

**TRANSPORTATION RESEARCH BOARD**  
**The National Academies**

Executive Committee Meeting

June 20-21, 2013

National Academy of Sciences Building  
Washington, D.C.

**FINAL MINUTES**

**PRIVILEGED INFORMATION**

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privileged and not for public release, except by special action of the  
Executive Committee

**TRANSPORTATION RESEARCH BOARD**  
**Executive Committee Meeting and Policy Session Discussion Minutes**  
**June 20-21, 2013**  
**Lecture Room – National Academy of Sciences Building**  
**Washington, D.C.**

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**TRB Executive Committee Meeting Attendance**  
**June 20-21, 2013**  
**Washington, D.C.**  
**Attendance**

**EXECUTIVE COMMITTEE**

Deborah Butler	Chair
Kirk Steudle	Vice Chair
Victoria A. Arroyo	
Scott Bennett	
Rebecca M. Brewster	Ex Officio
James M. Crites	
John T. Gray, II	Ex Officio
John Halikowski	
Michael Hancock	
Susan Hanson	
Steve Heminger	
Chris T. Hendrickson	
Jeffrey D. Holt	
Gary LaGrange	
Michael P. Lewis	
Joan McDonald	
Michael P. Melaniphy	
Steven Palmer	
Lucy Priddy	
Peter Rogoff	Ex Officio
Sandra Rosenbloom	
Kumares C. Sinha	
Joseph Szabo	
Daniel Sperling	
Gary Thomas	
Paul Trombino	*by phone
Barry Wallerstein	Ex Officio
Phillip Washington	
Bud Wright	Ex Officio
Gregory Winfree	Ex Officio

**MARINE BOARD CHAIR**

Thomas M. Leschine

**TECHNICAL ACTIVITIES COUNCIL**

Katherine Turnbull	Chair
James Thiel	
Thomas Wakeman	

**GUESTS**

Bill Bronrott	Federal Motor Carrier Safety Administration
Kevin Knight	U.S. Army Corps of Engineers
Walt Kulyk	Federal Transit Administration
Venkatesh Narayananamurti	
Jeffrey Paniati	Federal Highway Administration
Ellen Partrige	Research and Innovative Technology Administration

Todd Riley	Maritime Administration
Nan Shellabarger	Federal Aviation Administration
Jarrett Stoltzfus	Federal Transit Administration
Michael Trentacoste	Federal Highway Administration
John Tunna	Federal Railroad Administration
Matt Welbes	Federal Transit Administration
James Corbett	
David Greene	
Amy Myers Jaffe	
Matt Miyasato	

**TRB STAFF**

Cindy Baker
Ann Brach
Karen Febey
Kimberly Fisher
Stephen Godwin
Russell Houston
Christopher Jenks
Lisa Marflak
Mark Norman
Thomas Palmerlee
Suzanne Schneider
Robert Skinner
Gary Walker

**TRANSPORTATION RESEARCH BOARD**  
**Executive Committee Meeting and Policy Session Minutes**  
**June 20-21, 2013**

**Washington, D.C.**

*Highlighted areas indicate Executive Committee action.*

**June 20, 2013**

## **Welcome**

Transportation Research Board Executive Committee Chair Debra Butler called the meeting to order at approximately 8:30 a.m. Chair Butler welcomed everyone in attendance and recognized incoming and outgoing members of the Executive Committee. Self-introductions were made.

## **Bias/Conflict-of-Interest Discussion**

A bias/conflict-of-interest discussion was held, in which members of the Executive Committee were given the opportunity to disclose potential biases or conflicts of interest they could have related to areas that might be discussed at this or future Executive Committee meetings. No members reported any conflicts of interest related to the Executive Committee's duties.

## **Previous Meeting Minutes**

The minutes of the January 16-17, 2013, meeting of the Executive Committee were approved as submitted.

## **Executive Director's Report**

Bob Skinner provided a report on a number of items concerning TRB as detailed in the Executive Director's Report (page 18 of the electronic agenda). During his presentation, Mr. Skinner highlighted the following:

- Critical Issues in Transportation, Triennial Review, and the Strategic Plan:
  - The latest *Critical Issues in Transportation* publication has been in the draft revision process for the past 6 months and is nearing completion.
  - The Triennial Review Visiting Committee recently submitted a comprehensive and thoughtful report about TRB, which includes recommendations for follow-through by TRB and the NRC. The Triennial Review Visiting Committee was appointed by Ralph Cicerone, the National Research Council (NRC) Chairman and National Academies of Sciences (NAS) President.
  - With the completion of the *Critical Issues in Transportation* and recommendations from the Triennial Review Committee, TRB and the Subcommittee on Planning and Policy Review (SPPR) would like to revisit updating TRB's Strategic Plan.
- Funding for the Cooperative Research Programs (CRPs):
  - Chris Jenks will discuss that FY 2013 funding is in place. Funding for each program is either in place or being released incrementally at expected levels, with the exception of the Transit Cooperative Research Program (TCRP).
  - TCRP funding will be \$3.5 million in FY 2013, which is a substantial decrease from the \$8-10 million range that the program has received in past years. TRB can manage this reduction efficiently.
- Naturalistic Driving Study Database:
  - 2,000 vehicles are instrumented to record driver behavior and interactions with the vehicle and roadway geometry. The recordings capture videos of what drivers see, the number of occupants in the vehicle, what's going on in a driver's lap, and detect blood alcohol records.
  - This study is a \$60 million investment.

