

TRANSPORTATION RESEARCH BOARD
The National Academies

Executive Committee Meeting
January 15-16, 2014
Palladian Room, Omni Shoreham Hotel
Washington, D.C.

DRAFT MINUTES

PRIVILEGED INFORMATION

Minutes of all TRB Executive Committee Meetings shall be regarded as 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
January 15-16, 2014
Palladian Room, Omni Shoreham Hotel
Washington, D.C.

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**TRB Executive Committee Meeting Attendance
January 15-16, 2014
Attendance**

EXECUTIVE COMMITTEE

Deborah Butler	Chair
Kirk Steudle	Vice Chair
Victoria A. Arroyo	
William A. V. Clark	
James M. Crites	
Anne S. Ferro	Ex Officio
Stewart Fotheringham	
John T. Gray, II	Ex Officio
John Halikowski	
Susan Hanson	
Chris T. Hendrickson	
Jeffrey Holt	
Brian Jackson	
Gary LaGrange	
Michael P. Lewis	
Joan McDonald	
Michael P. Melaniphy	Ex Officio
Abbas Mohaddes	
Gregory Nadeau	
Steven Palmer	
Peter Rogoff	Ex Officio
Craig Rutland	Ex Officio
Sandra Rosenbloom	
Henry G. Schwartz	
Lisha Smith	Ex Officio
Daniel Sperling	
Paul Trombino	
Phillip Washington	
Greg Winfree	Ex Officio
Bud Wright	Ex Officio

MARINE BOARD CHAIR

Thomas M. Leschine

TECHNICAL ACTIVITIES COUNCIL

Katherine Turnbull	Chair
James S. Thiel	
Daniel S. Turner	
Thomas Wakeman	

YOUNG MEMBERS CHAIR

Lucy Priddy

GUESTS

Stacy Cummings	Federal Railroad Administration
Jim Jensen	National Research Council
Kevin Knight	U.S. Army Corps of Engineers
Kelly Leone	Federal Motor Carrier Safety Administration
Venkatesh. Narayanamurti	Harvard School of Engineering and Applied Science
Jeffrey Paniati	Federal Highway Administration
Todd Ripley	Maritime Administration
Nan Shellabarger	Federal Aviation Administration
Michael Trentacoste	Federal Highway Administration
Matt Welbes	Federal Transit Administration
Thomas Berry	Policy Session Speaker
Jeff Hamiel	Policy Session Speaker
Stephen D. Van Beek	Policy Session Speaker
Michael Whitaker	Policy Session Speaker

TRB STAFF

Cindy Baker
Ann Brach
Karen Febey
Stephen Godwin
Russell Houston
Christopher Jenks
Mark Norman
Robert Skinner
Gary Walker

TRANSPORTATION RESEARCH BOARD
Executive Committee Meeting and Policy Session Minutes
January 15-16, 2014

Washington, D.C.

Highlighted areas indicate Executive Committee action.

January 15, 2014

Welcome

Transportation Research Board Executive Committee Chair Debra Butler called the meeting to order at approximately 8:30 a.m. Butler welcomed everyone in attendance, made general announcements, and recognized incoming and outgoing members of the Executive Committee. In addition, she noted that the summer Executive Committee meeting will be held on June 26-27, 2014. 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 that may be related to possible discussion topics at this or future Executive Committee meetings. No members reported any conflicts of interest.

Previous Meeting Minutes

The minutes of the June 20-21, 2013, meeting of the Executive Committee were approved as submitted.

Executive Director's Report

Bob Skinner provided a report on items concerning TRB as detailed in the Executive Director's Report (p.22 of the agenda book). During his presentation, Skinner highlighted the following:

- 2014 Annual Meeting:
 - This Annual Meeting had one of the highest turnouts of directors of state departments of transportation due in part to the CEO Roundtable Sessions.
 - At this year's meeting there were 135 workshops, 450 lectern sessions, 195 poster sessions, 500 committee and sub-committee meetings, and a sold-out exhibit hall. In addition, a record number of papers (5,200) were submitted for presentation. Attendees were very diverse in age, nationality (70+ countries), and professional background.
- The updated *Critical Issues* document was released at the end of 2013 thanks to the Executive Committee. It will be distributed to the media, sponsors, committee chairs, and Executive Committee members, and will be available in both hard and electronic copy.
- Staffing changes:

