



## TRANSPORTATION RESEARCH BOARD

June 3, 2022

**MEMORANDUM**

To: Members, TRB Executive Committee  
TAC Representatives to TRB Executive Committee

From: Neil Pedersen *Neil J. Pedersen*  
Executive Director

Subject: Agenda for TRB Executive Committee Meeting  
June 15-16, 2022

Enclosed is the agenda book for the Executive Committee meeting on June 15 & 16 (all day Wednesday and Thursday until noon). For those who will be attending in person, the meeting will be held at the Executive Conference & Training Center in Sterling, VA. Zoom invitations have been sent to those who will be participating online.

All of you are receiving this information electronically. Chair Nat Ford urges all members to review the agenda material prior to the meeting so that time spent in oral briefings can be reduced to a minimum. This will also expedite the handling of the more routine items on the agenda, allowing more time for discussion of substantive transportation issues. If you have limited time, I ask that you prioritize review of the Executive Director's report (Tab 5) and the three strategic plans that you will be asked to vote to approve.

Susan Shaheen, Chair of the Subcommittee on Planning and Policy Review (SPPR), will present a proposed TRB 2022-2027 Strategic Plan that is in alignment with the new National Research Council strategic plan. Executive Committee members are asked to review the proposed plan developed by the SPPR (found in Tab 7) and be prepared to vote to adopt the new plan.

The Special Committee on Diversity, Equity, and Inclusion (DE&I) has been working to develop a revised DE&I strategic plan. Carol Lewis, chair of the special committee, will present the revised plan (found in Tab 22), and you will be asked to vote to adopt this plan as well.

NATIONAL  
ACADEMIES *Sciences  
Engineering  
Medicine*

The International Subcommittee, under Randy Iwasaki's leadership, has developed a revised Strategic Plan for TRB International Activities (found in Tab 24), which you will also be asked to vote to adopt.

SPPR has been working on the next edition of the *Critical Issues in Transportation*. Executive Committee members are asked to review the list of issues identified so far by SPPR (found in Tab 9) and provide feedback and comments on the draft list of issues. Our goal is to have a new edition ready for release at the 2023 TRB Annual Meeting.

Our traditional policy session on the afternoon of June 15 will be on reimagining goods movement. We will have a one-hour panel presentation session with three speakers, Paula Dowell, Jolene Hayes, and Caroline Mays, which will be the first all-female panel for an Executive Committee policy session. The three speakers will discuss the major economic trends affecting the future of goods movement, supply chain issues, and automation technology and sustainability. This will be followed by first impressions from several Executive Committee members involved in goods movement, which will then be followed by a discussion with the entire Executive Committee.

*You are asked to bring your agenda material with you as only late items or corrected material will be distributed at the meeting.* (A few extra agenda books will be available in case you forget yours). Please note that the electronic PDF version of the agenda book includes bookmarks. In the left column, please click the "Bookmark" icon to find tabs that will take you directly to each agenda item.

On **June 15 (Wednesday)**, the meeting will start promptly at 8:30 a.m. Breakfast will be served in the dining room of the Executive Conference & Training Center starting at 7:30 a.m.

We will break for evening activities at 5:00 p.m. An offsite dinner will be held at the Passion Fish Reston restaurant for members of the TRB Executive Committee and their guests, Technical Activities Council members, and policy session panelists. We have arranged for round trip bus transportation for those attending Wednesday's dinner. Departure time is 5:30 pm at the main entrance of the Hampton Inn & Suites Dulles hotel. For those allergic to seafood, steak or vegetarian meals will be available.

On **June 16 (Thursday)**, the meeting will start at 8:30 a.m. and adjourn by 1:00 pm. Breakfast (7:30 a.m.) and lunch (12 noon) will be served. If you are not planning to stay for lunch on Thursday, but would like to take a boxed lunch with you, and did not RSVP yet, please let Sierra know.

Business casual wear is appropriate at the meetings, as well as the local restaurants. Ties are very strongly discouraged!

Wireless internet will be available at no charge.

I look forward to seeing you either at the Executive Conference & Training Center or online and to having a productive meeting.

*Note: If you find your plans change and you cannot attend the meeting, please call the hotel directly— Hampton Inn & Suites Dulles (703-537-7800). You must cancel 72 hours prior to your arrival. I would appreciate your letting us know also.*

**AGENDA**  
**TRB EXECUTIVE COMMITTEE MEETING**  
**Executive Conference and Training Center, Sterling VA**  
**June 15-16, 2022**

**TUESDAY, JUNE 14, 2022**

**Reception & Dinner – 6:00 pm – 9:00 pm, Washington Monument Room, Hampton Inn & Suites  
Dulles Hotel**

**WEDNESDAY, JUNE 15, 2022**

Item	Time	Page	Speaker	Type
1. Welcome and Announcements a. Cover Memo b. Agenda c. Zoom Instructions d. Policy Statement on Preventing Discrimination, Harassment, and Bulling e. Bias and Conflict Discussion	8:30 a.m.	1 3 6 8	Ford	Information
2. Self-Introductions; Bias/Conflict of Interest	8:40		All	Discussion
3. Approval of January 12-13, 2022 Minutes	8:50	11	Ford	Action
4. Approval of Consent Agenda a. SPPR Meeting Notes b. Conference Approvals	8:55	19 32	Ford	Action Menzies Brach
5. Executive Director's Report a. Financial Update	9:00	40	Pedersen	Information
6. TRB Division Committee Report	9:20	50	Hendrickson	Information
7. TRB Strategic Plan	9:30	56	Shaheen	Action
8. Break	10:00			
9. Critical Issues in Transportation	10:15	72	Shaheen	Discussion
10. Panel on Regulatory Issues for AV/CV	11:00	88	Ford	Discussion
11. Lunch	12:00 pm			
12. Policy Session on Reimagining Goods Movement a. Introduction b. Economic Trends Affecting the Future of Goods Movement c. Supply Chain Issues d. Automation, Technology, and Sustainability Issues	1:15	89	Wilson Dowell  Hayes  Mays	Presentation  Presentation Presentation Presentation

e. First Impressions/Modal Perspectives			Ceva McClellan Albaugh Grabowski Ableson	Logistics Rail Aviation Marine Automated Trucking
13. Break	3:00			
14. Plenary Discussion	3:15		Wilson/All	Discussion
15. Break for Evening Activities	5:00			
16. Buses leave for dinner	5:30			
17. Dinner at Passion Fish Reston Restaurant	6:00			

**THURSDAY, JUNE 16, 2022**

Item	Time	Page	Speaker	Type
18. Policy Session Follow Up Discussion	8:30 a.m.		Ford	Discussion
19. Future Policy Sessions	9:00	93	Houston	Discussion
20. Technical Activities Update	9:15	101	Grimes/Brach	Information
21. Communications Update	9:35	105	Mackie	Information
22. Diversity and Inclusion Strategic Plan	9:45	109	Lewis	Action
23. Break	10:00			
24. International Subcommittee Strategic Plan	10:15	115	Iwasaki	Action
25. Marine Board Update	10:30	117	Grabowski	Information
26. Young Member's Council	10:45	124	Kontou	Information
27. Cooperative Research Program Update	11:00	125	Hedges	Information
28. Consensus and Advisory Studies Update	11:15	131	Menzies	Information
29. Other Business	11:45		Ford	Information
30. Lunch	12:00 p.m.			
31. Adjourn	1:00			
<b>Consent Agenda Items</b>				
1. Conferences and Workshops		32	Brach	
2. SPPR Meeting Minutes		19	Menzies	



**BACKGROUND ATTACHMENTS:**

Rosters and Staff – 143

Organization Charts – 151

Division Descriptions – 152

Purpose and Duties of Executive Committee – 160

Standing Oversight Committees – 163

Project Approval Processes – 166

Policy on Executive Committee Participation – 168

**Next Meeting: January 11 & 12, 2023 (Wednesday & Thursday)  
Marriott Marquis, Washington, DC**

**Next Summer Meeting: TBD**

TRB EXECUTIVE COMMITTEE HYBRID MEETING INSTRUCTIONS

Sierra Hall is inviting you to a scheduled Zoom meeting.

**Topic: TRB Executive Committee Summer Meetings – Day 1**

**Date/Time: Wednesday, June 15, 2022 8:30 AM Eastern Time (US and Canada)**

Join from PC, Mac, Linux, iOS or Android:

<https://nasem.zoom.us/j/91549539239?pwd=Z0VzUmR6Qm1ZSjJod0YrcDlhcHlpZz09>

Password: 273737

Or iPhone one-tap :

US: +13126266799,,91549539239# or +14702509358,,91549539239# Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 312 626 6799 or +1 470 250 9358 or +1 646 518 9805 or +1 646 558 8656 or +1 651 372 8299 or +1 301 715 8592 or +1 669 219 2599 or +1 669 900 6833 or +1 720 928 9299 or +1 971 247 1195 or +1 213 338 8477 or +1 253 215 8782 or +1 602 753 0140

Meeting ID: 915 4953 9239

Password: 273737

International numbers available: <https://nasem.zoom.us/j/91549539239?pwd=Z0VzUmR6Qm1ZSjJod0YrcDlhcHlpZz09>

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Code of Conduct: The National Academies of Sciences, Engineering, and Medicine (NASEM) follows the NASEM guidelines in preventing discrimination, harassment, and bullying of participants at NASEM events, including conferences. [http://www.nationalacademies.org/about/NA\\_186023.html](http://www.nationalacademies.org/about/NA_186023.html)

**Topic: TRB Executive Committee Summer Meeting – Day 2**

**Date/Time: Thursday, June 16, 2022 8:30 AM Eastern Time (US and Canada)**

Join from PC, Mac, Linux, iOS or Android:

<https://nasem.zoom.us/j/92487054572?pwd=MXBhb1VXajJlcWpPaXlCU3QwdWdRZz09>

Password: 194397

Or iPhone one-tap :

US: +16465588656,,92487054572# or +16513728299,,92487054572# Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 646 558 8656 or +1 651 372 8299 or +1 301 715 8592 or +1 312 626 6799 or +1 470 250 9358 or +1 646 518 9805 or +1 669 900 6833 or +1 720 928 9299 or +1 971 247 1195 or +1 213 338 8477 or +1 253 215 8782 or +1 602 753 0140 or +1 669 219 2599

Meeting ID: 924 8705 4572

Password: 194397

International numbers available: <https://nasem.zoom.us/j/92487054572>

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### **Zoom Meeting Best Practices**

- Use the “Raise Hand” feature to notify the host or current speaker that you wish to speak or use the chat feature.
- Unmute your microphone before speaking.
- Mute your microphone anytime you are not actively speaking.
- Avoid noisy activities like typing while your microphone is on.
- Focus on the meeting – avoid multitasking when you can.
- Monitor chat for conversation.
- Make sure you can see the Zoom windows at all times, especially if someone is sharing their screen.
- Sit somewhere with a neutral background or use a virtual background.
- Make sure your camera is on a steady surface to prevent shaking.
- Turn off your camera if you need to take care of business outside of the meeting. Turn the camera back on when you are present in the meeting again.
- Communicate privately with the meeting host or co-host if you need to step away from the computer. Notify the host or co-host when you return.

## PREVENTING DISCRIMINATION, HARASSMENT, AND BULLYING: POLICY FOR PARTICIPANTS IN NASEM ACTIVITIES

The National Academies of Sciences, Engineering, and Medicine (NASEM) are committed to the principles of diversity, inclusion, integrity, civility, and respect in all of our activities. We look to you to be a partner in this commitment by helping us to maintain a professional and cordial environment. **All forms of discrimination, harassment, and bullying are prohibited in any NASEM activity.** This policy applies to all participants in all settings and locations in which NASEM work and activities are conducted, including committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

**Discrimination** is prejudicial treatment of individuals or groups of people based on their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws.

**Sexual harassment** is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment.

**Other types of harassment** include any verbal or physical conduct directed at individuals or groups of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

**Bullying** is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, or coercion to dominate others in the professional environment.

### REPORTING AND RESOLUTION

Any violation of this policy should be reported. If you experience or witness discrimination, harassment, or bullying, you are encouraged to make your unease or disapproval known to the individual at the time the incident occurs, if you are comfortable doing so. You are also urged to report any incident by:

- Filing a complaint with the Office of Human Resources at 202-334-3400 or [hrservicecenter@nas.edu](mailto:hrservicecenter@nas.edu), or
- Reporting the incident to an employee involved in the activity in which the member or volunteer is participating, who will then file a complaint with the Office of Human Resources.

Complaints should be filed as soon as possible after an incident. To ensure the prompt and thorough investigation of the complaint, the complainant should provide as much information as is possible, such as names, dates, locations, and steps taken. The Office of Human Resources will investigate the alleged violation in consultation with the Office of the General Counsel.

If an investigation results in a finding that an individual has committed a violation, NASEM will take the actions necessary to protect those involved in its activities from any future discrimination, harassment, or bullying, including in appropriate circumstances **the removal of an individual from current NASEM activities and a ban on participation in future activities.**

### CONFIDENTIALITY

Information contained in a complaint is kept confidential, and information is revealed only on a need-to-know basis. NASEM will not retaliate or tolerate retaliation against anyone who makes a good faith report of discrimination, harassment, or bullying.

*Updated December 2, 2021*

# Conflict of Interest and Bias Definitions

- “Conflict of interest” means any financial or other interest which conflicts with the participation of an individual in particular decisions of the institution because the interest (1) could significantly impair the individual's objectivity or (2) could create an unfair competitive advantage for any person or organization.
- “Bias” ordinarily relates to views stated or positions taken that are largely intellectually motivated or that arise from the close identification or association of an individual with a particular point of view or the positions or perspectives of a particular group.

# Conflict of Interest

- Financial in nature;
- For individual and immediate family;
- Includes *current* employment, investment, and property interests and only lasts for the duration of the project;
- Details provided on forms are confidential;
- Financial conflicts are usually disqualifying

## Bias

- Perspective -- point of view;
- Expertise -- relevant to understanding and analyzing the issues;
- Goal is to achieve balance, not disqualify.

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**Executive Committee Meeting Minutes**

January 12-13, 2022

Liberty LM Room (Meeting Level 4)  
Marriott Marquis Hotel, Washington, DC

**Wednesday, January 12**

8:30 a.m.

Introductions and Announcements (Shaheen) Information

- a. Policy Statement on Preventing Discrimination, Harassment, and Bullying was noted.
- b. Bias/Conflict of Interest Discussion – There were no conflicts of interest reported.

9 a.m.

Approval of August 17-19, 2020 Minutes (Shaheen) Action

- The minutes were approved, with an amendment that attendees need to be added.

9:02 a.m.

Approval of Consent Agenda (Shaheen) Action

9:05 a.m.

Executive Director's Report (Pedersen) Information

- He discussed how 2021 was a year of adaptation and resilience for TRB's work, staff, and volunteers.
- He outlined the key issues of focus for TRB research as we begin 2022.
- The TRB Executive Committee is developing a new TRB strategic plan.
- Several USDOT agencies, and two new ones, are once again TRB sponsors.
- TRB finances have more certainty than in recent years, with the greatest uncertainties related to revenue and expenses from the 2022 TRB Annual Meeting and COVID-19.
- The Woods Hole Academies location continues to be on sale for \$27.5 million.
- He offered expressions of gratitude to TRB staff and volunteer leadership and the support of National Academies' leadership.

9:20 a.m.

Development of New TRB Strategic Plan (Turnbull) Information

- a. The NRC Strategic Plan was adopted in February 2021 and TRB is committed to developing a new strategic plan to be aligned with it, hopefully this upcoming June.
- b. The proposed goals and strategies were outlined.
- c. This will be a five year plan and will be for staff and volunteers.

9:40 a.m.

Break

10:10 a.m.

Panel Discussion with USDOT Modal Administrators (Hampshire, Dickson, Boss, Joshi, Lessley)  
Information

- Representatives from the Federal Aviation Administration, the U.S. Maritime Administration, the Federal Motor Carrier Safety Administration, and the Federal Rail Administration each expressed their interest and enthusiasm for working with TRB on issues that need research and data development.

11:20 a.m.

Introduction to Policy Session on Decarbonization (Ford, Eisinger, Dodder, Berube, Committee Chairs)  
Information

- USDOT Activities on Decarbonization: Over the last 30 years, technology has been key in reducing emissions. Going forward, emission reductions will require an acceleration of ZEV adoption. Research is needed on how to best structure incentives and how best to support infrastructure buildout.
- EPA Activities on Decarbonization: More research work is needed on many areas that intersect between the EPA's priorities and what TRB can offer.

11:45 a.m.

NTSB's Safety Priorities (Homendy) Presentation

12:10 p.m.

Walk to the Convention Center

12:15 p.m.

Lunch

1:30 p.m.

Chair's Plenary Session

3 p.m.

Walk Back to the Marriott

3:30 p.m.

Policy Session on Decarbonization (Ford, Hendrickson, Kim, Muncrief) Presentation/Discussion

- Political and business tides are turning on decarbonization. Electric vehicle sales in the U.S. has recently gone above 2% of all vehicle sales. These numbers are much higher in Europe.
- The International Transport Forum is growing as a Paris-based forum that provides research reports and seeks to show best practices.
- The International Council on Clean Transportation is looking at trajectories for how much we can reduce emissions based on what kinds of transportation policies and procedures we put in place.

6 p.m.

Break for Evening



**Thursday, January 12, 2022**

8:30 a.m.

## Policy Session Follow Up (Shaheen) Discussion

- Some of the questions that sum up yesterday's policy session on decarbonization: How do we think about getting people to think about their personal choices in how they use transportation? How do we think about incentives? How do we think about how the U.S. is positioned compared to other countries in the market and in policy? Is the grid robust enough to support conversion to electric vehicles? How about hydrogen? How do we make electric vehicles accessible to everyone? What about the new mobility landscape in relation to housing and land use? How do the workforce and supply chain fit into decarbonization? How do we measure how clean the grid is? How is the role of planning affected in both rural and urban areas? What is the role of the different modes?
- What is the role of TRB and next steps on decarbonization research? It would be important to bring mode administrators into better communication with utilities. What is the government's role in terms of identifying gaps in the grid, including in the bus network? We need a timeline of reports and research that is aligned with when they will be most valuable in the real world, such as a report what the U.S. government's decarbonization strategy should be.

9 a.m.

## June 2022 Policy Session (Houston) Action

- The SPPR's recommendation for the June policy session topic is "reimagining goods movement."

9:10 a.m.

## Technical Activities Update (Grimes/Brach) Information

- Attendance appears to be between 6,000 to 7,000 of the more than 9,000 registered. Anecdotally, it seems we've had a lot of young people in attendance and social media has been particularly active because of sharing research digitally.
- The team was applauded for pulling off this year's conference and also for opening up the Chairs Plenary to everyone.

9:20 a.m.

## TRB Division Committee Report (Hendrickson) Information

- This was an overview of how TRB fits into the National Academies and an overview of the committee's functions. The second half of 2021 was busy, with 36 committees and panels approved for CRP, 4 for CAAS, and 52 CRP and CAAS reports were reviewed.

9:30 a.m.

## Diversity, Equity, and Inclusion Strategic Plan (Lewis) Presentation/Discussion

- An update was given on TRB's Diversity, Equity, and Inclusion (DE&I) Strategic Plan.

9:45 a.m.

## Minority Student Fellow Programs (Febey) Presentation

- A program overview was given of its status in the 13<sup>th</sup> year of its existence.

10 a.m.

## Young Member's Council (Kontou) Presentation

- The Young Members Coordinating Council (YMCC) is in its 12<sup>th</sup> year and has continued to develop and promote opportunities for involvement, resources, connections, and representation in all levels of TRB.

10:00 a.m.

Equity Conference Highlights (Ward/Williams) Presentation

- The Conference on Advancing Equity (CATE) potentially broke mid-year conference records with about 900 attendees

10:20 a.m.

Break

10:30 a.m.

International Subcommittee (Iwasaki) Information

- TRB currently has 16 signed agreements (Memorandums of Understandings and Letters of Intent) in effect with international partners. We may be seeing an increase in international engagement due to COVID and becoming more virtual.

10:50 a.m.

Marine Board Update (Grabowski) Information

- An update was given of the Marine Board's activities and its Spring Meeting.

11:05 a.m.

Communications Update (Mackie) Information

- A report was given on how the TRB Communications Strategic Plan, which was adopted by the Executive Committee in July 2021, is being put into action.

11:20 a.m.

Cooperative Research Program Update (Hedges) Information

- The many publications from CRP in 2021 were and increased funding for the program from the infrastructure bill were noted.

11:30 a.m.

Consensus and Advisory Studies Update (Menzies) Information

- Details were given about the four CAAS studies published since the July 2021 Executive Committee Meeting and current and upcoming studies were noted.

11:50 a.m.

Other Business (Shaheen) Information

- No other business was discussed.
- Neil Pedersen thanked Susan Shaheen for her outstanding leadership over the past year.
- Susan Shaheen also thanked Russell Houston for his work behind the scenes, Neil Pedersen and his work fighting on behalf of women in transportation, the TRB staff for its hard work making this conference happen, and TRB volunteer leadership

12 p.m.

Adjourn

Full list of attendees:

#### CHAIRS

- Susan A. Shaheen; Professor and Co-Director, TSRC; University of California, Berkeley
- Nathaniel P. Ford, Chief Executive Officer, Jacksonville Transportation Authority

#### MEMBERS

- Michael F. Ableson, CEO, Arrival Automotive-North America
- Carlos M. Bracerias, Executive Director, Utah Department of Transportation
- Marie Therese Dominguez, Commissioner, New York State Department of Transportation
- Ginger Evans, Chief Strategy Officer, CAG Holdings, Inc.
- Michael F. Goodchild, Professor Emeritus, Department of Geography, University of California, Santa Barbara
- Diane Gutierrez-Scaccetti, Commissioner, New Jersey Department of Transportation
- Susan Hanson, Distinguished University Professor Emerita, School of Geography, Clark University
- Stephen W. Hargarten, Director, Injury Research Center, Associate Dean, Office of Global Health, Professor of Emergency Medicine, Medical College of Wisconsin
- Chris T. Hendrickson, Duquesne Light Professor of Engineering, Dept. of Civil and Environmental Engineering, Carnegie Mellon University
- S. Jack Hu, Senior Vice President for Academic Affairs and Provost, University of Georgia
- Randall Iwasaki, Leader of State and Local Transportation, Amazon Web Services (AWS)
- Ashby Johnson, Executive Director, Capital Area Metropolitan Planning Organization
- William Kruger, Vice President, UPS Freight for Fleet Maintenance and Engineering
- Julie Lorenz, Secretary, Kansas Department of Transportation
- Michael R. McClellan, VP Strategic and Network Planning, Norfolk Southern Corporation
- Patrick K. McKenna, Director, Missouri Department of Transportation
- Brian W. Ness, Director, Idaho Transportation Department
- Craig Philip, Research Professor and Director, VECTOR, Department of CEE, Vanderbilt University
- Leslie S. Richards, General Manager, Southeastern Pennsylvania Transportation
- Kevin Thibault, Secretary, Florida Department of Transportation
- James M. Tien, Distinguished Professor and Dean Emeritus, College of Engineering, University of Miami
- Katherine F. Turnbull, Executive Associate Director, Texas A&M Transportation Institute
- Shawn Wilson, Secretary, Louisiana Department of Transportation and Development

#### EX OFFICIO MEMBERS

- Michael R. Berube, Acting Deputy Assistant Secretary for Sustainable Transportation, U.S. Department of Energy
- Richard Corey, Deputy Executive Officer, California Air Resources Board, Federal Transit Administration, U.S. Department of Transportation
- Steven Cliff, Acting Administrator, National Highway Traffic Safety Administration

- LeRoy Gishi, Chief, Division of Transportation, U.S. Bureau of Indian Affairs (BIA), U.S. Department of the Interior
- Martha Grabowski, McDevitt Assoc. Chair in Information Systems, Professor & Chair, Business Administration Dept Dir., Information Systems Program, LeMoyne College
- Major General William Graham, Deputy Commanding General for Civil and Emergency Operations, U.S. Army Corps of Engineers
- John T. Gray, Senior Vice President Policy and Economics Association of American Railroads
- Eleftheria (Ria) Kontou, Assistant Professor, University of Illinois Urbana-Champaign
- Stephanie Pollack, Acting Administrator, Federal Highway Administration, U.S. Department of Transportation
- Craig A. Rutland, U.S. Air Force Pavement Engineer, Air Force Civil Engineer Center
- Admiral Karl L. Schultz, Commandant, U.S. Coast Guard, U.S. Department of Homeland Security
- Karl Simon, Director, Transportation and Climate Division
- Paul P. Skoutelas, President and CEO, American Public Transportation Association
- Jim Tymon, Executive Director, American Association of State Highway and Transportation Officials

#### Technical Activities Council Representatives

- George Avery Grimes, CEO Advisor, Patriot Rail Company
- Michael Griffith, Director, Office of Safety Technologies, Federal Highway Administration (FHWA)
- Jane Lin, Professor and Director, SusTrans Lab, Department of Civil and Materials Engineering Research Professor, Institute for Environmental Science and Policy, University of Illinois at Chicago
- Kathryn Zimmerman, Applied Pavement Technology, Inc.