- The amount of data received thus far is 2.7 petabytes. TRB expects to collect 4 petabytes of information.
  - A special committee chaired by Joe Schofer is providing advice to the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and other interested parties on issues associated with the long-term ownership, maintenance, and availability of the database once TRB's current mission is complete.
  - Virginia Tech has agreed to host the data for the next five years, and the National Academies has agreed to be the owner during that time. FHWA and AASHTO support this five-year concept.
- Policy Studies:
  - A study looking at the impacts of transportation infrastructure projects intended to stimulate the economy in response to recessions is now in review and nearing public release.
  - A study examining intercity passenger transportation with the aim of explaining the advantages and disadvantages of the various intercity modal options for one-way distances of 100 to 500 miles including high speed rail and intercity bus is about midstream in the study process.
  - The U.S. Department of Transportation has requested that TRB proceed with a congressionally requested study that will examine the economic conditions of the freight railroads, rail rates, and future roles for the Surface Transportation Board. This request was mentioned in the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) to look at the economic conditions of freight railways; however money was not appropriated for this study in 2005.
- Sharon D. Banks Award for Humanitarian Leadership in Transportation:
  - The award, which is presented biennially, recognizes recipients that have a documented record of innovative and successful humanitarian leadership in areas such as the education, training, and mentoring of transportation professionals; community-sensitive transportation facilities and services; and other people-oriented initiatives that bring together individuals of diverse backgrounds in the pursuit of excellence.
  - Chair Butler has appointed a selection committee, and they plan to coordinate via conference calls.
  - The selection committee may not know some or many people nominated for this award.
  - The nomination deadline is August 31, 2013. The announcement is enclosed in the meeting agenda packet, and everyone is encouraged to spread the word about nominations.
- Minority Student Fellows Program:
  - The Minority Student Fellows Program is now permanent and in its fifth year.
  - The program received approximately \$4,000 from check box added to the TRB Annual Meeting registration form.
  - The program has grown to include 15 eligible universities.
  - Twelve students are expected to participate in the 2014 TRB Annual Meeting.
  - The program has had 30 students in the past four years. Survey results of past program participants found unanimous agreement that the Minority Student Fellows Program is useful and increases interest in both TRB and transportation-related careers.
  - An article highlighting the program will be available in May/June TR News.
  - Mr. Skinner encouraged more organizations and agencies to become involved in sponsoring the program.
- NAS Leadership Transition:
  - Dr. Charles (Chuck) Vest is completing a six-year term as President of the National Academy of Engineering. Dr. C. Daniel (Dan) Mote, past president of the University of Maryland, will succeed Dr. Vest on July 1, 2013.
- NAS Gulf of Mexico Program:
  - As part of the settlement for the 2010 Deepwater Horizon disaster, BP and Transocean will be donating a total of \$500 million to NAS over the next five years to support studies and

- monitoring initiatives related to environmental issues. This money must be spent during the next 30 years.
- An advisory group has been formed to map out a direction of the program. Once there is a clear strategic vision for the program, the advisory group will dissolve and the program will transition to the guidance of a permanent board within the NAS.
- TRB's connection to the Gulf of Mexico Program is through the Marine Board. The Marine Board has provided input to the advisory group, and has suggested including more experts with drilling experience to balance out the scientists and health care professionals involved.
- **TRB Overall Budget:**
  - At the January meeting, Mr. Skinner reported that the National Research Council anticipated a 3 percent decline in its budget compared with 2012 in the "regular" or "direct" portion of the budget, which excludes pass-through funds (such as CRP and SHRP 2 contracts) and which generates the bulk of the indirect funds that support the institution.
  - Unfortunately, the figures for the first quarter reflected a sharper decline of 6 percent.
  - While some of the lost ground may be made up in the remainder of the year, sequestration and funding uncertainty throughout the federal government are clearly playing a role in this decline, and there is little likelihood that this situation will turn around soon.
  - If this trend continues, our overhead rates will soar.
  - TRB is going through a process to reduce indirect spending, which includes a reduction in our support units and governance structure.
- **2014 Executive Committee Summer Meeting:**
  - Mr. Skinner proposed to stay in D.C. at the NAS Building for the 2014 Executive Committee summer meeting, particularly given the ability of federal employees to participate in the D.C. area.
  - The Beckman Center, located on campus of University of California, Irvine, may be an option for the 2015 summer meeting, but Mr. Skinner proposed that the committee reassess the location for the 2015 meeting in 2014.
- **Media Coverage:** Selected reprints of articles that mention TRB studies and other activities are included in the agenda packet.
- **Recognition of Dr. Suzanne Schneider:**
  - TRB awarded Dr. Schneider with a plaque commemorating her service with the TRB Executive Committee and her years of service with TRB.
  - Dr. Schneider will retire in September 2013, after serving a 27-year career with TRB.

