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TRB

TRANSPORTATION RESEARCH BOARD

TRB Executive Committee Meeting
-Notes & Action Items-
Wednesday, June 22, 2016, 8:30 am – Noon; 1:00 pm-5:30 pm
Thursday, June 23, 2015, 8:30 am – 11:30 am
Beckman Center, Irvine, California

Day 1: Wednesday June 22, 2016

I.	**Welcome, Introduction, and Overview of Agenda**	**Crites**

A. Meeting attendee list is attached to the document on p.10.

B. Agenda Book pages are referenced throughout the document.

II.	**Bias/Conflict of Interest Discussion**	**Pedersen**

III.	**Approval of January 13-14, 2016 Minutes**	**Crites/Houston**

➢ *Approved*

IV.	**Executive Director's Report**	**Pedersen**

A. Year One Report Card – see p.21 of Agenda Book for more details.

B. Neil Pedersen's 2016 Performance Goals:
1. Reduce TRB's core program operating deficit to the point that TRB's Core Program Reserve Fund is projected to remain above 75 percent through FY2021. This will be done through a combination of revenue enhancements and expense reductions.
2. Continue significant involvement of members of the three Academies in TRB policy and program activities.
3. Collaborate with other divisions with the Academies to conduct joint activities that meet sponsor and stakeholder needs.
4. Secure additional sponsors for TRB, including additional private sector support for TRB activities.
5. Continue to modify and refine TRB's organizational structure as new programs are developed or existing programs are revised.
6. Complete plans for TRB's three strategic issues (transformational technologies, resilience, and transportation and public health) and undertake those activities planned for the reporting period, including joint activities with other NRC divisions.
7. Provide oversight to TRB's policy studies, with particular emphasis on the new congressionally-mandated studies.
8. Reengineer the Transportation Research Record process based on recommendations from the 2015 peer review and the TRR Review Advisory Board. Implement those actions recommended for the reporting period.

9. Identify and implement methods to produce Cooperative Research Program research in a timelier manner for high priority, quick turnaround research issues.

10. Adopt a new TRB Diversity and Inclusion Plan, and proactively implement action items, with the support of the NRC Office of Human Resources in the plan to increase underrepresented group participation in TRB activities, with emphasis on minorities, women, persons with disabilities, and young professionals.

11. Collect data on the impact of TRB research, policy, and convening activities, and report this information to stakeholders.

12. Complete TRB's strategic marketing and communications plan, and implement those items identified for the performance period.

C. Dr. Marcia McNutt starts her first term as President, National Academy of Sciences, on July 1, 2016.

D. Expanding Participation in TRB with other organizations: Mr. Pedersen spoke about involving younger professionals, international professionals, minorities and women, and logistics/freight professionals.

V. Finance and Revenues (p. 33 of the Agenda Book) **Pedersen**

A. Budget and Reserve Fund:
1. Reserve fund: The target level for the reserve fund for the TRB core program is 75% of annual operating expenses. TRB is projected to fall below the target level in FY2020, and will fall to 57% by FY 2021 if no actions are taken.

2. Steps being considered to resolve this situation include:
   - Increase Annual Meeting registration rates about 7%. This increase is in line with other meetings this size in the industry. This will recover half of the deficit. (Note – due to scheduling necessities, this step has been implemented.)
   - Reduce number of papers selected for TRR from 900 to 700.
   - Eliminate printed version of TRR and offer only electronic access.
   - Sell sponsorship in TRB E-Newsletter and TRID database.
   - Increase TRB subscription and affiliate fees by 5% over regular consumer price index increases.
   - Reduce publication of *TR News* from bi-monthly to quarterly.
   - Increase conference fees and be more selective in conferences managed directly by TRB.
   - Increase minimum sponsor level from $65,000 to $70,000.
   - ➢ *Action: Staff implement steps to reduce deficit and report status at SPPR and TRB Executive Committee meetings.*

B. New Revenue Task Force (p. 37 of the agenda book) **Norman**
   1. Pursue new TRB Sponsors and Affiliates
   2. Review TRB fees/prices and adjust accordingly
   3. Consider leveraging advertisements in the TRB E-Newsletter and TRID database

4.   Investigate feasibility of TRB Roundtables
5.   Launch TRB planned giving program

Questions for the Executive Committee:
6.   Are there other high priority revenue options that should be considered?
7.   Planned Giving Program:
- Who should TRB be reaching out to for possible donations?
- What are the best strategies for soliciting donations?
- What role can TRB Executive Committee members play?

