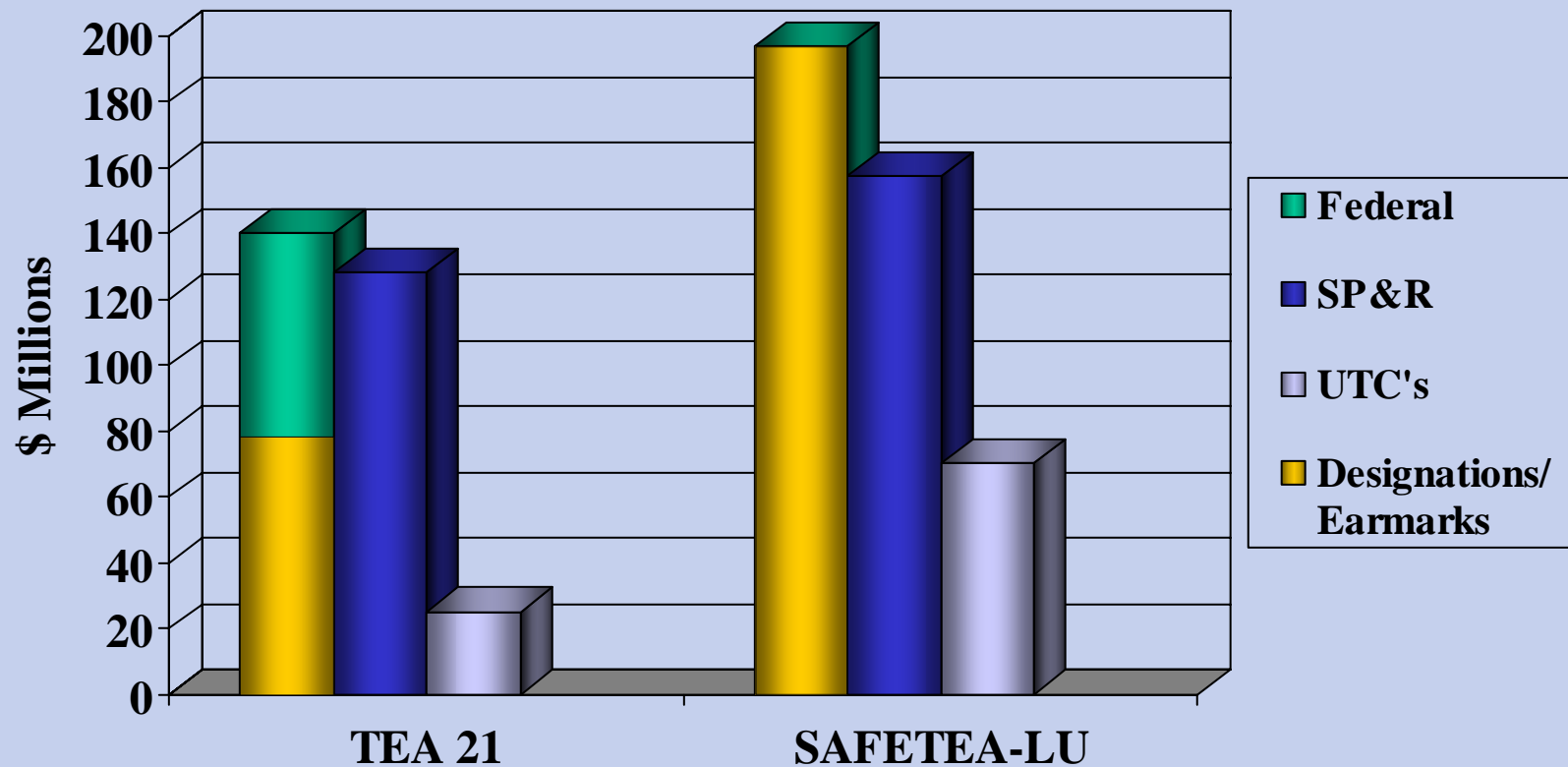
Other Research Provisions

- State SP&R provisions virtually unchanged
- Establishes statutory basis for Pooled Fund Program and simplifies accounting procedures
- All of STRDD is either Designated or Earmarked
- Earmarks 45.6% of STRDD authorized (pending appropriations)
- 50/50 match default with some exceptions