#### SOON TO BECOME EX OFFICIO MEMBERS

- Robert Hampshire, Deputy Assistant Secretary for Res. & Tech. (OST), U.S. Department of Transportation
- Tristan Brown, Acting Administrator, Pipeline and Hazardous Materials Safety Administration (PHMSA)
- Brad Mims, Deputy Administrator, Federal Aviation Administration, Representing Administrator Stephen Dickson
- Mary A. Leary, Acting Associate Administrator of the Office of Research, Demonstration, & Innovation, Federal Transit Administration, U.S. Department of Transportation, Representing FTA Administrator Nuria Fernandez
- Maryam Allahyar; Director, Office of Research, Development, and Technology; Federal Railroad Administration Representing Acting Administrator Amit Bose
- Tom Keane, Associate Administrator Office of Research and Registration, Federal Motor Carrier Safety Administration

#### VIRTUAL OBSERVERS

- Anne Aylward, Director of the Volpe National Transportation System OST-R/Volpe Center
- Dr. David Chien, Deputy Director of Aviation Policy and Plans, Federal Aviation Administration
- Casey Clemmons, Special Assistant to Tristan Brown, Pipeline and Hazardous Materials Safety Administration (PHMSA)

- John Croft, Federal Aviation Administration
- Tom Everett, Executive Director, Federal Highway Administration
- Patricia Hu, Director, Bureau of Transportation Statistics

#### OST-R

- Timothy Klein, Director, Office of Technology Policy and Outreach, Office of the Assistant Secretary for Research and Technology
- Firas Ibrahim, Director, Office of Research, Development, and Technology
- Meagan Manago, Executive Assistant to Tristan Brown, Pipeline and Hazardous Materials Safety Administration
- Neil Mansharamani, Federal Aviation Administration
- Kelly Regal; Associate Administrator for Research, Development, and Technology; Federal Highway Administration
- Kevin Montgomery, Transportation Program Specialist, Federal Transit Administration
- Nanda Srinivasan; Associate Administrator for Research, Development, and Technology; National Highway Traffic Safety Administration
- Caitlin McKeighan, National Highway Traffic Safety Administration

#### MEMORANDUM OF UNDERSTANDING (MOU) SIGNING

- Alva Carrasco, President, Board of Latinos in Transit

#### TRB Staff

- Neil J. Pedersen, Executive Director
- Rosa Allen
- William Anderson, Senior Program Officer
- Cynthia 'Cindy' Baker, Executive Assistant
- Scott Babcock
- Ann M. Brach, Director, Technical Activities
- Scott Brotemarkle, Marine Board Program Director, Senior Program Officer
- Patrice Davenport, Deputy Director, TRB Program Development & Strategic Initiatives
- Karen S. Febey, Senior Report Review Officer
- Sierra Hall, Executive Assistant
- Christopher Hedges, Director, Cooperative Research Programs
- Russell W. Houston, Associate Executive Director
- Bernardo Kleiner, Associate Division Director, Transportation Safety
- Patti Lockhart
- Paul Mackie, Director, Communications/Media, Office of the Chief Communications Officer
- Stephen Maher
- Thomas Menzies, Director, Consensus and Advisory Studies
- Tom Palmerlee, Associate Director, Technical Activities Division
- Gary Walker, Senior Deputy Director, TRB Program Finance, Office of Chief Financial Office

#### Policy Session Speakers

- Dr. Tierra Bills, Assistant Professor  
Wayne State University  
Dorval Carter  
President  
Chicago Transit Authority  
Elizabeth (Betsy) Harvey  
Transportation Equity Program Manager  
Central Transportation Planning Staff  
Dr. Elizabeth (Liz) Williams  
Director of Data and Policy  
Massachusetts DOT  
Invited Policy Session Guests  
Robert Hampshire  
Deputy Assistant Secretary for Res. & Tech. (OST)  
U.S. Department of Transportation  
Brad Mims  
Administrator  
Federal Aviation Administration  
Stephanie Pollack  
Acting Administrator  
Federal Highway Administration  
Andrea D'Amato

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

Tuesday, April 19, 2022

8:30 am – 3:00 pm

Keck Center, Washington DC

Members in Attendance: Susan Shaheen (Chair), Nathaniel Ford, Carol Lewis, Shawn Wilson, Drew Kodjak, Craig Philip, Martha Grabowski, Carlos Braceras, Randy Iwasaki, Ginger Evans, Julie Lorenz, Avery Grimes (virtual), Chris Hendrickson (virtual), Patrick McKenna (virtual)

Staff in Attendance: Neil Pedersen, Tom Menzies, Katherine Kortum (virtual), Ann Brach, Russell Houston, Scott Brotemarkle, Beth Ewoldsen (virtual), Chris Hedges, David Willauer, Stephen Godwin, Patrice Davenport, Karen Febey, Noel Popwell (virtual), Michael Covington, Gary Walker, Sierra Hall

The spring meeting of the Subcommittee on Planning and Policy Review (SPPR) was called to order at 9:00 am on April 19, 2022 at the Keck Center in Washington, D.C. by Susan Shaheen, Chair, SPPR. She began the meeting by welcoming committee members and staff in attendance, followed by a round of self-introductions. Chairman Shaheen briefly reviewed the agenda items for the meeting. She motioned approval of the consent agenda. No items on the consent agenda were raised for discussion, so these items were approved by consent.

### **Executive Director's Report**

Neil Pedersen presented news updates within the USDOT, the Omnibus FY2022 Appropriations Bill, and updated activities within TRB:

- Federal Aviation Administrator and Executive Committee member Steve Dickson resigned from his position, naming Billy Nolan FAA's Associate Administrator for Aviation Safety as the Acting Administrator until a new Administrator is confirmed.
- Deputy Federal Motor Carrier Safety Administrator Meera Joshi left her position to become Deputy Mayor of Operations for New York City. Robin Hutcheson was appointed to the FMCSA Deputy Administrator role and has been nominated to become Administrator. She will serve as an ex-officio member on the TRB Executive Committee.
- The USDOT released its new strategic plan, which highlights six primary goals: Safety, Economic Strength and Global Competitiveness, Equity, Climate and Sustainability, Transformation, and Organizational Excellence.
- The next edition of TRB's Critical Issues in Transportation will also underscore societal goals that align closely with those of the USDOT strategic plan.
- Continued support and engagement from leadership sponsors of the USDOT to TRB's work remains strong, with the participation of Deputy Secretary Polly Trottenberg at the recently completed Marine Board Meeting. The meeting focused

on diversity, equity, and inclusion issues in the maritime sector. A number of TRB committees and the USDOT have been engaged in the focus of the implementation of the Bipartisan Infrastructure Law. TRB is also in discussion with the Department of Energy, Environmental Protection Agency, and USDOT on ways TRB can assist with the electronic vehicle and climate change issues related to the Bipartisan Infrastructure Law.

- The passing of the Omnibus FY2022 Appropriations Bill authorized an increase in funding for new programs in the BIL and enable increased funding to existing programs. This includes increased funding for the TCRP and BTSCR programs. The funding agreement also enables TRB to reenter the agreement with USDOT to reestablish a national cooperative freight transportation research program.
- The Omnibus Appropriations Bill also supported the work of TRB by providing and additional \$1.5M for work on equity metrics. This funding is in addition to the \$1M consensus study currently in the works.
- Statewide Planning and Research Funds (SP&R) increased by 14.96 percent FY2022. The percentage from the state DOT contributions made to both NCHRP programs and the core technical programs will also increase.
- TRB operations at the Keck building has resumed and is open to staff on a voluntary basis since July 2021. After the decline in pandemic surges it has been decided by NASEM leadership that staff is now expected to be onsite a minimum of 20% effective May 2022. Those staff that use personal office space will be expected onsite a minimum of 40% or share office space on a hoteling basis. As return to work phases are implemented, more and more meetings are being conducted in a hybrid format.
- Pedersen briefly discussed the 2022 TRB Annual Meeting and plans for the 2023 meeting. TRB held the 2022 Annual Meeting in person during the surge of the COVID-19 Omicron variant. Final numbers showed this year's attendance was slightly less than half the attendants from the last in person annual meeting held in January 2020. Despite going forward with the meeting during the surge, only a very small number of COVID-19 cases were reported by those who attended the meeting.
- Plans for the 2023 TRB Annual Meeting are underway. Leadership is evaluating all options to conduct next year's meeting in a hybrid format, while closely considering the benefits and financial implications of this decision.
- Pedersen briefly highlighted that TRB is tightening up the rules for members of both CRP oversight committees and research project panels. Members are excluded from involvement with decisions on projects submitted for proposal by their organization.
- Pedersen touched on the changes within Executive Committee membership. Kevin Thibault left the Florida Department of Transportation as Secretary in March, leaving a vacancy on the Executive Committee available for a CEO in the southeastern region. Neil will work along with Jim Tymon and the nominating committee to identify a new CEO to succeed Mr. Thibault.
- Updates/refinements to the TRB Strategic Plan and TRB's Critical Issues in Transportation are in development. A draft of the strategic plan's strategies and actions were presented at the Executive Committee meeting in January. TRB's senior staff made additional upgrades to the plan and developed a set of metrics for



measuring progress on the plan. TRB identified five societal goals that transportation supports for the next Critical Issues in Transportation. SPPR members were charged with discussing changes or refinements to both topics for submission to the Executive Committee at the June meeting. Neil proposed a goal to have a new edition of Critical Issues in Transportation ready for the 2023 TRB Annual Meeting.

- The Special Committee on Diversity, Equity and Inclusion is currently revisiting the DE&I strategic plan adopted January 2018. Carol Lewis and the committee hope to have a proposed revised plan to present at the June 2022 Executive Committee meeting.
- This summer's TRB Executive Committee meeting will be held June 15-16 at the Executive Conference and Training Center in Sterling, Virginia. The meeting facility and reserved rooms at the hotel are conveniently located across the street from each other. Access to Dulles International Airport is a four-mile distance from the meeting location. The Technical Activities Council and the TRB Division Committee will also hold their meetings at the same location prior to the Executive Committee meeting.
- Pedersen provided SPPR members with actual 2021 expenditures and 2022 estimates. Due to impacts of the pandemic, expenditures in 2021 decreased from 2020 levels in every program, except the Marine Board. Projected expenditures and revenues are expected to recover and increase for all programs in 2022. Projected revenue of the TRB Core Budget is expected to increase over the next six fiscal years. Contributions from state DOT support for the core technical program resulting will increase due to the increase in SP&R funds from the BIL. Funding from the USDOT agencies that became TRB sponsors are also reflected in the increase in revenue.
- On March 30, Neil announced his intention to retire as TRB Executive Director in early fall. The National Academies is in the process of hiring an executive search firm to assist with the hiring process.
- Pedersen closed out his presentation by expressing his appreciation for the continuous support of TRB staff and volunteers while serving in the role of Executive Director for seven years.

## **TRB Strategic Plan and Performance Metrics**

Pedersen presented the SPPR with the latest draft of the TRB Strategic Plan. The plan contained a number of changes and modifications to its strategies and actions under each proposed goal. TRB staff also drafted a number of performance measures and metrics that can be used to report the progress under each goal. Prior to the meeting, SPPR members reviewed the strategic plan and metrics. The overall plan was well received by the committee. During the discussion, members provided their comments and suggestions for consideration to include in the plan:

- Effort to develop a survey for the transportation community regarding awareness of TRB and the usage of products and services. Use the survey as a benchmark (Julie Lorenz).
- Include a sub bullet to monitor key research from international transportation research. (Ginger Evans)
- Integrate Subcommittee on International Affairs in contributing in solving these issues. (Randy Iwasaki)
- Metrics are currently associated with process issues, measures should be related to goals and the critical issues in transportation. (Drew Kodjak) Neil raised a question to the committee for suggestions on who can accomplish this action item.
- Determine how many private sector providers associated with TRB are included. (Avery Grimes)
- Assess volunteers coming into TRB. How well is TRB allowing volunteers to be appointed as members, opportunities to ascend to chair positions from a DEI perspective? How would TRB measure this? (Carol Lewis)
- Develop an engagement survey for individuals participating with TRB. (Carlos Braceras)
- Find alignment between strategic plan and critical issues and measure on a goal level. (Carlos Braceras)
- Post interviews conducted by Neil and Karen after project studies and reviews should be reflected in the metrics. (Chris Hendrickson)
- Discuss impact on standard regulation and policy, especially in decarbonization. (Ginger Evans)
- Delve deeper into outcome metrics. Focus on global impact, how is TRB affecting things on a global scale on a sustainability level? (Susan Shaheen)
- Identify papers receiving the highest level of impact and how they relate to critical issues. How is TRB making an impact with that? (Susan Shaheen)
- Focus on fostering special issues that narrow down the critical issues. (Susan Shaheen)
- Two-month period to incorporate the subcommittee changes. (Nat Ford)

From the discussion, TRB staff will apply modifications suggested by the SPPR to the plan. The plan will be submitted for adoption by the Executive Committee at its June meeting. TRB leadership will determine implementation responsibilities and schedules to adopt all strategies and actions over a five-year plan.

### **Critical Issues Framing**

TRB's goal is to release the next edition of *Critical Issues in Transportation* at the 2023 TRB Annual meeting. The next edition will serve as a guide of important issues framed around five broader societal goals that transportation supports. The goals are as follows: climate change and resilience, public health, safety, thriving society and economy, and equity. Members of the Executive Committee and Technical Activities Council identified additional critical issue topics that relate to the broader goals. They are as follows: technology; workforce; infrastructure; travel demand; and funding, finance, and

governance. SPPR members were charged with reviewing the proposed list and providing any additional issues they think should be added to the list, and those issues that should be changed or removed. Results from the discussion will be used to highlight the importance of each issue and provide supporting research published for each issue. TRB's goal is to have a near finalized list to present to the Executive Committee for review at the June meeting. The final draft will proceed to the report review process, with the goal for approval and release at the 2023 TRB Annual Meeting.

Menzies and Kortum lead the discussion by presenting the proposed framework developed to achieve said goals to SPPR members. The focal points of the proposed framework seek to identify and describe some of society's most important goals, while identifying transportation's role in furthering each goal and highlighting the key technical and policy related issues, with a focus on research aimed to help address and resolve these issues to strengthen transportation's role. The framework seeks to identify and resolve key foundational transportation issues associated with its workforce, governance, and financing in order to strengthen its role in furthering all societal goals. The framework will also utilize and reference the work of the USDOT and other state DOT's efforts to address societal goals within their own framework.

Menzies and Kortum presented example issues for each goal to consider as important topics to focus on to the SPPR committee. Committee members provided their feedback on each goal:

### **Climate Change Mitigation and Resilience**

- Supply chain issues should be incorporated into resilience. (Carlos Braceras)
- The absence of a baseline assessment where the US is and where the transportation system is poses a concern. Where are the CO2 emission trends in the United States? Weed out what is relevant to TRB and what it can leverage. (Drew Kodjak)
- Suggests adding fuel sales, research in low or net zero drop in fuels. Design a standard for severe weather events and slow moving events like sea level rise. (Chris Hendrickson)
- Assign SPPR members to assist in drafting the key topics. (Tom Menzies)
- Income for electric vehicles. How can land use decision making be used to reduce climate change? (Carol Lewis)
- Develop policies to help modal shift to mitigate effects on climate change. (Avery Grimes)
- Climate change is a top priority. Suggests including supply chain to move the needle. (Ginger Evans)
- What are the hot topics in research for climate changes? Issues associated with evacuation and disaster relief. (Susan Shaheen)
- What is the role of evolving models as academic or research driven organization? (Susan Shaheen)
- Design standards for slow-moving events and for reducing the carbon footprint of infrastructure.

- Policy questions regarding affordability of EVs and distribution across incomes.

## Equity

- How do we accommodate those on foot and bicycle/pedestrian impacts? (Carol Lewis)
- Access to electric charging stations. (Carlos Braceras)
- Equity access for pedestrian safety (Carlos Braceras)
- Provide access to all modes of transportation for those in rural areas (Julie Lorenz)
- Equity in providing access to all modes of transportation. Access should be a major focus especially for those with disabilities. (Susan Shaheen)

## Safety

- Incorporate a behavioral psychologist to dive deeper in identifying causes of fatalities. (Carol Lewis)
- Focus to create safety culture. Increase penalties for speeding, DUI, aggressive driving, and seat belt violations. How do we address the anger issues associated with accidents and fatalities? (Carlos Braceras)
- Include aviation safety and other modes of transportation, currently too surface centric. (Neil Pedersen)
- Focus on leadership and governance to making real decisions. (Shawn Wilson)
- Do these topics hit the target? (Drew Kodjak)
- Vision Zero technology for a proactive metrics approach to safety to reduce city speeds and identify hot spots. (Randy Iwasaki)
- Bring in issues associated with construction and safety culture. (Chris Hendrickson)
- Focus on public transportation safety for transit operators (buses, trains, etc.); passenger attitudes toward drivers. (Nat Ford)
- Measure healthcare outcomes in ridership. (Nat Ford)
- Analysis and focus towards issues associated with gender on shared modes of transportation. Transit safety perceptions around homeless populations. (Susan Shaheen)

## Public Health

- Add air quality, active transportation safety associated with the environment. (Carlos Braceras)
- Public health has a strong overlap with some of the other goals such as climate change and is related to battery EVs and the power grid when we move to zero carbon emissions. Draw conclusions and make connections to other goals clear here. (Chris Hendrickson)

Due to time constraints, Pedersen suggested a follow up Zoom meeting to revisit the remaining topics that were not discussed.

## Technical Activities Report & Annual Meeting Results

Ann Brach reported on the results from the 2022 TRB Annual Meeting. Based on the figures generated from registration, the estimated 2022 in-person attendance was 7,500. Brach presented the SPPR with the overall rating for virtual meetings versus in-person meetings. Here we see a very good rating of 4.5 out of 5 during pre-Covid years in 2019 and 2020. Looking at the virtual meeting, you see a very significant change in rating as the overall number drops to 3.1, showing segments of fewer positive ratings. Analysis of registration data show a decrease in 2021 in the categories for academics, research institutions and non-profits, consultant and general industry, and TAD committee chairs and members. There was also a decrease in 2021 and 2022 in attendance percentage for young professionals and students. Other categories that saw an increase in 2021 was sponsor employees, due to complimentary registration at nearly 70%. Impacts in gender and race show the percentage of women in attendance increased in 2021 but decreased in 2022. Asian attendance in 2021 had a significant decrease, most likely attributed to the time zone difference. Data shows an increase in Black/African American and Hispanic/Latino categories from the 2021 virtual meeting to the 2022 in-person meeting. International attendance saw a slight decrease in 2021 and a significant decrease in 2022. This decrease could also have contributed to the time zone difference and Covid restrictions. Attendance from European countries increased as travel was a lot easier. Countries in Asia and Canada had a harder time with travel.

Overall, reactions from the annual meeting were positive, attendees were grateful the meeting was held in-person. Covid-19 updates showed attendees followed safety protocols resulting in very few reports of Covid-19 infections. From the survey of attendees, pre Covid-19 numbers are similar in 2019 and 2020 in-person attendees. International participation decreased due to an uptick in Covid-19 infections. Decisions around planning for the 2023 annual meeting are based on input from the attendee survey, exhibitor survey, chair survey, as well as staff analysis of annual meeting data, industry experiences, and Technical Activities Council review and discussion. The decisions are driven by planning deadlines for committees, vendors, cost, and revenue. The SPPR suggests an adoption and support of these principles by the Executive Committee.

Messages received from attendees support TRB's annual meeting is an in-person meeting to develop relationships both domestically and internationally, for network building, and for expanding horizons. The success and value of the annual meeting is not solely dependent upon how many attend, but hinges on who attends, such as researchers and practitioners, young/new students, and seasoned professionals. The annual meeting is the core of TRB's Core Program. Financial contributions from exhibitors, patrons, and registration play a significant role in the success of the annual meeting and in terms of financial sustainability.

Plans for the TRB 2023 Annual will essentially go back to an in-person meeting with the expectation of providing some limited virtual/remote access. Early program decisions are also working on going back to the normal annual meeting schedules to include more sessions in aviation, rail and other areas, hold the Chair's Plenary Session on Wednesday after lunch, and having a true plenary session without conflicting lecture sessions. TRB will continue to post the keynote and Dean lecture online, while considering posting selected additional sessions, such as the DOT CEO sessions, from the annual meeting. For future annual meeting planning, TRB will look to other conferences for best practices in conducting large meetings.

### **Executive Committee Meeting Policy Sessions, June and January**

Russell Houston updated the SPPR on the policy session topic for the June Executive Committee meeting. The policy session will be on Reimagining Goods Movement. For this topic Houston has secured three speakers, Paula Dowell; Jolene Hayes; and Caroline Mays, marking the first all-female panel the Executive Committee has had in 20 years. The three speakers will discuss the major economic trends affecting the future of goods movement, supply chain issues, and automation technology and sustainability, followed by a first impression discussion. Houston turned the focus to topics for the January Executive Committee. He proposed two potential topics for consideration to the SPPR: Policy and Regulation Development for Automated Vehicles, and Successful Delivery of Large Transportation Projects. He also suggested looking at critical issues for potential additional policy session topics. Houston opened up the discussion for comments and suggestions from the committee:

- Large mega transportation projects in multimodal transportation, pipeline development, and the reconstruction or consolidation for rural water systems. (Shawn Wilson)
- Interested in a session focused on how to deliver successful mega projects on improving water systems (Julie Lorenz)
- Adding new regulations dealing with automated vehicles, while reducing outdated regulations to push toward transformation (Randy Iwasaki)
- Suggests a major project topic on how transportation projects have successfully implemented and achieved the societal goals discussed in critical issues (Carlos Braceras)
- New infrastructure topics (Craig Philip)
- Discuss development of framework for policies and practices in automation (Nat Ford)
- Recognize the implications of big projects and who they negatively impact (minority neighborhoods) (Carol Lewis)
- Find a project that was successful in addressing the equity issues (Neil Pedersen)

From the discussion, the committee reached a close second for the first policy session topic to be on successful delivery of megaprojects. Houston suggested further discussion in October to determine the second topic for the June Executive Committee meeting.

### **Marine Board Update**

Martha Grabowski briefed the SPPR on the activities of the Marine Board. The board's areas of interest are shared in maritime and offshore activities, everything from artic shipping, to autonomous systems, maritime supply chain, and decarbonization. The Marine Board hosted and completed a successful spring meeting with a focus on diversity, equity, and inclusion in marine transportation. The spring meeting featured keynote speaker, DOT Deputy Secretary Polly Trottenberg and a panel discussion of positive impacts of DEI issues related to education and workforce. Grabowski referenced the presentation by Gina Martinez regarding the enormous issues that the Wilmington community near the Port of Los Angeles is currently facing because of the number of trucks overtaking the community. In the presentation, she also highlights air quality issues, how cancer rates have increased due to pollution, and the frustration from the community around inaction from higher officials on these issues. From the presentation, the Marine Board wants to bridge the gap in governance when issues are raised and communities are impacted, and how these issues make it to governance. In discussions with Deputy Secretary Trottenberg, the board will also look to address the issue of trucking enforcement and regulation on local roads. The board plans to follow up with the Deputy Secretary and Maritime Administrator on these issues and port infrastructure development.

Grabowski opened the floor for discussion from the committee. The following are ideas for consideration:

- Measure mitigation and strategies for inland ports (Avery Grimes)
- Put applications together to bridge the gap between money and governance; and the ability to conceive grant applications for building better infrastructure (Julie Lorenz)
- Find a role for Gina Martinez to present at the annual meeting where DOT leadership is involved (Neil Pedersen)

### **Candidate Topics for Next Self-Initiated Consensus Study**

Tom Menzies briefly reviewed the criteria for selecting a self-initiated consensus study. The study allows TRB to address timely issues, and to do so with more scoping latitude than an agency-sponsored study. He referenced using critical issues as a good basis for selecting topics but to also connect the topic from a policy dimension. Menzies presented the SPPR with a list of topics for a self-initiated study, including: Transit Implications from More Work from Home; Supply Chain Challenges; Bringing Equity to the Fore in the Transportation Planning and Decision Making; Reversing Recent Highway Safety Trends; Ensuring the Safety of Advanced Technology; Implication on Aviation from Reduced Business Travel; Mileage-Based User Fees; Cybersecurity of Transportation; and Transportation Workforce Issues and Transformation Change. Menzies also provided

additional insight on the subject matter for each topic. Transit implications from more work from home looks to discuss the effects of the decline in ridership during the pandemic, the extent to which transit ridership will rebound, and the revenue loss and service disruption for dependent riders. Challenges surrounding supply chain looks to address equity impacts, making supply chain more sustainable in preparing for natural hazards, trucking operator shortages, and overcoming capacity constraints in intermodal facilities. A study highlighting equity in transportation planning and decision making can include community consideration in transportation equity when informing and influencing operations and investment decisions. Reversing recent highway safety trends aims to address the policy issues and causes of fatalities on the road. Ensuring safety of advanced technology looks to ensure that the complex systems vehicle electronics and automation are safely constructed for safe use by motorists. Addressing the implications on aviation from reduced business travel by identifying the patterns and impacts of decreased business travel perhaps due to more meetings being conducted virtually, and how the decrease challenges the sustainability of airport operations.

Menzies opened the topic for discussion and comments from SPPR members. The committee concluded the top two topics to consider for a self-initiated consensus study are work force transportation and safety issues.

### **TRB Communication Update**

Beth Ewoldsen presented the SPPR with Q1 data from social media and communications during the annual meeting. Despite some negative sentiment prior to the meeting, the vast majority of social media posts and reactions to holding the annual meeting in person was positive and consistent with previous reactions. The annual meeting also trended on Twitter under the hashtag “Washington Trends.” TRB released the Annual Meeting Newsletter, which received a good open rate of close to 50 percent and the average click rate was around 8 percent. The success of the newsletter allowed TRB to push out a lot of information with some of the most viewed items being vaccination information. TRB also saw coverage in trade press and mainstream media, where over 30 articles were written about content from the annual meeting, including in the New York Times and the Washington Post. Communications also took advantage by promoting and making videos from the annual meeting to engage and expand the audience reach. Communications relaunched the new TRB Weekly Newsletter. This launch required a resubscription process. The number of subscribers increased from September 2021 at 10K to 15.7 K in April 2022. The newsletter is currently running a yearlong campaign that will publicize feedback from volunteers about TRB and DEI issues. There have been a few changes in the communications team with a key staff person leaving the department. Ewoldsen explained they are working closely with OCC to try to fill in the staffing gaps. She highlighted the communications plan, approved summer 2021, which calls for an aggressive approach to audience development strategies. The department is honing in on metrics to ensure the data collected matches with the goals they are aiming to reach for audience development. From the metrics, the department would like to determine if their strategies are successful and see how different audiences interact with TRB. In bigger news, Ewoldsen informed the



SPPR of the launching of the Academies new brand logo. The logo will also be paired with the TRB logo. The use of the new logo will take effect on April 25, 2022.

