

**Policy Analysis and Highway Information  
Research and Technology Partnership Working Group**

**Transportation Research Board  
2001 Wisconsin Avenue, NW (Green Building), Room 104  
June 14, 1999**

**Background**

In the latter part of 1998, the Federal Highway Administration (FHWA) began discussions regarding a national initiative to look at highway-related research. The Transportation Equity Act for the 21st Century (TEA-21) restructured Federal research funding. In response, FHWA and the Transportation Research Board (TRB) began looking for others to work with in a collaborative effort.

The restructuring of FHWA is viewed as an opportunity to reexamine the research agenda. In an effort to be more responsive to its users by learning about their needs and priorities, FHWA is looking for broader stakeholder and user input to assist in the agenda's formulation.

FHWA, the American Association of State Highway and Transportation Officials (AASHTO), and TRB have agreed to a partnership approach to address future transportation research. The first meeting, held on December 10, recognized a need to define a national research agenda. At that meeting, five working groups were formed to look into individual areas of research and technology. These working groups (Safety, Infrastructure, Operations, Policy, and Planning and Environment) correspond to the FHWA business units under the new FHWA organizational structure. Robert Skinner prepared a working paper which proposes a three-tiered approach. Representatives of the sponsor organizations would give oversight to the process. The five working groups, of which this group is one, would form the second tier. The third tier would be the standing committees of TRB.

The invitees to this meeting included many of those who attended the December meeting, in addition to others who were identified as individuals and organization representatives that should be involved in this dialogue. FHWA feels that its research issues should be those issues of maximum importance to the transportation community, and would like to overlay its current research program with that of national organizations to identify missing elements. A key question to be answered is "how can stakeholders use this research?"

The objective of this initiative is a national agenda and not a discussion of what FHWA is doing. FHWA, AASHTO, and TRB are committed to a working partnership with the transportation research community.

As part of a brainstorming activity of this meeting, each participant was asked to bring three ideas for others to consider--research topics that somebody should pursue. The ideas were then categorized into the following research topic areas as part of the brainstorming activity :

- a. Data Collection
- b. Research and Management
- c. International
- d. Pricing and finance
- e. Benefits/Costs of Transportation Investments
- f. Performance
- g. Safety
- h. Futures

Barna Juhasz briefed the group on the current research agenda and planned programs of FHWA's Policy Service Business Unit. These program areas, or research roadmaps, are Travel Monitoring, Highway Performance Monitoring System (HPMS) and Highway Economic Requirements System (HERS) Investment Performance Models, Truck Size and Weight Policy Analysis, Highway Cost Allocation and Revenue Analysis, Value Pricing and Market-based Demand Management Strategies, and Highways and Economic Productivity. As added information, the draft publication, *FHWA Research Roadmaps: Effective Transportation Policy Information Analysis, and Strategic Decision-Making*, was distributed. The publication discusses these research roadmaps in detail and the work that the Office of Policy is currently performing in these areas. It was also noted that future research is still open to influence, especially beyond FY 2001.

Workshop participants then formed break-out groups to formulate more detailed research statements for the research topics generated during the brainstorming session. Following the breakout sessions, each group reported its recommendations to the entire workshop. The following table summarizes those recommendations.

As Is-- What Program Needs Investigating	What Would be Difference as a Result of Research	Responsibility for Work	Other Groups to Involve	What are First Steps	Funding
<i>Data Collection</i>					
Use of ITS data as a new data source; i.e., roadway ITS data as a tool for policy & planing development	Demonstrate value & techniques of ITS data collection and archiving.	ITS America, FHWA,AASHTO cooperative DOT	State DOT's and MPO's	Need volunteer test site; evaluate ITS data for usefulness. Analyze & compare with traditional methods. Document benefits & costs.	AASHTO pooled-fund project.
Accessing data from systems on board vehicles. Trucking companies already have vehicle instrumentation, but it is proprietary and not available for policy & planning purposes.	Increase data available for policy & planning purposes (e.g., highway maintenance). Would improve highway safety.			Instrument & monitor more trucks.	
<i>International</i>					
Lack of central location for truck regulations at State & county levels.	Better planning for national highway policy analysis.	FHWA	BTS, MPO's, AASHTO,TRB State DOT's	Establish working group across agencies. Develop framework for collecting data covering jurisdiction, size, & weight.	FY 2000 budget. Co-financing with other agencies, i.e., AASHTO.
Lack of benchmark values for door-to-door intermodal costs so that shippers can judge whether they have paid too much or less.	Better functional market clearing mechanism based on pricing.	FHWA Office of International Programs	World Bank, multinational enterprises, shipping lines, freight forwarders.	Elaborate concept of "logistics information bank" (LIB). State pilot program for LIB.	U.S. Govt
Differences in intermodal regs outside U.S. that affect decisions inside U.S. & impacts domestic transportation system. What actions can be taken to reform current legal system & how are important issues to be addressed?	Smoother trade with trading partners of the U.S. & less regulatory impediments & lowering costs to U.S. consumers.	FHWA Office of International Programs	World Bank, government of trading partners, & multinational enterprises, United Nations.	World Bank has already developed "Intermodal Service Toolkit" for other sectors--Modify toolkit for intermodal movement; initiate discussion with stake-holders to improve model.	U.S. Govt.
An increasing number of dry ports have been developed in many countries but are not connected with each other. If they	Ability to have broader & reliable intermodal service network which would facilitate global trade.	International Office of FTA.	World Bank, multi-national enterprises,	Elaborate concept of "international dry port network." Start pilot	U.S. Govt.