## **Technical Activities Division (TAD) and Council Report**

Katherine Turnbull, Lucy Priddy, and Mark Norman reported on activities of the Technical Activities Council (TAC) and Technical Activities Division as detailed in their report (page 34 of the electronic agenda). Their presentations highlighted the following:

### **Technical Activities Council**

The TAC met on June 18-19, 2013, immediately preceding the Executive Committee Meeting, and discussed the following:

- The TAC held a dialogue with the Research and Development Directors of TRB Sponsor Agencies.
- Dr. Turnbull stated that the TAC could provide input to TRB's strategic plan, and stated that committees are interested in providing input into the publication *Critical Issues in Transportation*.
- Dr. Turnbull announced that a selection has been made for the 2014 Thomas B. Deen Distinguished Lecture. [On June 21, Dr. Turnbull announced that Joe Schofer of Northwestern University has been selected for this honor, after Dr. Schofer accepted the nomination.]
- The TAC discussed ways to make the 2015 TRB Annual Meeting transition to the D.C. Convention Center seamless and transparent.

- Ms. Priddy highlighted activities of the Young Members Council (YMC), which consists of a representative from each of the 11 TAC Groups and the YMC Chair:
  - The YMC is currently leading an effort to develop a mentorship program. The council has developed guidance and tools for committees across TRB, and will be piloting the program this year.
  - The YMC has established the TRB Outstanding Young Member Award. This award was created to recognize exceptional young member service to TRB and achievements in transportation research, policy, or practice. The inaugural award was provided in 2013 to Stephanie Camay.
  - The YMC is also working on developing online and printed resources for young members. The YMC GroupSite is an online community that has more than 280 registrants since June 1, 2013. A New and Young Members Guide is currently in development, and will provide valuable information to new committee members.

#### TRB Annual Meeting

- Mark Norman reported that the 2013 Annual Meeting broke several previous records:
  - More than 11,700 registrants attended the 2013 TRB Annual Meeting, breaking the previous record of 11,000 set in 2012.
  - 4,800 papers were received for review by the August 1 deadline, breaking the record of 4,200 papers set in 2012.
  - 750 sessions and workshops were developed and presented during the meeting.
  - Other highlights of the TRB Annual Meeting include the new “app” for smartphones and mobile devices. More than 6,000 individuals downloaded the app.
- The 2014 Annual Meeting will take place January 12-16, 2014 at the Connecticut Avenue Collection hotels in Washington, D.C.
  - The spotlight theme is “Transportation Research: Celebrating our Legacy and Anticipating our Future.”
  - Standing committees are submitting information highlighting the most notable research achievements over the past decades.
  - Paper submissions for the 2014 meeting are due August 1, 2013.
    - In recognition of the White House Office of Science and Technology Policy, the paper submission website will ask authors if their research was funded with federal funds.
  - The Marriott Wardman Tower will be turned into condominiums this year and will no longer be part of the Marriot Wardman Park hotel, which will reduce capacity at this venue.
- The 2015 Annual Meeting venue will change from the Connecticut Avenue Collection hotels to the D.C. Convention Center and Marriott Marquis Hotel in Downtown D.C.
  - Contracts are being negotiated and executed. Hotels with signed contracts are providing the Annual Meeting attendees with the Federal Government Per Diem rate. The other hotels will probably fall in line to be competitive.
  - TRB has set up staff teams in five areas to plan for the transition, and they'll develop recommendations in the next month or two. State and federal sponsors will be able to provide input into the transition recommendations.
  - The Committee of History prepared an article for the TR News about the history of the Annual Meeting.

#### Conference, Workshop, and Project Approvals

- Global Sustainability, Local Transportation Solutions (Sponsor)
  - Date: Spring, 2015
  - Location: To be determined
- AASHTO GIS for Transportation Symposium (Cosponsor)
  - Date: Spring 2014
  - Location: Burlington, VT

These conferences were approved.

### **Subcommittee for NRC Oversight (SNO)**

Susan Hanson, chair of the SNO, described the role and background of the SNO and some of its oversight activities, including its efforts to support the broadening of the representation of minorities and women on TRB committees and panels as detailed in the SNO report (page 46 of the electronic agenda book). The SNO has reviewed a diverse set of topics, and the reports remain high-quality products.

### **NRC Governing Board Triennial Review of TRB**

Dr. Hanson and Mr. Skinner discussed the NRC Governing Board Triennial Review of TRB. The results of the review are included in the electronic agenda book, beginning on page 56.

As a part of the NAS, the NRC Governing Board has determined that each unit be reviewed every three years. TRB was reviewed in 2013. The review process includes an external review committee of four distinguished members of the NAS or the National Academy of Engineering (NAE). The review committee consisted of:

- Anita Jones: former Director of Defense Research and Engineering at the U.S. Department of Defense and current Professor Emerita at the University of Virginia. Dr. Jones is a member of the NAE and chaired this review committee.
- David Daniel: President of the University of Texas at Dallas. Dr. Daniel is a member of the NAE.
- Lou Lanzerotti: Distinguished Research Professor at the New Jersey Institute of Technology. Dr. Lanzerotti is a member of the NAE.
- Joe Schofer: Professor of Civil and Environmental Engineering and Associate Dean of the Robert R. McCormick School of Engineering and Applied Science at Northwestern University. Dr. Schofer is a TRB Committee Member.

Two of the Triennial Review Committee members were knowledgeable about some aspects of the TRB, while the other two members were relatively unacquainted with TRB. The report that they produced provides an objective narrative about the value that TRB's role plays in the transportation community, while including recommendations on how to improve various aspects of the organization. TRB will report to the NRC Governing Board in November with an update on the status of implementing the report's recommendations.