## **TRB Cooperative Research Programs Report**

Chris Hedges updated the SPPR on CRP studies. CRP has seen increases in three of the four programs. CRP financials have increased by \$5 million this year and he expects continued growth during the life of the Bipartisan Infrastructure Law. The transit program increased by \$1.5 million to \$2.5 million per year over the five years. The behavioral traffic safety programs increased by \$1 million per year from \$2.5 million. He highlighted five recent studies that have been published, one in the airport program on “Preparing Your Airport for Electric Aircraft and Hydrogen Technologies and Hydrogen Technologies.” The study presents an introduction to the emerging electric aircraft industry. It talks about the potential market growth and provides guidance to help airports estimate those potential impacts and preparation to accommodate them. CRP also published a study on greenhouse gas emissions that tries to identify and describe tools, methods, and data sources that state DOT’s can use to assess greenhouse gas emissions. The study evaluates reduction opportunities and methods to develop action plans based on current and desired engagement levels. Hedges discussed another study on trespassing on rail transit and commuter rail rights of way. The report provides guidance on strategies to deter trespassing on rail transit and right of way. CRP also published a study on equity as a topic that documents the current practice of how transit providers are defining, assessing, and addressing the equity impacts of their bus network redesigns. The final study on a “Systematic Approach for Determining Contract and Construction Time,” provides guidance on producing credible, reliable, and defensible contract time estimates.

## **Consensus and Advisory Studies Update**

Tom Menzies updated the SPPR on the ongoing studies nearing report completion. The division is currently doing a study on the “Safe Transportation of LNG by Rail.” Menzies informed the committee that the chair of the study, Craig Philip, and division staff will review the recommendations following the close of the SPPR meeting, with a planned release date of summer 2022. The division is also conducting a study looking at the emerging trends in aviation safety. The study will be a 10-year project with six reports. The first report looks at the safety databases to identify emerging trends in aviation safety. The completion date for this study is also scheduled for summer 2022.

Menzies reported on the new studies that are underway as well. The USCG is sponsoring a study on the “Future Authorities for Coast Guard,” to look at the emerging trends that may affect its requirements. In this study, the Consensus and Advisory Studies division wants to distinguish between statutory authorities and resource requirements under existing statutes based off emerging trends. The USDOT and EPA have also requested a study on “Repurposing Plastics Waste in Infrastructure.” The study will focus in large part on asphalt, but also other applications such as railroads where some of the plastic waste could

be repurposed. Another study underway is the “Automatic Shutoff Valves for Pipelines.” The study will look at the criteria used for installing the automatic shutoff valves. There have been a few pipeline accidents that potentially could have had less severe outcomes if valves could have been accessed remotely or automatically shut off, as opposed to manually operated. TRB has also been asked to do a study looking at the substance abuse treatment programs that the FAA has for flight crews for pilots and flight attendants. TRB will partner with DBASSE and a senior program officer with a PhD in psychology to spearhead this study. Katherine Kortum discussed the equity metrics study that is underway. The committee on equity has been holding monthly virtual meetings since December 2021. The committee will hold its first in-person meeting in Austin, Texas in June 2022. Here the committee will convene together to discuss equity and how it is being addressed at a local level. Kortum reports there have also been a handful of individuals on the federal level that contribute to the committees talks on equity. Recent talks have focused on how equity is taken into account when distributing the most recent RAISE grants and how the equity considerations have evolved over the life of this program. The committee is currently in the information gathering phase, gathering data from a variety of sources to develop their findings and recommendations.

Menzies shared with the committee the \$1.5 million contained in Appropriations Bill on equity metrics to discuss federal decision making at the state and local level. Robert Hampshire is interested in focusing on how the money can be used for pilots in local districts. After further discussion with Hampshire, the division determined the main focus should be on the development of methodologies and pilot testing. Menzies has been charged with writing a proposal that suggests having a portion of the \$1.5 million used to expand the current consensus study to focus on state and local decision-making, followed by \$1 million of the funding used to support a CRP-type effort to hire a contractor that would develop methodologies and guidance for local jurisdictions. There will be more to come in terms of how OST-R will react to the proposal.

Menzies briefly discussed currently pending studies; first being the study on “Certificate of Compliance Inspections Program for LNG Tanker Vessels.” The study seeks to determine if the Coast Guard has the ability to inspect the vessels efficiently under the current compliance program. The study is anticipated to start July 2022. The second study on “Highway Safety Research to Practice,” will discuss how highway safety research evidence finds its way into practice in the guidebooks and guidelines for practice. Funding for this study is anticipated spring/early summer 2022. The third study on truck driver compensation will focus on compensation impacts in methods such as pay by mile and the impact on truck driving speeds. TRB is awaiting FMCSA review and approval of a proposal for this study. The fourth study on “Impacts of Trains Longer than 7,500 feet,” will discuss the impacts to safety, rail operations, and the environment of long trains. Discussions are underway with FRA on the scope of the study. The fifth study on “Storm Water Best Management Practices,” will discuss how states handle storm water management and total maximum daily load compliance strategies. Discussions are also underway with FHWA and EPA regarding the scope of the study. A sixth study on “Transportation ITS Workforce Development,” looks to develop a workforce needs assessment that address the education

and recruitment of technical workers for the intelligent transportation technologies and systems industry. TRB is awaiting a response from OST-R. The final study on equity metrics seeks to identify, assess, and develop metrics for measuring the effectiveness of surface transportation projects. The study will address the transportation challenges and barriers faced by historically disadvantaged communities, areas of persistent poverty, and public transportation dependent populations. This study has received \$1.5 million appropriated in the FY2022 Omnibus Appropriations Act.

### **Meeting Adjournment**

Susan Shaheen made her final remarks to close the SPPR meeting. She thanked everyone in attendance in-person and virtually for the enriching discussions. The SPPR meeting adjourned at 3:00 pm.

## Cosponsored Conference Approval Form

### Proposals for TRB Sponsored/Cosponsored Conferences (ACTION – Consent Agenda)

*The following criteria are used in evaluating proposals for conferences, workshops, and similar activities. In general, an activity should not be proposed unless it draws a favorable response to all applicable criteria. The TRB staff and the proposing committees feel that the conferences being proposed satisfy these criteria.*

1. Is the proposed activity consistent with TRB's mission?
2. Does it have a high probability of producing worthwhile results?
3. Is the purpose of the activity objective and noncommercial? (Might the undertaking of the activity or the potential result give TRB an image of bias in an area in which it must remain neutral?)
4. Are the available time and funding adequate to conduct it in a proper manner and to carry it to a logical conclusion?
5. Is it within the existing staff capability of TRB or a capability that can reasonably be established?
6. Can committee members necessary to guide it be identified and their services obtained?
7. Does TRB retain the requisite control? Alternately, in case where TRB is not the lead organization, will TRB be involved in developing the program, and will TRB receive appropriate recognition?
8. Does it duplicate other efforts? Has the subject received all of the attention that is justified for the present time?
9. Is there a more appropriate organization, within the National Research Council or elsewhere, to handle it?

Executive Committee approval is requested for three TRB Co-sponsored conferences as part of the consent agenda.

CONFERENCES PROPOSED FOR SPONSORSHIP BY TRB		
Title	Date	Location
1. Summerail 2022*	August 16-18, 2022	Michigan City, Indiana
2. Geosynthetics Conference 2023*	February 5-8, 2023	Kansas City, Missouri
3. 11th Young Researchers Seminar*	May 17-19, 2023	Lisbon, VA, Portugal
4.		

\* TRB participates as a cosponsor

## Cosponsored Conference Approval Form

<b>Title:</b>	Summerrail 2022
<b>Location:</b>	Michigan City, Indiana, USA
<b>Date:</b>	August 16-18, 2022
<b>Description:</b>	This conference brings together rail researcher and practitioners to discuss the latest issues in railroad engineering, equipment, operations and marketing with a particular emphasis on attracting students.
<b>Anticipated Attendees:</b>	60
<b>Target Audience:</b>	Railroad researchers and practitioners.
<b>Admission:</b>	Open Registration
<b>Anticipated Products:</b>	None
<b>Convening Organization:</b>	University of Tennessee Knoxville
<b>Other Sponsors:</b>	
<b>Funding:</b>	
<b>TRB Standing Committees:</b>	Freight Rail Transportation Committee (AR040)
<b>TRB Role:</b>	Committee member(s) to serve on program committee Committee member(s) to organize or participate in session(s)
<b>TRB Staff Contact:</b>	Scott Babcock

## Cosponsored Conference Approval Form

<b>Title:</b>	Geosynthetics Conference 2023
<b>Location:</b>	Kansas City, Missouri, USA Kansas City Convention Center (KCCC)
<b>Date:</b>	Feb. 5-8, 2023
<b>Description:</b>	Geotechnical practitioners, designers, regulators, contractors, and installers come together at this highly respected event to learn the latest research, materials, applications, and case studies. The technical program typically includes more than 110 technical paper presentations as well as energetic panel discussions and special sessions across the 35 technical sessions. This event is co-located with the International Erosion Control Association's Annual Conference.
<b>Anticipated Attendees:</b>	1200
<b>Target Audience:</b>	Private and public civil engineers, government agencies and academics
<b>Admission:</b>	Open Registration
<b>Anticipated Products:</b>	Proceedings will be published with all accepted papers
<b>Convening Organization:</b>	Geosynthetic Materials Association (GMA), a division of Industrial Fabrics Association International (IFAI)
<b>Other Sponsors:</b>	Canadian Geotechnical Society (CGS), Deep Foundations Institute (DFI), Erosion Control Technology Council, Fabricated Geomembrane Institute (FGI), Geo-Institute (G-I) Kansas City Chapter, Geosynthetic Institute (GSI), International Association of Geosynthetic Installers, ASTM International, FHWA, University of Kansas, International Geosynthetic Society (IGS) North America, United States Universities Council on Geotechnical Education and Research (USUCGER)
<b>Funding:</b>	
<b>TRB Standing Committees:</b>	Standing Committee on Geosynthetics (AKG80) and Standing Committee on Transportation Earthworks (AKG50)
<b>TRB Role:</b>	Committee member(s) to serve on program committee Committee member(s) to organize or participate in session(s) Committee member(s) to review papers/abstracts.
<b>TRB Staff Contact:</b>	Nancy Whiting

## Cosponsored Conference Approval Form

<b>Title:</b>	11th Young Researchers Seminar
<b>Location:</b>	Lisbon, VA, Portugal National Laboratory for Civil Engineering
<b>Date:</b>	May 17-19, 2023
<b>Description:</b>	<p>The Young Researchers Seminar (YRS) is a unique activity organized jointly by the YRS Supporting Organizations, European Conference of Transport Research Institutes (ECTRI), Forum of European National Highway Research Laboratories (FEHRL) and Forum of European Road Safety Research Institutes (FERSI), since 2003. In the context of the European Transport Research Alliance (ETRA) cooperation, the three founding Supporting Organizations agreed in 2021 to open the Seminar to EURNEX and HUMANIST.</p> <p>The main YRS objectives are:</p> <ul style="list-style-type: none"> <li>- To train young researchers belonging to the Supporting Organizations' Members, ECTRI, FEHRL, FERSI, EURNEX, HUMANIST and from United States' Universities[1], to prepare papers and present oral scientific communications, by direct interaction with assigned tutors.</li> <li>- To enable the exchange and networking opportunities of young transport researchers with their peers and tutors.</li> </ul> <p>Therefore, this Seminar is not only aimed at building up scientific excellence, it also seeks at improving presentation skills and the ability to communicate science.</p>
<b>Anticipated Attendees:</b>	75 young professionals and mentors
<b>Target Audience:</b>	Meant for young researchers working at organizations belonging to ECTRI, FEHRL, FERSI, as well as researchers who are committee members and friends of TRB. The young researchers are incited to participate by their own Institutes or Universities. They are preferably PhD students; Postdoctoral may also be accepted, within their 1-2 years after PhD. Also, attending would be transportation research professionals to mentor and tutor young professionals.
<b>Admission:</b>	Call for papers is open to those who are working for members of YRS Supporting Organizations, and TRB committee members and friends. 75 paper presenters from among them will be invited to participate.
<b>Anticipated Products:</b>	papers & presentations
<b>Convening Organization:</b>	European Conference of Transport Research Institutes (ECTRI), Forum of European National Highway Research Laboratories (FEHRL) and Forum of European Road Safety Research Institutes (FERSI)
<b>Other Sponsors:</b>	EURNEX and HUMANIST
<b>Funding:</b>	

## **Cosponsored Conference Approval Form**

<b>TRB Standing Committees:</b>	International Coordinating Council (A0020C) Young Members Coordinating Council (A0040C)
<b>TRB Role:</b>	Committee member(s) to serve on program committee Committee member(s) to organize or participate in session(s) Committee member(s) to review papers/abstracts.
<b>TRB Staff Contact:</b>	Bill Anderson and Bernardo Kleiner



TRB Conferences, Webinars, and Recordings  
January 14, 2022 – June 14, 2022

**Conferences**

(\*indicates event cosponsored by TRB)

18th Biennial National Harbor Safety Committee Conference  
June 13-15, 2022  
Boston, MA

International Conference on Managing Pavement Assets\*  
June 7-10, 2022  
Chicago, IL

Conference on Sustainability and Emerging Transportation Technology  
May 31 - June 2, 2022  
Irvine, CA

International Conference on Roundabouts  
May 15-18, 2022  
Monterey, CA

Research Day at ITF Annual Summit\*  
May 17, 2022  
Leipzig, Germany

Road Use Charging and Finance Conference\*  
May 15-17, 2022  
Denver, CO

International Conference on Roundabouts  
May 15-18, 2022  
Monterey, CA

International Conference on Accelerated Pavement Testing\*  
April 3, 2022  
Nantes, France

International Data Science for Pavements Symposium\*  
March 22, 2022  
McLean, VA

American Society of Civil Engineers (ASCE) Geo-Congress 2022\*  
March 20, 2022  
Charlotte, NC

## **Webinars**

TRB Webinar: Saving Lives with Autonomous Truck Mounted Attenuator Systems  
June 14, 2022

TRB Webinar: Enhancing Public Health Equity through Transportation  
June 8, 2022

TRB Webinar: Pavement Performance—Fundamentals and New Technologies  
May 31, 2022

TRB Webinar: Sustainable, Resilient, and Durable Concrete Pavements  
May 26, 2022

TRB Webinar: Innovations in Testing—Modified Binders Cracking Resistance  
May 25, 2022

TRB Webinar: Telecommunication at Airports—Trends and Legal Considerations  
May 17, 2022

TRB Webinar: Understanding the Effects of COVID-19 on Impaired Driving  
May 13, 2022

TRB Webinar: Implementing and Evaluating Wildlife Crossings  
April 14, 2022

TRB Webinar: Using Buried Bridge Techniques to Accelerate Bridge Construction Processes  
March 14, 2022

TRB Webinar: End Communication Breakdown—Practices in Airport Emergency Plans  
February 28, 2022

TRB Webinar: Transportation in an Aging Society—The Future is Now  
February 23, 2022

TRB Webinar: Designing and Constructing Concrete with Advancing Technologies  
February 22, 2022

TRB Webinar: On the Edge—New Applications and Safety Outcomes of Edge Lane Roads  
February 15, 2022

TRB Webinar: Embracing the Unknown—Strategic Transportation Planning in the Pandemic Age  
February 10, 2022

TRB Webinar: Improving Diversity and Inclusion Programs in Public Transportation  
February 3, 2022

TRB Webinar: Hit the Ground Running—Innovative Concrete Pavements in Roundabout Design  
December 16, 2021  
January 2022

### **Straight to Recordings**

None since the last Executive Committee meeting.



## TRANSPORTATION RESEARCH BOARD

**Memorandum**

TO: TRB Executive Committee

FROM: Neil J. Pedersen, *Neil J. Pedersen*  
Executive Director

DATE: June 1, 2022

SUBJECT: Executive Director's Report

I am pleased to submit this Executive Director's Report for the TRB Executive Committee meeting that will be held June 15-16, 2022 at the Executive Conference and Training Center in Sterling, Virginia. This report summarizes the status of a number of TRB activities, provides a financial report for TRB, and identifies several items for action or discussion at the upcoming meeting. More detailed information is provided for most of the items covered in this report in the remainder of the agenda book, and most of the items will be discussed more in depth during the course of the Executive Committee meeting. You will be asked to approve a new TRB strategic plan, a new TRB International Activities Strategic Plan, and a new TRB Diversity, Equity, and Inclusion Strategic Plan. In addition, we hope to engage you in a discussion about the issues that should be included in the next edition of *Critical Issues in Transportation*, which the Executive Committee plans to issue for the 2023 TRB Annual Meeting. We are also looking forward to a panel discussion about regulatory issues associated with automated vehicles and our policy session, which is about the future of goods movement.

**USDOT News**

Since our last meeting, Executive Committee member Steve Cliff was confirmed as Administrator of the National Highway Traffic Safety Administration. In addition, since the last TRB Executive Committee meeting, Federal Aviation Administrator and Executive Committee member Steve Dickson, resigned from his position. Billy Nolan, FAA's Associate Administrator for Aviation Safety has been named Acting Administrator until a new Administrator is confirmed. Also, since the last Executive Committee meeting, Deputy Federal Motor Carrier Safety Administrator Meera Joshi left her position to become Deputy Mayor of Operations for New York City. Robin Hutcherson was appointed to the FMCSA Deputy Administrator role and has been nominated to become Administrator. Ms. Hutcherson most recently served as USDOT Deputy Assistant Secretary for Safety Policy.

NATIONAL  
ACADEMIES *Sciences  
Engineering  
Medicine*

On March 28, 2022, USDOT released its new strategic plan. The plan contains six primary goals with the following titles:

- Safety
- Economic Strength and Global Competitiveness
- Equity
- Climate and Sustainability
- Transformation
- Organizational Excellence

As you will see when we discuss the next edition of TRB's *Critical Issues in Transportation*, these goal areas align very closely with the societal goals around which TRB's critical issues document is framed.

The leaders of each of the USDOT sponsoring agencies continue to be very engaged in and supportive of TRB. For example, Deputy Secretary Polly Trottenberg personally participated in the spring Marine Board Meeting, which focused on diversity, equity, and inclusion issues in the maritime sector. Much of the focus of USDOT since the Executive Committee meeting has been on implementation of the Bipartisan Infrastructure Law, and a number of TRB committees have been engaged with USDOT representatives on these issues. We are also in discussions with the Department of Energy, the Environmental Protection Agency, and USDOT on ways that we can assist with the electric vehicle and climate change issues.

#### Omnibus FY2022 Appropriations Bill

On March 12, 2022, President Biden signed into law the Omnibus FY2022 Appropriations Bill. In addition to providing funding for FY2022, this bill was critical because it provided funding for new programs in the Bipartisan Infrastructure Law and enabled increased funding for existing programs to be released. Passage of the bill enables the increased funding for the TCRP and BTSCRIP programs to be made available. It also enables TRB to enter into an agreement with USDOT to reestablish a national cooperative freight transportation research program. Statewide Planning and Research Funds (SP&R) increased by 14.96 percent in FY2022. The state DOT contributions to both the NCHRP program and the core technical program are based on a percentage of total SP&R funds, so the total state DOT contributions to both of these programs will increase by that percentage.

The omnibus appropriations bill also provided an additional \$1.5 million for work by TRB on equity metrics that is in addition to the \$1million consensus study that is currently underway. We are in discussions with USDOT on scoping the work that will be done with that additional funding. A study on the Coast Guard's LNG vessel inspection capacity that had been authorized in a previous National Defense Authorization Act also received \$500,000 in funding.

## TRB Operations

When I reported to you a year ago, we thought that the pandemic was nearing an end, TRB staff would be returning to the office last summer, and in person meetings would once again become the norm. COVID-19 had other plans for us. With surges in the virus last summer and winter, most employees continued to telework and most meetings were held virtually through the winter. The major exception of course was the TRB Annual Meeting. Now many more meetings are being held as in person or hybrid meetings, and employees are gradually returning to the office, although in almost all cases on a part time basis.

TRB staff have been able to continue to effectively provide services and deliver products in this hybrid environment. TRB volunteers who have been able to attend in person events have been grateful for the opportunity to interact with peers in person and almost universally express thanks for being able to do so. Although we have tried to enable those who participate in hybrid events to be able to do so in meaningful way, the experience is just not the same as being in the meeting in person. We have found in some cases that being able to hold a series of shorter meetings virtually instead of a day and a half or two-day in person meeting can actually be more productive and is much easier to schedule. We do not expect that we will return to all meetings being held in person, as they were before the pandemic. With the prevalence of video conferencing capabilities, standing technical committees are able to hold more meetings and to involve more persons who were not previously able to travel to in person meetings. Contractor activity in the cooperative research programs has picked up over the past year, with many more research projects being completed and reports being issued than in the first year of the pandemic. The amount of activity in the Consensus and Advisory Studies Division has also increased, with new staff being hired. In fact, with the new funding provided through the Bipartisan Infrastructure Law, we expect TRB staff levels to increase in each of the program divisions.

I continue to be grateful for the resilience and adaptability of TRB volunteers and staff as we work toward a “new normal.” The way that we do business is likely to continue to evolve as we take advantage of some of the technologies that we used during the pandemic and we adapt our way of doing business based on lessons learned during the pandemic.

## TRB Annual Meeting

Ann Brach will give a more detailed report, but I wanted to highlight a couple of points related to both the 2022 and 2023 TRB Annual Meetings. As you all know, we held the 2022 TRB Annual Meeting as an in person meeting during the surge in the omicron variant of COVID-19. Final attendance numbers were slightly more than half those of the last in person annual meeting held in January 2020. TRB took extraordinary safety measures to protect attendees, and it appears that there were only a very small number of cases of attendees who contracted COVID-19 while at the annual meeting. There were no major outbreaks that were brought to our attention. Ann Brach and the entire Technical Activities Division had to make numerous changes in the weeks

leading up to and during the meeting, and they are to be commended for the superb job that they did in executing the meeting.

For financial reasons, the Chair's Luncheon was changed to be a Chair's Plenary Session during Wednesday afternoon of the 2022 Annual Meeting. The change in format was so well received that we have decided to do a similar plenary session at the 2023 TRB Annual Meeting.

Net revenues from the 2022 TRB Annual Meeting were approximately \$2 million less than we would expect in a non-COVID year. This was after net revenues in 2021, when the meeting was conducted virtually, were \$3 million less than we would expect in a non-COVID year. It is only because TRB had been maintaining a healthy reserve fund for core technical activities that we were able to absorb those levels of net revenue loss two years in a row. We are grateful to the Executive Committee for their support of the Reserve Fund.

We have received numerous inquiries about whether the 2023 TRB Annual Meeting can be conducted as a hybrid meeting. We carefully analyzed a full range of options regarding what TRB Annual Meeting activities might be able to be offered in a hybrid format. This evaluation carefully considered both the benefits and financial implications of each option. We gathered information from other organizations that have meetings the size of the TRB Annual Meeting to understand their experiences and lessons learned. Hybrid meetings require considerably more staff and financial resources and often end up with lower revenues than in person events. All decisions need to be made in the context of TRB's year round technical activities relying heavily on revenues from the TRB Annual Meeting to support these ongoing activities. Ann Brach will report at the Executive Committee on the conclusions that we reached regarding what can realistically be done for the 2023 TRB Annual Meeting.

### Cooperative Research Programs

Chris Hedges will provide a status report on the cooperative research programs, so I will not provide an update here, other than to say that the programs continue to produce very useful products and reports that are extensively used by practitioners both here in the United States and globally. What I do want to highlight is that the CRP programs have issued modified conflict of interest policies for both contractors and for oversight committee members. These were developed in the context of the National Academies of Sciences, Engineering, and Medicine modifying their conflict of interest policies.

### New TRB Strategic Plan

Based on feedback received during the January TRB Executive Committee meeting, as well as from several other TRB oversight committees, SPPR made revisions to the draft strategic plan that had been presented to the Executive Committee in January. SPPR also reviewed and commented on a set of metrics proposed for the plan, and it prepared introductory text for the

plan. The final version of the plan proposed by SPPR for adoption by the Executive Committee is in the agenda book under Tab 7. We ask that each of you review the plan as submitted by SPPR because you will be asked to vote for its adoption. The plan will set the strategic direction for TRB's programs and activities for the next five years.

#### Next Edition of *Critical Issues in Transportation*

The update to TRB's *Critical Issues in Transportation* document is also a separate agenda item, and it is covered in detail in the agenda book under Tab 9. The SPPR has lead responsibility for drafting the document, which will be issued as a product of the Executive Committee. The SPPR has identified five broader goals that transportation supports that are critical to enabling a thriving society. SPPR has also identified five cross cutting topics related to these societal goals, and a series of high-level questions under each of the five goals and five cross cutting topics. Our hope is that Executive Committee members will take the time to review the list of issues and give us feedback on what is missing, or whether there are different issues that you feel are more important. The goal is to have a maximum of 3-4 high-level issues under each goal and cross cutting topics. We would like to be in a position to have a refined list of issues coming out of the Executive Committee meeting, so we can begin work on writing text and providing supporting information for each issue over the summer. Our schedule calls for a new edition of *Critical Issues in Transportation* to be ready for the 2023 TRB Annual Meeting.

#### Diversity, Equity, and Inclusion

The National Academies and the TRB Executive Committee continue to place a high priority on addressing Diversity, Equity, and Inclusion (DE&I) issues from both a programmatic and a participation perspective. TRB continues have a large number of ongoing programmatic activities that address equity issues in transportation. The definitions used by the National Academies for classifications of racial and ethnic minorities, as well as for sex, have changed and TRB staff are working hard to get as many of its committee and panel members to update their data as soon as possible, so we can better track progress on participation. Chris Hendrickson will provide a status report as part of his report for the TRB Division Committee.