- Russell Houston is the assistant executive director and will oversee information technology activities, publications, and communications, and will provide support to the TRB Executive Committee.
- Karen Febey is the senior report review officer who will support the Subcommittee for NRC Oversight.
- Lisa Marflak is the director of communications and media.
- In the Technical Activities Division, Rick Pain, Frank Lisle, and Jody Cambridge retired.
- In the CRP division, Chris Hedges is the manager of NCHRP after Crawford Jenck's retirement.
- The Policy Studies Division has carried out a number of studies, including a report on the best available and safest technology for offshore oil drilling and another on diluted bitumen.
 - The Policy Studies Division will conduct a \$1 million study about the safety culture on oil and gas drilling operations. This study is funded from the \$500 million that NAS received from the BP and TransOcean settlement money.
 - TRB's policy fund is sufficient to finance about two policy studies every three years; these funds can also be used to leverage or supplement funding from other sources.
- TRB is one of a few organizations that can carry out long-term, big picture policy studies. Two upcoming studies include one on inter-city transportation options, and another on the inland waterways system.
- In 2012 TRB hosted 34 webinars, while in 2013 TRB hosted 63. Webinars are a growing component of TRB's outreach efforts and can be very effective in reaching out to people who have travel difficulties.
- SHRP 2:
 - The Naturalistic Driving Study is complete: data collection is over, and the study achieved its sampling objectives of 3900 vehicle years of travel (about 5 million trips).
 - Kirk Steudle, director of the Michigan Department of Transportation, added that SHRP 2 is changing its focus in that it is transitioning from research to implementation. There has been much progress in this transition and the SHRP 2 implementation committee has established a good working relationship with the AASHTO and FHWA committees. One challenge facing implementation is management of the many products coming out. Currently 15 products are available to state DOTs and agencies. State DOTs and other transportation agencies have expressed much interest in the SHRP 2 products.
- TRB and RITA (now called the Office of the Assistant Secretary of Transportation for Research and Technology) produced a draft chart (pp. 33-36 of the agenda book) that summarizes the origin and spending of the Department of Transportation's spending on

transportation research in FY 2010 and FY 2013. The chart shows that USDOT's research spending has declined 15 percent since FY 2010.

- Regarding funds that went to TRB, SHRP 2 received all of its funding prior to FY 2013 figures and therefore is not included in the FY 2013 figures.
- CRP funds are 20 percent less in FY 2013 when compared to FY 2010. About one-third of that decline can be attributed to the rail research program, which was only funded in FY 2010.
- Dan Moat was elected as the new NAE president, and took office on July 1, 2013 after Chuck Vest's term ended. IOM will have a new president, Victor J. Dzau, who will take office on July 1, 2014 when Harvey Fineberg's term ends.
- Budgetary issues:
 - The National Academies' budget expectations were not met for FY 2013 so a mid-year adjustment in indirect spending was made. This included an academy-wide reduction in indirect staff. The outlook for 2014 appears stable, as it also does for TRB.
 - TRB's core program of its standing committees, the Annual Meeting, publications, conferences/workshops, and information services is in its second year of a triennium. Even though states and FHWA reduced their funding to TRB in this triennium, TRB has been able to handle the reduction because of its cost containment strategies and revenue from the Annual Meeting.
 - Starting this spring, TRB will convene a finance committee comprised of state DOTs leaders (chaired by Kirk Steudle) who will look at TRB's budget for the next triennium.

Subcommittee for NRC Oversight (SNO)

Susan Hanson described the role, background, and oversight activities of the SNO (p.47 of the agenda book). She stated that the SNO works to ensure quality of research by ensuring the quality of committees that produce the research. In addition, the SNO seeks to sustain a diversity of expertise, background, age, geography, and gender in committee leaders and members. TRB assesses its efforts at maintaining diversity in part through tracking committee composition by a range of different variables (e.g., gender, nationality, race/ethnicity). In addition, Hanson said that over the past 15 years, there has been much progress in bringing diversity to the activities of TRB. One meeting participant suggested that diversity may be increased if directors of state DOTs encourage their younger staff to come to Annual Meeting and become involved with TRB activities.

Hanson highlighted TRB's *Framing Surface Transportation Research for the Nation's Future* report, which will be released in February 2014. Henry G. (Gerry) Schwartz, who continues as the SNO vice chair with oversight responsibilities for SHRP 2, highlighted the SHRP 2 letter report about options for the long-term stewardship of SHRP 2 data. This report is about use of

data from the Naturalistic Driving Study and contains a recommendation for TRB to be the repository for the study's data for the next five years.

Subcommittee on Planning and Policy Review (SPPR)

Sandi Rosenbloom presented the report of the SPPR. Rosenbloom explained the purpose of the subcommittee (p.130 of the agenda book), which is providing guidance and input to TRB in between meetings of the Executive Committee. The most pressing issue of the SPPR has been the new strategic plan, which is prepared by TRB staff under the guidance and approval of SPPR members. The plan must represent a consensus of the Executive Committee to move forward. The strategic plan will address suggestions made in the NRC's Triennial Review of TRB. At the SPPR meeting, members made suggestions to improve the report's content and structure.