C.   New Sponsors/Affiliates   **Norman**
1.   Follow guiding principles developed by staff and New Revenues Task Force
2.   Flesh out value propositions
3.   Reach out to prospective and existing private sector stakeholders
4.   Develop, revise, and proactively market resulting packages
5.   Solicit input from existing university stakeholders, including those that facilitate increased diversity

➢ *Action: TRB staff follow-up on the above steps and report progress to the SPPR and TRB Executive Committee.*

VI.   Expanding TRB Participation   **Rosenbloom/Louard-Clarke**

A.   [International Task Force]   Rosenbloom/Pedersen

Rosenbloom reported on the results of the International Task Force's review of TRB's international activities. The task force developed 56 recommendations across 11 categories and prioritized the recommendations within each category.

➢ *Action: When the task force's final report is submitted, TRB staff will review the recommendations to identify those top priorities that can be implemented with minimal additional resources.*

B.   Diversity and Inclusion   Louard-Clarke
1.   A comprehensive evaluation of current environment completed in early 2016.
2.   Conducted meetings with each division director and the senior management group.
3.   Presentations made to all TRB staff to explain the initiative.
4.   Plans are being developed to address recruitment and committee/panel outreach strategies.
5.   Score-cards and evaluation criteria being developed to track progress.
6.   Best practices for diversity and inclusion will be shared with staff and committees.

➢ *Action: Progress updates will be provided to the SPPR and Executive Committee.*

VII.   Break

VIII.   How to get TRB more engaged in freight   **Panel**

A.   Current TRB Freight Activities   Babcock

B.   Comments from invited guest speakers:

1. Freight is a measure of economic activity. U.S. freight systems are complex, change all the time, and cross all modes. Challenges include:
   - Ensuring that the TRB freight and logistics activities are known in that community.
   - Identifying the community (target audience): It encompasses many modes.
   - Plan to define the target audience, develop a value proposition that TRB can provide, and develop a communications plan.
   - For example, the Automotive Industry Action Group (AIAG) is hosting an event in August that has significant overlap with TRB activities. One Executive Committee member coordinated with AIAG to partner with them, which resulted in saving time and money planning something that TRB has already covered.
2. Freight must be seamless to connect one mode to another. Where is there synergy in the transportation industry? Is the greatest impediment infrastructure or regulatory?
3. TRB can provide guidance on sustainable financing for the highway system, while ensuring efficiency for users and reliability. How can we alleviate highway congestion? How can businesses review economically-significant regulation? How do the new technologies relate to the safety of trucks?
4. A TRB sponsor asked, "Why are we willing to spend the money and time to participate in activities at TRB?" Most of our business is private, which puts different incentives and objectives in place. TRB provides an outlet for our researchers to exhibit their work and share their results. TRB is extremely relevant in publishing and recognition of work. TRB provides organizations with a seat at the table, even when you disagree.
5. One member summarized reports that are important from TRB for the freight community:
   - Policy issues that tie into the funding issues and regulatory issues.
   - Trend reports
   - Summaries of research reports
   - Communications is critical. However, you will not find c-suite individuals accessing information in TRB reports.
6. Educating non-freight transportation professionals is a good goal. TRB volunteers are not well-structured to get the private sector involved; the best way to get the information to these groups is to attend their meetings.
7. TRB is one of the best organizations to unite the freight community because it is multimodal.

C. Mr Trombino summarized some major themes as communications, engagement, bringing TRB to industry organizations, policy and regulations, urban areas, and what the long-term vision is for freight in this world.