The Special Committee on Diversity, Equity, and Inclusion has been hard at work monitoring progress in implementation of TRB's DE&I strategic plan, as well as developing a new DE&I plan. Executive Committee member Carol Lewis, who is chair of the special committee, will be presenting a proposed revised DE&I strategic plan for adoption by the Executive Committee. The revised plan is based on experience and lessons learned with implementation of the previous plan, which was first adopted by the Executive Committee in 2018. The new strategic plan includes a number of specific actions that will help support the strategies contained in the plan.



### International Activities

TRB's international activities have continued throughout the pandemic, despite travel restrictions. In some ways, they have increased with more activities being done virtually, and not requiring international travel. TRB participation or co-sponsorship in international conferences is resuming, while virtual activities continue.

The International Subcommittee of the Executive Committee, under Randy Iwasaki's leadership, has been working to make revisions to TRB's International Strategic Plan. Randy will be presenting a revised strategic plan to the Executive Committee for adoption that includes strategies intended to increase the impact of TRB's international activities.

### Executive Committee Membership Change

Kevin Thibault left the Florida Department of Transportation as Secretary in March and is now the CEO of the Greater Orlando Aviation Authority. CEOs of state DOTs serve on the TRB Executive Committee with the understanding that when they leave their position as CEO of the state DOT that they will resign from the Executive Committee, so Kevin has tendered his resignation. I am working with Jim Tymon and the nominating committee to identify a new CEO from the southeastern United States to nominate a new CEO to succeed Kevin.

### Sale of the Jonsson Center

Since I expect to be asked what the status is of the sale of the Jonsson Center in Woods Hole, I thought that I should address it in this report. You may recall that it was originally listed for sale last fall, with an asking price of \$27.5 million. It is still listed on the market, but the asking price has been lowered to \$22 million. The center is no longer being used for meetings or other functions.

### TRB Finances

I have attached the two financial tables that we normally provide at Executive Committee meetings. This is the first time that you are seeing actual 2021 expenditures and 2022 estimates. As can be seen in Table 1, expenditures in 2021 decreased from 2020 levels in almost every program, except the Marine Board, due to the impact of the pandemic. As can also be seen in Table 1, we expect to recover and increase expenditures and corresponding revenues in almost every program in 2022. The effect of the FY2022 increase in SP&R revenues from the state DOTs, the increases in funding for CRP programs, and increases in USDOT support for the core technical program will not fully show up until 2023 due to the timing on when we receive revenues from these sources.

Table 2 shows projected revenue by source and projected expenses for the core technical program for FY2021 through FY2026. It also shows projected balances for TRB's Core

Technical Program Reserve Fund. This table reflects the increase in state DOT support for the core technical program resulting from the increase in SP&R funds from the Bipartisan Infrastructure Law. It also reflects the increased funding from USDOT agencies that became TRB sponsors in the past year. The FY2021 and 2022 TRB Fees & Sales line shows the impact of reduced revenues from the TRB Annual Meeting in both years.

The TRB Executive Committee set a target that we should try to keep the TRB Core Technical Program Reserve Fund somewhere between 75 and 100 percent at the end of the 6-year program period. As can be seen, it is currently projected to be at 85% at the end of FY2026.

### Succession Planning

On March 30, 2022, I announced that I intend to retire as TRB Executive Director in early fall. I had promised Greg Symmes, the Chief Program Officer of the National Academies that I would give him six months' notice, so he could have sufficient time to undertake a recruitment and selection process, and we could have as smooth a transition as possible.

The National Academies has hired an executive search firm that is assisting with the hiring process. Greg Symmes intends to attend the first part of the Executive Committee meeting to update the committee on the search process and the schedule for selecting a successor.

While the seven years that I have been TRB Executive Director have been the highlight of my professional career, my wife Barbara and I have a number of things that we would like to do while we are still able to do them, and which are not possible while I remain in my current position. I remain committed to fulfill all my duties between now and when my successor takes over later this year.

I have appreciated the tremendous support that I have received from all of the members of the TRB Executive Committee. I intend to remain involved in transportation and TRB as a volunteer.

### Concluding Thoughts

2020 and 2021 were TRB's COVID-19 Years. They required perseverance, resilience, and adaptability of the TRB staff and the understanding of TRB's volunteers, as we worked to continue to provide the products and services that our stakeholders have come to expect and rely on from TRB. I am proposing that we call 2022 TRB's Year of Resilience. We are coming out of the pandemic having, not just survived, but having become a stronger, more resilient organization. Our way of doing business will not return to the way it was before March 2020. We have all changed individually and collectively as a result of the pandemic. TRB will do a number of things differently than we have in the past. As long as we adhere to the National Academies' and TRB's high standards for objectivity, independence, non-partisanship, integrity,

excellence, and an evidence-basis for all that we do, TRB can and will adapt to the changing world around us, and we will continue to provide great value to our sponsors, our volunteers, and our customers. We have a bright future in front of us!

Unless my successor does not start until after January 12, 2023 this will be my last Executive Committee meeting as TRB Executive Director. I truly appreciate the wise counsel and guidance that all of you have continually provided to my TRB colleagues and me over the past seven years. I look forward to continuing to interact with each of you when I am promoted to the highest role one can have in TRB, Volunteer!

Attachment

Table 1

### TRB Spending by Program and Source(s) of Funds

	2020 act.	2021 act.	2022 est.	Source(s) of Funds
Core Technical Activities	\$14,769,000	\$14,049,000	\$15,618,000	State DOTs (60%), Fees & Sales (22%), FHWA (10%), Other (8%)
Cooperative Research Programs				
NCHRP	\$43,620,000	\$40,463,000	\$41,637,000	State DOTs (99.5%) FHWA (.5%)
ACRP	\$12,503,000	\$12,476,000	\$13,333,000	FAA
TCRP	\$5,327,000	\$4,687,000	\$5,160,000	FTA
NCFRP	\$32,000	\$0	\$0	OST-R
BTSCRCP	\$1,163,000	\$1,675,000	\$1,974,000	NHTSA/GHSA
Rail Safety IDEA	\$367,000	\$223,000	\$460,000	FRA
Evaluation of FHWA Research Projects	\$791,000	\$715,000	\$978,000	FHWA
Policy Studies	\$2,737,000	\$2,611,000	\$3,318,000	Coast Guard (26%), FAA (19%) PHMSA (17%), OST-R (16%), FHWA (6%), Policy Fund (5%), BSEE (2%), Other (8%)
Conferences, Workshops, Forums & Centennial	\$1,401,000	\$1,393,000	\$1,893,000	Registration Fees/Core (72%), FHWA (8%),NHTSA (7%), State DOTs (7%), Other (6%)
SHRP2 (Safety Database)	\$1,392,000	\$0	\$0	FHWA
Marine Board	\$189,000	\$345,000	\$321,000	Army (28%), Coast Guard (19%), ONR (19%), NOAA (16%), BSEE (10%), MARAD (8%)
<b>Total</b>	<b>\$84,291,000</b>	<b>\$78,637,000</b>	<b>\$84,692,000</b>	

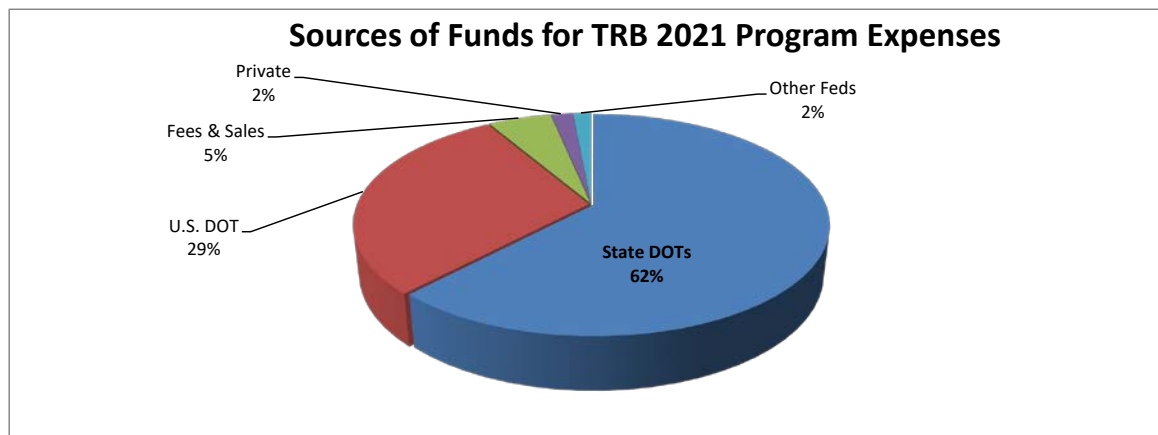


Table 2

TRB CORE BUDGET ESTIMATE FOR SIX FISCAL YEARS (July 1 - June 30)

	<u>FY2021 (act)</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>
<b>Revenue</b>						
State Highway & Transportation Departments (State DOTs)	8,004,000	8,004,000	9,201,000	9,385,000	9,573,000	9,764,000
Federal Highway Administration (FHWA)	1,425,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
Other Federal Agencies						
Office of the Assistant Secretary for Research and Technology (OST-R)	81,000	231,000	300,000	300,000	300,000	300,000
Federal Transit Administration (FTA)	81,000	312,000	250,000	250,000	250,000	250,000
National Highway Traffic Safety Administration (NHTSA)	73,000	222,000	250,000	250,000	250,000	250,000
Federal Motor Carrier Safety Administration (FMCSA)	38,000	63,000	77,000	79,000	81,000	83,000
Federal Aviation Administration (FAA)	36,000	69,000	77,000	79,000	81,000	83,000
Federal Railroad Administration (FRA)	36,000	69,000	77,000	79,000	81,000	83,000
Pipeline and Hazardous Materials Safety Administration (PHMSA)	-	57,000	77,000	79,000	81,000	83,000
USDOT Office of the Under Secretary for Policy	-	38,000	77,000	79,000	81,000	83,000
Department of The Interior (DOI)	85,000	85,000	85,000	85,000	85,000	85,000
Air Force Civil Engineer Center (AFCEC)	75,000	76,000	77,000	79,000	81,000	83,000
Department of Energy (DOE)	75,000	76,000	77,000	79,000	81,000	83,000
Environmental Protection Agency (EPA)	75,000	76,000	77,000	79,000	81,000	83,000
Army Corps of Engineers (COE)	62,000	76,000	77,000	79,000	81,000	83,000
	<u>717,000</u>	<u>1,450,000</u>	<u>1,578,000</u>	<u>1,596,000</u>	<u>1,614,000</u>	<u>1,632,000</u>
Other Non-Federal						
Association of American Railroads (AAR)	75,000	76,000	77,000	79,000	81,000	83,000
American Public Transportation Association (APTA)	75,000	76,000	77,000	79,000	81,000	83,000
California Air Resources Board (CARB)	80,000	81,000	82,000	84,000	86,000	88,000
	<u>230,000</u>	<u>233,000</u>	<u>236,000</u>	<u>242,000</u>	<u>248,000</u>	<u>254,000</u>
TRB Fees & Sales	2,897,000	4,675,000	6,150,000	6,335,000	6,525,000	6,721,000
	<b>13,273,000</b>	<b>15,762,000</b>	<b>18,565,000</b>	<b>18,958,000</b>	<b>19,360,000</b>	<b>19,771,000</b>
<b>Expenses</b>						
Personnel Related Expenses	12,364,000	12,315,000	13,950,000	14,913,000	15,925,000	16,562,000
AM Logistics and Travel	379,000	1,950,000	2,235,000	2,380,000	2,451,000	2,525,000
Library, Publishing & Report Production	935,000	1,235,000	1,272,000	1,310,000	1,349,000	1,389,000
Staff/Committee Travel & Meetings	22,000	55,000	200,000	206,000	212,000	218,000
Other Costs	91,000	195,000	280,000	288,000	297,000	306,000
	<u>13,791,000</u>	<u>15,750,000</u>	<u>17,937,000</u>	<u>19,097,000</u>	<u>20,234,000</u>	<u>21,000,000</u>
<b>Reserves</b>						
Yearly Surplus/(Deficit)	(518,000)	12,000	628,000	(139,000)	(874,000)	(1,229,000)
Reserve Fund Balance	19,360,869	19,372,869	20,000,869	19,861,869	18,987,869	17,758,869
Percent of Core Operating Year	<b>140%</b>	<b>123%</b>	<b>112%</b>	<b>104%</b>	<b>94%</b>	<b>85%</b>

## **REPORT OF THE TRANSPORTATION RESEARCH BOARD DIVISION COMMITTEE January through May 2022**

### **BACKGROUND**

The Transportation Research Board (TRB) Division Committee (Div-Comm) liaises between the Governing Board of the National Research Council (NRC) and TRB. The Div-Comm ensures that TRB meets the NRC's standards for objectivity and ensures that its activities are appropriate for the NRC. In addition, the Div-Comm monitors TRB's specially funded project committees and panel appointments, report review, and programs that are approved by the NRC Governing Board. The Div-Comm Chair also assists the Executive Committee with special project approvals requested of the NRC Governing Board.

Members of the 2022/2023 Div-Comm are Chris Hendrickson (NAE), Chair; Nat Ford, Executive Committee Chair; Julie Lorenz, State DOT Representative; and James Tien (NAE). The *ex officio* non-voting members are Susan Shaheen, Outgoing Executive Committee Chair; Shawn Wilson, Incoming Executive Committee Chair; and Carol Lewis, Special Committee on Diversity, Equity, and Inclusion Chair.

### **OVERSIGHT ACTIVITIES**

The following projects and committees were approved by the NRC Governing Board Executive Committee from January through May 2022.

#### **Committee and Panel Approvals**

The Div-Comm Chair approved appointments to 18 committees and projects. One was from Consensus and Advisory Studies: Repurposing Plastics Waste in Infrastructure, and 17 were Cooperative Research Programs (CRP) project panels:

- 2 from the Airport Cooperative Research Program (ACRP),
- 9 from the National Cooperative Highway Research Program (NCHRP),
- 6 from the Transit Cooperative Research Program (TCRP).

#### **Report Review**

From January through May 2022, the Div-Comm oversaw reviews of one report from CAAS and 77 from the CRPs. Details about the CRP reports are as follows:

**Table 1: Number of CRP Reports: January 1-May 31, 2022**

<b>Program</b>	<b>Research</b>	<b>Syntheses</b>	<b>Legal</b>	<b>Totals</b>
ACRP	12	3	0	<b>15</b>
BTSCRIP	6	0	0	<b>6</b>
NCHRP	33	11	2	<b>46</b>
TCRP	4	2	1	<b>7</b>
TFPE	3	0	0	<b>3</b>
<b>Totals</b>	<b>58</b>	<b>16</b>	<b>3</b>	<b>77</b>

The one CAAS report was the *Review of Federal Highway Administration Infrastructure R&D*.

### **Involvement in CRP and TAD by Race/Ethnicity and Sex**

The Div-Comm monitors TRB's progress in broadening the representation of minorities and women, both as members and friends of standing committees in the Technical Activities Division, the members of cooperative research program panels, and the committee members on consensus studies in the CAAS Division.

In 2021, the National Academies announced new categories by which volunteers will report their race/ethnicity and sex; these mirror those used by the U.S. Census Bureau. TRB is, so far, the only National Academies division to implement these categories. Next year the Academies will implement the new categories in tandem with implementing a new database for Academy members and consensus study committee members. While TRB volunteers and event attendees updated their information in MyTRB, members of CAAS committees do not necessarily have records in MyTRB unless they are already involved in TRB in some capacity. Thus, CAAS committee member demographic data will be reported once the Academies has fully implemented its new database with the new demographic categories.

Because the demographic categories have shifted, comparisons to volunteers' demographic characteristics from previous years is not straightforward. Before, volunteers could select only one response to the race and ethnicity question (American Indian/ Alaska Native, Asian or Pacific Islander, Black/African American, Hispanic/Latino, Other, Two or More, White, and Prefer Not to Answer). Now, volunteers can select more than one race/ethnicity if they choose which are as follows: American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander, Other, White, and Prefer Not to Answer). In addition, "gender" is now called "sex" and the option of "Other" is provided as a response option (in addition to Male, Female, and Prefer Not to Answer).

### *How Data Will Now Be Reported*

- Because volunteers are no longer limited to selecting one category for reporting the race/ethnicity, data for each race/ethnicity will be reported in two ways: (1) responses for each race/ethnicity category for those who responded to only that one category, and (2) responses for each race/ethnicity category AND those who responded that they identify in at least one other race/ethnicity category. Respondents are counted in each category to which they provide a reply—so they are double-counted. The numbers of individuals who report multiple categories are generally only a small fraction of those reporting a single race/ethnicity.
- The denominator for reporting volunteers' demographic data is those who have both updated and reported their demographic information—not the total number of those who are on committees or panels. Thus, those who have not yet updated their demographic information and those who selected “Prefer Not to Respond” are not included.
- Those included in the calculations are individual friends, committee members, or panel members—thus if someone is, for instance, a panel member on multiple panels, they will only be counted once.

Table 2 below shows the composition of friends and members on TAD committees and CRP panels as of May 2022 by race/ethnicity. Table 3 shows the composition of males and females. Given the new reporting categories, comparisons to previous years are not provided, though will be provided starting in January 2023.

For TAD standing committees, members of the 176 committees are appointed at the TRB level. Each committee is allotted 36 slots and selects its own members while working with its TRB staff member; chairs are approved by TRB's TAD director.

Individuals can also become involved in standing committees through becoming a “friend of a committee” which allows them to sign up for an unlimited number of committees. Friends can attend meetings and participate in committee activities, and can be considered for committee membership.

On CRP panels, individuals included in the data are those who serve as either a chair, member, or AASHTO monitor on panels that are Div-Comm-approved and active panels that oversee contract projects. The data also include Div-Comm-approved panel members and members from Executive Office-approved panels (e.g., topic panels and synthesis panels).



*Future Reporting*

As more volunteers have updated their demographic information, the data in this report will be included in future year-to-year comparisons. In addition to the comparisons that will begin in January 2023, the Div-Comm will also start reporting demographic data on those nominated but not selected for a CRP panel and all TRB volunteers once there is a sufficient response rate to do so.

**Table 2: Race/Ethnicity of TAD and CRP Volunteers**

	<b>TAD Friends</b>	<b>TAD Volunteers</b>	<b>CRP Volunteers</b>
<i>Total Unique N</i>	18,214	4281	4421
<i>Total N Reporting</i>	6,431	2870	1405
<i>Response Rate</i>	35.3%	67%	31.8%
<i>American Indian/Alaska Native</i>	0.3%	0.2%	0.3%
<i>American Indian/Alaska Native + One or More Other Races/ Ethnicities</i>	0.5%	0.5%	0.4%
<i>Asian</i>	21.0%	17%	13.9%
<i>Asian + One or More Other Races/ Ethnicities</i>	21.7%	17.7%	14.7%
<i>Black/African American</i>	5.0%	4.3%	7.7%
<i>Black/African American + One or More Other Races/ Ethnicities</i>	5.3%	4.5%	8.1%
<i>Hispanic/Latino</i>	4.4%	4.2%	4.4%
<i>Hispanic/Latino + One or More Other Races/Ethnicities</i>	5.3%	5.1%	5.3%
<i>Native Hawaiian/Other Pacific Islander</i>	0.2%	0.3%	0.4%
<i>Native Hawaiian/Other Pacific Islander + One or More Other Races/Ethnicities</i>	0.3%	0.4%	0.5%
<i>Other Race/Ethnicity</i>	2.8%	2.2%	1.7%
<i>Other Race/Ethnicity + One or More Other Races/Ethnicities</i>	3.0%	2.4%	1.9%
<i>White</i>	64.0%	69.5%	69.2%
<i>White + One or More Other Races/ Ethnicities</i>	66.0%	71.5%	70.8%

**Table 3: Gender of TAD and CRP Volunteers**

	<b>TAD Friends</b>	<b>TAD Members</b>	<b>CRP Members</b>
<i>Response Rate*</i>	38.0%	71.3%	33.6%
<i>Male</i>	69.7%	68.8%	63.5%
<i>Female</i>	30.3%	31.2%	36.5%

*\*No one provided an "other" response when reporting sex.*

### **DIVERSITY IN CRP CONTRACTORS**

TRB encourages participation of women and minorities as principal investigators (PIs) on university teams and of disadvantaged business enterprises (DBEs) so as to represent a variety of perspectives on CRP projects. (DBEs are small businesses that have at least a 51% interest and control of daily business operations by those who identify as African American, Hispanic/Latino, Native American, Asian-Pacific and Subcontinent Asian American, or women.) Therefore, TRB collects data on minority and women PIs from university teams serving as NCHRP contractors, and on contract funding that went to DBEs from new ACRP, BTSCR, NCHRP, and TCRP contracts. Table 4 below details the amounts that went to DBEs in 2021 and Table 5 details minority and women PIs from FY 2015 to FY 2021. (FY 2020 data were not available.)

**Table 4: Amounts to DBEs for the Four CRPs in 2021**

	Total Contracted Amounts	\$ Amount to DBEs	% to DBEs
ACRP	\$8,463,050.00	\$1,918,375.41	22.7%
BSTCRP	\$1,299,958.00	\$0.00	0%
NCHRP	\$19,352,060.00	\$2,596,161.20	13.4%
TCRP	\$1,019,157.00	\$383,672.00	37.6%
All CRP	\$30,134,225.00	\$4,898,208.61	16.3%

**Table 5: Women and Minority Participation on University-led Teams on NCHRP Projects**

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2021*</b>
N of Women-led Teams	3	6	4	4	4	5
N of Minority-led Teams	4	2	0	5	3	2
Total N of University Teams	11	11	11	15	19	17

\*In FY 2021, for all 50 NCHRP projects, there were 19 women-led teams and 7 minority-led teams. Data were not readily available for previous years.

Since July 2019, all organizations submitting proposals to CRP must respond to a question that asks how their team would bring a diverse and inclusive approach to their research, and policies or programs that they have in place to promote diversity and inclusion at their organization. Each CRP panel that evaluates organizations' proposals can decide the percentage by which they want to weight those responses when deciding on the winning proposal. Some observations about DE&I elements in the 56 winning proposals from June 2021 to May 2022 are as follows:

- By definition, universities cannot be a DBE but 3 of 15 universities submitting proposals included at least one DBE as a subcontractor.
- Of the 41 consulting organizations submitting a proposal, 7 were a DBE and 21 included at least one DBE as a subcontractor. But 14 were neither a DBE, nor did they include at least one as a subcontractor.
- Of the 56 proposals, 43 discussed how the organization would bring a diverse and inclusive approach through the diversity of researchers (by race/ethnicity, geography, stage in their careers, expertise, and educational level) carrying out the project.
- Eighteen of the proposals included information about how they ensure that a diversity of views, especially those that have traditionally been excluded from research projects in the past, would be included in the research process. Such efforts are being carried out by soliciting input from associations and community groups that represent diverse groups, and targeting recruiting efforts for interviews and workshops to ensure that respondents from racial/ethnic groups is representative of the U.S. population.

Examples of different types of responses that organizations have provided to three of the CRPs are as follows:

- One consulting organization submitting a TCRP project proposal included the project team's diversity in research experience and demographic characteristics, outlined their strategy to include perspectives of those from a particular minority community, and detailed DE&I training available to its employees.
- Another consulting organization submitting an ACRP project proposal included a statement affirming its organizational commitment to DE&I and detailed initiatives to convey those values to all of its employees. In addition, the organization included two DBE as subcontractors and discussed its efforts to maintain a wide network of DBEs it can work with in the future.
- A university submitting a proposal for an NCHRP project included a DBE as a subcontractor, information about its efforts to recruit a diverse research team, and a statement detailing its commitment to DE&I, including through various campus-wide initiatives.

## **TRB 2022-2027 Strategic Plan**

### Background

The Executive Committee of the Transportation Research Board (TRB) of the National Academies of Sciences, Engineering, and Medicine is pleased to present this strategic plan for the period 2022 to 2027. Its intent is to provide strategic direction for TRB's programs and activities for the next five years.

The TRB Executive Committee last adopted a strategic plan in June 2019. At the time it adopted that plan, TRB's parent organization, the National Research Council (NRC) was beginning a process to develop a strategic plan for the NRC. TRB adopted its 2019 plan with the understanding that once the NRC had a new strategic plan, TRB would revisit its plan and make modifications so its plan would be in alignment with the new NRC plan.

