



May 2, 2005

Ms. Mary E. Peters
Administrator
Federal Highway Administration
Room 4218
400 7th Street, SW
Washington, D.C. 20590

Dear Administrator Peters:

The Research and Technology Coordinating Committee (FHWA) met on March 21–22, 2005, at the Keck Center of the National Academies in Washington, D.C. The enclosed meeting roster indicates the members, liaisons, guests, and TRB staff in attendance. On behalf of the committee, I wish to thank FHWA for its continuing interest in and support for the work of the RTCC. I also thank and commend members of the FHWA staff for their participation in the meeting. The committee appreciates the presentations made by Marci Kenney, King Gee, and Debra Elston, as well as the contributions of other FHWA staff who attended the meeting.

This letter report is an intentionally brief summary of the meeting; information about the committee's future activities and meetings is also provided. The report is organized under the following main topics:

- Coordination among highway R&T programs
- Update on Office of Infrastructure R&T activities
- Status reports on several FHWA R&T activities, including laboratory assessments at Turner-Fairbank Highway Research Center and FHWA's Corporate Master Plan for R&T
- Institutional approaches for organizing highway safety programs
- Briefings by representatives of the Research and Innovative Technology Administration and the Federal Motor Carrier Safety Administration

Coordination among Highway R&T Programs

The committee hosted a panel discussion of how highway R&T programs coordinate their efforts so that the programs effectively address national research needs, unnecessary duplication is avoided, and research results are widely implemented. The panelists included Wesley Lum, Chief, National Liaison Office, California Department of Transportation; Robert Johns, Director, Center for Transportation Studies, University of Minnesota; Robert Reilly, Director, Cooperative Research Programs, Transportation Research Board (TRB); Neil Hawks, Director, Special Programs Division, TRB; and Don Brock, RTCC member and President, Astec Industries.

Even though highway R&T is decentralized and fragmented, it benefits from considerable formal and informal coordination across programs. A key example is the way state research programs coordinate their activities with the National Cooperative Highway Research Program (NCHRP). Representatives of the state departments of transportation (DOTs), the program's owners, play a major role in the NCHRP program by preparing research problem statements, helping evaluate them, participating in the annual selection of research projects, and serving on project panels. In fact, each step in the program delivery process relies on their active participation and this participation supports NCHRP coordination with the individual state programs. Similarly, FHWA staff participate in the NCHRP process, supporting coordination between NCHRP and FHWA programs.

Other examples of coordination involving states, universities, and the private sector were discussed. Several panelists pointed out that research managers and researchers interact regularly through TRB activities and those of other technical and professional organizations and through personal networking. Coordination after reauthorization, however, could be made more challenging for FHWA, especially if there is an increase in designated recipients who are unfamiliar with existing highway research programs, their stakeholders, and existing coordination mechanisms.

As the mission agency responsible for both the federal aid highway program and the nation's largest individual highway research program, FHWA is well-positioned to promote coordination across individual programs. In light of the panel discussion and committee decision to host a workshop on the impacts of reauthorization on highway R&T, the committee formed a planning task force—comprised of Len Sanderson, Joe Sussman, and Kevin Womack—to examine potential themes and organizational options. The task force will assist staff in preparing a preliminary proposal on workshop purpose, scope, and format for consideration at the next committee meeting. Because there is considerable interest in coordinating the university component of the highway research program and aligning it with national priorities, this topic will be highlighted in the proposal.

It is anticipated that representatives from federal, state, university, and private sector research programs, as well as highway researchers affiliated with consultants, research institutes, and universities, will be invited to examine the status of existing programs and the nature of new research initiatives. The task force will work with FHWA staff to gather data and information about current highway R&T activities, especially congressionally-designated research projects, designated recipients, and project funding from TEA-21, and prepare background material for further discussion at the committee's next meeting. FHWA staff agreed to provide more information on its current coordination efforts for review.

Update on Office of Infrastructure R&T Activities

King Gee, Associate Administrator of the Office of Infrastructure, reviewed his office's R&T activities, emphasizing that the infrastructure R&T program is dominated by congressionally designated projects that limit the program's flexibility in addressing the full range of priority topics identified in conjunction with its stakeholders. Nevertheless, the committee was

pleased to see that research roadmaps have been prepared for each of its major topic areas—pavements, structures, and asset management—and that the office is continuing to refine the roadmaps as well as developing research performance measures for its research evaluation process.

Status Reports on other FHWA R&T Topics

Marci Kenney, Director of the Office of R&T Program Development and Evaluation, reported the assessment of the Structures Laboratory at Turner-Fairbank Highway Research Center (TFHRC) took place in February, 2005 and that the assessment of the Arens Photometric and Visibility Laboratory is scheduled for May, 2005.

Debra Elston, Director of the Office of Corporate Research and Technology, reported on agency efforts to develop and implement its Corporate Master Plan for R&T. The committee recognizes the value of the plan to the agency and appreciates FHWA's efforts to focus management efforts in this activity.

Institutional Approaches for Organizing Highway Safety Programs

As a follow-up to several recent committee discussions about highway safety, the committee hosted Frank Cardeman of the Traffic Improvement Association (TIA) in Oakland County, Michigan and Vince Burgess of the Virginia Department of Motor Vehicles. Both are managers of highway safety programs in their respective organizations but represent different institutional situations; TIA is a well-established, one-of-a-kind program aimed at improving highway safety in a single county while VDMV, in conjunction with its partners, is working to strengthen support for improved highway safety in a state. In addition, staff provided information on a highway safety initiative under way in the South Carolina Department of Transportation (SCDOT) aimed at improving the state's highway safety performance.