As Is-- What Program Needs Investigating	What Would be Difference as a Result of Research	Responsibility for Work	Other Groups to Involve	What are First Steps	Funding
were licensed & regulated, they might serve as a consistent information source. It would then be possible to develop a reliable data and services network, improve efficiencies, & decrease shipping costs.			developing counties	program connecting U.S with one of the major trading partners.	
Global trade facilitation. Transport infrastructure & service limitations that act as barriers to trade. Impediments to trade increase costs.	Facilitation of global trade would lead to efficiency of global freight logistics, enhanced competitiveness of U.S.-owned multinational corporations in foreign markets.	FHWA--Office of International Programs	World Bank, OECD, OST/USDOT, USDOT/USAR	Summarize issues, define TOR/SOW from documents available at FHWA Office of International Programs.	FY 2000 or 2001 Budget request. Co-financing with World Bank and/or OECF.
Global Climate Change (UNFCCC) — meeting emission targets set by Kyoto Treaty through international emission tracking.	Reduction of CO <sub>2</sub> thru cost-effective strategies, e.g, U.S. providing technical assistance to developing countries.	FHWA, Office of International Programs	USDOS/AID, OST, EPA, Eno Foundation, Pew Foundation	Clarification of policy options & interagency agreements on joint implementation design of projects. Design projects & implement.	FY 2001 budget. Co-financing with IBRD. Cooperation with other industry reps.
International cooperation in policy research & cost-effective information sharing.	Recognition of commodity issues. Fewer efforts to “reinvent the wheel.” Harmonization of technical standards (e.g., metric system).	FHWA, Office of International Programs	World Bank. OECD, Permanent Internat’l Assoc of Road Congresses, IRF, & others.	Summarize existing program gaps. Review “scanning trip” already taken. List cost-effective initiatives for TRB committees.	FY 2001 budget. Cofinancing w/EC/ DGVII (Fifth framework). Cofinancing w/Japanese Ministry of Transport, Ministry of Commerce, & OECF.
Innovative finance for global infrastructure development to meet U.S. economic interests abroad.	Enhanced export opportunities for U.S. goods & services. Reduced risk for U.S. investments overseas. Improved competitive position.	FHWA, Office of International Programs	USDOS/AID, U.N. Development Program	Framework papers already developed by interagency groups. Follow-up issues papers to be drafted. U.S. expected to lead.	FY 2001 budget. Co-financing of conference organizations. Publication of proceedings, World Bank “tool box” concept of best practices.
Impact of International travel & tourism activity on national transportation systems.	Improved planning thru quantification of benefits & costs from this component of transportation system demand.	FHWA Office of International Programs.	World Travel & Tourism Council, OST, specific States, BTS, Dept of Commerce, World Bank,	Feasibility of improved travel/tourism data collection. Improve & develop travel satellite accounts internationally.	FY 2000 Cofunding with World Bank.