Mr. Skinner highlighted the Triennial Review Report recommendations, which included:

*Recommendation 1:* Succession planning for senior leadership positions appears to be neither urgent nor (at this stage) well planned.

Mr. Skinner explained that TRB is a unique organization, and promotions at the very senior level are best made internally. Succession planning should be addressed. A large fraction of staff are nearing retirement. To address attrition, TRB has moved some retiring staff to half-time, and overlapped staff to help newer employees learn those jobs. TRB expects additional contraction after the SHRP 2 phases out around the March 2015 timeframe. Additionally, the overall volume of CRP work is declining, so it's expected that natural attrition will occur.

*Recommendation 2:* The TRB should be proactive in seeking out and including more National Academy members in TRB activities, particularly in policy study venues, with emphasis on attracting National Academy member volunteers who are expert in technologies that will deliver future functionality in the transportation sector.

Mr. Skinner stated that NAE members have not been as involved with TRB as in decades past. The median age of NAE members primarily concerned with transportation is around 80 years old. Nonetheless, TRB will try to include more academy members. Other academies such as the National Academy of Science and the Institute of Medicine do not overlap with TRB as much as the NAE.

*Recommendation 3:* The Publication Board for the *Transportation Research Record (TRR)* should continue to evaluate and evolve the journal by benchmarking it against competing journals, increasing rankings, increasing citation ratings, perhaps transitioning to an all-electronic journal, and reducing the time from submission to publication.

Mr. Skinner remarked that the TRR Editorial Board will explore this recommendation.

*Recommendation 4:* It may be possible to accelerate the publication cycle for some papers, and to offer potential authors an outlet for important publications at any time, if there is a separate track for considering papers submitted outside the normal annual-meeting process.

Mr. Skinner explained that all papers are currently accepted on August 1 of each year, and then parsed out to committees to be reviewed. One of the factors that led to an annual August 1 deadline is the work that it takes our volunteers to review papers. The volunteers know that, at a particular time of year, they'll be spending several hours reading and reviewing papers. However, they only have to go through this effort once a year.

*Recommendation 5:* The TRB should revise and update a strategic communications plan to consider ways to communicate more effectively to promote better cross-fertilization of ideas across the TRB units and ways to communicate more effectively with other NRC and National Academies units, especially to encourage people not yet involved with TRB to become more engaged in the organization's activities.

*Recommendation 6:* TRB research programs would be well served by sharper and more comprehensive tracking of the impacts of the research.

*Recommendation 7:* The TRB, and the National Academies, should both rationalize their information infrastructures, and not treat them as a collection of applications chosen with little regard to one another and how the overall information service is being delivered.

Mr. Skinner mentioned that the committee was impressed with the software that TRB uses to manage the papers, records, and other items. However, they thought TRB should do more to manage information in a strategic sense. The NAS does not have an overarching strategic plan.

*Recommendation 8:* The TRB should pursue its adoption of the Aptify volunteer engagement management application, exercising discipline over adaptations of it so as to emerge with a best-of-breed system that supports modern business practices.

## **Studies and Special Programs Division**

Mr. Godwin noted that the Studies and Special Programs Division report (page 74 of the electronic agenda book) provides an overview of pending studies, potential studies, policy studies under way, and reports completed in 2013.

Mr. Godwin asked for the Executive Committee's approval of the following two self-initiated studies, as recommended by the SPPR:

### Freight Rail Transportation and Regulation

Mr. Godwin directed the committee to page 76 of the agenda book to review the proposed study on freight rail transportation and regulation. This study would provide recommendations on set of complex and controversial issues:

- Railroad service levels, service quality, and rates
- Projected demand for freight transportation over the next two decades and the constraints limiting the railroad's ability to meet that demand
- Public policy success in balancing the needs of railroads to earn adequate returns with those of shippers for reasonable rates and adequate service
- The future role of the Surface Transportation Board (STB).

The interest for this study was likely initiated by shippers who have contacted Congress. The shippers believe that they are being held captive to individual railroads and/or paying excessive rates. Additionally, the shippers believe that the STB lacks responsiveness to their concerns.

After hearing these concerns, Congress requested the study as a part of SAFETEA-LU transportation authorization of 2005. The Executive Committee debated and approved project in 2005, but circumstances changed. The U.S. Department of Transportation declined to fund the \$1.8 million study, so it was not completed at that time. Recently, Senator Rockefeller added language to the FY 2012 appropriations to fund study at \$1 million.

Mr. Godwin met with **Appropriations Committee staff members/Senator Rockefeller's staff members** on the hill to determine if the study still needed to be completed. He mentioned to staffers that this study would be challenging for TRB given that there is a one year timeframe to complete the request; it would be difficult to identify knowledgeable experts free of conflicts of interest; and, the study would place heavy demands on existing TRB staff. While these limitations were recognized by congressional staff, they concluded that the study must be done.

**This study was approved by the Executive Committee** with one “nay” vote from John Halikowski. Mr. Halikowski stated that the study should be re-scoped given the amount of time that has passed since the request was first authorized.

#### Long-Term Pavement Performance Committee

Mr. Godwin directed the committee to page 87 of the agenda book to review the continuation of the Long-Term Pavement Performance Committee (LTPP).