Strategic Plan Update

Bob Skinner provided an update on the development of the TRB Strategic Plan. As an overview, he said that this development includes consideration of groups that TRB should outreach to, services that TRB provides, and delivery of those services. During his presentation, Mr. Skinner highlighted the following:

- The plan must show alignment between what TRB proposes to do and willingness of sponsors to provide resources.
- Mark Norman said that there will likely be a final draft of the Strategic Plan by the 2015 Annual Meeting.
- The process for developing the Strategic Plan included meetings of TRB's leadership, examination of the *Critical Issues* document, and review of the Triennial Review. In addition, TRB staff will incorporate results from focus groups and a survey of TRB leadership.
- Survey results that will inform the Strategic Plan include the following:
 - Leaders rated TRB's value and ability to meet future challenges as high. There was much support to engage other stakeholder groups in the transportation community. TRB's strengths are the networking opportunities it offers and its sharing of research results.
 - Suggestions for TRB include streamlining its processes, shortening the time from identifying research needs to disseminating results, enhancing the prestige of the *Transportation Research Record*, providing research results in user-friendly formats, better managing the number and types of standing committees, and taking greater advantage of technology tools for committee activities.
 - Prominent themes were the importance of community building, reaching out to other stakeholders, and helping people understand TRB's structure and processes.
 - Transportation trends that should be included are climate change, advances in technologies, changes in demographics and vehicles, and limited resources for building, maintaining, and repairing infrastructure.

- Non-traditional stakeholders that TRB should reach out to are local governments, public health organizations, the private sector, elected officials, law enforcement, and technology companies.
- TRB cannot sacrifice the quality of research in pursuit of speed. At the same time, TRB should focus on how it can speed up its processes and detect emerging issues quicker than in past.
- Finally, Skinner remarked that TRB's Executive Committee is unique in the National Academies. It would be beneficial to take advantage of the technical capabilities across the Academies to augment TRB's strength of having broad connections.
- Suggestions made by Executive Committee members to improve the draft are as follows:
 - TRB's business model is unclear, which has implications for stakeholder involvement. The plan should stress a coordinated, proactive approach to address critical issues. One of TRB's performance measures should be the number of members and papers generated by each committee.
 - TRB's structure and processes are unclear, especially those new to TRB. The current draft plan may not reflect the future generation as much as it does the current generation.
 - Climate change is a key issue to include in a strengths-weaknesses-opportunities-threat analysis. Similarly, the plan should include implications of electrification of the transportation system as a way to reduce reliance on fossil fuels.
 - TRB needs to partner with other institutions and stakeholders to address critical and emerging issues in a more systematic manner.
 - TRB can address the issue of increasing involvement of younger professionals by turning to state departments of transportation.
 - One issue to consider is the role and goals of external vs self-directed policy studies.
 - The plan should have transportation transformations on the horizon (in addition to those in the *Critical Issues* document) such as the movement of funding to state and local levels, environmental changes, and technology innovations. In addition, the plan should include TRB's international role.

Young Members' Council Report

Lucy Priddy, the outgoing Young Members' Council (YMC) representative to the Executive Committee, provided an overview and update on the council's activities. This year at the Annual Meeting, the Young Members' Council sponsored or co-sponsored 25 events, six technical sessions, five workshops, four cross-cutting sessions, and one poster session. The most popular events were the young professionals' reception, the six-minute pitch, and "works in progress" podium sessions. In addition, there was a pilot mentoring program hosted by the freight and marine groups and an award to an outstanding young member. To help improve young members' involvement in TRB, council members developed a young members' guide that provides advice for involvement in TRB. Dr. Alison Conway will begin a three-year term as the YMC

representative to the Executive Council. She aims to increase involvement of minority and Eisenhower fellows in YMC and develop resources for mentorships.

Briefing from NAS Director of Congressional and Government Affairs

Jim Jensen, the National Academies' director of congressional and government affairs briefed the Executive Committee on the Congressional environment. He highlighted that the appropriations process may be finalized as a result of Republicans and Democrats agreeing to budget targets. Federal departments will therefore know what budgets are for current fiscal years so can make better discretionary budget decisions. TRB will benefit because much of its work is based on discretionary funding.

Reauthorization of Federal Surface Transportation Programs—AASHTO and APTA Positions

Frederick “Bud” Wright, executive director of the American Association of State Highway and Transportation Officials (AASHTO), and Michael Melaniphy, president and chief executive officer of the American Public Transportation Association (APTA), briefed the Executive Committee on reauthorization issues of the federal surface transportation programs.