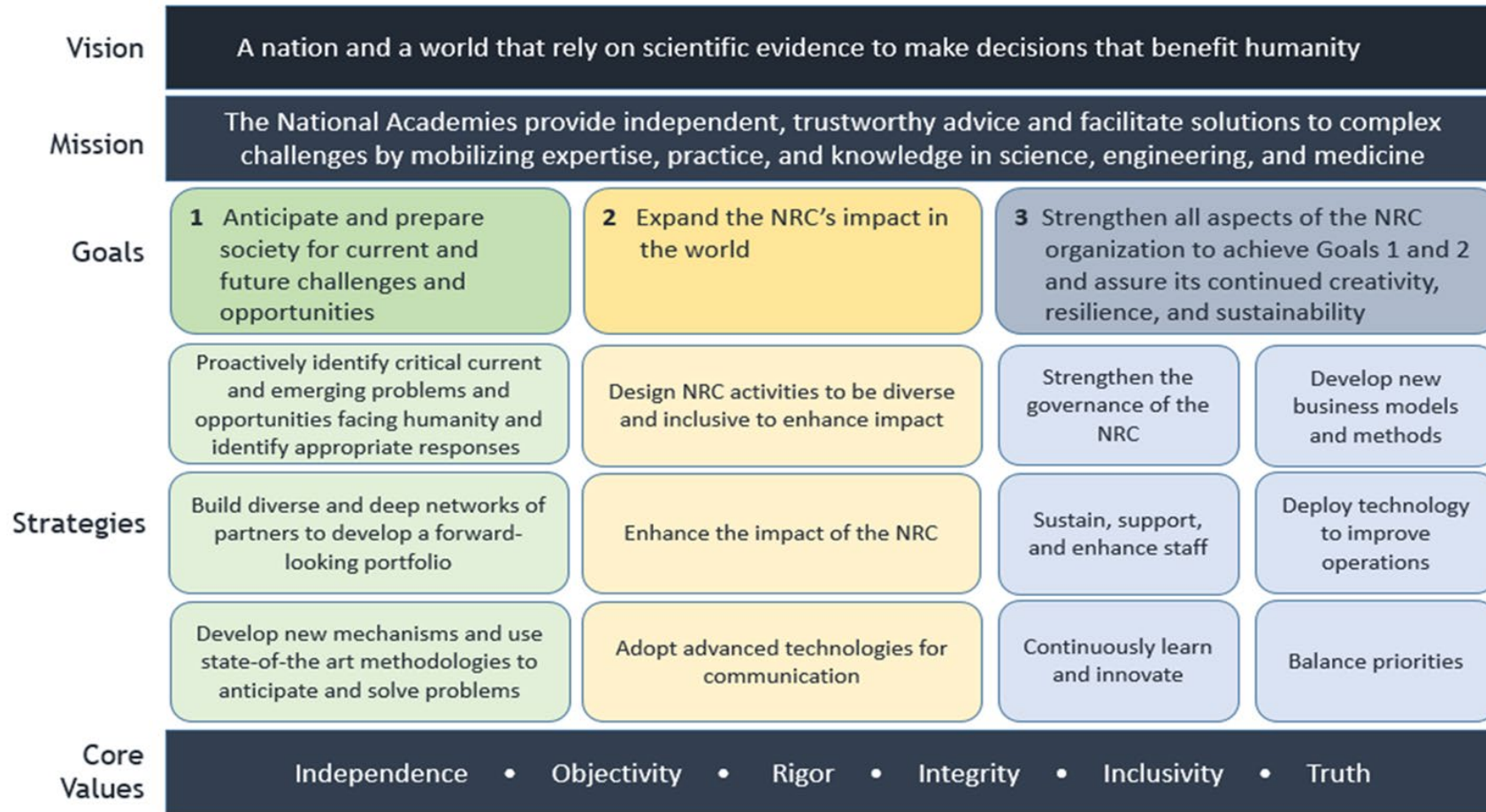
The NRC Governing Board adopted the new NRC strategic plan on February 8, 2021. The plan's goals called for (1) anticipating and preparing society for current and future challenges and opportunities and (2) expanding the NRC's impact in the world. A third goal called for strengthening the NRC's organization to achieve the first two goals and to assure the NRC's continued creativity, resilience, and sustainability. The plan included a number of strategies to support these goals. Figure 1 shows a summary of the NRC strategic plan. A major effort is underway within the NRC to implement the strategies contained in its plan.

Once the NRC adopted its new strategic plan, the TRB Executive Committee started a process to develop a new TRB strategic plan that would be in alignment with the NRC strategic plan. A description of the process used by the TRB Executive Committee is contained later in this introduction.

### TRB Overview

TRB is one of seven program divisions within the National Academies of Sciences, Engineering, and Medicine. The National Academies are private, nonprofit institutions that provide expert advice on some of the most pressing challenges facing the nation and the world. The National Academies' work helps to shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine. The fact that TRB is part of the National Academies enables TRB to take advantage of the expertise of some of the most renowned scientists, engineers, and medical professionals in the world, as well as the experts on the staff of the other six program divisions of the Academies. It also brings with it the obligation to meet the National Academies' standards for objectivity, independence, scientific rigor, and an evidence-basis in all that TRB does. TRB is committed to advancing the state of the practice through sound research, sharing of information on cutting-edge innovation, and rigorous analysis of current policy issues.

# Figure 1 NRC Adopted Strategic Plan



Approximately 8,500 volunteers serve on TRB's standing technical committees and task forces, its research panels, its advisory study committees, and the Marine Board. These volunteers are supported by a staff of 120 professionals who are experts in the wide variety of disciplines involved in transportation. The TRB Executive Committee provides strategic direction and oversight for all of TRB's programs and activities. In addition, there are oversight committees for each of TRB's major program areas.

TRB's major functions are research, convening, and advising. Through TRB's cooperative research program, TRB manages over 600 research projects at any given time in the areas of highways, public transit, airports, and behavioral traffic safety. TRB publishes approximately 800 peer reviewed research papers per year in its journal the *Transportation Research Record*, as well as articles in several additional publications. TRB maintains the largest transportation research bibliographic database in the world with over 1.3 million records.

The TRB Annual Meeting is held each January in Washington DC and is the largest convening activity of transportation professionals in the world, with over 14,000 attendees (in a non-COVID year) and over 800 sessions and workshops. TRB has 177 standing technical committees and councils that convene to discuss current and future issues and research in almost all topics related to transportation. TRB sponsors or co-sponsors approximately 50 conferences or workshops per year in addition to its annual meeting. TRB delivers over 100 webinars per year on a wide variety of subjects.

TRB conducts a number of consensus studies on a wide variety of policy issues across all modes of transportation following the rigorous procedures of the National Academy of Sciences, Engineering, and Medicine. These studies often contribute to changes in legislation or regulation in areas such as investment, public/private policy, acquisition, safety, security, equity, and more. In addition, TRB has several standing committees that provide advice to USDOT modal research programs.

#### Relationship to Other TRB Strategic Plans

The TRB Executive Committee has adopted strategic plans for the following areas:

- International Activities
- Diversity, Equity, and Inclusion
- Communications.

The communications strategic plan was adopted in July 2021. A revised international activities plan and a revised diversity, equity, and inclusion plan were adopted at the Executive Committee's June 15-16, 2022 meeting. Strategic plans for technical activities and for various cooperative research programs have been adopted by the oversight committees for these programs. All of these individual plans have provided input to the overall TRB strategic plan.

### Process to Develop the TRB Strategic Plan

The TRB Executive Committee assigned lead responsibility for development of the new TRB strategic plan to its Subcommittee on Planning and Policy Review (SPPR). SPPR met April 26, 2021 to compare the vision, mission, goals, and strategies in the new NRC strategic plan with these same elements in the 2019-2024 TRB strategic plan. SPPR discussed the approach that it should take to develop a new TRB strategic plan and decided to modify each element of the TRB plan to align more closely with the NRC plan. SPPR members brainstormed ideas for each of the elements.

The TRB Executive Committee met on July 19-20, 2021, where it reviewed and provided feedback and suggested modifications regarding initial draft vision, mission, goals, and strategies statements developed from the SPPR brainstorming session. The Executive Committee also discussed the values statements contained in the NRC strategic plan and decided that since TRB is a program division of the NRC that it should adopt the NRC values. In addition, the Executive Committee provided feedback on a draft set of principles to guide TRB into its future and decided these principles should be included in the plan (Note: the principles were changed later to tenets).

The draft plan elements were revised based on Executive Committee feedback, and the modified elements of the plan were reviewed with the SPPR at their October 2021 meeting. A revised version based on SPPR feedback was then circulated to several of TRB's oversight committees, who provided additional input. During the fall of 2021, TRB staff began developing a proposed list of actions under each of the strategies. The TRB Executive Committee provided feedback on the latest version of the draft plan at its January 12-13, 2022 meeting. Subsequent to that meeting and based on the Executive Committee's feedback, TRB staff developed a draft list of metrics for measuring progress in achieving the plan. The SPPR reviewed an updated version of the plan, including the proposed metrics, at its April 19, 2022 meeting and offered a number of additional refinements. The SPPR presented the final strategic plan to the Executive Committee for adoption at its meeting on June 15, 2022.

### Next Steps

In order for the strategic plan to be effective, TRB leaders, volunteers, and staff must implement the adopted goals, objectives, and action items. The SPPR will work together with oversight committees from each of TRB's program areas and TRB staff to identify how the TRB strategic plan will be implemented. This will be done recognizing that the strategic plan is quite an aggressive plan, containing a very large number of action items, and it is being adopted in a resource-constrained environment. Therefore, it is likely that not all action items listed in the plan will be able to be implemented within the five-year timeframe for the plan.

TRB staff will work with the SPPR to identify the highest priorities and a schedule for implementation of the action items. The metrics contained in the plan will be used to monitor

progress. Both the SPPR and Executive Committee will receive regular progress reports on implementation and which items may need to be deferred due to resource constraints.

There will inevitably be additional circumstances that arise that will require changes in priorities or actions contained in the strategic plan. TRB staff will work together with the SPPR and the Executive Committee to identify appropriate changes. The plan will be a living document that will be adjusted as circumstances warrant over the five-year life of the plan or modified based on emerging factors during implementation.

#### The TRB 2022-2027 Strategic Plan

In order to show how the TRB strategic plan aligns with the NRC strategic plan, the elements of the plan are shown with the NRC plan element first shown and the corresponding TRB plan immediately shown immediately thereafter. The actual TRB strategic plan only includes the TRB elements.



## **TRB 2022-2027 Strategic Plan with Actions**

June 15, 2022

### **Vision**

NRC vision: A nation and a world that rely on scientific evidence to make decisions that benefit humanity.

TRB Vision: A nation and a world that rely on scientific evidence and expertise about transportation to ensure a system that benefits individuals, society, and the environment.

### **Mission**

NRC mission: The National Academies provide independent, trustworthy advice and facilitate solutions to complex challenges by mobilizing expertise, practice, and knowledge in science, engineering, and medicine.

TRB Mission Statement: TRB mobilizes expertise, experience, and knowledge to anticipate and solve complex transportation-related challenges.

### **Values**

NRC Values: Independence, Objectivity, Rigor, Integrity, Inclusivity, Truth

TRB Values: TRB, being a program division of the NRC, adopts the NRC values as TRB's values.

### **Guiding Tenets as TRB Looks to Its Future**

1. Adhere to the National Academies' and TRB's high standards for objectivity, independence, non-partisanship, integrity, excellence, and an evidence-basis for all that we do;
2. Leverage being part of the National Academies of Sciences, Engineering, and Medicine, and the expertise available to TRB throughout the National Academies;
3. Facilitate researchers and practitioners interacting with and learning from each other;
4. Enable individuals and society to benefit from the multi-disciplinary and multi-modal expertise and contributions of TRB's participants, and the multi-disciplinary and multi-modal scope of its portfolio;
5. Meet the needs of TRB's sponsors and professionals working in transportation-related fields by offering relevant services and producing implementable strategies and useful, high quality products;

6. Facilitate the professional development and growth opportunities of students and transportation professionals at all stages of their careers;
7. Continually evaluate and improve TRB's services to maximize value to TRB's sponsors and participants; and
8. Leverage diversity of thought, background, perspective, and experience to better address transportation's challenges; identify and eliminate barriers to full and active inclusion in TRB; and develop of a diverse set of TRB volunteer leaders.

## Goals

### NRC Goals:

1. Anticipate and prepare society for current and future challenges and opportunities.
2. Expand the NRC's impact in the world.
3. Strengthen all aspects of the NRC to achieve Goals 1 and 2 and ensure its continued creativity, resilience, and sustainability.

### TRB Goals

1. Prepare transportation professionals and decision makers to address current and future transportation-related challenges and opportunities.
2. Expand TRB's impact and influence through its objective research, information exchange, and advisory activities.
3. Assure TRB's continued creativity, resilience, and sustainability in an ever evolving world.

## NRC Strategies under Each Goal

1. Anticipate and prepare society for current and future challenges and opportunities.
  - a. Proactively identify critical current and emerging problems and opportunities facing humanity and identify appropriate responses.
  - b. Build diverse and deep networks of partners to develop a forward-looking portfolio.
  - c. Develop new mechanisms and use state-of-the-art methodologies and data to anticipate and solve problems.
2. Expand the NRC's impact in the world.
  - a. Design NRC activities to be diverse and inclusive to enhance impact.
  - b. Enhance the impact of the NRC.
  - c. Adopt advanced technologies for communication.

3. Strengthen all aspects of the NRC to achieve Goals 1 and 2 and ensure its continued creativity, resilience, and sustainability.
  - a. Strengthen the governance of the NRC.
  - b. Sustain, support, and enhance staff.
  - c. Provide relevant and timely evidence-based guidance through continuous innovation and learning.
  - d. Develop new business models and methods.
  - e. Deploy technology to improve NRC operations.
  - f. Balance priorities.

### **TRB Strategies and Actions under Each Goal**

1. Prepare transportation professionals and decision makers to address current and future transportation-related challenges and opportunities.
  - a. Identify current and future critical transportation-related issues and address these issues through TRB's convening, research, and advising programs and activities.
    - i. Publish a new edition of *Critical Issues in Transportation* that addresses how transportation supports broader societal goals.
    - ii. Develop and highlight TRB Annual Meeting sessions related to the critical issues.
    - iii. Pursue sponsorship of conferences/workshops for the critical issues.
    - iv. Conduct research projects on the critical issues and disseminate the findings to key stakeholders.
    - v. Pursue sponsorship of consensus and advisory studies for critical issues, including working together with other National Academies program divisions on studies addressing these issues.
    - vi. Produce webinars that address critical issues.
    - vii. Produce Executive Committee policy sessions that address critical issues.
    - viii. Develop addenda to the *Critical Issues in Transportation* report as new or evolving issues develop between reports.
    - ix. Monitor and publicize research done by others, including international research, on critical issues.
    - x. Develop and market TRID snap searches for critical issue topics.
  - b. Educate and communicate with transportation professionals, decision makers, and the public about the critical issues identified and the work that TRB is doing to address them.

- i. Develop strategies for communicating within the TRB stakeholder community about critical issue topic areas through e-newsletter articles, *TR News* feature editions, blogs, podcasts, and TRID feature articles.
    - ii. Develop communications strategies for individual reports and activities related to TRB's critical issues, including Cooperative Research Program reports, consensus study reports, topical *Transportation Research Record* editions, conference/workshop reports, and TRID snap searches on the topics, as contained in the TRB Communications Strategic Plan.
    - iii. Address critical issues in collaboration with other transportation organizations, including international organizations.
    - iv. Develop strategies for communicating with the broader public and decision makers about critical issue topic areas, as well as specific reports on these topic areas.
    - v. Feature *Transportation Research Record* papers (e.g., special editions) on critical issues.
  - c. Identify state-of-the-art methods and data for addressing critical issues.
    - i. Find opportunities to use data that has been collected or will be collected using state of the art data collection methods (e.g., crowdsourced data, cell phone probe data), as well as state of the art analysis methods (e.g., artificial intelligence, advanced geographic information systems).
2. Expand TRB's national and international impact and influence by advancing knowledge, sharing lessons learned, and impacting policy through its objective research, information exchange, and advisory activities.
  - a. In planning TRB activities, identify actions that will expand each activity's impact.
    - i. As part of initial planning for conferences/workshops, cooperative research studies, and consensus studies, develop a communications and outreach approach for when reports are issued, including measures to gauge impact.
    - ii. Develop and deploy communications strategies to increase awareness of and participation in the TRB Annual Meeting, conferences, workshops, and committee meetings.
  - b. Measure the impact of TRB's programs and activities
    - i. Develop both quantitative and qualitative performance metrics to measure the impact of TRB's convening activities, research studies and reports, TRB's consensus study reports, *Transportation Research Record*, TRID database, and communications efforts.

- ii. Collect data and anecdotal information from users and sponsors on the short- and long-term impact of selected reports.
  - iii. Summarize impact data in TRB's annual report and in periodic reports for individual TRB programs.
  - iv. Working with oversight committees for each program area, adjust the program to focus on areas of greatest value and impact for TRB sponsors and stakeholders.
  - v. Survey members of key stakeholder groups to determine familiarity and satisfaction with TRB products and services and to understand how and the extent to which the products and services are being used by different audiences.
  - vi. Conduct an engagement survey of members of TRB standing committees, Cooperative Research Program research panels, and consensus study committees to evaluate their volunteer experience. Employ these data to improve volunteer outcomes.
- c. Educate transportation stakeholders about TRB's programs, products, and activities.
- i. Using impact information collected, develop and communicate value proposition statements for each of TRB's programs and major activities.
  - ii. Refine materials that describe TRB's programs, products, and activities, tailoring them to specific target audiences, as well as diverse audiences.
  - iii. Reach out to targeted audiences to educate and engage in dialogue with them about TRB, and how TRB can be of benefit to them.
  - iv. Develop communications materials and strategies about TRB's capabilities and value proposition for the following specific audiences:
    - Sponsors,
    - Congressional staff,
    - Transportation professionals and organizations from nations other than the United States, and
    - Young professionals and students.
  - v. Equip TRB staff and volunteers and MOU partners to be ambassadors for TRB's programs, products, and activities.
  - vi. Adapt TRB's communications strategies to rapidly changing communications methods and different groups of stakeholders.
  - vii. Strengthen and evolve the marketing strategy for the TRB Annual Meeting.

- d. Communicate with transportation professionals and the public about transportation issues and research.
  - i. Develop timely communications materials on transportation-related issues and share through blogs, social media, and other communications methods.
  - ii. Develop materials that demonstrate the value obtained from transportation research.
  
- e. To enhance impact, build a diverse and deep network of partners.
  - i. Identify a list of international and domestic organizations that TRB will engage with, publicize each other's activities, and as appropriate establish liaisons between the organizations' committees. The International Subcommittee and the Special Committee on Diversity, Equity, and Inclusion will facilitate engagement with international and minority-serving organizations.
  - ii. Pursue joint activities with these organizations.
  
- f. Ensure multidisciplinary involvement in addressing TRB's issues.
  - i. Identify disciplines or sectors involved in transportation-related issues that are underrepresented in TRB, and develop strategies to engage with professionals from these disciplines or sectors.
  - ii. For individual standing technical committees, research panels, or study committees, ensure that membership reflects an appropriate diversity of disciplines.
  
- g. Provide career-long learning opportunities by fostering an environment that continually enhances the diversity, inclusivity, skills, and capacity of the transportation professional community.
  - i. Develop appropriate communications and resource materials, and convey the benefits of standing committee volunteer opportunities to enhance professional development and encourage pathways for diverse groups to become actively engaged and take on leadership roles in TRB.
  - ii. Develop and deliver targeted communications materials for students, early career professionals, and underrepresented groups focused on learning and professional development opportunities through TRB.
  - iii. Enhance marketing of TRB's continuing education credit program.

3. Assure TRB's continued creativity, resilience, and sustainability in an ever evolving world.
  - a. Identify and address the issues and needs of existing and potential sponsors, partners, volunteers, and users of TRB's programs, products, and activities.
    - i. Conduct regular outreach meetings with sponsors to discuss their challenges and opportunities for TRB to assist in addressing their issues.
    - ii. Periodically survey participants in TRB events and webinars, and make appropriate adjustments based on feedback received.
    - iii. Seek feedback regarding TRB reports, the TRB website, and e-newsletter to identify potential areas for improvement.
  - b. Pursue continuous improvements and efficiencies in TRB programs, products, and activities to increase effectiveness, usefulness, quality, and timeliness and to identify how to best use new resources.
    - i. Continually evaluate TRB's programs and activities to ensure that they are being delivered as efficiently and effectively as possible.
    - ii. Conduct reviews of key processes to identify improvements, opportunities for consistency or standardization, and efficiencies.
    - iii. Implement IT changes that can improve efficiencies or effectiveness.
    - iv. In conjunction with National Academies initiatives, implement improved project management systems in TRB.
    - v. Work with oversight committees to determine the most effective way to use additional funding from the Bipartisan Infrastructure Law.
    - vi. Initiate the new Freight Cooperative Research Program.
    - vii. Coordinate with TRB sponsors to determine additional activities where TRB could help support the sponsor agency, if appropriate financial support is provided.
    - viii. Work with NRC leadership and other program division staff on new NRC products or services emerging from the NRC strategic plan.
    - ix. Obtain feedback from sponsors, Report Review Committee Chairs, and users of TRB reports, webinars, and convening activities regarding the quality of TRB's products and services.
  - c. Employ technology to expand TRB's outreach and participation.
    - i. Take advantage of videoconference technology to support TRB activities, as appropriate.
    - ii. Increase participation on TRB's social media platforms.
    - iii. Develop products that best meet sponsor and stakeholder needs, including digital formats as appropriate.

- iv. Use state of the art collaboration tools for committee and panel work.
- 
- d. Engage with and involve new participants in TRB activities
    - i. Identify targeted groups or disciplines that are underrepresented in TRB activities.
    - ii. Develop marketing materials and strategies for these groups.
    - iii. Develop strategies to engage new attendees at the TRB Annual Meeting and following the event.
- 
- e. Balance TRB's programs, products, and activities with available financial, volunteer, and staff resources to achieve the goals and strategies in this plan.
    - i. Annually adjust the amount of activity in each program area to be in balance with the financial support made available to that TRB program area while meeting the needs of core constituencies.
    - ii. Ensure that financial resources made available are programmed and deployed in a timely manner.
    - iii. Keep expenditures as close to budget allocations as possible.
    - iv. Use information developed on the use and impact of TRB's programs, products, and activities to make adjustments that ensure that the greatest value is provided for the resources that are made available.
    - v. Evaluate the effectiveness of TRB's Global Affiliate and Individual Affiliate programs.
    - vi. Evaluate the package of private sector support opportunities for the TRB Annual Meeting (i.e. patron programs, exhibits, advertising).
    - vii. Identify and pursue additional sponsors, affiliates, and other support opportunities for TRB programs, products, and activities.
    - viii. Make TRB's conferences and workshops self-supporting through sponsorships, exhibit sales, and registration revenues, including potential pool-fund arrangements.
    - ix. Identify additional organizations that are willing to provide funds for Cooperative Research Program (CRP) research projects or self-funded TRB consensus studies.
    - x. Train staff to assist in fundraising activities for specific programs and activities.
    - xi. Expand TRB's programs and activities to address new and future transportation issues as opportunities arise, provided financial and staff resources can be secured.



- f. Expand the diversity of TRB participants, ensuring an inclusive and welcoming environment for all persons involved in transportation.
  - i. Develop guidance materials and training for committee chairs and TRB staff to identify, recruit, and welcome diverse candidates for TRB committees and research panels.
  - ii. Work with minority-serving organizations to market TRB and opportunities for their members to be involved in TRB.
  - iii. Identify ways to ensure that TRB Annual Meeting and specialty conference attendees have equal opportunities to make connections and feel included, welcomed, and able to participate.
  - iv. Identify practices/and develop primers for TRB staff and the contracting office to identify and minimize barriers to achieving greater diversity among TRB contractors and their lead staff, whether they are suppliers or research consultants.
  - v. Improve existing data, information, and communication mechanisms to support diversity efforts.
  
- g. Sustain, support, and enhance staff.
  - i. Enhance methods used in recruiting and hiring candidates to fill staff vacancies.
  - ii. Improve the onboarding experience for new employees.
  - iii. Review training programs for employees in different job classes and develop more structure to employee training programs within each TRB division.
  - iv. Develop career advancement strategies for staff.
  - v. Review and refine TRB's mentoring programs for staff.
  - vi. Review and revise process-related guidance materials for staff.
  - vii. Review and revise TRB's rewards and recognition program.

### **Metrics Associated with Each Goal**

Goal 1. Prepare transportation professionals and decision makers to address current and future transportation-related challenges and opportunities.

- # of downloads of *Critical Issues in Transportation*
- # of TRB Annual Meeting sessions on critical issues
- # of papers published in the *Transportation Research Record* on critical issues, including special issues focused on specific critical issue topics

- Measure impact of papers on individual critical issues (using measures such as journal citation factor, Altmetrics measures of citation, etc.)
- # of conferences/workshops and workshop reports on critical issue topics
- # of CRP research projects/reports on critical issues
- # of webinars on critical issues; attendance at these webinars
- # of TRID searches on critical issues; # of snap searches developed on critical issue topics
- # of consensus studies on critical issues
- # of blogs/podcasts on critical issue topics
- Qualitative measure: Examples of impact of TRB research, consensus studies, or published papers on critical issues, including changes in legislation, regulations, or policy

Goal 2. Expand TRB's impact and influence through its objective research, information exchange, and advisory activities.

- # of unique individuals who are members and friends of TRB standing technical committees
- # of attendees at the TRB Annual Meeting by academic/researcher, government employee, private sector
  - # of first time attendees
  - # of sponsor employees
  - # of Congressional staff
  - # of international attendees
  - # of private sector organizations involved in the TRB Annual Meeting
- % satisfied with the TRB Annual Meeting from post-meeting survey; response rate to survey
- # of papers submitted and peer reviewed by topic
- # of downloads of *Transportation Research Record* papers by topic
- Journal citation impact factor of TRR papers; Altmetrics measures of citation
- # of webinars and attendance at webinars by critical issue topic; % giving positive ratings of webinars
- # of unique individuals who are members of CRP research panels and oversight committees
- # of CRP problem statements received by program
- # of CRP reports by program and by type
- # of downloads of CRP reports by program and by type
- Qualitative measure: value of CRP products based on anecdotal data of impact of individual products as reported in CRP impact reports, including changes in legislation, regulations, or policy
- Sponsor satisfaction scores for consensus studies from sponsor interviews conducted after each consensus study

- # of TRID sessions
- % with positive responses to questions on knowledge of TRB and overall ratings of TRB from a broader transportation stakeholder survey
- Ratings from engagement survey of TRB committee and research panel members
- # of *TRB Weekly* subscribers; open rate
- # of *Upcoming TRB Webinars* newsletter subscribers; open rate
- # of TRB social media followers on LinkedIn, Twitter, and Facebook combined
- Website users/open rates
- Citations of TRB reports/papers in mainstream and trade media

Goal 3. Assure TRB's continued creativity, resilience, and sustainability in an ever evolving world.