A TRB committee has been advising FHWA and AASHTO about the conduct of the LTPP project since 1992. The study is collecting data and analyzing 2,500 in-service highway pavements in the United States and Canada. Approximately 200-300 sites are still collecting data. The NRC requires on-going committees to be reviewed every three years.

**The continuation of the committee was approved by the Executive Committee.**

#### Information Items

##### Offshore Regulatory Policy and Real-time Monitoring:

Mr. Godwin directed the committee to page 82 of the agenda book for background information on this project. This work builds on prior and ongoing work conducted by TRB and Marine Board projects for the Bureau of Safety and Environmental Enforcement (BSEE). Since the Deepwater Horizon oil spill, BSEE is seeking guidance with regard to opportunities made possible by real-time monitoring technologies. The committee will:

- Identify proposed expansions in BSEE's regulatory oversight to improve offshore industry safety;
- Identify, as appropriate, the types, and minimum capabilities of real-time monitoring technologies required for BSEE to adopt such options;

- Identify the policy issues of each option, along with what is known about each option's pros and cons, and
- Consistent with available information, make recommendations to BSEE about appropriate options for the agency to pursue.

Mr. Godwin mentioned that BSEE has asked for this review, and the project is undergoing high-level review by BSEE.

#### Offshore Oil and Gas Safety Culture Workshop:

Page 86 of the agenda book provides background information on this workshop currently under discussion. Admiral Jim Watson, BSEE Director has indicated interest to the Marine Board with helping to foster dialogue with the offshore oil and gas industry on building a positive safety culture. Mr. Godwin stated that he is currently awaiting response from the BSEE Director regarding scope, size, and location of a workshop, as well as if a report is desired.

#### Self-Initiated Studies

Mr. Godwin directed committee members to page 92 of the agenda book, which provides a summary of TRB's self-initiated policy studies. The Executive Committee has initiated major policy studies over the years on topics that the Committee believes are important. The studies are either partly or wholly funded by TRB through the Policy Fund. Several self-initiated studies have been influential. Mr. Godwin expects that the Policy Fund will become more important with ever-growing federal fiscal constraints.

Mr. Godwin has tasked the SPPR with developing list of possible topics to bring to Executive Committee, such as the integration of technology into vehicles and understanding travel behavior of different generations and ethnicities without a mobile bias.

#### **Major Update to the TRB Strategic Plan**

Mr. Skinner summarized the initial plan to conduct a new round of strategic planning, which is summarized on page 102 of the agenda book. The current strategic plan was adopted by the Executive Committee in 2007. A couple of years ago, TRB focused on improving a few areas of the plan rather than redoing the plan completely.

With the anticipated completion of the Critical Issues in Transportation and the completion of the Triennial Review, the SPPR believes that now is an appropriate time to revisit and update various elements of the 2007 strategic plan. Mr. Skinner is seeking approval from the Executive Committee to proceed with the staff-developed plan to conduct a full-scale strategic planning process. Mr. Skinner stated that a first draft may be ready for approval in June 2014.

The Executive Committee authorized the SPPR to move forward with developing the TRB Strategic Plan.

#### **Marine Board Update**

Tom Leschine provided the Marine Board Report. He stated that most items were covered in Mr. Godwin's presentation; however, funding is getting more difficult for the board to obtain. Due to the efforts of Mr. Godwin and others, the U.S. Coast Guard, BSSE, the National Oceanic and Atmospheric Administration, and the U.S. Army Corps of Engineers are committed to providing funding.

#### **Cooperative Research Programs (CRP)**

Christopher Jenks provided a status report on the National Cooperative Highway Research Program (NCHRP), Transit Cooperative Research Program (TCRP), Airport Cooperative Research Program (ACRP), National Freight Cooperative Research Program (NFCRP), Hazardous Materials Cooperative Research Program (HMCRP), and the new National Cooperative Rail Research Program (NCRRP), as detailed in the

Cooperative Research Programs report on page 124 of the agenda packet. He highlighted the following items:

#### NCHRP

Crawford Jencks, Deputy Director of the Cooperative Research Program, will be retiring from TRB after a 34-year career. Mr. Jencks' position will not be filled; instead, Mr. Jenks will staff an NCHRP Program Manager position. Mr. Jenks is also working on reallocating projects to other existing staff, particularly those who are working on projects that are winding down.

Funding is in place at expected levels for FY 2013, and Mr. Jenks expects FY 2014 funding will be \$39 million. Post-FY 2014 funding will depend upon the reauthorization of the Moving Ahead for Progress in the 21st Century Act (MAP-21).

The AASHTO Standing Committee on Research met in March 2013, and they selected the FY 2014 program on assumption that MAP-21 funding will be in place. Fifty new projects have been selected, and 50 existing projects will continue during FY 2014. Further information can be found on pages 130-133 of the agenda packet.

#### TCRP

According to language in congressional legislation, the Federal Transit Administration (FTA) has discretion over its transit research funding, and has provided TRB with \$3.5 million for FY 2013, a \$3 million decrease from FY 2012 amounts. Mr. Jenks stated that FY 2014 legislation currently has an authorized amount of \$7 million, but the U.S. House of Representatives' markup has **allocated** \$4 million for TCRP in FY 2014.

Mr. Jenks stated that the TCRP Oversight and Project Selection Committee will be deprogramming funds from TCRP projects during their next meeting in June 2013.