Highlights from Mr. Wright’s presentation include the following:

- There is little sense of normalcy for programs funded by trust funds, particularly the Highway Trust Fund, which will likely reach insolvency before the end of FY 2014.
- Stepping away from a user-fee based approach will make it more difficult to compete for general funds revenues. It is therefore important to educate state-level policy makers on the importance of transportation for quality of life and economic vitality.
- AASHTO’s Board of Directors adopted nine policy resolutions that it believes should be included in the reauthorization of the MAP-21 legislation, including a re-examination of the proposals for expanding the national highway system and the national freight network.
- One of most fundamental changes of the MAP-21 legislation was its performance-based federal aid program that facilitates public accountability.
- AASHTO’s Board of Directors strongly supports prioritizing a federal research agenda in the MAP-21 reauthorization.

Highlights from Mr. Melaniphy’s presentation include the following:

- Transit funding continues to be critical as evidenced by how this past year had the second highest ridership level since 1957. The estimated number of trips of public transit is estimated at 10.5 billion.
- To achieve a “state of good repair” in the transit system, a 13 percent growth rate in funding would be needed over six years. In the past 20 years, the highest growth rate in

funding was just under seven percent, so to meet the system's basic needs, it is necessary to nearly double the previous highest levels of funding.

Studies and Special Programs

Stephen Godwin provided an overview of policy studies that are pending, potential, underway, and completed in 2013. Godwin discussed the following:

- Godwin requested, and the Executive Committee approved, a one-year policy study to consider possible benefits of urban mobility services, suggest areas for future research, and key issues for policy makers.
- A possible policy study topic on autonomous vehicles would identify technical and policy issues, safety assurance processes, and regulatory issues. The Executive Committee will address this topic in its policy session this summer and then direct TRB staff, as appropriate, regarding next steps. Therefore, there was no request for action.
- Godwin requested, and the Executive Committee approved, TRB's assistance to the U.S. Department of Energy's quadrennial energy review. TRB's role would be to assist with the issue of transportation of energy, particularly gas transmission in pipelines.

Briefings on Completed Studies

Impacts of Stimulus Spending on Highway Investments

Jay Shambaugh, study committee member and professor at George Washington University, provided an overview of the *Transportation Investments in Response to Economic Downturns* report. He highlighted the following:

- The report was intended to help Congress and state and federal transportation agencies in planning a stimulus program that includes transportation, evaluating the term and value of transportation investments, and managing the spending.
- The conclusions of the report address the extent to which stimulus spending is effective, the role of spending funds on transportation in a stimulus program, and management of a transportation stimulus program.
- Recommendations in the report included changes in established transportation programs, design features for future transportation stimulus programs, and methods for evaluating projects in a transportation stimulus program.

Research Frameworks

Genevieve Giuliano, study committee member and professor at the University of Southern California, provided an overview of the *Framing Surface Transportation* report. She highlighted the following aspects of the report:

- This report revisited an international scan of transportation research programs, and compared that scan to transportation research in United States. The purpose of the scan was to frame the future of U.S. transportation research, and then evaluate strengths and weaknesses of the U.S. transportation research enterprise, writ large.

- Strengths of transportation research in the United States are its applied research programs and leadership in educating future transportation professionals. Weaknesses are its lack of a robust basic research program and cohesive link between research and national goals.
- The two main recommendations in the report were for a new national research framework for transportation and a more productive federal research enterprise.
- Other recommendations concerned raising the profile of federal transportation research by improving coordination with the Office of Science and Technology Policy and by strengthening USDOT's research culture and capacity through reinstating its chief scientist position.
- The report concluded that if the United States had a robust program of both basic and applied research, it would be well positioned to respond to “quantum leaps” in transportation that will likely take place in the near future.

Break for Chairman's Lunch

The Committee recessed at approximately noon so that members of the Executive Committee could attend the Chairman's Lunch.

Afternoon Session

The Executive Committee reconvened at approximately 2:30 p.m.

Policy Session: Aviation Issues: Challenges and Opportunities

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

Members of the panel were:

- Michael Whitaker, Deputy Administrator, Federal Aviation Administration
- Stephen D. Van Beek, Executive Director, Policy and Strategy, LeighFisher
- Thomas Berry, Senior Analyst, MITRE
- Jeff Hamiel, Executive Director/CEO, Metropolitan Airports Commission, Minneapolis, Minnesota

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

Break for the Evening

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

January 16, 2014, Thursday

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

Policy Session: Aviation Issues: Challenges and Opportunities

Policy Session Rapporteur Summary

Vickie Arroyo, the policy session rapporteur, provided a summary of each panelist's presentation and then her observations and conclusions from the previous day's presentations and discussions:

Summary of presentation from Michael Whitaker, Deputy Administrator, Federal Aviation Administration:

