

THE STATE OF TRANSPORTATION RESEARCH Federal Highway Administration

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The Transportation Equity Act for the 21st Century marks the beginning of a new era, one in which decision-making power shifts from Washington to the state and local officials who best understand the transportation needs of their communities. This new empowerment applies as much to research and technology as it does to other areas covered by the new legislation.

TEA-21 will transform the transportation research and technology program as we know it today. Accordingly, the Federal Highway Administration will assemble the relevant stakeholders to determine national research and technology priorities; coordinate implementing program activities across the federal government; and measure the results of those activities by partnering with state transportation agencies, the private sector, and the academic community to deliver research that meets the needs of the traveling public.

The new program requires a change in thinking by the decision makers—federal officials, state officials, and industry leaders. In particular, there must be a new focus on partnerships as funding is increasingly provided directly to states and universities.

New decision makers—the American Association of State Highway and Transportation Officials, its Standing Committee on Research (SCOR), and its Standing Committee on Highways; all of the heads of the state highway agencies; and the directors of the university research centers—now have a much more significant voice. Decisions will be made by those closest to the action—the state transportation agencies that have actual responsibility for their system's operations. These officials understand the short-term problems of their road systems, the long-term needs, and the weight of public opinion.

Funding decisions are likely to be made in

sequence. First, the states and universities must set priorities for their short-term research efforts. All of the parties—FHWA, the states, universities, and private industry—must then make the decisions necessary to create and pay for a long-term national and strategic research agenda. There will be new procedures as well. FHWA and the states must reach agreement on how research funds can best be used, and how federal and state officials can work together to produce an effective transportation system for the 21st century throughout the nation.

Today we are faced with the short-term task of determining how these decisions will be made. FHWA and state officials continue to be engaged in discussions that began almost immediately after the enactment of TEA-21. Decisions on funding priorities, contributions, and direction for the 6-year life of TEA-21—the kinds of decisions that are vital for a long-term research program—can take time. Collaboration will ensure that the various players are undertaking the right research to solve the problems of today, as well as to prepare for the future.

In a letter to the chief administrative officers of the state transportation agencies, Francis B. Francois, AASHTO Executive Director, summarized the effects of TEA-21 (see also article by Francois in this issue). He stated, "TEA-21 reduces the central role of FHWA in highway research, heavily cuts funding to continue with SHRP [Strategic Highway Research Program] implementation and the LTPP [Long-Term Pavement Performance] program, includes a large number of earmarks directing funds to universities and specific research projects, and substantially increases State Planning and Research (SPR) funding."

Francois also indicated that new arrangements are in order to compensate for the reduction in funding for the National Highway Institute (NHI)

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from \$43 million under the Intermodal Surface Transportation Efficiency Act to \$39 million. NHI provides education and training to transportation professionals. Said Francois, "I would like to see FHWA work with all of us and convene a national conference of universities, states, and industry to discuss the research agenda. The conference can lead to a new type of partnership and cooperation. We can discuss what we think is important and how we find the resources for it."

Iowa has a success story that illustrates this kind of partnership. Thomas H. Maze, Director, Center for Transportation Research and Education, Iowa State University, noted, "We have a unique partnership with Iowa Department of Transportation and the Iowa Asphalt Paving Association. One of our professors works part-time for the university and part-time for the state in a laboratory with equipment paid for by the association." TEA-21 partnerships in funding make these types of arrangements possible.

As soon as TEA-21 was enacted, people involved with the research program recognized that major decisions were required, and they had to be made quickly. In early July, AASHTO's Mississippi Valley Conference adopted a resolution backing a contribution of state NCHRP funds to help support the FHWA research program. States currently contribute 5.5 percent of their SPR funds to NCHRP for projects selected by AASHTO. Because funding

for SPR has grown substantially under TEA-21, NCHRP funds have also increased. NCHRP will now receive \$25 million annually instead of the \$17 million it received under ISTEA.

The new funding distribution also dominated discussions in July and August at the Local Technical Assistance Program meeting in Salt Lake City; the AASHTO Research Advisory Committee meeting in Nashville, Tennessee; the FHWA technology deployment meeting in Washington, D.C.; and the Research and Special Programs Administration's University Transportation Centers workshop, also in Washington, D.C. The idea that funding of research efforts is vital to the future of the nation's transportation program was emphasized in all of these forums.

With the increase in state research funds, the role of SCOR within AASHTO becomes more significant. According to Allan L. Abbott, Director, Nebraska Department of Roads:

There is more money for research than in the past. How it is distributed is different. The challenge is to use it in a positive way to benefit the nation. There is a necessity for more state involvement if research is to be carried out on a national level. Without support from the states, FHWA won't have a program. The states will have to agree on a national program—not only in concept but with their pocketbooks.