As Is-- What Program Needs Investigating	What Would be Difference as a Result of Research	Responsibility for Work	Other Groups to Involve	What are First Steps	Funding
			OECD		
<b><i>Finance</i></b>					
How can new approaches to transportation finance be implemented in ways that are acceptable to the public?	More options that would be available for funding in case some traditional funding sources produce less revenue.	TRB, AASHTO, FHWA	State legislators, tax administrators, NCSL, NGA	Examine value pricing; tolls, other options, public/private partnerships in U.S. & other countries.	FHWA, pooled-State funds, NCHRP
Fuel tax may not be a reliable tax base in the future as the number of alternative fuels increases & fuel economy improves in response to environmental & other pressures.	Improved understanding of time-frame within which funding constraints may arise due to fuel tax revenues & options available to provide a stable long-term tax base.	FHWA, States, AASHTO,	Tax administrators, highway user groups.	Monitor & evaluate on-going sessions. Conduct pilot flexibility demo projects.	FHWA, States, NCHRP
<b><i>Benefits/Costs of Transportation Investments</i></b>					
Research on relationship between transportation & land use/location decisions; identify factors that affect the land use decisions that produce “sprawl,” including data development. Why do people live in distant suburbs? Need broader look at transportation investment decisions.	Better land use planning. Better information for transportation planning. Bad information can badly distort transportation planning decisions.	U.S. DOT	TRB, AASHTO	Examine impacts of highways with 20-year history.	
<b><i>Pricing Opinion Research</i></b>					
Why is there such resistance to testing or trying value pricing or congestion pricing on high occupancy/toll (HOT) lanes?	Guidance regarding the process management necessary to assure public acceptance of pricing initiatives.	TRB or consortium.	FHWA, FTA, AASHTO, STPP, BTS, ITS America	Secure partnership customers; research scoping workshop; secure contractor, develop & circulate survey instrument; test or focus groups; administer base line study; analysis & conclusions; follow-up iterations.	FHWA with partner contribution.
<b><i>Futures Area</i></b>					
Trends & opportunities related to transportation futures. Conduct annual conference on transportation futures.	Cross pollination on ideas; issues identification for future research.	TRB, U.S. DOT	AASHTO, ITE, STPP, ITS America, ATA, AAA, AARP,	Conference planning workshops.	DOT seed funds, sponsorships, registration.

As Is-- What Program Needs Investigating	What Would be Difference as a Result of Research	Responsibility for Work	Other Groups to Involve	What are First Steps	Funding
			NLC, NARC, APTA, NGA		

It was noted that the “Futures” area did not attract much interest and the question was posed as to whether this should be an area of consideration. In response, it was noted that the issue of land use and transportation could be included under the “Futures” topic area. However, there is some confusion over cause and effect between land use growth and transportation improvements. The issue of “aging drivers” is also a Futures issue. “Futures” cuts across many lines and covers many areas.

## **Conclusion**

This session was convened as preparation for the national forum. Participants placed on the table avenues of investigation to be included on the national agenda. What has been prepared to date is not a priority ranking, but merely a listing of representative projects.

Since the private sector is making investments and decisions on modes and land use and will be affected by government policy decisions, it needs to be represented at these sessions. Other representation should include real estate developers, auto manufacturers and the institutions that do research for them (e.g., University of Michigan does research for auto industry/Urban Land Institute on behalf of developers). The private sector looks at market trends and responds to trends, and should be included, not to steer policy, but to prosper as a result of policy changes.

Local governments, FTA, local public transit agencies, League of Cities, Conference of Mayors, counties are other representatives that might be included, along with representatives of regional and urban planning agencies, and sustainable communities groups. (Private interests could also be brought into the process through the TRB committees.) Other possible future attendees might include academia and the broader research community; non-profit research institutions such as the National Science Foundation, Brookings; and other international agencies - WRF. Some of these representatives might wish to make presentations.

The field of participants, however, should not be too wide. Participants should include those who are partners in pursuing a research agenda (e.g, AASHTO, international organizations). Truck standards developed by the International Trucking Association, for example, might not be consistent with the purpose of this activity.

It was suggested that since TEA-21 directed money into University research, FHWA might partner with universities to advance some of these projects.

In closing, several questions were raised:

1. How does the group see its next step?
2. Is there a procedure to get new research topics to FHWA in the future as new ideas arise? This is a matter that needs to be determined.
3. What can be done with the year 2000 funding? (This decision will be made in September or October.) The group will be looking toward the next budget cycle this fall and winter for issues in the FY 2001 budget. There will be discussions with the Policy Business Unit to determine the next step for the policy research group.

Suggestions for maintaining communications beyond this session included establishing a listserv and conducting periodic meetings, (e.g, quarterly, semi-annually).

4. How would it be possible to collect ideas from other groups with their own research agendas?

Some participants noted that TRB has been a traditional collection point for research ideas. They do not set priorities but do collect ideas. It is still to be determined how TRB's agenda will be merged with FTA's and FHWA's. In the meantime, Barna Juhasz will serve as a collection point for research ideas and issues.