#### ACRP

ACRP has been funded at \$15 million a year, and the U.S. House of Representatives' markup included the full \$15 million. The ACRP Oversight Committee will meet in July 2014 to discuss FY 2015, and they will use the \$15 million benchmark to make decisions on the 110 suggestions received for research.

#### NCFRP and HMCRP

NCFRP and HMCRP have not been reauthorized. These programs are winding down.

#### NCRRP

NCRRP has \$5 million a year authorized from FY 2010 to FY 2013; however, Mr. Jenks mentioned that this program is just starting and uncertainty remains regarding the longevity of funding.

### **Second Strategic Highway Research Program (SHRP 2)**

Ann Brach and Kirk Steudle directed members of the Executive Committee to the second Strategic Highway Research Program (SHRP 2) report (page 151 in the agenda book). Their report highlighted the following items:

Dr. Brach summarized SHRP 2's Research Program Status:

- 131 contracts have been awarded; 51 are completed
- 72 percent of contract work has been invoiced or paid
- 112 reports have been published, or are in production/review
- In addition to reports, SHRP 2 has issued 40 web tools, databases, and software applications

Dr. Brach stated that 40 state departments of transportation have participated in SHRP 2 committees, and 37 states are involved with 119 field activities such as pilots, demos, development of specifications, and data collection.

#### Safety Focus Area

The SHRP 2 Naturalistic Driving Study is underway. As of June 2013, 1,934 vehicles are currently equipped on the road; 3.2 million trips have been made; 386 crashes have been recorded; and, 10,560 centerline miles of roadway data have been collected. Dr. Brach reports that three analysis projects are currently underway to address road departures on rural two-lane curves, evaluate offset left-turn lanes, and understand the influence of driver inattention on crash risk.

More than 20 organizations are interested in using data from this study, including federal agencies, transportation associations, automobile manufacturers, universities, and private sector companies. Additionally, Verizon and AT&T have agreed to provide cell phone records directly to the study on the condition that participants have provided their permission. Participants with other mobile carriers can request their own records and send them to SHRP 2.

#### Renewal Focus Area

Dr. Brach stated that fieldwork such as pilots, demos, and field tests are taking place for several products, as detailed in the agenda packet. Dr. Brach also highlighted the public release of web-based tools like GeoTechTools, and the web-tool developed as a part of the project, Renewal Strategies for the Design and Construction of Long-Life Pavements.

#### Reliability Focus Area

The Reliability program has developed several projects to help transportation agencies integrate travel time reliability information into their analysis and design functions. For a detailed list of projects, view page 154 of the agenda book. Four teams from state departments of transportation are piloting tools to integrate travel time reliability into agency activities.

There are three projects that help ensure dissemination and knowledge transfer of the SHRP 2 Reliability research:

- A web portal about travel time reliability and SHRP 2 Reliability products
- Five Regional Operations Forums to provide education and training to transportation agencies on SHRP 2 Reliability products
- An archive of SHRP 2 data available for use by future researchers

#### Capacity Focus Area

Capacity research explores tools and efforts that communities can employ to help make better decisions. Four pilot sites are testing several practical applications developed through the Capacity program, as detailed on page 155 of the agenda book. In addition to the pilot sites, SHRP 2 will be hosting the second international Freight Demand Modeling and Innovation Forum, which will help advance state of the practice in freight demand modeling and freight data and focus on developing public sector models to better reflect private supply chain behavior.

#### **Implementation Update**

Mr. Steudle, Chair of the SHRP 2 Oversight Committee and Implementation Advisory Committee, provided the implementation update, as detailed on page 156 of the agenda book. Implementation is being led by an FHWA-AASHTO partnership. A program-wide implementation plan and budget has been established and total funding of \$169 million will be provided through SAFETEA-LU dedicated funds, FHWA MAP-21 funds, and state planning and research contributions.

The first-round implementation assistance selections were announced in May 2013, and included 34 state departments of transportation and the District of Columbia, 11 metropolitan planning organizations, and 1 tribal entity. A total of 108 projects were undertaken through the program:

- R04 - Innovative Bridge Designs for Rapid Renewal: 9 projects
- R09 - Managing Risk in Rapid Renewal Projects: 2 projects
- R10 - Innovative Strategies for Managing Complex Projects: 5 projects
- R26 - Preservation on High-Volume Roadways: 51 projects
- C06 - Implementing Eco-Logical: 14 projects
- L01/06 - Organizing for Reliability Tools: 27 projects

Mr. Steudle stated that the levels of assistance for these projects varied, and includes two proof-of-concept pilots, 74 lead adopter projects, and 24 user incentives. Limited technical assistance is being made available to 8 states

A second solicitation is planned for Summer/Fall 2013, and will include the following products:

- C19 - Expedited-Schedule Case Studies
- R07 - Performance Specifications for Rapid Highway Renewal
- R09 - Managing Risk in Rapid Renewal Projects
- R16 - Railroad-DOT Institutional Mitigation Strategies

Mr. Steudle provided the 2013 schedule for the second round of implementation:

- Week of July 22 – Product webinars
- August 2 – Implementation Assistance Program Round 2 Opens
- September 6 – Final date for applications
- October 4 – Final recommendations for assistance

Mr. Steudle explained that implementation for SHRP 2's Safety projects are more complex than the other research areas because of the very large and rich data set collected by the Naturalistic Driving Study. Planning is underway to ensure access to and maintenance of the data for up to 30 or 40 years. An FHWA-funded report from the USDOT's Volpe Center and an NRC-appointed advisory committee are examining this issue. The NRC letter report recommended that a phased approach be taken. The first phase will last approximately five years, and \$25 million will be set aside for operation and maintenance of the dataset. The NRC letter report concurred with the Volpe report that NRC ownership presents the easiest transition.