Abbott noted that a new element—the need for "salesmanship"—has been added to his responsibilities. He explained, "The chairman of SCOR must review these programs and use salesmanship to the remaining CAOs on projects of importance instead of just administering NCHRP."

Abbott cited two additional problems for a state-run research program. The first is duplication: "If you regionalize the program, you can duplicate efforts, and that's not desirable." The second problem is delays: "Development of projects will take longer. You have to satisfy 52 CAOs."

Abbott said changes can be expected in the research agenda, but determining those changes will be a long-term process. He noted, "It will now be how the states view it and whether they put up the money. TEA-21 has put the responsibility for decisions where I think it should be, but now we have to make decisions. We have to work with the universities and regional centers. We have to find and leverage funds...."

Abbott suggested that states must provide the additional funds needed for the LTPP program and for the implementation of SHRP. Under TEA-21,



Maryland Department of Transportation is repaving a portion of I-68 using the Superpave® system, a product of the Strategic Highway Research Program. States must provide the additional funding necessary to continue the SHRP implementation program, according to Allan Abbott, Chairman, Standing Committee on Research, AASHTO.



Stop/slow paddle with flashing lights, which get the immediate attention of drivers, is one of more than 100 new products and techniques developed under SHRP.

LTPP funding is reduced from \$15 million annually to \$9 million, while SHRP implementation receives no designated funding. "LTPP and SHRP implementation are my major concerns," said Abbott. "We have gotten the Superpave® process for better asphalt pavements, and we have made major advances in concrete pavement. We couldn't have gotten these results from anyone else because the industry would not have accepted them."

It is important for this year to make sure that essential programs, such as LTPP and SHRP implementation, receive the necessary funds while the decision-making process for the long-term research program is taking place. With the long-term structural changes in the program still being considered, many FHWA initiatives may not have sufficient funding this year. We encourage the states to work with us as they make the critical decisions on which of those programs should receive priority funding.

In summary, the partnerships in funding brought about by TEA-21 will require working together on the part of FHWA, state transportation agencies, the academic community, and private industry. The new legislation also necessitates a focus on thinking strategically, setting priorities, continuing education for transportation professionals, and making decisions that are in the best interest of the nation and the U.S. transportation system.

EDITOR'S NOTE: A version of this article appears in *Public Roads*, a publication of the Federal Highway Administration.

Web Sites Related to TEA-21

<http://www.fhwa.dot.gov/tea21/index.htm>

The Federal Highway Administration's site on the Transportation Equity Act for the 21st Century (TEA-21) is probably the most comprehensive source on the TEA-21 legislation. It includes links to the full text of Public Law 105-178 (TEA-21) and the TEA-21 Restoration Act, summary information on the legislation, and fact sheet and funding tables for both highway and transit programs. The site also contains information on upcoming FHWA outreach sessions on TEA-21.

<http://www.house.gov/transportation/bestea/bestea1.htm>

The House Committee on Transportation and Infrastructure provides links to the full text of the conference report for TEA-21 and analysis of the bill. The site includes tables of apportionments and obligations for highway projects.

<http://www.bts.gov/lawlib/lawlib.htm>

The Bureau of Transportation Statistics provides the full text of the various versions of the TEA-21 legislation. Also provided are the text of the Intermodal Surface Transportation Efficiency Act, links to titles of the U.S. Code (Transportation), links to U.S. Department of Transportation appropriation legislation for 1996-1999, and other legislation related to the BTS motor carrier statistics and airline information.

<http://www.apta.com/govt/legis/tea21/index.htm>

The American Public Transit Association legislative Web site includes tables showing TEA-21 legislative earmarks for bus and bus facility efforts and new starts. The site also provides a summary of transit-related provisions written by APTA and a listing of Federal Transit Administration outreach briefings.

<http://www.transact.org/june98/index.htm>

The Surface Transportation Policy Project Web site provides that organization's analysis of the bill. This site also includes links to articles on how TEA-21 affects environmental policy and planning. Explanations of new TEA-21 programs on land use and job access are given. STTP provides a scorecard analysis of the provisions of TEA-21.

<http://www.itsa.org/legislative.html>

ITS America's Legislative Web site provides links to articles and press releases on intelligent transportation programs under TEA-21. The site also provides information about ITS America symposiums on the impacts of the act. In addition, this frequently updated site contains information on other major transportation legislation, such as the appropriation bills.

<http://thomas.loc.gov/>

Thomas is the Library of Congress' source of legislation information. The site provides information on legislation, committee reports, and congressional hearings. All versions of bills are available, as is the complete legislative history of an act. Thomas also provides access to the full text of the Congressional Record. The site allows searching by topic, bill number, congressional committee, or public law number.

Information on Web sites provided by Barbara Post, Librarian, Transportation Research Board Library.