➢ *Action: Create a group to frame "freight" as a strategic initiative, in coordination and collaboration with other groups, committees, and TRB initiatives.*

IX.   Lunch

X.   Transformational Technology Taskforce (p. 90 of the Agenda Book)   Turnbull

A. Developed an action plan and worked with an outside consultant

B. Assisted in developing June 2016 TRB Executive Committee policy session (cybersecurity); Automated Vehicle Symposium 2016; and several NCHRP Projects

C. Guiding project to attract participation of stakeholders
- Conduct high-impact symposium.
- Generate research roadmaps and partnerships.
- Identify and encourage accelerated research processes (Dialogues are scheduled for several venues in 2016).

D. Peer reviewed "State-of-the-Activities" e-Circular

E. Questions for the Executive Committee:
1. What are the best mechanisms that TRB should employ to reach out to and involve the non-traditional stakeholders in this space?
2. What role can members of the TRB Executive Committee play in reaching out to these stakeholders?

XI. Policy Session on Cybersecurity

A. Admiral Robert Day, Bob Day and Associates LLC

B. Michael Dinning, the Volpe Center

C. Dr. Johanna Zmud, Texas A&M Transportation Institute

D. Bob Gourley, Partner, Cognitio Corp

Presentations available at http://www.trb.org/Main/TRBExecutiveCommitteeMinutes.aspx.

XII. Plenary Discussion   **Crites**

XIII. Break

XIV. Breakout Groups:

A. TRB's Role in Cybersecurity

B. Vehicle Vulnerabilities

C. Protecting Big Data

D. Leveraging Existing Efforts

XV. Break for Evening Activities and Dinner

XVI. Policy Session Breakout sessions   **All**

Day 2: Thursday, June 23, 2016

XVII. Rapporteur reports from breakout sessions   **Rapporteurs**

A. TRB's Role in Cybersecurity: TRB is in a solid position for capturing entities that are affected by cyber security.

B.   Vehicle Vulnerabilities: Connected vehicles raise cybersecurity threats. Transportation agencies have a stake in ensuring that vehicles and traffic are not vulnerable to cyber-attack. It's essential for the public to be confident that personal information is protected from cyber threats. Need to ensure that technology introduction does not outpace safety assurance mechanisms.

C.   TRB roles: TRB can host roundtables for stakeholders around connected vehicle safety concerns. Transportation agencies have a stake in ensuring vehicles/traffic are not vulnerable to cyber-attack. It's important that personal information is protected. It's also essential that technology introduction does not outpace implementation methods. All relevant research should include an assessment of vulnerabilities.

D.   Protecting Big Data: Ensuring privacy is key when sharing data. It's difficult to anonymize data. The state transportation departments have to coordinate with other state departments that manage information technology within that state. There is a need for standards and specifications regarding data.

E.   Potential actions: Are state DOT CEOs struggling with this? Follow-up is needed with similar organizations like AASHTO, APTA, and others that address big data to determine the scope of the problem.

F.   Leveraging Existing Efforts: There is a lack of coherent cybersecurity practices. TRB can leverage its connection with other units within the Academies. Other Academies divisions have researched these issues. Also, learn from mistakes involving compromised and hacked information. Lastly, it's important to disseminate research. TRB has a role in identifying and disseminating research about cybersecurity. TRB can also create a problem statement with AASHTO to survey current practices and create syntheses products to understand the state of the practice for cyber security.

XVIII.   Discussion of Policy Session Follow Up   **Crites**

A.   How do we structure the themes of cybersecurity to take near-term actions within the committees and CRPs? TRB could use the CRPs to make this a multimodal activity. TRB can share best practices and new tools. CRP could develop tabletop exercises for other organizations to use.

B.   Other sponsors could include other tabletop exercise companies. As we highlight the needs for the tabletops, we may have another entity for TRB to engage. Repackage many of these ideas and make them workable for TRB. TRB should package information so it's understandable from a CEO perspective.