- FAA's mission is to provide the safest, most efficient aerospace system in the world by operating the U.S. air traffic control system; regulating the safety standards and rules for aircraft and flight crews; and funding the air traffic control infrastructure, airports, and research and development.
- Through carrying out its mission, FAA aims to make aviation safer and smarter, deliver benefits through technology and infrastructure in the National Air Space, enhance the U.S.'s global aviation leadership, and empower its workforce to innovate.
 - As part of its mission to deliver benefits in the National Air Space, FAA is implementing NextGen, which is a complete overhaul and upgrade of the U.S.'s air traffic control system. Also, FAA is working to incorporate new users (i.e., unmanned aircraft systems and commercial space aircraft) into the system and eliminate redundant aviation systems and facilities.
- There are two main groups that use air space in the U.S.
 - The first group is those who land and take off from airports where the FAA has control towers. In this group, 51.7 percent is general aviation, 43.2 percent is commercial aviation, and 5.1 percent is military aviation.
 - The second group is those who use the high altitude air space (that above 18,000 feet). In this group, 79.6 percent is commercial aviation, 15.8 percent general aviation, and 4.5 percent is military aviation.
- Central policy questions for FAA are whether there is a better structure for operating the air traffic control system and who should pay for using the air space.
- The majority of FAA funding (70 percent) comes from dedicated aviation taxes, collected from users of the national airspace system. The remainder of funding comes from the general fund. Most of FAA's budget is spent on operations.

Summary of presentation from Stephen D. Van Beek, Executive Director, Policy and Strategy, LeighFisher:

- Despite dramatic changes in aviation over the past 15 years (i.e., airline consolidation, globalization, more efficient aircraft), the basic policy framework of the aviation industry has changed little.
- There are insufficient revenues to support FAA's needs because the system is reliant on unpredictable taxpayer money. Therefore, FAA has experienced furloughs, loss of system capacity, and inadequate investment.
- The taxation system underlying aviation is complicated and fragmented; FAA, the Department of Homeland Security, and Customs and Border Protections assess a myriad of fees to tickets.
- Overall budget levels and FAA operations growth has squeezed its capital accounts so that there is no longer a stable funding source for infrastructure improvements.
- The Federal Aviation Management Advisory Council made the following recommendations for improving FAA and the funding of aviation operations:
 - Create a sustainable financial future through dedicated and user-fee-based funding.
 - Separate the Air Traffic Organization (ATO) from the FAA by separating air traffic control from the FAA, and appoint a board consisting of users and aviation stakeholders who can provide oversight.
 - Assess and codify FAA authorities and programs by simplifying statutes, regulations and policy, and by eliminating redundant regulatory oversight.
 - Reform the tax structure by eliminating the current mix of taxes and fees then replace it with transparent schedules of cost-based fees that sufficiently fund services (e.g., air traffic control and aircraft certification).

Summary of presentation from Thomas Berry, Senior Analyst, MITRE:

- Nearly every major airline merged or declared bankruptcy or both, which has resulted in a very different industry with four major airlines in the United States: American, Delta, Southwest, and United.
 - In addition to the major airlines, there are two major niche airlines: jetBlue and Alaska, and three major "ultra low-cost" airlines: Allegiant, Frontier, and Spirit.
- Airlines are unbundling their tickets, which means they separate out certain services and amenities (e.g., such as checking bags and sitting in an exit row) and require passengers to pay for those services and amenities in addition to their tickets. By unbundling tickets, airlines pay less in taxes because they are only assessed taxes on the amount that people pay for the ticket itself—not for any fees assessed on top of the ticket. Therefore, the ancillary revenue of the industry has risen rapidly; it was \$2.5 billion in 2007 and rose to \$27.1 billion in 2012.
- Airlines have exercised greater capacity control so planes are more crowded and the available seat mile per full-time-equivalent employee is greater.

- The airline industry will likely have its fifth straight year of profitability, which will be approximately \$5 billion.
- The airline industry is advocating for a national airline policy that is favorable to them in terms of regulations, profitability, infrastructure, jet fuel costs, and global competition.

Summary of presentation from Jeff Hamiel, Executive Director/CEO, Metropolitan Airports Commission, Minneapolis, Minnesota:

- The airline industry supports 10.5 million jobs (seven percent of all U.S. jobs) and has a total economic impact of \$1.2 trillion (8 percent of U.S. GDP).
- Demand for airline travel is projected to grow from 700 million passengers in 2013 to 1 billion passengers in the next 10 to 15 years.
- Through 2017, airports will need approximately \$14.3 billion a year in airport infrastructure improvements to meet this forecasted demand.
- There are three main types of traditional airport funding models:
 - Residual: Airlines pay airport costs not allocated to other users or covered by non-airline sources, which results in more risk to airlines but more control over spending decisions.
 - Compensator: Airlines pay fees and rent to recover costs of facilities and services they use. Airports bear the financial risk of other facilities but can use net revenues for capital projects.
 - Hybrid: Airlines share costs for portions of the airport (e.g., the airfield) and airports bear costs and keep revenues in areas not leased to airlines.
- A central funding issue at airports is that reduced federal funding and artificially-capped local funding streams, combined with cost control pressures from airlines, has resulted in an unsustainable airport financial model.
- Airports do not often have incentives to increase public transportation options because the money collected from airport parking fees is a major source of revenue, and federal law generally prohibits airports from spending money off-site on public transit.
- A policy question for airports is whether privatization may be an answer to their revenue problems.