The TIA is the only independent, county-wide organization focused on highway safety. Nearly 38 years ago, in response to several multiple-fatality traffic crashes, the President of Oakland University organized a summit comprised of high-ranking public and private officials to identify ways to improve traffic safety in Oakland County. One recommendation led to the creation of the independent, non-profit TIA with the task of overseeing highway safety improvements. Supported by the efforts of the TIA, the fatality rate in the county has dropped from 6.8 per hundred million vehicle miles traveled in 1967 to 0.58 in 2004, with a corresponding drop in fatalities from 206 to 75. This has been accomplished despite a fourfold increase in both population and vehicle miles traveled. The foundation of TIA's improvement efforts is its own traffic crash data base and internal crash analysis capability. Despite the success of TIA, no other local jurisdiction has been able to emulate its organizational model.

The Virginia Department of Motor Vehicles (VDMV), the state's Department of Transportation (VDOT), and Virginia's state highway patrol, are the core partners focused on

improving highway safety in the state. A current primary target is upgrading the state's traffic records system to provide more accurate crash analysis for highway safety improvements; this is particularly significant because in Virginia VDOT is responsible for more than 80 percent of the state's roads. Virginia's state agencies, partnering with coalitions of other organizations and the state legislature, have also had success in developing support for legislation to reduce drunk driving, tighten repeat offender laws, and enforce seat belt use laws.

South Carolina's recent highway initiatives have been directed at improving highway safety in a state that had a fatality rate in 1999 that was 50 percent higher than the national average. Since April 2000, when SCDOT organized a briefing on highway safety for 600 people, several activities have yielded improvements. The creation of an ad hoc legislative highway safety committee in September 2000 helped build political support for highway safety and led to the passage of stricter drunk driving, repeat offender, and open container laws. A primary seat belt law was passed early in 2005 but was not signed by the governor. Engineering improvements have included Interstate highway median barriers, lower speed limits on Interstate highways, and improvements to reduce run-off-the-road crashes. These, together with enforcement and education efforts, led to the following performance improvements from 1999 to 2003: 9 percent fewer fatalities; 17 percent fewer fatalities per million vehicle miles traveled; and 8 percent fewer non-fatal traffic injuries. SCDOT attributes much of the improvement to the support it has developed and sustained in the state legislature.

The committee was also informed that NCHRP is initiating a study on how states organize for highway safety. Using case studies it will document how several high-performing states involve their state departments of transportation, public safety, motor vehicles, and driver licensing; state and local police agencies; and local governments to improve highway safety performance. This report may fill important gaps in understanding about how institutional arrangements affect highway safety programs.

Briefings by Representatives of the Federal Motor Carrier Safety Administration and the Research and Innovative Technology Administration

Mary Powers-King, Director of Research and Technology, Federal Motor Carrier Safety Administration, briefed the committee on the agency's current research focus. The committee was pleased to learn that FMCSA's R&T program is based on a strategic plan, is data-driven, and takes account of stakeholder needs and concerns. Work is under way to support research performance explicitly by identifying outputs, outcomes, and impact metrics, key components of effective R&T management. Ms. Powers-King also noted several examples of FMCSA research partnering with other federal agencies and the private sector in order to leverage its research funds.

Lydia Mercado, Transportation Specialist, Research and Innovative Technology Administration, provided the committee with some preliminary information on the planned organizational structure and operations of this newly created agency. Its purpose is to

“provide (the U.S. Department of Transportation) a more focused research organization with an emphasis on innovative technologies and for other purposes.” Several current and possible future cross-modal initiatives for the agency include topics—such as human factors research, the university transportation centers program, intelligent transportation systems, preservation of aging infrastructure, national freight research—that are closely aligned to topics of interest to FHWA.

Future Meeting Plans

The committee’s next meeting is scheduled for June 15-16, 2005 at the J. Erik Jonsson Woods Hole Center of the National Academies in Woods Hole, MA.

Final Remarks

In closing, the committee expresses its appreciation for the highly constructive participation and presentations of FHWA staff at its meeting. The committee stands ready to support FHWA through the transition of the reauthorization process.

On a personal note, I invite you to participate in future committee meetings as time permits.

Sincerely,



E. Dean Carlson
Chair
Research and Technology Coordinating Committee (FHWA)

Enclosure

**Meeting Attendance: Committee, Liaisons, Guests, and Staff
November 22-23, 2004**

Committee

E. Dean Carlson (NAE), Chair
Don Brock
Karen Miller
Tim Neuman
Joseph Sussman
Kevin Womack

John Conrad
Cash Misel
Len Sanderson
Paul Wells

FHWA Liaisons and Guests

Joe Budras, FHWA
Debra Elston, FHWA
Marci Kenney, FHWA
Mike Trentacoste, FHWA

Rick Capka, FHWA
King Gee, FHWA
Tom Krylowski, FHWA
Paul Teng, FHWA

Guests

Vince Burgess, Virginia Department of Motor Vehicles
Frank Cardeman, Oakland County Michigan Traffic Improvement Association
Robert Johns, University of Minnesota
Ken Kobetsky, American Association of State Highway and Transportation Officials
Wes Lum, California Department of Transportation
Lydia Mercado, Research and Innovative Technology Administration
Mary Powers-King, Federal Motor Carrier Safety Administration
Amy Sterns, Research and Innovative Technology Administration

TRB Staff

Ann Brach
Stephen Godwin
Amelia Mathis
Robert Reilly

Walter Diewald
Neil Hawks
Mark Norman
Robert Skinner