- # of young (<35) registrants at TRB Annual Meeting and repeat attendees under age 35
- # of friends of committees
- # of first time committee members each year
- % participation on standing technical committees and research panels by women and underrepresented minorities
- % of committee and research panel chairs who are women and minority
- Registration revenue at the TRB Annual Meeting
- Exhibitor revenue at TRB Annual Meeting
- Patron and advertising revenue at the TRB Annual Meeting
- Global Affiliate revenue
- Annual expenditures versus budget by program area
- Projected TRB Core Program Reserve Fund percentage of operating expenses five years in the future
- CRP projects under contract within nine months of selection of the problem statement by the oversight committee
- % of CRP projects completed by original scheduled date for completion; % completed within 1, 2, 4, and 6 months of the original scheduled date
- % of annual CRP revenues spent on research contracts by program
- % of PIs on CRP contracts who are underrepresented minorities and % who are women
- Average ratings of CRP projects by CRP panels in post-project surveys
- # of partnership activities conducted with other organizations
- Report Review Committee scores regarding consensus study report quality
- # of joint studies/workshops with other NRC divisions
- Staff diversity data; % underrepresented minorities; % women

# *Critical Issues in Transportation 2023*

Presented to TRB Executive Committee  
June 15, 2022

# Societal Goals

Transportation helps support the following 5 broad societal goals:

- Mitigating and Becoming More Resilient to the Impacts of Climate Change
  - Advancing Societal Equity
  - Achieving Zero Transportation-Related Fatalities
  - Protecting and Improving Public Health
  - Strengthening the U.S. Economy and Global Competitiveness
- A thriving society is the ultimate outcome desired from achieving these 5 goals.
  - We recognize that improvements to transportation will be a key means to furthering these goals and their contribution to a thriving society.

# Cross-Cutting Dynamics

All of these goals are interrelated, but all help support a thriving society. There are also several cross cutting dynamics that are related to all of the goals that raise a number of additional important issues, including:

- Financing and Governance
- Workforce
- Technology
- Physical Infrastructure
- Travel Demand

# Proposed Framework



Note: A graphic artist will create an outer circle that the cross cutting dynamics will be shown within.

A number of critical issues are related to each of the societal goals that transportation supports, and others are related to the cross-cutting dynamics.

# Issues Related to Each Societal Goal

There are a number of transportation-related issues associated with each of the five societal goals that transportation helps support. The five goals are also interrelated, so some of the issues are related to more than one of the goals.



# Climate Change

Transportation is a major contributor to greenhouse (GHG) emissions that cause climate change. Not only must transportation change to limit GHG emissions, it must adapt to climate change that is already underway. However, as an industry with ingrained patterns and which is currently largely dependent on energy-dense petroleum products, change will not be easy or immediate.

- What are the most consequential and cost-effective public policy strategies to move the transportation sector toward net zero carbon emissions while taking into account the full life cycle environmental consequences?
- How can risk-based resilience management approaches be incorporated into transportation planning and decision making? What parts of the transportation system are most vulnerable to major disruptive events?
- How can results from climate models be translated into changes in design standards to address sudden severe weather events and those that are slow growing?

# Equity

Transportation planning, operations, enforcement, and decisions affect all aspects of society, often in inequitable ways. Decisions about infrastructure and policy have too often reinforced structural racism or economic disparities and limited the opportunities for some people to thrive. However, transportation is also unique in its ability to provide access to opportunities and address inequities that exist in society.

- How can affordable mobility and accessibility options across multiple modes be cost-effectively provided to disadvantaged populations while accounting for differences across urban, suburban, exurban, and rural areas, and physical/cognitive ability?
- How can bias in data, analytical methods, governance, and decision making be recognized and addressed in a way that ensures that environmental justice is a decision factor rather than simply a procedural requirement?
- How should racial justice and remedying persistent inequities from past decisions be incorporated into current and future transportation decision making?

# Safety

Safety is a stated top priority for all modes of the transportation system, yet progress has been slow in recent years and has even reversed for traffic safety. Safety is inextricably intertwined with other goals, as the system is not equally safe for all, and crashes are a leading cause of death and injury for many age groups. Life-saving improvements have occurred in the last decades, but changes in technology and travel behavior present additional challenges for the future.

- What strategies can be most effective in reducing the growing number of vehicle occupant, pedestrian, and cyclist deaths and injuries? What transferable lessons can be learned from countries, states, and localities that have successfully reduced deaths and injuries (e.g., the safe systems approach)?
- How can the statutory and regulatory framework for transportation become more encouraging of safety performance and culture?
- How can the public sector foster technological innovation as it steers the transition to connected and automated vehicles (CAVs) while ensuring safety, especially during the transition period? How much improvement in safety will actually be achieved through CAVs and other technology improvements?

# Public Health

Recent years have highlighted the importance of robust public health to a thriving society. Not only are infectious diseases relevant to societal health, but so are daily activity, clean air and water, and access to healthcare systems. The transportation system has the potential to affect all of these factors.

- How can public health planning and outcomes, along with public health policy makers, be better incorporated into the transportation planning and decision making process? What are appropriate metrics for measuring health outcomes as part of the transportation planning process?
- Which transportation pollution mitigation measures can be implemented to reduce health risks for those living near major transportation facilities?
- How can access to public health services be more effectively provided through integrated transportation services or through technology strategies?

# Economy and Global Competitiveness

Transportation networks are closely tied to economic productivity and the ability to safely and efficiently move both goods and people. In a closely-connected global economy, transportation's ability to provide the free flow of people, goods, and ideas affects social progress, safety, health, and equity.

- How can evolving technologies help improve transportation efficiency and national productivity, as well as the United States economy? What labor issues arise as a result?
- How can financial, institutional, and competitive barriers be overcome to reduce nationally significant bottlenecks at large-scale, complex transportation facilities?
- How can the transportation network evolve to improve the resiliency and capacity of supply chains in a dynamic and evolving global economy?

# Cross-Cutting Dynamics

Several topics have been identified that have issues that cut across the five societal goals that transportation helps support.

- Financing and Governance
- Workforce
- Technology
- Physical Infrastructure
- Travel Demand

# Financing and Governance

- How do we transition to a new financing system that will work with low or zero emission vehicles, declining power of the gas tax, and increased financial needs to operate and maintain aging infrastructure?
- How can we best address decisions that affect a national network but that are often made at a state or local level, whether by government alone or as a partnership with the private sector?
- How can planning and funding decisions be changed from being largely modally-based programs to a multimodal systems basis?

# Workforce

- How do we make transportation an attractive option for those entering the workforce, given that we are facing shortages of both operators and professional staff in all modes?
- How do we learn from other fields and retrain the existing workforce to use, maintain, and deploy new technologies in transportation?
- What policy issues are raised and need to be addressed to respond to changes in labor dynamics that are happening across industries?



# Technology

- How do we regulate new transportation-related technologies to ensure safety and cybersecurity, given the challenges that government regulators have in keeping up with changes in technology?
- How do we encourage development of new technology, data, and methods to improve transportation decision making and operations while still protecting privacy and safety for all users?
- Who should own data generated by vehicles and the transportation system, and how can the transportation industry keep up with IT development to ensure that existing systems' data storage and cybersecurity remain safe?

# Physical Infrastructure

- How can we use new materials, construction methods, and management strategies to address the higher costs of building, maintaining, and operating infrastructure in the US compared to other nations?
- How do we integrate new technologies (e.g., CAVs, broadband, EV charging) into our existing and planned infrastructure?
- How do we rethink existing incentives and policies to ensure that adequate investment is made in maintaining existing infrastructure assets and ensuring resilience of the system?

# Travel Demand

- What will be long-term changes in travel demand in light of telemobility, changes in the location of economic activity, demographic changes, and new and evolving mobility options, and how should we deal with uncertainty associated with future travel demand?
- How can we best understand how telecommunications is changing demand today and the implications for future demand?
- How can we manage and accommodate demand to optimize and accommodate movement of people and goods, especially in rapidly growing areas, given societal goals?



## TRANSPORTATION RESEARCH BOARD

### **Panel on Regulatory Issues for Automated Vehicles**

As automated vehicles are being introduced on a more widespread basis in a number of states, many regulatory issues have arisen at both the federal and state levels. Historically, vehicle-related regulatory issues have been a federal responsibility, and driver-related regulatory issues have been a state responsibility, but when the vehicle takes over some or all of the driver responsibilities, the situation becomes more complicated. Many current regulations are based on a driver being in the vehicle, thus complicating the ability to have driverless vehicles operating on public roadways without changes to current regulations.

A panel of experts who have been addressing many of the regulatory issues will engage in a discussion with the Executive Committee on the issues that are involved.

Moderator: Nat Ford, Chair of the TRB Executive Committee, and CEO, Jacksonville Transportation Authority

Panelists:

Kristin White, Chief Operating Officer of ITS America

Scott Schmidt, Vice President for Safety Policy at the Alliance for Automotive Innovation

A representative of the American Association of Motor Vehicle Administrators

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## TRANSPORTATION RESEARCH BOARD

May 16, 20221

**MEMORANDUM**

TO: Members, TRB Executive Committee  
FROM: Russell Houston *RH*  
SUBJECT: June 15 & 16, 2022, Policy Session on Goods Movement

The coronavirus disease 2019 (COVID-19) has accelerated a number of changes in goods movement that had already been underway, such as much greater reliance on e-commerce; automation, especially for first and last mile deliveries; enhancing resilience into supply chains; the onshoring of manufacturing of parts and supplies; and driver and broader logistic worker shortages.

According to a year-end Washington Post article “Consumers are spending less today on services like airline travel and restaurant meals than they did in early 2020. But they are purchasing about 15 percent more goods like furniture and computers.” This change is impacting aspects of the supply chain across the United States and the world.

COVID-19 related disruptions have demonstrated the fragility of the nation’s goods movement system, as well as the vulnerability of supply chains and the significant impact of their disruption on the economy and society within the U.S. and abroad. Issues, especially around the resilience of global supply chains existed before the pandemic and were greatly aggravated by it.

The session will explore major economic trends affecting how we need to reimagine goods movement; examine vulnerabilities in the goods movement supply chain; and address how and what new technologies may shape future goods movement.

A detailed agenda for the session is below. Brief biographies on our panel members are included after the agenda.

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*Session Agenda*

<b>Time (Eastern)</b>	<b>Wednesday, June 15, 2022</b>
1:15 p.m.	<u>Shawn Wilson</u> , Secretary, Louisiana Department of Transportation; and Vice Chair, TRB Executive Committee <i>Welcome and Session Introductions</i>
1:30 p.m.	<u>Paula Dowell</u> , Vice President, Integrated Planning, HNTB <i>Major economic trends affecting the future of goods movement.</i>
1:50 p.m.	<u>Jolene Hayes</u> , Senior Associate, Fehr and Peers <i>Supply chain issues</i>
2:10 p.m.	<u>Caroline Mays</u> , Director, Planning and Modal Programs, Texas Department of Transportation <i>Automation, technology, and sustainability issues</i>
2:30 p.m.	<i>First Impressions/Perspectives—The following individuals will provide five-minute first impressions on the presentation from various perspectives.</i> <ul style="list-style-type: none"> <li>• <u>Douglas Ceva</u>, VP Customer Lead Solutions, ProLogis (Transportation Logistics)</li> <li>• Daniel Keen, Assistant Vice President, Association of American Railroads (Rail)</li> <li>• <u>Ginger Evans</u>, President, Tower Consulting LLC (Aviation)</li> <li>• <u>Martha Grabowski</u>, McDevitt Distinguished Chair in Information Systems, Le Moyne College; Senior Research Scientist, Rensselaer Polytechnic Institute (Marine)</li> <li>• <u>Michael Ableson</u>, CEO, Arrival Automotive - North America (Automated Trucking)</li> </ul>
3:00 p.m.	Break
3:15 p.m.	<i>Plenary Discussion</i> – Moderated by <u>Shawn Wilson</u>
4:55 p.m.	<u>Shawn Wilson</u> <i>Concluding Remarks</i>
5:00 p.m.	<u>Shawn Wilson</u> <i>Adjourn</i>

<b>Time (Eastern)</b>	<b>Thursday, June 16, 2022</b>
8:30 a.m.	<i>Plenary Discussion</i> – Moderated by <u>Shawn Wilson</u>
9:00 a.m.	End of Policy Session Discussion

## *Policy Session Panelists Biographies*

### **Paula Dowell**

Vice President, Integrated Planning, HNTB



Paula Dowell is a nationally recognized thought leader who has worked with agencies across the country on economic analyses, border studies, freight planning, grant management and economic development. She has focused her career on applying her economic training to real-world decision-making, leading the development of numerous tools and processes to assist agencies in assessing the economic impacts and benefits/costs associated with multimodal transportation investments.

Ms. Dowell has more than 22 years of experience in transportation planning and policy—the last 14 at Cambridge Systematics where she supported some of the most foundational freight and economics projects in Texas, including the Texas Department of Transportation’s recent Statewide Truck Parking Plan, Texas Freight Mobility Plan and Permian Basin Freight and Energy Sector Transportation Plan.

Ms. Dowell is has served on the Transportation Research Boards Standing Technical Committees on Agriculture and Food Transportation, Urban Freight, and Transportation and Economics. She is also an active member of the International Transport Economists Association and Council of Supply Chain Management Professionals.

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### **Jolene Hayes**

Senior Associate, Fehr and Peers



Ms. Hayes is a Senior Associate at Fehr & Peers with over 20 years of experience in transportation, land use, and freight infrastructure planning, including six years of service as Transportation Planning Manager at the Port of Long Beach.

She currently chairs the Transportation Research Board’s Intermodal Freight Transport Committee and is intimately involved in current efforts to understand and develop solutions to the Nation’s supply chain congestion challenges through her recent work with freight industry representatives.

Ms. Hayes has served as a key researcher for freight and logistics studies funded through the National Cooperative Highway/Freight Research Programs on supply chain resiliency and truck bottlenecks, and most recently, the future of autonomous freight vehicles. Her experience serving as Port staff and then transitioning to working on freight projects across the country provides her with a holistic understanding of context-sensitive solutions to today’s supply chain issues.

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**Caroline Mays**

Director, Planning and Modal Programs, Texas Department of Transportation



Caroline Mays joined the Texas Department of Transportation (TxDOT) in late 2012 and has held several positions including, Statewide Freight Coordinator, Freight Planning Branch Manager, Director of Freight, and International Trade/Border Section, Director of Freight, Trade and Connectivity. Ms. Mays was recently appointed as TxDOT's Director of Planning and Modal Programs. She is charged with directing and overseeing all planning activities of the Texas Department of Transportation (TxDOT) through a comprehensive systems approach, ensuring the implementation of a robust multimodal, multidisciplinary, innovative, and consensus-oriented planning process. She is responsible for directing and overseeing Planning and Modal Programs; Aviation, Maritime, Public Transportation, Rail, and Transportation Planning and Programing.

Prior to joining TxDOT, Ms. Mays was a Freight and an Intelligent Transportation Systems (ITS) Planner for the Atlanta Regional Commission, the MPO for the Atlanta region, Georgia. She also worked as a Public Transportation Planner for Rockland County, New York and interned with the United Nations, New York.

Ms. Mays is a member of the American Planning Association and the American Institute of Certified Planners. She serves as the Vice-Chair of the Association of American State Highway Transportation Official's (AASHTO) Special Committee on Freight and is a member of the Transportation Research Board's (TRB) Planning and Logistics Committee. Ms. Mays represents AASHTO and United States on the World Road Association (PIARC) Technical Committee on Freight and serves as the emerging technology working group leader.

Ms. Mays holds a Bachelor's degree in Urban and Regional Planning from the University of Waterloo, Canada and a Master's degree of Science in Planning from the University of Toronto, Canada.

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## TRANSPORTATION RESEARCH BOARD

May 18, 2022

### MEMORANDUM

TO: Members, TRB Executive Committee  
 FROM: Russell Houston *RH*  
 SUBJECT: January 2023 Executive Committee Policy Session

### **January 2023, Policy Session – Action**

The Subcommittee on Planning and Policy Review (SPPR) recommends that the Executive Committee select successful delivery of megaprojects as the topic for the January 2023 Policy Session. Potential components for a session for addressing the successful delivery of megaprojects are included below. Also included in this memo is a list of TRB's critical issues (Attachment A) as well as a list of all past policy session topics (Attachment B) to potentially aid in the committee's discussion on a topic for the June 2022 session.

#### Successful Delivery of Megaprojects

The Project Management Institute (PMI) has documented past studies that have raised concern about transportation megaprojects experiencing large cost overruns, delays in completion dates, misunderstanding of expectations, or all of these. Experts also cite scope expansion as an Achilles heel of megaprojects. However, these outcomes may not be inevitable. PMI also observed that when megaprojects are successful they are distinguished by three major characteristics: a clear strategic vision, total alignment, and adapting to complexity.

This session would explore the challenges to successfully delivering large projects across multiple modes of infrastructure. It would highlight characteristics that successful megaprojects have in common to overcome these challenges. The panel would consist of leaders of successful megaprojects from different modes of transportation.

Among the questions and issues that could be discussed are:

- What are characteristics do successful megaprojects share across a range of modes and regions.
- What is necessary in terms of project management and political support for a megaproject to succeed?
- What role can sponsors with limited megaprojects experience play and what are effective tools for teaming with these sponsors to achieve success?

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- What is risk-based decision making and how can it contribute to the success of a megaproject?
- How have megaprojects furthered societal goals, including equity?
- What role can research (e.g., methods, data, metrics, lessons learned) play to make the successful delivery of megaprojects more common?
- How are unhappy stakeholders addressed, even when the project is successful?
- Can emerging and novel project management methods—agile and hybrid project management approaches, co-production and stakeholder inclusion processes, and values- and ethics-based PM approaches—be leveraged to define and deliver success in multimodal megaprojects?
- What role can/will emerging technology (e.g., AI) play in megaproject delivery, especially on the predictive side of schedule and budget separately and combined?
- What are the complexities (good and bad) that come when megaprojects have multiple sources of funding from Federal, State and Local governments? What are the additional hurdles and steps this brings to the table, which include reporting, oversight, audit, difference in rules/regulations, etc.?
- How can public agencies leverage private sector experience from similar international mega projects?
- What contract types and pre planning practices have led to increased success?

## Attachment A

**TRB Critical Issue**Transformational Technologies

1. Role of policy in development of connected and automated vehicles
  - a. Policy options to manage travel, congestion and emissions, especially from TNCs.
  - b. Policies to achieve net social benefits
  - c. Transition period issues with mixed traffic
  - d. Needed public sector investments, especially infrastructure
2. Shared mobility services
  - a. Relationship to transit
  - b. Regulatory issues between taxis and TNCs
3. Balancing state and federal safety oversight; sharing of information from pilots
4. Government oversight of artificial intelligence
5. Behavioral responses
  - a. # of trips, mode, willingness to pool
  - b. Auto ownership
  - c. Residential & commercial location
  - d. Safety issues with semi-automated vehicles
  - e. Public acceptance of risk with automated vehicles

Serving a Growing and Shifting Population

6. Mega-region internal travel and connections
7. Growth in travel in small/medium cities and in suburban/exurban areas
8. Rural access needs in light of decreasing population
9. Millennial and baby boomer needs, especially in low density areas

Energy/Sustainability

10. Reducing greenhouse gas emissions
11. Policies to move to more sustainable energy sources for transportation
12. Electric powered transportation; impacts on electric grid
13. Sustainability considerations in decision making

Resilience/Security

14. Adding security while maintaining mobility
15. Risk management approach to resilience
16. Adaptation to severe weather events and climate change
17. Security risks from drones
18. Cybersecurity
19. GPS vulnerabilities
20. Evacuation issues

Safety/Public Health

21. Adopting proven and new safety technologies

22. Semi-automated vehicle safety issues
23. Public health's linkage to transportation
24. Mitigation of pollution from transportation
25. Operator fatigue management
26. Unmanned aircraft safety issues
27. Safety management and safety culture
28. Impacts of marijuana and other drugs
29. Pedestrian and cyclist deaths and injuries

#### Equity

30. Equity impacts and opportunities of new technology services
31. Access issues for the economically disadvantaged
32. Environmental justice issues of equitable access and impacts of new facilities
33. Equity issues of alternative finance mechanisms
34. Equity issues of toll financing

#### Governance

35. Devolution's impact on funding and on interstate and international commerce
36. Addressing nationally significant bottlenecks
37. Megaregion and multi-jurisdictional decision making
38. Roles in providing mobility as a service
39. Implications of transformational technologies on institutions
40. Governance of data

#### System performance and Asset Management

41. Managing for system performance
42. How much can new technology substitute for adding capacity; ensuring new technology is incorporated in new infrastructure
43. Investing in preservation and maintenance; asset management and life cycle cost decision making
44. New materials, construction techniques, and maintenance approaches

#### Funding/Finance

45. Role of federal funding; how to pay for federal funding
46. Building support for raising user fees (e.g. fuel tax); efficient, effective, sustainable, and equitable user fees; subsidizing modes that cannot entirely rely on user fees (e.g. transit, inland waterways)
47. Responding to decreases in revenues due to improved energy efficiency and electric vehicles; mileage-based user fee issues

#### Goods Movement

48. Providing for growth in freight; changes in freight demand
49. Reducing emissions from freight
50. Worker shortages in freight
51. Technology changes in freight
52. Changes in how packages are delivered

53. Truck size and weight issues
54. Impacts of mega-vessels on ports and channels
55. Distribution of domestic energy

Institutional and Workforce Capacity

56. Local institutional capacity to address current issues
57. Preparing the workforce for new technologies and future issues
58. Attracting underrepresented groups into transportation
59. Displacements of workers by technology

Research and Innovation

60. Learning from new technology experiments and sharing lessons learned
61. Impact of rapid development and deployment of new technology on traditional research
62. Accelerating public sector research and innovation
63. Development and retention of the teachers and researchers of tomorrow

**Attachment B****Past Session Topics**

Date	Topic	Rapporteur
1/88	Current Status & Future Outlook for Air, Rail, Trucking, Highway, Urban, & Water Transportation	Hoel & Koltnow
6/88	Small Group Discussion of Exec. Comm. Policy Initiatives	
1/89	Marine & Intermodal Transportation	Hoel
6/89	Transportation Response to Problems of Air Quality	Paaswell
1/90	High-Speed Ground Transportation	Walton
6/90	Relationship Between Transportation & Economic Development	Wolpert
1/91	The Environmental Imperative, Fuel Use, & Surface Transportation Funding	Sussman
6/91	Air Passenger Transportation: Congestion Pricing for Airports	Harris
1/92	Transportation Policy Research Priorities for the 1990s (USDOT Associate Administrators for Policy)	Lamm
6/92	International Economic Development & U.S. Transportation	Walton
1/93	U.S. & International Efforts to Assist Russia & Other Former Soviet Republics on Transportation-Related Problems	Borrone
6/93	Implications of U.S. Defense Conversion for Transportation	DeLong
1/94	Transportation Policy Priorities to Support a National Transportation System	Millar
6/94	The "Green" Car: Technological, Institutional, & Environmental Issues	Yerusalim
1/95	Intermodal Freight Transportation: Barriers, Linkages, and New Technologies	Wormley
6/95	Financing Transportation in the Post-ISTEA Era	Kelly
1/96	ISTEA: Impacts and Issues for Reauthorization	Wachs
6/96	Cross-Border Transportation Issues	Martinez
1/97	Institutional Arrangements for Transportation: Impacts of Changing Roles	Sterman
6/97	Effects of the Federal Role on the U.S. Aviation System: Current Status, Prospects for & Barriers to Change	Riniker
1/98	Zero-Car Households: Strategies To Improve Mobility & Accessibility for the Carless	Fitzgerald
6/98	Land Use and Transportation: Relationships and Trends	Gilbert
1/99	The Clean Air Act: Goals, Issues, & Impacts on Transportation	Winstead
6/99	Industry Consolidation: Regulatory Issues, Cross-Modal Comparisons	McCaig
1/00	Approaches to Achieving Advances in Transportation Safety	Canby

Date	Topic	Rapporteur
6/00	Transportation Implications of E-Commerce and Telecommunications Technology	Giuliano
1/01	A System Wide View of Transportation Finance	Campbell
6/01	Freight Transportation in the U.S. Economy: Capacity Issues and Operating Challenges	Wilding
1/02	U.S. Petroleum Dependence: Issues and Prospects for the Transportation Sector	Frosch
6/02	Work Force Development and Staffing Needs in Transportation	Meyer
1/03	Decision-Making Processes for Public Sector Transportation Investments	Kirby
6/03	Transportation Security Initiatives: Balancing Public Perceptions, Political Expectations, and Practical Applications	Rebensdorf
1/04	The Impact of Global Warming on Transportation	Kanafani
6/04	Shifting Patterns and Growth of Global Trade: Implications for the Transportation System	Shucet
1/05	Innovative International Roadway Safety Initiatives	McNeil
6/05	How Should America Pay for Transportation?	Morris
1/06	Raising the Public Profile of Transportation	Butler
6/06	20 <sup>th</sup> Century Institutions Mismatched to 21 <sup>st</sup> Century Missions	Miller
1/07	The Energy Component of Transportation Sustainability	Gittens
6/07	Innovative Transportation Performance Measures	Garber
1/08	Public-Private Partnerships: With an Emphasis on Equity	Rosenbloom
6/08	The Role of Transportation in Climate Change Mitigation	Johns
1/09	Key Issues in Transportation and Climate Change	N/A
6/09	Issues and Perspectives on Water Transportation	Scalzo
1/10	Dialogue with the U.S. DOT Deputy Secretary	
6/10	Definitional Issues Related to the Concept of Livability	Clark
1/11	Multimodal Freight Policy, Corridor-Level Priorities, and Funding Strategies	Conti
6/11	Financing and Funding Transportation in a Transitional Period	Seltzer
1/12	Inland Waterway Transportation: Issues, Challenges, Opportunities	Hancock
6/12	New Information and Telecommunication Technology Applications to Transportation: Opportunities and Challenges	Sperling
1/13	International Research Activities: Issues, Priorities, and Lessons Learned	Sinha
6/13	Energy: Transportation Fuels and Sources	Hendrickson
1/14	Session on Aviation Issues: Challenges and Opportunities	Arroyo
6/14	Connected Vehicles—A Pathway to Automation	Washington

Date	Topic	Rapporteur
1/15	Big Data	Fotheringham
6/15	The Intersection Between Urban Goods Movement, Smart Growth, and Public Health	Breakouts
1/16	Advancing Public Health Through Transportation: Challenges, Opportunities, and Lessons Learned	Breakouts
6/16	Cyber Security in an Age of Transformational Technology	Breakouts
1/17	Climate and Extreme Weather Resilience	Houston
6/17	Smart Cities and Transportation	Breakouts
1/18	Public Transportation: Challenges and Opportunities	Breakouts
6/18	Electric Vehicles	Breakouts
1/19	Transportation's Role in the Wellbeing of Rural Communities	Breakouts
6/19	Distraction	Breakouts
1/20	Artificial Intelligence	Breube
8/20	Urban Air Mobility	Virtual
1/21	The Impact of COVID-19 on Personal Mobility and Social Equity	Virtual
7/21	Racial Equity	None
1/22	Decarbonization of the Transportation Sector	None



**TRB Technical Activities Division Read-Ahead Information for Executive  
Committee**  
June 2022

**Program**, Stephen Maher, Deputy Division Director and Director for Program  
Content

*The Program Office in TAD is responsible for the volunteers and all the technical programs for which the volunteers provide content, Annual Meeting and conference content development and paper review, and developing and maintaining relationships with Core Program sponsors.*

*Field/State Visits & State DOT TRB Representatives*

Due to COVID, the annual field visits, also known as state visits, ordinarily conducted in-person by TAD program staff, were not possible for two years. In 2021, the “visits” were conducted virtually, organized by regions of the country and included updates on TRB activities and state DOT activities, as well as wide-ranging discussions. A virtual meeting of the TRB State DOT Representatives also took place in December of 2021.