Ms. Arroyo summarized common themes from all of the presentations:

- The funding model for the aviation industry is broken and needs reform to be sustainable.
- The aviation system is not tied to actual stakeholder use (e.g., some rural systems are cross-subsidized, carriers of all sizes and general aviation are supported through other revenues).
- The current system does not create the right market incentives for generating revenue.
- Because of political reasons, FAA cannot shut down facilities that are redundant.
- Among underfunded transportation modes, there is much competition for dollars, especially when transportation funding legislation reaches Congress.

- Arroyo also noted that the panel members did not discuss the following topics:
 - A path for reform that develops a clear consensus on policy approaches that can bring disparate groups together.
 - FAA does not appear to be considering the impacts to infrastructure and operations that climate change will bring about to coastal airports (e.g., extreme weather and sea level rise).
- Potential roles for TRB are to make the U.S. aviation system's funding model and problems associated with it more transparent; highlight aviation systems in other countries that fund their air traffic control systems differently; and consider future impacts of climate change.

Future Policy Session Topics

Russell Houston provided an overview of the SPPR's suggested topics for the June 2013 policy session (p.155 of the agenda book). The proposed topic for the June 2014 policy session is the transformation to automated vehicles, including issues such as how government agencies may prepare to adapt to these advances in vehicle automation and associated regulatory and legal challenges. Executive Committee members wanted to move forward with the proposed session, and focus on a pathway to these vehicles, specifically connected vehicles and intelligent transportation systems.

International Activities Update

Sandra Rosenbloom, the Committee's international secretary, provided a report to the Executive Committee on TRB's international activities (p.161 of the agenda book). Highlights from Rosenbloom's presentation are as follows:

- Of the members on TRB's 200 standing committees, one in seven is an international participant, facilitated in part by the five slots set aside for those from countries other than the U.S.
- One committee, the international activities committee, focuses on reaching out to international scholars and ensuring that committees fill their five international slots.
- In 2004, fewer than 10 percent of Annual Meeting attendees were from outside the U.S. whereas it was 16 percent in 2013.
- Of visits to TRB website, 60 percent are from non-U.S. countries.
- The fifth annual conference on women's travel issues is in Paris in April 2014. TRB will be an official co-sponsor of the conference.

Marine Board

Stephen Godwin provided the report of the Marine Board in place of Thomas Leschine. The Marine Board was originally part of the National Research Council (NRC), and became a part of TRB in 1999. The three main sponsors of the Board are the U.S. Army Corps of Engineers, the

U.S. Coast Guard, and National Oceanic and Atmospheric Administration. Godwin discussed the following Marine Board activities and projects:

- In aftermath of the Deepwater Horizon incident, the Marine Board has carried out two studies for the U.S. Department of the Interior's Bureau of Safety and Environmental Enforcement.
- In addition, the Marine Board carried out a study that reviewed a risk assessment of bare tanker transport through Buzzards Bay for the state of Massachusetts.
- The Marine Board holds policy sessions with sponsors during its biannual meetings to determine whether there are topics that they could study by pooling their resources. In 2013 the sessions were on safety culture and the role of regulators, and on e-navigation. In 2014 the Marine Board is considering a session on coastal marine infrastructure resilience.
- As a result of a policy session last spring, a study is underway called the *Safety Culture of Offshore Oil and Gas Operations*. Also, TRB may receive a Congressional request to review studies about impediments associated with Coast Guard oversight of the U.S. Flag Registry.

TRB Minority Student Fellows Update

Karen Febey discussed progress with TRB's Minority Student Fellows Program (p.166 of the agenda book). As of 2012, the Minority Student Fellows Program is a full-fledged program of TRB that supports travel expenses of senior undergraduate and graduate students from underrepresented minority groups who attend a recognized minority-serving institution. These fellows write a research paper and present it in a poster or lectern session at TRB's annual meeting.

Febey stated that the Fellows Program continues to be a strong component of TRB's efforts to encourage underrepresented minorities to become involved in the transportation field and in TRB. Febey highlighted the following aspects of the program:

- At TRB's 2014 Annual Meeting, 11 academic institutions participated.
- In addition to TRB, five organizations and numerous individual donors contributed about half of the costs to cover the program.
- There are 15 institutions that are eligible to participate in the program, so TRB will be working to include student fellows from all of those institutions.
- TRB staff will be making a concerted effort to encourage fellows' involvement in TRB's committee structure.
- Interviews with program alumni revealed that fellows found the program to be a worthwhile component of their academic development.

