

New Directions for Highway Research in the United States

**Robert E. Skinner, Jr.
Transportation Research Board**

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U.S. Depends on Highways

- **>90 percent of trips to/from work**
- **>90 of inter-city person trips over 50 miles**
- **About 70 of freight traffic, based on billings**

Highway Research Is Undervalued

- **Low-tech image**
- **Decentralized enterprise**
- **Few incentives to innovate**
- **Hard-to-measure benefits**

U.S. Research & Technology (R&T) “Enterprise”

- **Decentralized**
- **Federal, state, university, and private-sector components**
- **More than research—innovation support**
- **Comparatively low overall funding**
- **Surprisingly successful**

Federal Role Is Crucial Federal Government:

- **Conducts and sponsors research**
- **Supports state research programs**
- **Supports university research**
- **Supports “special” research programs**
- **Facilitates technology transfer**

Reshaping the Federal Role --TRB Recommendations--

- **Emphasize more fundamental, longer-term research**
- **Reemphasize open competition and merit-based evaluation**
- **Create a new continuing program on environmental issues**
- **Establish a new 6-year SHRP**

Federal Research Today

- **Modest increase in funding**
- **New, but modest, emphasis on “exploratory advanced” research**
- **Increased Congressional designations and earmarks**
- **New environmental and planning research program**

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(continued)

- **Funds a new 4-year Strategic Highway Research Program (SHRP 2)**

Table 1
U.S. Public-Sector Spending on Highway Research
(thousands of dollars)

	<u>FY 2003</u>	<u>FY 2006</u>
<u>U.S. DOT</u>		
FHWA	137,000	169,000
ITS	98,000	95,000
University Research	24,000	60,000
NHTSA	85,000	92,000
FMCSA	<u>7,000</u>	<u>7,000</u>
Total, U.S. DOT	351,000	423,000
<u>State DOTs</u>		
Federal-Aid minimum	125,000	149,000
Total, State DOTs	NA	326,000

Table 2
Congressional Designations and Earmarks within
Selected U.S. DOT Highway Research Activities

	<u>FY 2003</u>	<u>FY 2006</u>
FHWA		
% designated	26	58
% earmarked	21	42
ITS		
% designated	0	5
% earmarked	0	6
University Research		
% earmarked	69	100

Reference Material

- TRB, *The Federal Role in Highway Research and Technology*, TRB Special Report 261, 2001.
- TRB, *Strategic Highway Research: Saving Lives, Reducing Congestion, Improving Quality of Life*, TRB Special Report 260, 2001.
- Advice to Federal Transit Administration on its R&T agenda contained in letter reports from TRB's Transit Research Analysis Committee (2005, 2006a&b, 2007 pending)

Contact Information

Robert E. Skinner, Jr.

Executive Director

Transportation Research Board

500 Fifth Street, NW

Washington, D.C. 20001

202-334-2936

202-334-2920 (fax)

bskinner@nas.edu