➢ *Action: TRB Executive Committee Task Force on Transformational Technologies take the lead in providing guidance and direction in addressing cyber-security issues:*
  - *Coordinate with Resiliency Task Force*
  - *Develop summary of existing TRB activities and an action plan for review by the SPPR and TRB Executive Committee*

XIX.   Future Policy Session Topics   **Crites**

A.   Three hot topics:

1. Public health and transportation (January 2016)
2. Transformational technology (includes connected and automated vehicles) (June 2016)
3. Resilience – Climate and Extreme Weather (Proposed January 2017):
➢ *Approved: Resilience – Climate and Extreme Weather is selected. A decision regarding panelists is currently under consideration based on recent conferences and new information.*

XX. **Resilience Task Force**   (p. 108 of the Agenda Book)   **Card**

A. Reviewed current research:
1. 200+ publications from Cooperative Research Program
2. 25+ potential gaps for resilience activities identified
3. Resilience Section (Technical Activities Division)

B. Identified gaps for appropriate action, involving state DOT representatives who serve on the TRB Executive Committee

C. Identified tactical actions, developed a final report, and applied a communications plan developed by the TRB Resilience Section

D. Additional Actions:
1. Get resilience research needs from Aviation and Railroads
2. Further develop resilience research needs in Freight
3. Integrate research needs identified in EU-US
4. Transportation Resilience Climate Change Symposium

XXI. **US – EU TRB Resilience Dialogue**   **Arroyo**

A. Common themes across jurisdictions –
1. There is a need for more relevant information for decision-making as climate change impacts infrastructure, people, turbulence, ports, etc. There are multimodal effects from climate change.
2. Discussed the usefulness of drills, table top exercises, information from others' disasters/evacuations to improve crisis responses.
3. Dr. Arroyo presented on Georgetown Law's resources, including case studies detailing how officials at all levels of government are preparing transportation infrastructure for climate change impacts.
4. Other presentations focused on the importance of policy to promote changes and to remove existing legal and policy barriers to spending.
5. Another theme of the conference involved coordinating across silos, including understanding the vulnerabilities of other systems and how that affects transportation. For example, power outages/electricity, and interdependency of systems such as the "internet of things." Interdependencies in systems may potentially make systems less resilient.

XXII. **Public Health Task Force**   (p. 127 of the Agenda Book)   **Crites**

A. [Exploring Data and Metrics of Value at the Intersection of Health Care and Transportation](#) conducted on June 6-7, 2016. A recording of the workshop is available.

B. Explore how to structure this task force into the Technical Activities Division as we go.

C. Drafted materials to communicate Task Force objectives and will be revising the one-pager with CEOs in mind.

XXIII. Break

XXIV. SNO Update **Sperling**

A. Looking at the engagement data, it appears that we have a long way to go to involve more women and minorities.

B. Looking to get universities engaged with involving more minorities and women in TRB.

XXV. Technical Activities Update **Turner/Brach**

A. A survey was conducted of attendees to the 2016 Annual Meeting; ratings reflect positive experiences at the meeting.

B. 2017 Annual Meeting Spotlight theme is "Transportation Innovation: Leading the Way in an Era of Rapid Change." This theme will encompass the strategic focus areas of the Executive Committee as well as other emerging topics.

C. Group chairs reviewed committee demographic reports and discussed strategies to increase diversity.

D. Almost 170 Transportation Research Record papers were published under a new "early publication" process.

E. The Technical Activities Division welcomed four new staff in the last month to replace staff who retired or moved into other positions.

F. The Oversight Committee for the SHRP 2 Safety Database has started to think of ways to ensure the long-term sustainability of the data.

XXVI. Marine Board Update **Card**

A. The Marine Board held focus sessions on (a) seagoing autonomous vessels and (b) precision navigation at its May 2016 meeting in Woods Hole. The latter raised concerns about the growing dependence on GPS, which is vulnerable to disruption. Because the dependence on and vulnerability of GPS has implications beyond marine transportation, staff will follow up with other NRC units to determine interest in possible follow-up activities.