Technical Activities, Division A Report

Katherine Turnbull (outgoing chair) and Mark Norman reported on activities of the Technical Activities Council (TAC) and the Technical Activities Division as detailed in their report (p.173 of the agenda book). Their presentation highlighted the following TAC-related activities:

- The Blue Ribbon Committee Award Program continues to grow; this year, the TAC selected six committees to receive recognition.
- 40 committees invited a non-traditional stakeholder to speak at the Annual Meeting and participate TRB committee activities.
- In addition, 80 committees followed up on a request to provide recent and anticipated research breakthroughs in their areas, which was related to this year's theme of "Celebrating Our Legacy and Anticipating Our Future." These breakthroughs are posted on the TRB website.
- Most of the groups and sections have young member task forces.
- Over the past few years, the Technical Activities Council has enhanced its transportation research database. A task force is developing training programs for transportation research managers who work at state DOTs, transit agencies, and universities.
- Norman requested, and the Executive Committee approved, TRB co-sponsorships of the National Equipment Fleet Management Conference in 2014 and the Fifth International Symposium on Nano-Technology and Construction Conference (as listed on pp.181-182 of the agenda book).

TRB Annual Meeting:

- This year's Annual Meeting set an attendance record again with 11,900 attendees—up from 11,700 last year.
- Next year, the Annual Meeting will be held for the first time at the D.C. Convention Center and the adjacent Marriott Marquis Hotel.
- The on-site attendee experience, but not the actual program, will change. For instance, the venue is closer to many amenities and will likely facilitate more networking opportunities.
- Most of the committee meetings will take place in the Marriott and most of the sessions, major events, and exhibits will take place in the Convention Center.
- The Convention Center will have more exhibit hall space, which can accommodate a greater number of exhibits and vehicles than the exhibit space at the Marriott Wardman Park Hotel.

Administration and Finance Division

Gary Walker summarized the Administration and Finance Division report (p.192 of the agenda book):

- TRB's expenditures in 2014 are projected to be around \$106 million, which is a reduction from a peak of \$128 million in 2011. The reduction was due to the contraction of TCRP, the freight and hazmat programs, and the winding down of the SHRP 2 program.
- The budget for TRB's core technical activities is prepared on a triennial basis; the triennium that TRB is now operating under runs from July 2012 to June 2015.
 - TRB's core funding can be broken down as follows: 45 percent comes from state DOTs, 13 percent from FHWA, and seven percent from other sponsors. The remaining 35 percent is self-generated, and has increased in recent years for reasons including increased attendance and registration fees at the Annual Meeting. TRB has therefore been able to accommodate a reduction in funding from FHWA and state DOTs in FY 2014/15 without experiencing an adverse impact to its activities or services.
- Another effect of generating the additional revenue has been an increase in the TRB reserve fund, which the Executive Committee determined should equal at least 75 percent of TRB's annual expenditures for core activities. Because of TRB's increased revenue, its reserve fund was 117 percent of core annual expenditures at the end of FY 2012. For the current triennium, TRB has drawn down the fund such that at the end of FY 2015, it will be approximately 93 percent of the core budget.
- The Finance Committee will meet before the June Executive Committee meeting to begin work on a recommended budget for the next triennium. Based on TRB's overall funding outlook and needs in upcoming years, the Committee will also make recommendations for the future size of the reserve fund.

SHRP 2

Ann Brach, SHRP 2 director, and Jim Hedlund, the SHRP 2 safety coordinator, reported on activities of the SHRP 2 program (p.196 of the agenda book). Their report highlighted the following items:

- There is much interest in the SHRP 2 program, products, and webinars, especially with the IT products.
- Staff members are accelerating transition of SHRP 2 products to FHWA and AASHTO.
- Approximately 50 percent of all contracts are still active, so staff members are working to make sure that everything ends on time.

Renewal Research Focus Area (as provided by Brach):

- The goal this focus area was to make more widespread use of rapid infrastructure renewal projects so that it will be possible to complete those projects quickly and with minimal disruptions.

- In the process of working on this focus area, SHRP 2 staff found that state DOT staff spent much time spent negotiating with utilities and railroads while trying to complete rapid renewal projects. SHRP 2 staff therefore developed a product for state DOTs and railroads and utilities to collaborate. This product is a customized, web-based tool with a searchable library of documents and best practices that can be used in negotiations.
- The renewal areas products have been successful because they have been focused on the renewal goal rather than on specific disciplines or stages of research and development. In addition, SHRP 2 focused on achieving more widespread use of rapid renewal techniques and how best practices can be implemented.