In 2022 the visits will continue to be virtual unless a state requests an in-person visit. This year we have proposed an option of region-centered virtual meetings or topic-centered virtual meetings. We expect to have a virtual State Representatives meeting later in the year as well.

In the future we plan to return to in-person visits but to enhance them with virtual options to expand methods of contact and communication with the state DOT and other agencies we typically visit as part of this program.

*Value Propositions*

At its July 2021 meeting, the Technical Activities Council developed a set of value proposition for different stakeholders involved in TAD activities. Public Transportation Group Chair Brendon Hemily developed some of the value propositions into a brochure that was used to encourage people to get involved.

*Committee Restructuring*

TAD conducted a thorough restructuring of its committees, which was initiated in 2018 and worked out in detail during 2019. The new structure was rolled out at the 2020 Annual Meeting, just before COVID shut down all in-person events and required everyone to focus elsewhere. One aspect of the restructuring that did take place during COVID was a gradual return to normal committee sizes; when

committees were combined in the restructuring, the terms of members from both committees were honored until their normal rotation date. April 2022 marked the last rotation dates for these members.

The aspect of restructuring that suffered from COVID was working on culture changes and learning new ways to do things. Coming out of COVID, we are still clarifying processes, Annual Meeting session allocations, etc. Now that a staff restructuring has been implemented, the Program staff are charged with ensuring that the strategic goals of the committee restructuring are achieved: strategic focus on critical and emerging issues, leveraging the multi-disciplinary and multi-modal components of the TAD structure to address these issues, and improving the diversity of committee membership and leadership. Engaging younger professionals and professors is critical to TAD's future.

### **Publications and Outreach**, Patti Lockhart, TAD Director for Publishing and Outreach

*The Publications Office in TAD is responsible for TRB's peer-reviewed journal, the Transportation Research Record and for other TAD publications. This office also promotes communication with paper authors and their institutions and with TAD volunteers to strengthen the work of the volunteers, disseminate research findings, and otherwise promote the work of TAD's committees.*

#### *Transportation Research Record Journal*

The TRR continues to improve in stature and quality. The impact factor rose to its highest level to date. Scholarly citations increased significantly—75% of papers received more than 1 citation, up from 38% in 2018; 4% had more than 10 citations in 2021 up from 0.05% in 2020. Downloads of TRR papers has risen 30% to more than 150,000. The journal continues to lead the field in the practical areas of policy and patent citations.

Diversification of the content stream made considerable headway in 2021: 48% of submissions came from outside of the Annual Meeting submission process. Partnerships with outside organizations like the International Bridge Conference and the Association of Asphalt Pavement Technologists have been solidified and will provide quality content for the foreseeable future. Focus Issues on COVID-19 and Freight and Supply Chain Logistics also contributed to the diversification.

Last summer TRR staff started a process of promoting articles related to equity issues in transportation. Leveraging our publisher Sage's platform and the press offices of authors' institutions helped attract attention to these important contributions. Papers by TRB's Minority Student Fellows were also highlighted.

Regular meetings with the TAD Publications Advisory Board and the Editorial Board working group have helped establish a framework for improving the quality and diversity of the Editorial Board. Editorial Board evaluation and rotation started this spring and a new editor training protocol has been implemented to promote the highest level of ethical, bias-free review. The Publications Advisory Board is currently working on 1-year and 5-year strategic goals.

### *Other TAD Publications*

TAD produces a few practitioner guidebooks that are used internationally. We are moving toward modernizing the formats of these documents and giving them broader exposure, in addition to updating the technical content. We have published *Landslides: Investigation and Mitigation* as a fully digitized ebook and worked with the National Academies Press (NAP) to migrate the book to their sales platform. We also have digitized the 7th Edition of the *Highway Capacity Manual* and worked with NAP to produce a print version for sale on their platform.

### **Conferences**, Ed Leonardo, TAD Director for Meetings

*The Meetings Office in TAD is responsible for all logistics for the TRB Annual Meeting and for all the smaller conferences if they take place outside of NASEM facilities.*

TAD is moving back to in-person conferences. Of the ten conferences planned for 2022, all but one will be held in person, in various locations across the country:

- Roundabouts, May 15-18, Monterey, CA
- Sustainability & Emerging Transportation Technology (SETT), May 31-June 2, Irvine
- Harbor Safety, June 13-15, Boston, MA
- Automated Road Transportation Symposium (ARTS), July 18-21, Garden Grove, CA
- Law Workshop, July 24-27, Portland, OR
- Tools of the Trade, August 29-31, Boise, ID?
- Mobility, Accessibility, and Demand Response Transportation Conference (TRANSED), Sept 12-16, online
- Scenario Planning in Transportation, September 19-21, Washington, DC
- Visualization in Transportation, November 2-4, Washington, DC
- 3D Printing in Transportation (dates and location TBD)

Ed and his team have also been working with Stephen Maher, TAD Deputy Director, and Chris Rajaratnam, TAD Director of Operations to improve all aspects of conference planning and management. Details are in the next section.

Throughout COVID, the Meetings Office has gathered information on how others' events have performed to inform TRB's planning. They have developed guidance for virtual and hybrid meetings. This office was central to developing COVID policies and protocols for the 2022 Annual Meeting and for operationalizing them. Since the 2022 Annual Meeting, they have developed COVID policies for smaller conferences such as those listing above.

### **Operations, Chris Rajaratnam, TAD Director for Operations**

*The Operations Office is a new unit within TAD and is responsible for administrative and operation aspects of TAD's work. It was created to advance our strategic goal of improving the quality and efficiency of the many and complex operations that support hundreds of committees, subcommittees, sections, groups, and councils as well as the Annual Meeting, smaller conferences, committee rotation, state visits, etc.*

Since beginning the job several months ago, Chris has contributed a number of operational improvements. Most of the examples below were underway before the creation of the Operations Office and by their nature involve coordination across TAD, but they have been substantially advanced in recently months:

- Transfer of the entire year-long Annual Meeting planning process into SmartSheet to provide a single location for all due dates, process, documentation, etc. This was initiated by Patti Lockhart and eventually grew to involve all TAD staff.
- Enhancement of a staff guide for developing and managing conferences by adding more elements related to operational program staff responsibilities; this guide is also linked to SmartSheet.
- Creation of a brief committee guide for developing conferences.
- With the Communications team, development of a guide for communications related to TAD conferences.
- Arrangements for SmartSheet to provide customized training for TAD staff.

In addition, with the support of Gary Walker and the Finance Office staff, TAD negotiated new sponsor agreements with the following agencies:

- Federal Aviation Administration
- Federal Motor Carrier Safety Administration
- Federal Railroad Administration
- Federal Transit Administration
- National Highway Traffic Safety Administration
- Office of the Secretary of Transportation-Policy
- Office of the Secretary of Transportation-Research (+ Volpe Center)
- Pipelines and Hazardous Materials Safety Administration

# TRB Strategic Communications Update for the Executive Committee

**NATIONAL  
ACADEMIES** *Sciences  
Engineering  
Medicine*

**TRB** TRANSPORTATION RESEARCH BOARD

JULY 2022

- **Branding:** Academies new logo and templates have launched; TRB co-branding work in progress
- **Marketing products:** *TRB Weekly* growing slowly; social media and new website traffic are growing much more quickly
- **Audience development focus:** Some audiences are finding us, but we have much work to do to help others find us



- **Mainstream media coverage:** Our work publicizing the blogs is helping drive an increase in “making it easy” for journalists to use our findings
- **DEI marketing campaigns:** New perspectives highlighted are drivers of developing new audiences
- **Developing new processes, realigning responsibilities:** Strengthening documented guidelines for when communications services come into play; less administration of webinars

The  
New York  
Times

TIME

WIRED

Bloomberg

CAR AND DRIVER





- **Communications strategy evolution:** Changes – especially reduced staff capacity – mean we are evaluating the best ways forward for the podcast, videos, event communications, internal staff and volunteer communications, webinars (as mentioned), and other tactics
- **Changes at OCCO:** Used to report directly to David May. Now we report to Mimi Koumanelis, Division Communications Director. More navigation of charging, responsibilities, OCCO cross-division communications
- **Changes at TRB:** With Neil leaving soon, working with Tom, Ann, Chris, and others to learn how they are preparing for a change of leadership



## **Diversity, Equity, and Inclusion (DE&I) Strategic Plan Update Transportation Research Board**

### **Mission**

TRB's Diversity, Equity, and Inclusion (DE&I) Initiative's mission is to create and foster an inclusive environment that leads to increased diversity of participants in TRB and equitable outcomes for the transportation system. The TRB DE&I Strategic Plan provides a roadmap for achieving this mission.

### **Membership**

The Special Committee chair is Dr. Carol Lewis, Texas Southern University, and the members are as follows:

- Gloria Bender, TransSolutions LLC
- Alva Carrasco, WSP
- Joey Goldman, Kearns & West
- George (Avery) Grimes, Patriot Rail Company, Chair of TAC
- Tanisha Hall, Fairpointe Planning, LLC
- Chris Hendrickson, Carnegie Mellon University: member of Executive Committee, SPPR, and Chair of the TRB Division Committee
- Hyun-A Park, Spy Pond Partners, LLC
- Natalie Stiffler, City of Boulder
- Kimberly Webb, Michigan Department of Transportation

### **Updates on Strategies and Associated Action Items**

The following are the seven strategies and associated actions that have been accomplished or are underway in TRB:

#### Strategy 1

*Identify practices and develop primers for committee and panel chairs, and TRB staff that ensure equitable opportunities for all, and highlight strategies and resources used to recruit, welcome and actively involve a more diverse committee and panel membership.*

- TRB is reviewing and implementing tools recently released by the NASEM-wide DEI Council: the Inclusive Language Guide and the Inclusive Meeting Scorecard.

#### Strategy 2

*Engage with transportation-related organizations and other appropriate organizations that serve women and members of minority groups that are underrepresented in TRB to increase their members' awareness of and participation in TRB.*

- TRB is collaborating with COMTO through their MOU, recently by submitting 4 articles (profiling the Minority Student Fellows Program and 3 equity-related

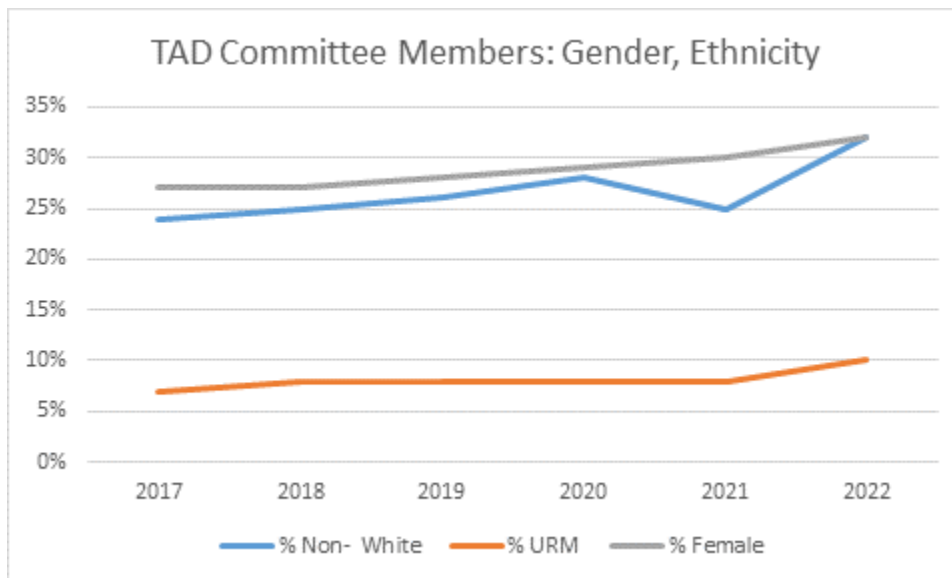
standing committees) for its *Accelerate* magazine, partnering with TRB on its virtual career fair, and by distributing calls for nominations for CRP projects.

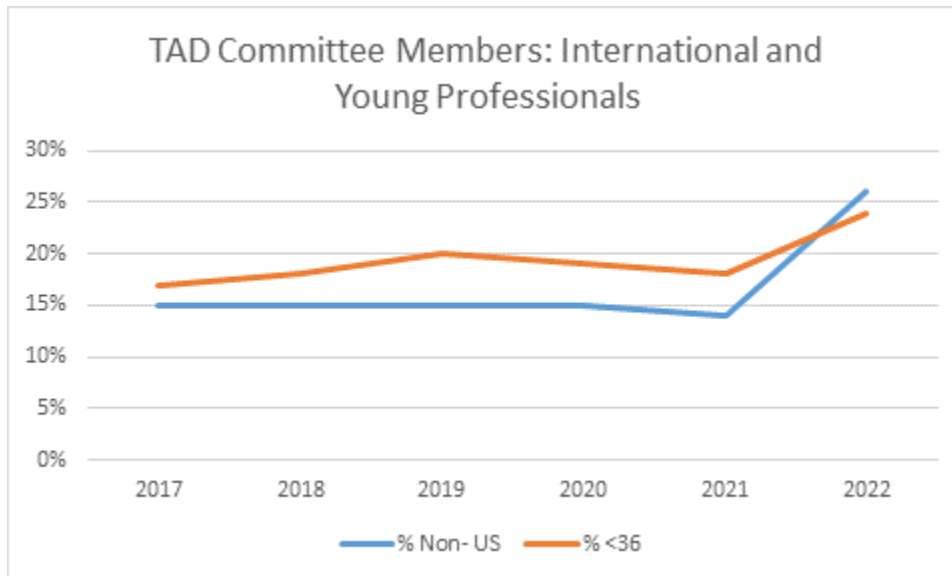
- TRB has begun implementation of its MOU with Latinos In Transit through partnering with TRB on its virtual career fair and through selecting a TRB senior program officer to serve on its board of directors.
- The ACRP manager is developing an MOU with the Airport Minority Advisory Council (AMAC).
- In addition to the organizations that TRB has MOUs with, some of the other organizations that TRB works with to recruit CRP panel members include the Women's Transportation Seminar, Historically Black Colleges and Universities, and the Society of Hispanic Professional Engineers.

Strategy 3

*Find new ways for Annual Meeting and specialty conference attendees to engage in a way that creates openings for everyone to have equal opportunities to make connections and feel included, welcomed, and able to participate.*

- TRB staff are continuing to work with FHWA Dwight David Eisenhower Transportation Fellowship Program (DDETFP) staff to engage the 200+ DDETFP fellows in standing committees' meetings and activities, and other Annual Meeting sessions/events, especially those planned by the Young Members Council.
- Mentoring initiatives: TRB staff/volunteers will again match all Minority Student Fellows with Annual Meeting mentors. YMC subcommittees are also establishing similar Annual Meeting mentoring initiatives.
- Continued and sustained improvements in engagement of TAD standing committee members by gender, ethnicity, international status, and young professional status.





#### Strategy 4

*Identify practices/and develop primers for TRB staff and the contracting office to identify and minimize barriers to achieving greater diversity among TRB contractors and their lead staff, whether they are suppliers or research consultants.*

- The CRPs continue to ask organizations submitting proposals about how their team would bring a diverse and inclusive approach to their research, and policies or programs that they have in place to promote diversity and inclusion.
- TRB's ACRP used project teaming capabilities software, its [IdeaHub](#) portal, to allow contractors and sub-contractors to connect when submitting a proposal—thus facilitating opportunities for finding the right expertise and connecting with disadvantaged business enterprises and minority-owned businesses.

#### Strategy 5

*Identify and minimize barriers to achieving greater TRB staff diversity.*

- The National Academies' Director of Workforce Diversity and Inclusion is implementing the first employee resource group (ERG)—one for Black staff and their allies. An ERG is based on staff interest and can be focused on any dimension of diversity (race/ethnicity, gender, sexual identity, disability, etc.).
- The new NASEM Diversity Council, on which TRB has representation, is addressing staff diversity issues through engagement activities and implementation of an action plan built upon the following five areas:
  - Foster Culture of Inclusion & Belonging
  - Examine and Refine Hiring & Advancement Policies & Practices
  - Apply a DEI Lens to Programs & Initiatives
  - Processes, & Practices to Diversity Academy Members, Volunteers, Contractors & Local Partnerships
  - Increase Accountability, Communication & Data Transparency

- NASEM HR is advertising widely in publications that target diverse populations and is partnering with a company that assists with focused recruiting of candidates based on characteristics such as attendance at an HBCU and STEM background.
- The NASEM Diversity Council has been carrying out the following work:
  - Convening staff engagement sessions;
  - Developing toolkits and resources including the newly released; Inclusive Language Guide and the Inclusive meeting scorecard; and
  - Creating an online onboarding curriculum called Creating a Respectful Workplace.

### Strategy 6

*Ensure that technical activities and research projects address diversity, equity, and inclusion.*

- The CRPs have a robust array of ongoing and newly funded projects that address DE&I-related topics. A sample array of some of the projects in progress include the following:
  - [ACRP 03-59](#) Strategies to Address Homelessness at Airports
  - [ACRP 04-24](#) - Guidelines to Develop an Anti-Human Trafficking Action Plan for Airports
  - [BTSCR 12](#) - State Practices Promoting Older Driver Safety
  - [BTSCR 15](#) - Highway Safety Behavioral Strategies for Rural Areas
  - [NCHRP 08-131](#) - Access to Jobs, Economic Opportunities, and Education in Rural Areas
  - [NCHRP 08-160](#) - Guide to Identify and Mitigate the Negative Effects of Gentrification Caused by Transportation Investment
  - [NCHRP 08-161](#) - Cultivating Accountability Through Meaningful Public Engagement
  - [NCHRP 20-06/25-04](#) - Laws Governing Homeless Encampments in Transportation Rights-of-Way
  - [TCRP B-46](#) - Tactile Wayfinding in Transportation Settings for Travelers Who Are Blind or Visually Impaired
  - [TCRP B-47](#) - Impact of Transformational Technologies on Underserved Populations
  - [NCHRP 08-147 & TCRP B-49](#) - Improving Public Transportation in Rural Areas and Tribal Communities
  - [TCRP H-59](#) - Racial Equity, Black America, and Public Transportation
- ACRP hosted an Insight Event about systemic racism issues at airports in April 2022. A conference proceedings report that summarizes discussions is in progress.
- During its Spring 2022 meeting, the Marine Board heard a keynote address by Deputy Secretary Polly Trottenberg called “DEI USDOT Viewpoint and Initiatives” and held panels and discussion segments titled “The Positive Power of DEI,” “DEI Workforce Issues and the Future of Education in

Maritime,” and “Federal Agency Leadership DEI Roundtable.” The Board will further its DE&I work by examining the current paradigms for maritime infrastructure discretionary grant funding programs and the potential systemic policy gaps associated with mitigating adverse effects of port projects on surrounding communities.

- TRB will host [TRANSED: Mobility, Accessibility, and Demand Response Transportation Conference](#) in September 2022 which has the theme of “Inclusive Accessible and Sustainable Demand Response Transportation.”
- A consensus study committee, the Committee on Data, Metrics, and Analytic Methods for Assessing Equity Impacts of Surface Transportation Funding Programs” has been meeting since December 2021 and plans to release its report in 2023.
- Transportation Research Record (TRR) staff are maintaining the following open-access collections:
  - [COVID-19 and Transportation](#): papers covering the impact of the virus on transportation;
  - [Minority Student Fellows Papers](#): from the 2010-2022 cohorts of all fellow papers accepted for publication; and
  - [ACRP Graduate Award Program on Public-Sector Aviation Issues](#) from the 2010-2022 cohorts of all Graduate Research Award recipients.
- TRB held its first 4-Week Emerging Transportation Leaders Networking Challenge focused on engaging transportation professionals who are 35 years old and under. The Challenge began with a virtual TRB Careers in Motion Networking Fair on February 17<sup>th</sup> in partnership with AASHTO, COMTO, the Council of University Transportation Centers, Latinos in Transit, and Young Professionals in Transportation. It continued with weekly assignments focused on networking with the broader professional TRB community.
- TRB’s Transportation Research Integrated Database (TRID) has DE&I-related snap searches on accessibility, social equity, tribal transportation, and underserved populations.
- TRB hosted two DE&I-related webinars: “Creating Inclusive Mobility; Transportation in an Aging Society—The Future is Now” and “Improving Diversity and Inclusion Programs in Public Transportation.”

### Strategy 7

*Improve existing data, information, and communication mechanisms to support all strategies.*

- TRB Division Committee is implementing the National Academies’ new racial/ethnic categories for collecting demographic data from TRB volunteers (which now allow people to select an unlimited number of race/ethnic categories when identifying their race/ethnicity). In addition, the Division Committee will begin collecting data on the panel members who were nominated but not selected for a CRP.

- The Communications staff have also worked with TAD standing committees to highlight transportation issues relative to nationally recognized months focusing on diversity issues. Those months are: February—Black History, March—Women’s History, and May—Asian American/Pacific Islander Heritage.
- TRB activities are regularly featured on the [DEI homepage of the National Academies](#).
- DE&I topics have been highlighted into two podcasts in [TRB's Transportation Explorers series](#):
  - Jacky Grimshaw: Pinpointing Community Needs for Policymakers
  - Alan Jette and Gary Weissel: Wheelchairs on Airplanes
- TRB’s Communications Department has released the following articles on its blog (on TRB’s webpage):
  - [Making Travel More Equitable for People with Disabilities](#)
  - [Finding, Keeping, and Advancing Women in the Transportation Workforce](#)

# Strategic Plan for TRB International Activities 2022-2027

*Administered by the*  
Executive Committee, Subcommittee on International Activities

## Vision

TRB's International Activities facilitates actions that result in a safe, more secure, and sustainable global transportation system through bilateral and multilateral international engagement and collaborative research conducted through international cooperation.

## Mission

The mission of the Subcommittee on International Activities of the TRB Executive Committee is to provide guidance and support on building and strengthening strategic international transportation partnerships, and leveraging TRB activities, committees, and publications to advance impactful transportation research and practice around the globe.

## Goals and Objectives

**Goal One:** Enhance and leverage TRB's impact with global entities and value by engaging with non-U.S. colleagues and partners.

- Partner with international transportation organizations through formal and informal agreements and action plans to achieve this goal.
- Pair international partner organizations' committees and research panels with relevant TRB technical committees and research panels to include international perspectives in joint programs and twinning research opportunities
- Encourage more international participation in the TRB Annual Meeting and in TRB committee activities.
- Encourage participation of TRB volunteers and staff in international conferences and other international convening activities.
- Offer networking and peer exchange opportunities for international participants of the TRB annual meeting and other activities, including encouraging informal mentorships of young international researchers.

**Goal Two:** Achieve bilateral and multilateral international cooperative benefits by leveraging TRB and international partner events.

- Create opportunities for international dialogue and shared resources to advance research that would address critical global, transcontinental, or international transportation issues.
- Build globally shared knowledge (such as TRID and TRR) and networks through the exchange and promotion of research and innovation results with and among TRB's international partners.
- Support sponsorship and co-sponsorship of international conferences to ensure they address criteria for international activities and leverage existing international partnerships.

**Goal Three:** Encourage international collaboration of transportation research and practice across the world and in all modes of transportation.

- Measure TRB's international activities based on information developed, identify opportunities to grow and enhance the international activities.
- Through TRB's International Coordinating Council as a forum of TRB committees and international partner organizations, encourage international collaboration on addressing TRB's critical issues.
- Using TRB and international partner events, peer exchanges, international visits and communication resources, present and share the impact TRB's reports, resources, and international activities have on international organizations and their transportation programs.

Goal Four: On behalf of the TRB Executive Committee, provide oversight and strategic direction to TRB's international activities.

- Receive reports from TRB's International Coordinating Council and other TRB international programs regarding TRB's international activities on a regular basis and provide reports on these activities to the full Executive Committee.
- Review draft memoranda of understanding or other types of agreements with international transportation organizations.
- On behalf of the Executive Committee, propose strategic international direction to TRB programs and activities, taking into account fiscal and staffing constraints.