B. The Marine Board has been holding mini workshops, akin to the Executive Committee's policy sessions, as a way of framing possible questions of interest to sponsors. A previous session on building a culture of safety led to the recently-completed policy study summarized in the following agenda item.

C. The Office of Naval Research has now joined as a sponsor of the Marine Board.

D. Dr. Mary Brooks will rotate into the role of Chair of the Marine Board in November 2016.

XXVII. Policy Studies Update **Godwin**

A. Evidentiary Protection of Public Transportation Agency Safety Information:

The issue is the legal discovery and introduction into evidence in public transportation information. TRB will collaborate with the National Academies of Sciences, Engineering, and Engineering Committee on Law and Justice and the Committee on Science, Technology, and Law. The charge will explore if the broad public interest in safety is better furthered through the incentives driven by tort litigation or by assuring public agencies that evidence they collect will not be used against them in a court of law.

➢ *Action: Approved*

B.   Semi-autonomous vehicles and human factors: Mr. Godwin indicated that he was postponing asking for Executive Committee consideration of this possible self-initiated study due to the demands on staff caused by the unusual number of pending study requests from Congress. No action needed at this time.

C.   Mr. Godwin summarized the results of [Strengthening the Safety Culture of the Offshore Oil and Gas Industry.](#)

D.   Organizational safety reports produced by the Academies: Mr. Godwin discussed the results of a number of past and current reports on safety regulation of the offshore oil and gas industry and their possible implications for safety regulation of private carriers and public transportation agencies.

XXVIII. Discussion of Consent Agenda Items   Crites

➢ *Action: Conferences and Workshops Approved.*

XXIX.   Other business

TRB Executive Committee Meeting Attendees

Executive Committee Members
1. James Crites (Chair)
2. Paul Trombino (Vice Chair)
3. Vicki Arroyo*
4. Scott Bennett
5. Jennifer Cohan*
6. Jeff Holt
7. Jack Hu
8. Roger Huff
9. Geraldine Knatz
10. Ysela Llort
11. Margaret Melinda McGrath
12. James Redeker
13. Mark Rosenberg*
14. Sandra Rosenbloom*
15. Kumares Sinha
16. Gary Thomas
17. Pat Thomas
18. Katie Turnbull
19. Dean Wise

Ex Officio Members
20. James Card (Marine Board)
21. Scott Darling (FMCSA)
22. Carolyn Flowers (FTA)
23. Bevan Kirley (Young Members Council)*
24. Tim Kline (USDOT/OST-R)
25. Raquel Girvin (FAA)*
26. John Gray (AAR)*
27. Kevin Knight (USACE)
28. Cameron Naron (MARAD)
29. Wayne Nastri (SCAQMD)
30. Kelly Regal (FMCSA)
31. Reuben Sakar (DOE)*
32. Rose Sheridan (APTA)
33. Dan Sperling
34. Tim Schmidt (FHWA)
35. Michael Trentacoste (FHWA)
36. Vincent Valdes (FTA)
37. Bud Wright (AASHTO)

Technical Activities Committee
1. Dan Turner
2. Anne Goodchild
3. Stephen Lane
4. Ram Pendyala
5. Robert Shea

TRB Staff
1. Steve Andrle*
2. Scott Babcock
3. Cindy Baker
4. Ann Brach
5. Karen Febey
6. Steve Godwin
7. Marci Greenberger*
8. Chris Hedges*
9. Russell Houston
10. Bernardo Kleiner*
11. Claudette Louard-Clarke*
12. Lisa Marflak*
13. Tom Menzies
14. Mark Norman*
15. Thomas Palmerlee
16. Stephan Parker
17. Neil Pedersen
18. Gary Walker

Policy Session Guests
1. Robert Day, Bob Day and Associates LLC
2. Michael Dinning, Volpe, The National Transportation Systems Center, U.S. Department of Transportation
3. Johanna Zmud, Texas A&M Transportation Institute
4. Bob Gourley, Cognitio Corp.

National Academies Attendees:
1. Alina Baciu, Health and Medicine Division*

*Videoconference attendees