Safety Research Focus Area (as provided by Hedlund):

- Virginia Tech University is the lead contractor for the driving data and Iowa State University is the lead contractor for the roadway data.
- The data collection for the Naturalistic Driving Study is over, and the driving and roadway file will be completed by the end of March.
 - Key data enhancements for users will be done by the end of 2014.
 - Three trial analysis contracts are underway and will finish in July 2014. Two of these are roadway oriented and one is driver-vehicle oriented.
- The Naturalistic Driving Study exceeded targets for its goals of the number of participants (with 3,147) and the number of trips (with 5.4 million).
- The file for the Study is two petabytes. The data will be publicly available (released throughout 2014) and will allow for queries. Data will include trip summary files about events such as crashes and near crashes. There will be a crosslink between the roadway file and driving file, and the video data.

Use and Storage of Safety Data After SHRP 2 is Over (as provided by Brach):

- Chaired by Joe Schofer from Northwestern, the Committee on Long-Term Stewardship of SHRP 2 Safety Data is tasked with determining how to store and use the data in the future.
- The committee has produced two letter reports. One of these reports concluded that not enough is known to make a decision about the long-term stewardship of the data for the next 20 to 30 years so a phased approach should be taken. The first phase, expected to last about five years, should address issues such ways for a variety of stakeholders to be operators and have secure access to the data. In addition, a sustainable financial model is needed to manage and maintain the data, and will most likely require a public subsidy. The report lays out options for the future of the data, one of which was that the most cost-effective and common sense approach would be for NRC/TRB to manage this first phase.
- The first five years (or so) of storage and management of the safety data will involve a cooperative agreement between TRB and FHWA that starts on January 1, 2015. To

manage these first five years, there is a governance structure in place \$25 million available from SHRP 2 implementation funds.

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 (HMCRRP), and the National Cooperative Rail Research Program (NCRRP), as detailed in the Cooperative Research Programs report (p.205 of the agenda book). He highlighted the following items:

2013 CRP Highlights

- The six CRP research programs spent about \$56 million in applied research in 2013.
- In 2013, just over 130 publications were produced.
- About half of the publications were from NCHRP.
- There is much funding uncertainty in the CRP division, but a lot of material is still being produced.

Program Updates

- NCHRP:
 - Jenks stated that NCHRP funding was \$39 million in 2013, but it is unknown what will happen with the funding relative to the MAP-21 reauthorization.
 - After Crawford Jencks retired as manager of NCHRP and Chris Hedges assumed the role as manager, their projects were reallocated to existing staff to offset decline in workload associated with programs that have lost or are losing funding.
 - TRB has a new cooperative agreement with FHWA, which will start with the FY 2014 program and will continue for five years.
 - TRB has gone through the procurement process for 50 new NCHRP FY 2014 projects. After Congress makes money available through the appropriations process, states will be asked to authorize their share of funding for the NCHRP program. At that point, the money will be added to the cooperative agreement that TRB has with FHWA, and TRB will have access to funds for contracting.
 - NCHRP is in the middle of selecting projects for its FY 2015 program. It is unknown what the exact level of funding will be until MAP-21 reauthorization is complete. Staff members have therefore had to make assumptions about this funding level.
 - NCHRP had 60 new publications in 2013.

- **TCRP:**
 - Program funding has declined over the past several years. In FY 2011 it was between \$9 and \$10 million, in FY 2012 it was \$6.5 million, and in FY 2013 it was \$3.5 million.
 - With the current omnibus appropriations bill in Congress, FY 2014 funding will likely be further reduced to \$3 million. Because staff assumed \$4 million in funding when planning for new FY 2014 projects, the program is seeking additional funding from the FTA. If the omnibus bill passes and no additional funding is available, staff will adjust accordingly.

- **ACRP:**
 - ACRP funding has been \$15 million per year and if the omnibus bill passes, the program will likely retain that funding level.
 - Products have been very popular with the airport community and ACRP Report 100 was just published.
 - With the start of the FY 2014 program, ACRP staff will be starting five new projects that address various aspects of the NextGen air traffic control system and its impact on airports.
 - There are 25 FY 2014 RFPs out, and contractors will soon be selected to start those projects.

HMCRP and NCFRP:

- HMCRP and NCFRP were not reauthorized in the MAP-21 legislation, but program staff members were able to arrange the financing so that there is enough administrative money to complete and publish all projects that were in the pipeline.
- For NCFRP, there are 14 projects underway. After these projects are completed, this program will be closed out unless funding is provided in the reauthorization of the MAP-21 legislation.

NCRRP:

- This program was authorized at \$5 million from FY 2008 to FY 2013, but it only received funding in FY 2012.
- All projects are underway. The future of the program will be a function of the reauthorization of the Passenger Rail Investment and Improvement Act.

New Business

There was no new business.

Next Meeting and Adjournment

Debra Butler adjourned the meeting at 11:26 a.m.