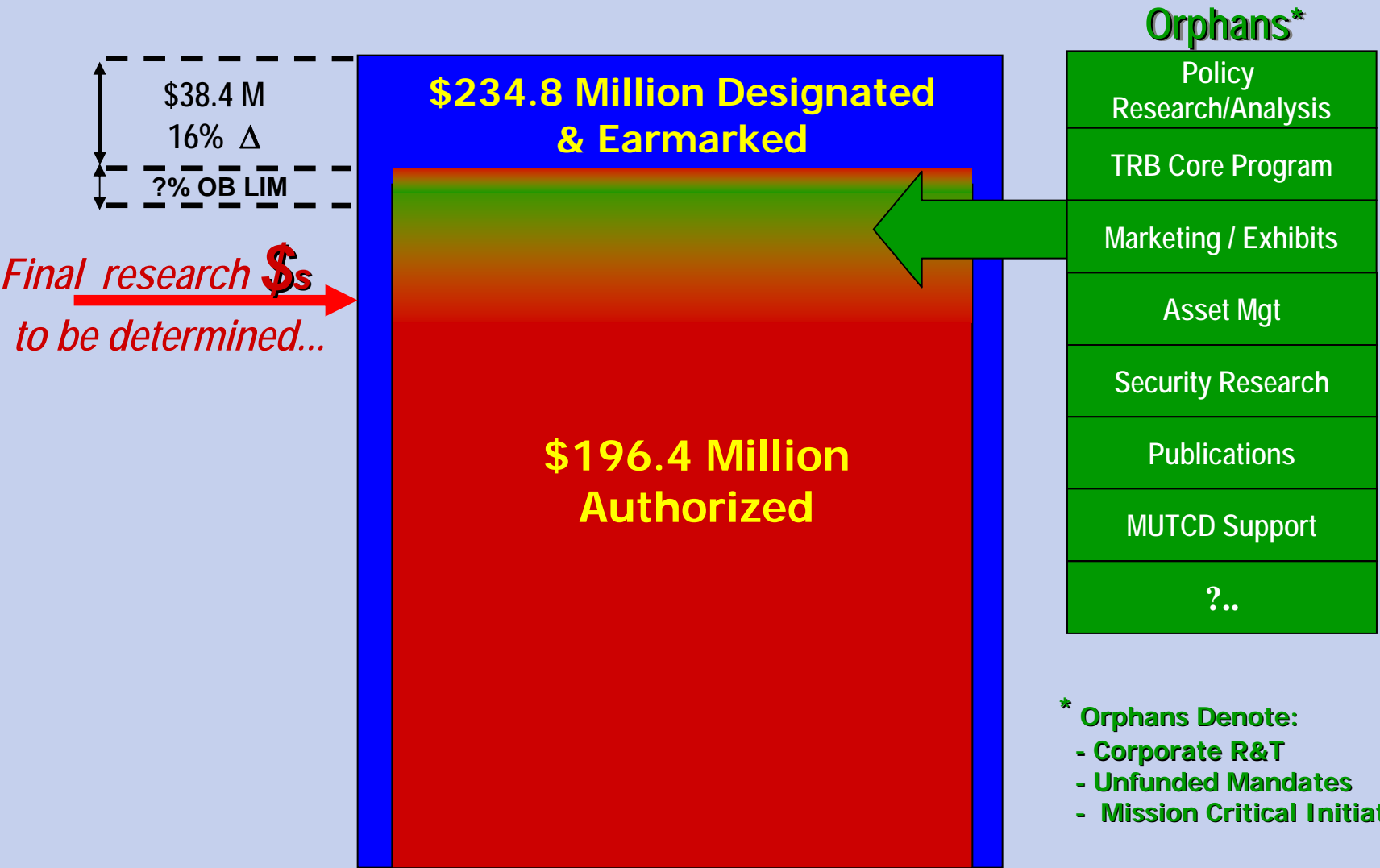
Funding Comparison – Average Annually

Authorized Amounts (1998 – 2009)





Surface Transportation Research, Development, & Deployment Funding Dilemma



* Orphans Denote:
 - Corporate R&T
 - Unfunded Mandates
 - Mission Critical Initiatives



What does this mean?

- National R&T Partnership more urgent than ever
- Redefinition of FHWA emphasis areas/roadmaps
- Explore research program and project collaboration/partnerships
- Creative, Outside-the-Box Thinking and Solutions
- Strategic communication of R&T agendas for SCOR (Irvine/Oct.) and TRB Annual Meeting





Much More Information on Legislative Provisions

- ✓ Legislation
- ✓ Section-by-Section Analysis
 - ✓ Program Fact Sheets

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