Lastly, Mr. Steudle outlined SHRP 2's communications and outreach planning. Bi-monthly, product-specific webinars branded as "SHRP2 Tuesdays" are timed with implementation opportunities. As many as 20-30 state visits are being conducted, and briefings about the SHRP 2 program are taking place at AASHTO regional and committee meetings. Mr. Steudle also highlighted that information can also be found on the GoSHRP2 web site.

### **Lunch Break**

The Executive Committee recessed at noon for lunch.

### **Afternoon Session**

The Executive Committee reconvened at approximately 1:15 p.m.

Bud Wright, Executive Director of AASHTO, and Michael Melaniphy, Executive Director of the American Public Transportation Association (APTA) discussed congressional policy and funding issues prior to the Policy Session.

Mr. Melaniphy stated that the American Association of Railroads and APTA have recently participated in congressional testimonies about positive train control and rail safety. Mr. Melaniphy also mentioned that

transit funding is expected to stay relatively flat as a result of MAP-21. APTA is currently looking at innovative approaches for funding transit, such as tax credit bonds and federal credit packages. The U.S. House of Representatives markup for FY 2014 has funded the FTA at \$10.7 million, which is less than authorizing levels. The House has a lower allocation than the U.S. Senate.

Mr. Wright provided perspectives about the Water Resources Development Act, MAP-21, and the Highway Trust Fund. Regarding the Water Resources Development Act, Mr. Wright reports that the Senate moved forward successfully, and the bill is now with the House Transportation and Infrastructure Committee.

AASHTO is particularly interested in the MAP-21 authorization. Mr. Wright hopes this legislation will be the main focus of House Transportation and Infrastructure and Environment and Public Works committees. However, a major concern of Mr. Wright's is the Highway Trust Fund, which will be insolvent at the end of FY 2014. Mr. Wright stated that the money flowing into the Highway Trust Fund cannot sustain current spending levels, and he conjectures that a long term sustainable source of user-based revenue must be identified. Mr. Wright believes that transportation researchers and practitioners need to engage with Congress about the importance of transportation and a multimodal network in both their states as well as the national economy.

### **Policy Session: New Information and Telecommunication Technology Applications to Transportation: Opportunities and Challenges (Part 1 of 2)**

Chair Butler welcomed the policy session panelists and expressed the committee's appreciation for their participation in the session.

Members of the panel included:

- David Green: Corporate Fellow, Oak Ridge National Laboratory
- Amy Myers Jaffe: Executive Director, Energy and Sustainability, University of California, Davis
- James Corbett: Professor, College of Earth, Ocean, and Environment, Civil and Environmental Engineering, College of Engineering, University of Delaware
- Matt Miyasato: Deputy Executive Officer, Science and Technology Advancement, South Coast Air Quality Management District

A summary of the presentations and the ensuing discussion are captured in the rapporteur's presentations included in the Policy Session Rapporteur's Summary section of these minutes.

Chair Butler called a recess to the meeting at 5:30 p.m.

**June 21, 2013**

Chair Butler called the Executive Committee back in session at 8:30 a.m.

### **Policy Session: New Information and Telecommunication Technology Applications to Transportation: Opportunities and Challenges (Part 2 of 2)**

#### Policy Session Rapporteur Summary

Summary observations were drawn by Chris Hendrickson from the previous day's presentations. Dr. Hendrickson is the Duquesne Light University Professor of Civil and Environmental Engineering at Carnegie Mellon University.

Despite innovations in multimodal transportation, interest in protecting the environment, and importance of energy independence, America continues to rely primarily on petroleum as its sole source of fuel for all modes of transportation. Although petroleum use has been pervasive across all transportation modes, some strides have been made to diversify the energy portfolio of some transportation modes. For example, from

1965 to 1975, miles traveled by light duty vehicles increased at the same pace as fuel consumption. From 1975 to 2010, vehicle travel has increased however fuel consumption has not increased at the same rate. Within the past decade, vehicle miles traveled has decreased, and with that, so has the need for fuel.

Ms. Myers Jaffe discussed that policy options for transportation fuel consumption have taken a “business as usual approach.” Instead of transitioning away from petroleum, policy makers have tried to increase light duty vehicle fuel efficiency, use ethanol fillers, and transition heavy duty vehicles to natural gas. Greenhouse gas emissions, air emissions, and petroleum imports have been somewhat lowered because of these efforts. However, major shifts away from petroleum remain to be seen.

Dr. Hendrickson summarized Dr. Green’s remarks that researchers are currently making strong business cases to move vehicles away from petroleum-based fuels to options like electrification, hydrogen, or fuel cell technology. Models developed for the NRC publication, *Transitions to Alternative Fuels and Vehicles*, explores using a combination of energy platforms for vehicles to help reach greenhouse gas emissions targets. Dr. Hendrickson emphasized that simply investing in plug-in electric vehicles will still create high emissions. However, electrification for other modes like rail may work, especially if it’s being used for auxiliary power.

Policy session presenters also mentioned that resources like biofuels and natural gas are plentiful in the United States, and could serve as interim fuel sources as fuel cells and hydrogen are in the development phase for light duty vehicles. Natural gas is a proven technology and reserves are plentiful. Biofuels may also be a good transition fuel, as it has been used for several years in gasoline. Current biofuels like ethanol or corn-based fuels do present problems, according to Dr. Hendrickson. Fuels made from corn or sugar may disrupt food supply, water use, and land consumption. Fuels like algae and cellulosic fuels are currently being researched.

Beyond technology improvements, Dr. Hendrickson emphasized that non fuel-based policy options are also available, such as planning land use differently, modal changes to improve efficiency, congestion management strategies, the potential of autonomous vehicles improving driving cycles and fuel consumption, and teleworking, to name a few.

The presenters recognized potential opportunities, but were not remiss to highlight the barriers preventing change to the status quo. The implementation of many of these new fuel options will require simultaneous infrastructure and vehicle changes. Subsidies are essential to overcome current economic hurdles, but government has little interest in investing in infrastructure. Also, Dr. Hendrickson mentions that there is no guarantee that technologies like fuel cells are going to work, which makes it challenging for the market to invest in these technologies.

Dr. Hendrickson closed with mentioning the research implications and opportunities for TRB to influence the policy debate about emerging fuels. He states that TRB may want to engage new stakeholders in the fuel, utility industry and create partnerships to generate potential policy options. TRB may want to research fuel technology innovations with other issues like land use and bicycling. TRB may want to explore ways to increase the diversity of vehicle fleets.

## **Future Policy Session Topics**

Russell Houston provided an overview of the SPPR’s suggested topics for the January 2014 policy session (tab 6B of the agenda book).

The Executive Committee decided to explore “The Nation’s Aviation System,” specifically, the impact of global alliances on competition, service in less-dense corridors, the Next Generation Air Transportation System (NextGen), and impacts on the environment. Presenters may provide the current state of the infrastructure and industry, but will also include specific policy debates relating to technology and funding.

## **International Activities**

Sandra Rosenbloom provided a report to the Executive Committee as the Committee's International Secretary. Highlights from Rosenbloom's presentation are as follows:

- TRB as an organization is becoming more international.
- TRB is signing more memoranda of understanding, and cooperation among international institutions continues to grow. Two years ago, RITA and the European Commission agreed to hold four workshops. The first workshop was held two weeks ago and was about freight. The next workshop will be in Paris focusing on the implementation of research.
- TRB has a large international presence on our committees. Committees have reserved slots for international participants.
- Dr. Rosenbloom expects the interaction with our international partners will continue to grow.

## **Administration and Finance Division**

Mr. Gary Walker summarized the Administration and Finance Division report (page 171 of the agenda book). During his presentation he reported that:

- Program spending has grown significantly in recent years as a result of SHRP 2-associated activities and contracts.
- TRB will see steadily decreasing expenditures in the next few years as SHRP 2 winds down from a high of \$41 million in 2011, with the program anticipated to end in the second quarter of 2015.
- NCHRP and ACRP are not experiencing contraction, while funding for other cooperative research programs like TCRP, NCFRP, and HMCRP have been reduced.
- Finances for the other TRB divisions remains stable with relatively minor fluctuations from year to year. TRB remains the largest of the program units in the National Academies.
- TRB has had recent success generating revenue. Self-generated income currently covers 35 percent of TRB's operational costs. State departments of transportation provide 45 percent of TRB's Core Program funding, FHWA finances 13 percent, while 7 percent is provided by other sponsors.
- Within the next two years, TRB is anticipating a reduction of support from state departments of transportation and FHWA. Mr. Walker states that this reduction can be sustained for next two years. The Finance Committee's approved budget for the remainder of this triennium incorporates a planned drawdown of the Reserve Fund. It is anticipated that by the end of FY 2015 the reserve fund balance will be 93 percent of the Core Program budget, which is within industry standards.

## **Subcommittee on Planning and Policy Review (SPPR)**

Dr. Rosenbloom, Chair of the SPPR, presented the SPPR report. Dr. Rosenbloom described the role of the subcommittee (page 175 of the agenda book), which is charged with providing guidance and input to TRB between meetings of the Executive Committee. She noted that the SPPR met on April 4, 2013:

- The SPPR has produced a draft of the *Critical Issues in Transportation* publication. The draft has been approved and the SPPR recommends its adoption by the Executive Committee. Dr. Rosenbloom stated the importance of this document, as it is used by students, media, and others.
- *Critical Issues in Transportation* covered the performance of transportation, safety, the link between energy and environmental issues, funding challenges, and the need for innovation and information dissemination.
- The publication describes each issue on a broad level, and is designed for use by a general audience.

The Executive Committee approved the Critical Issues in Transportation draft, pending minor changes. Chair Butler suggested a dissemination timeline to publicize the release of the publication and suggested various avenues of dissemination, including a social media campaign.

**New Business**

There was no new business.

**Next Meeting and Adjournment**

- The next meeting of the Executive Committee will take place January 15-16, 2014 (Wednesday and Thursday), at the Omni Shoreham Hotel, Washington, D.C.
- Chair Butler adjourned the meeting at 11:30 a.m.