Marine Board visits Altasea at the Port of Los Angeles,  
6 April 2022



Marine Board aboard the MV Mauretania, 6 April 2022



# MARINE BOARD

of the

TRANSPORTATION RESEARCH BOARD

TRB Executive Committee Meeting  
June 16, 2022

*Martha Grabowski, Chair*

*Craig Philip, Vice Chair*

*Scott Brotemarkle, Program Director*

# 2022 Marine Board Areas of Interest

- Autonomous Shipping / Future of Navigation
- Maritime Resilience
- Future of the Maritime Supply Chain
- U.S. Offshore Wind Energy Development
- Towards Zero Emissions Shipping
- U.S. Maritime Policy
- Arctic Maritime Operations



## Crosscutting Elements

- Human and Intellectual Capital
- Safety Management, Culture and Inspections
- Cyber in the Marine Transportation System



<https://www.dw.com/en/how-do-offshore-wind-farms-affect-ocean-ecosystems/a-40969339#>

Retrieved 21 August 2021

# Marine Board Spring Meeting, 2022

*Beckman Center, Irvine CA, April 4-7*

## Diversity, Equity and Inclusion (DEI) in Marine Transportation – *Focus Session*

- **Keynote:** DOT Deputy Secretary Polly Trottenberg
- **Panel discussions:**
  - Positive Power of DEI in Maritime & Offshore
  - Human Capital and Workforce Issues
  - Federal Leadership Panel – USCG, NOAA, MARAD, Multi Agency Committee on MTS
  - Underserved Community Impacts of Ports and Freight Mobility
- **Ports of LA, Long Beach water tour**
  - Supply Chain, Energy Security, Automation, Decarbonization, DEI in Port Planning



*DOT Deputy Secretary Polly Trottenberg, Marine Board Chair Martha Grabowski, Vice Chair Craig Philip, Marine Board Spring 2022 meeting, 5 April 2022*



*Gina Martinez, Wilmington/Port of Los Angeles community representative, briefing Marine Board, Pier 56/Altasea, Los Angeles, 6 April 2022*



*2 cruise, 1 container ship at anchor, Port of Los Angeles, 6 April 2022,*



*Evergreen container ship loading, Port of Los Angeles, 6 April 2022*

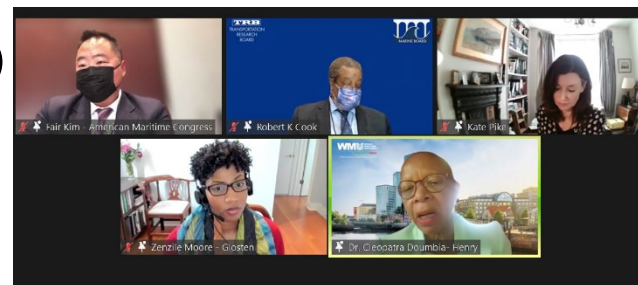


# Marine Board Spring Meeting, 2022

*Beckman Center, Irvine CA, April 4-7*

## Diversity, Equity and Inclusion (DEI) in Marine Transportation – Focus Session Takeaways

- Positive Power of DEI
- Shortages: *Mariners, STEM, Maritime Security Officers*
- Federal programs, plans, metrics
- **Port, Freight Mobility Impacts on Underserved**
- **Tour:** Supply Chain, Energy Security vulnerability, Labor and Underserved Impacts
- **Missing:** LGBTQ, Disability, Remote workers



Robert Cook (center) leads 'Positive Power of DEI', Marine Board Spring meeting, Focus Session on DEI, 5 April 2022.  
 From top left: Fair Kim, President, American Maritime Congress/MEBA; Dr. Kate Pike, Field Research LTD; Dr. Cleopatra Dombia-Henry/WMU, Dr Zenzile Moore, Glosten Naval Architects



Cosco container ship loading, Port of Los Angeles, Cranes up, 5 pm 6 April 2022



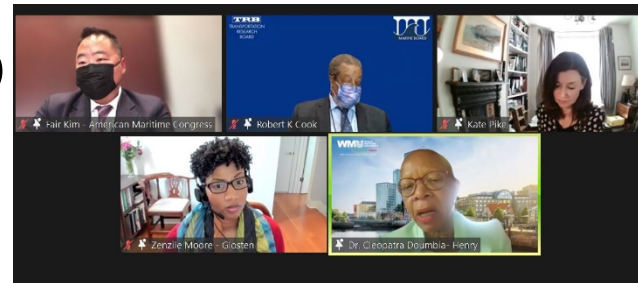
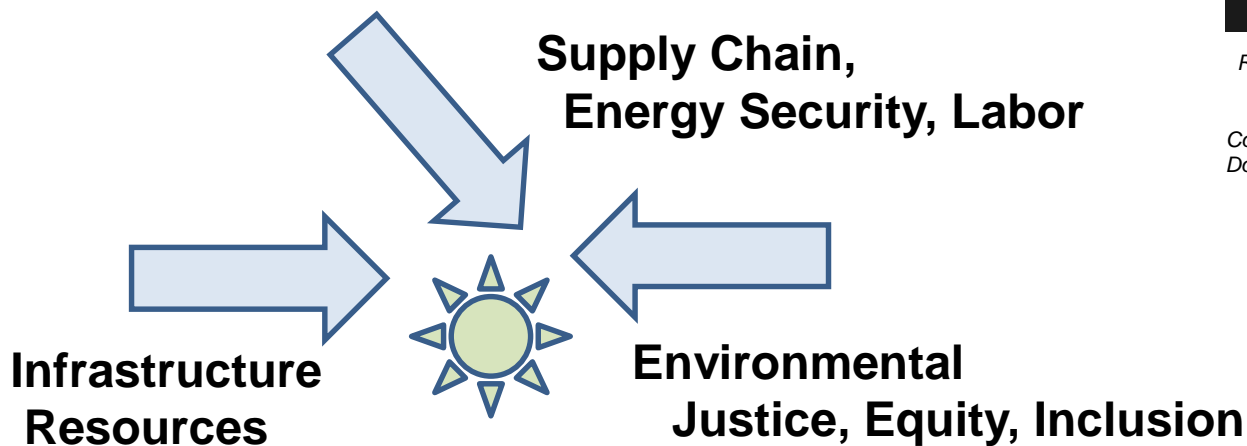
Left: Containers are piled high on Drumm Ave., Wilmington/Port of Los Angeles,  
Right: Residents protest truck traffic. Both: LA Times, 1 March 2022

# Marine Board Spring Meeting, 2022

*Beckman Center, Irvine CA, April 4-7*

## Diversity, Equity and Inclusion (DEI) in Marine Transportation – *Focus Session*

- Takeaways



Robert Cook (center) leads 'Positive Power of DEI', Marine Board Spring meeting, Focus Session on DEI, 5 April 2022.  
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Cosco container ship loading, Port of Los Angeles, Cranes up, 5 pm 6 April 2022

[Containers are piled high on Drumm Ave.,](#)  
 Wilmington/Port of Los Angeles, LA Times, 1 March 2022





# Marine Board Next Steps

## Diversity, Equity and Inclusion (DEI) in Marine Transportation

- Engage Sponsors
  - Webinars for agile response
  - Frameworks for inclusion, accountability
  - Not just metrics or processes
  - Leverage NSF convergence research
  - Self Funded Workshop
- **Fall 2022 Meeting – Nov 1-2 Washington, D.C. Infrastructure, DEI Opportunities**
- **Missing: LGBTQ, Disability, Remote workers**



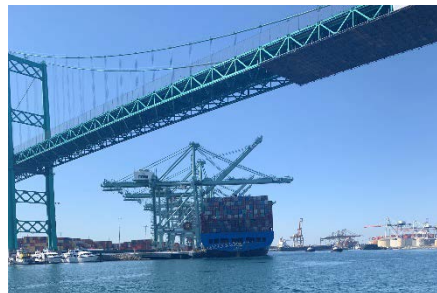
CAPT Robert Cook, Neil Pedersen, Charlie Williams II during Marine Board Spring 2022 water tour of the ports of Los Angeles-Long Beach, aboard the MV Mauretania, 6 April 2022.



Marine Board members Charlie Williams II, Dale Sause, Tom Menzies/TRB, Ellen Menzies, Ally Cedeno, CAPT, CDR Laura Springer, USCG aboard the MV Mauretania, 6 April 2022



[Containers are piled high on Drumm Ave., Wilmington/Port of Los Angeles, LA Times, 1 March 2022](#)



A view from under the Long Beach International Gateway, 6 April 2022

# TRB - Marine Board Activities

## On Going Activities

### Workshops and Conference Support

- 2022 National Harbor Safety Committee Conf  
*June 13-15, 2022 Boston*
- 2022 SNAME Maritime Convention  
*September 27-29, 2022 Houston*
- 2022 Maritime Risk Symposium  
*November 15-17, 2022  
Argonne National Lab*

### Partnerships with PIANC, SNAME



*Ships at anchor outside of the Ports of LA and Long Beach*



*Marine Board Chair Martha Grabowski and Marine Board Member Geraldine Knatz at ALTASEA at the Port of Los Angeles, 6 April 2022.*



*Marine Board Chair Martha Grabowski and Marine Board Vice Chair Craig Philip at USDOT in Washington, D.C., 19 April 2022*

## Young Members Coordinating Council Report, July 2022

In its thirteenth year, the Young Members Coordinating Council (YMCC) has continued to develop and promote opportunities for involvement, resources, connections, and representation in all levels of TRB. Evolution of YMCC continues following the Technical Activities Division's Strategic Alignment effort and as the field of transportation continues to advance.

### Organization

YMCC is one of four Coordinating Councils and continues to have representation from most TAC Groups, although, the level of participation varies. Some newly established Group level subcommittees have been meeting beginning at the 2021 January Annual Meeting and are building momentum with various initiatives. Other new Group subcommittees are still under consideration.

Eleftheria (Ria) Kontou effectively assumed the YMCC Chair position April 15, 2021. Under Dr. Kontou's leadership, YMCC continues to hold periodic meetings and to promote and maintain young professional involvement at an effective level of young member activity including:

- Documenting key points for YMCC and its Subcommittees to provide input to Group and Section leadership, as well as TAC and the Executive Committee
- Mentoring Programs organized at the Group Subcommittee level
- Exploring strategies and platforms to help foster effective communication with young members and friends

The YMCC Chair continues to serve as an active member of TAC and ex officio member of the Executive Committee. This action has helped establish young member representation at all levels and spheres of TRB, offering the opportunity to share young member input and to communicate directly back to young members with relevant information.

### 2023 Annual Meeting Activities

As the TRB Annual Meeting is underway, session and workshop allocations remain limited. Young members continue to be actively engaged in several program elements, including:

- Meetings of Young Members Coordinating Council and the following Group-level Young Member Subcommittees: Aviation, Freight Systems/Marine, Policy and Organization, Public Transportation, Safety and Operations, Transportation Infrastructure
- YMCC has been holding 'idea generator' discussions to narrow down to a single session topic as allocated for the 2023 Annual Meeting.
- Young Member Subcommittees are exploring opportunities to engage with their respective Groups to engage in session planning.
- The YMCC Chair will participate in meetings of TAC and the Executive Committee.

### Other Activity

YMCC is actively engaged in discussions and planning with other Coordinating Councils and Standing Committees to explore areas for collaboration and engagement of young professionals' perspectives.

A number of Young Member Subcommittees continue to have active mentorship programs. These programs match young members with experienced professionals for annual meeting and/or career advice and guidance. Other Subcommittees are considering similar initiatives within their respective Groups.

YMCC is again prepared to assist as the *Careers in Motion Networking Fair* returns to the Annual Meeting in 2023.



TRB Cooperative Research Programs  
Report to TRB Executive Committee  
Agenda Item 27

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**Impacts on CRP of Infrastructure Investment and Jobs Act:**

<b>NCHRP</b>	Annual increase from \$47 million by ~20%
<b>TCRP</b>	Annual increase from \$5 million to \$6.6 - \$7.2 million
<b>BTSCR</b>	Annual increase from \$2.5 million to \$3.5 million
<b>NCFRP</b>	Reinstated at \$3.75 million per year

**CRP Reports published in the last 90 days:**

ACRP WebResource 11	Construction Safety and Phasing Plans
ACRP Web-Only Document 52	Command-Level Decision Making for Transportation Emergency Managers
ACRP Synthesis 117	Agricultural Operations on Airport Grounds
ACRP Synthesis 116	Examples of Facility Space Provided for Community Use at Airports
ACRP Research Report 237	Primer and Framework for Considering an Airport Noise and Operations Monitoring System
NCHRP Synthesis 581	Rehabilitation of Culverts and Buried Storm Drain Pipes
NCHRP Synthesis 583	Implementation of Subsurface Utility Engineering for Highway Design and Construction
NCHRP Synthesis 579	Subsurface Drainage Practices in Pavement Design, Construction, and Maintenance
NCHRP Synthesis 580	Practices for Ensuring the Smoothness of Concrete Bridge Decks
NCHRP Synthesis 578	Use of Unmanned Aerial Systems for Highway Construction

NCHRP Web-Only Document 321	Command-Level Decision Making for Transportation Emergency Managers
NCHRP Web-Only Document 326	Design Guidelines for Test Level 3 (TL-3) through Test Level 5 (TL-5) Roadside Barrier Systems Placed on Mechanically Stabilized Earth (MSE) Retaining Walls
NCHRP Web-Only Document 325	Consideration of Roadside Features in the Highway Safety Manual
NCHRP Web-Only Document 323	Highway Safety Manual User Guide
NCHRP Web-Only Document 320	Aligning Geometric Design with Roadway Context
NCHRP Web-Only Document 298	Developing a Systematic Approach for Determining Construction Contract Time
NCHRP Web-Only Document 308	Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector
NCHRP Web-Only Document 319	Roadside Safety Analysis Program (RSAP) Update
NCHRP Web-Only Document 318	Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials
NCHRP Web-Only Document 312	Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
NCHRP Research Report 995	Guidelines for Treatments to Mitigate Opposite Direction Crashes
NCHRP Research Report 990	Guidebook for Effective Policies and Practices for Managing Surface Transportation Debt
NCHRP Research Report 1002	Metropolitan Planning Organizations: Strategies for Future Success
NCHRP Research Report 979	Systematic Approach for Determining Construction Contract Time: A Guidebook

NCHRP Research Report 986	Implementation of the AASHTO Guide for Enterprise Risk Management
NCHRP Research Report 987	Ruggedness of Laboratory Tests for Asphalt Mixture Cracking Resistance
NCHRP WebResource 1	Reducing Greenhouse Gas Emissions: A Guide for State DOTs
NCHRP Legal Research Digest 85	Public Liabilities Relating to Driveway Permits
TCRP Synthesis 163	Considering the Unbanked in Cashless Fare Payment at Point of Service for Bus/Demand-Response Services
TCRP Synthesis 162	Coordination of Public Transit Services and Investments with Affordable Housing Policies
TCRP Synthesis 160	Fare Capping: Balancing Revenue and Equity Impacts
TCRP Synthesis 161	ADA Paratransit and Other Demand-Responsive Transportation Services in Small to Midsized Transit Agencies
TCRP Web-Only Document 75	Command-Level Decision Making for Transportation Emergency Managers
TCRP Research Report 234	Measuring & Managing Fare Evasion
BTSCRIP Web- Only Document 2	Development of Research Problem Statements That Utilize Naturalistic Driving Data to Improve Teen Driving Safety
BTSCRIP Web- Only Document 1	Influence of Infrastructure Design on Distracted Driving

## 2021 Cooperative Research Programs Publications

### Airport Cooperative Research Program

Research Reports: 12  
 Synthesis: 1  
 Legal Research Digests: 5  
 Web-Only Document: 1  
 WebResources: 2  
 Annual Report: 1

**Total: 22**

### Behavioral Traffic Safety Cooperative Research Program

Research Report: 1  
 Annual Report: 1

**Total: 2**

### National Cooperative Highway Research Program

Research Reports: 24  
 Syntheses: 17  
 Legal Research Digest: 1  
 Web-Only Documents: 22  
 E-Circular: 1  
 Annual Report: 1

**Total: 66**

### Transit Cooperative Research Program

Research Reports: 12  
 Syntheses: 5  
 Research Results Digest: 1  
 Legal Research Digests: 2  
 Web-Only Document: 1  
 Annual Report: 1

**Total: 22**

**CRP TOTAL FOR 2021: 112**

### Other Publications

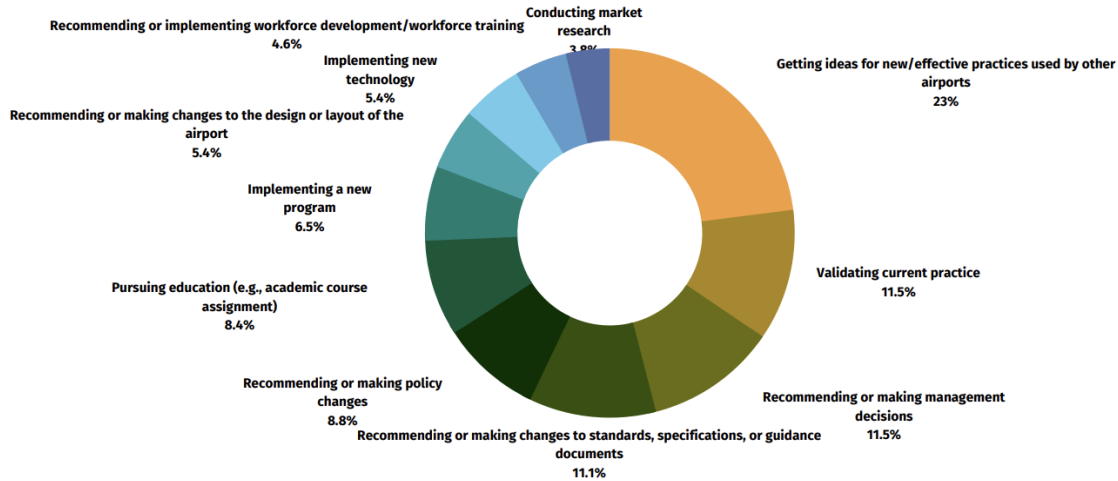
Transportation Research E-Circulars: 7  
*TR News*: 6

and

TRB 2021 Annual Report  
 Highway IDEA Program Annual Report  
 Transit IDEA Program Annual Report  
 Rail Safety IDEA Program Annual Report

# Why were ACRP products downloaded?

Survey respondents answered why they downloaded an ACRP product. "Getting ideas for new and effective practices used by other airports" was the highest response.

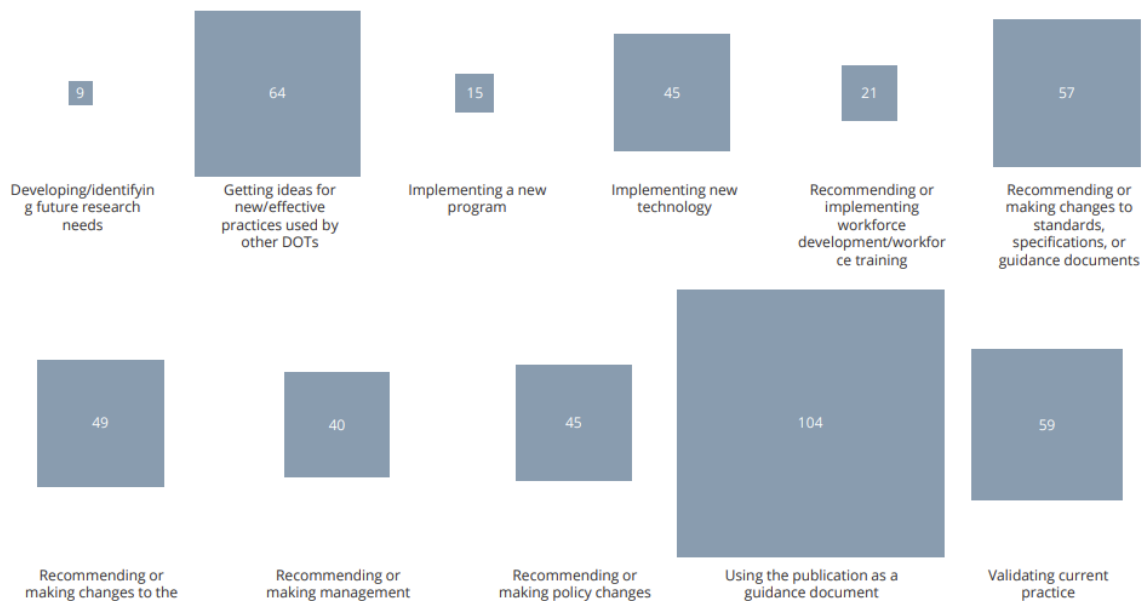


NCHRP IMPACT REPORT 2020 | The 2020 NCHRP Publications Survey Results

21


## How NCHRP research results were applied

The same NCHRP research result can often be applied differently by different users. Below are some of the major ways NCHRP research results were applied, according to our 2020 NCHRP publications survey.



The size of the boxes and the numbers in them denote the number of responses for that application.


## Learn From TCRP Reports on Equity and Diversity



**Resource Guide for Improving Diversity and Inclusion Programs for the Public Transportation Industry**

TCRP Report 228

[Download Free](#)



**Resources for Recruiting Minorities for Chief Executive Officers at Public Transit Agencies**

TCRP Report 148

[Download Free](#)

## Behavioral Traffic Safety Cooperative Research Program – the first four years:

Project Number	Project Title
<a href="#">BTSCR P BTS-01</a>	Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
<a href="#">BTSCR P BTS-02</a>	Behavioral Traffic Safety Messaging on Variable Message Signs
<a href="#">BTSCR P BTS-03</a>	Examining the Implications of Legislation and Enforcement on Electronic Device Use While Driving
<a href="#">BTSCR P BTS-04</a>	Tracking State Traffic Citation and Adjudication Outcomes
<a href="#">BTSCR P BTS-06</a>	MPO and SHSO Coordination on Behavioral Traffic Safety
<a href="#">BTSCR P BTS-07</a>	Assessing the Impacts of Automated Driving Systems (ADS) on the Future of Transportation Safety
<a href="#">BTSCR P BTS-08</a>	Using the SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
<a href="#">BTSCR P BTS-09</a>	Influence of Infrastructure Design on Distracted Driving
<a href="#">BTSCR P BTS-10</a>	E-Scooter Safety: Issues and Solutions
<a href="#">BTSCR P BTS-11</a>	Ensuring Child Safety in For-Hire Rideshare Vehicles
<a href="#">BTSCR P BTS-12</a>	State Practices Promoting Older Driver Safety
<a href="#">BTSCR P BTS-13</a>	Communicating Safe Behavior Practices to Vulnerable Road Users
<a href="#">BTSCR P BTS-14</a>	Informing the Selection of Countermeasures by Evaluating, Analyzing, and Diagnosing Contributing Factors that Lead to Crashes
<a href="#">BTSCR P BTS-15</a>	Highway Safety Behavioral Strategies for Rural Areas
<a href="#">BTSCR P BTS-16</a>	Developing Driver Skills Examination and Scoring Guidance for Evaluating and Predicting High Safety Risk Drivers
<a href="#">BTSCR P BTS-17</a>	Determining the Effectiveness of Combined High Visibility Enforcement
<a href="#">BTSCR P BTS-18</a>	Understanding the Effectiveness of Public Awareness Educational Campaigns (non-law enforcement) and the Necessary Components Critical for Success
<a href="#">BTSCR P BTS-19</a>	Improving Moped and Seated Motor Scooter (50 cc or less) Rider Safety
<a href="#">BTSCR P BTS-20</a>	Strategies to Address Misreporting of Impaired and Distracted Driving in Motor Vehicle Crashes
<a href="#">BTSCR P BTS-21</a>	Assessing and Mitigating Racial Disparities in the Enforcement of Pedestrian, Bicycle, and Micromobility Traffic-Related Laws
<a href="#">BTSCR P BTS-22</a>	Guidelines for Selecting Communication Channels to Deliver Traffic Safety Messaging
<a href="#">BTSCR P BTS-23</a>	Outcomes of Variability in Teen Driving Experience and Exposure: Evidence from the Naturalistic Driving Study

## **CONSENSUS AND ADVISORY STUDIES DIVISION**

### **Director, Thomas Menzies**

*The Consensus and Advisory Studies Division provides consensus advice to the federal government and the transportation community more broadly based upon the deliberations of special, ad hoc committees appointed by the chair of the National Research Council.*

### **INFORMATION AND DISCUSSION ITEMS**

Studies Underway	Information
Pending Studies	Information
Chart of Study Timelines and Balances	Information
<u>Potential Self-Initiated Studies</u> Attracting, Retaining, and Advancing Women in Transportation	Discussion
Reversing Troubling Trends in Traffic Safety	

**STATUS OF CONSENSUS STUDIES AND OTHER ACTIVITIES UNDERWAY**

(Expenditures through April 2022)

<u>PROJECT</u>	<u>SPONSOR</u>	<u>FUNDED AMOUNT</u>	<u>SPENT</u>	<u>SCHEDULE BEGAN</u>	<u>COMPLETION</u>	<u>COMMENT</u>
1. Research and Technology Coordinating Committee	FHWA	\$200,000 (per year)	50%	10/2003	9/2023	Last meeting 5/2022; Next meeting 12/2022
2. Long-term Infrastructure Performance	FHWA	\$320,000 annually for 5 years (\$1.6 million total)	0%	7/2017	6/2027	Last meeting 11/2021; Next meeting TBD
3. Transit Research Analysis Committee	FTA	\$145,000	0%	9/2003	7/2023	Suspended pending FTA guidance
4. AV/Shared Mobility Forum	multiple	\$250,000	65%	1/2018	continuing	Webinar 3/2022;
5. Emerging Trends Symposia	FHWA	\$250,000	95%	9/2020	8/2022	Final event held 12/2021
6. Emerging Aviation Safety Trends (first report)	FAA	\$560,000	75%	7/2021	7/2022	Report in review
7. Gulf of Mexico Offshore Energy Production Safety Risks	Gulf Research Program	\$962,000	75%	1/2020	9/2022	Meetings underway



**STATUS OF CONSENSUS STUDIES AND OTHER ACTIVITIES UNDERWAY**  
(Expenditures through April 2022)

8. Automatic Shutoff Valves for Pipelines	PHMSA	\$720,000	15%	8/2021	3/2023	Meetings underway
9. Safe Transportation of LNG by Rail	PHMSA	\$1,000,000	70%	4/2020	8/2022	Report in review
10. Repurposing Plastics Waste in Infrastructure	USDOT/EPA	\$1,600,000	10%	9/2021	3/2023	Meetings underway
13. Future Authorities for Coast Guard	USCG	\$780,000	20%	9/2021	3/2023	Meetings underway
14. Transportation Equity Metrics	USDOT/TRB	\$1,000,000	20%	9/2021	9/2023	Meetings underway
15. Substance Abuse Treatment Programs for Airline Flight Crew	FAA	\$1,000,000	5%	3/2022	12/2024	Collaboration with DBASSE. Committee being formed

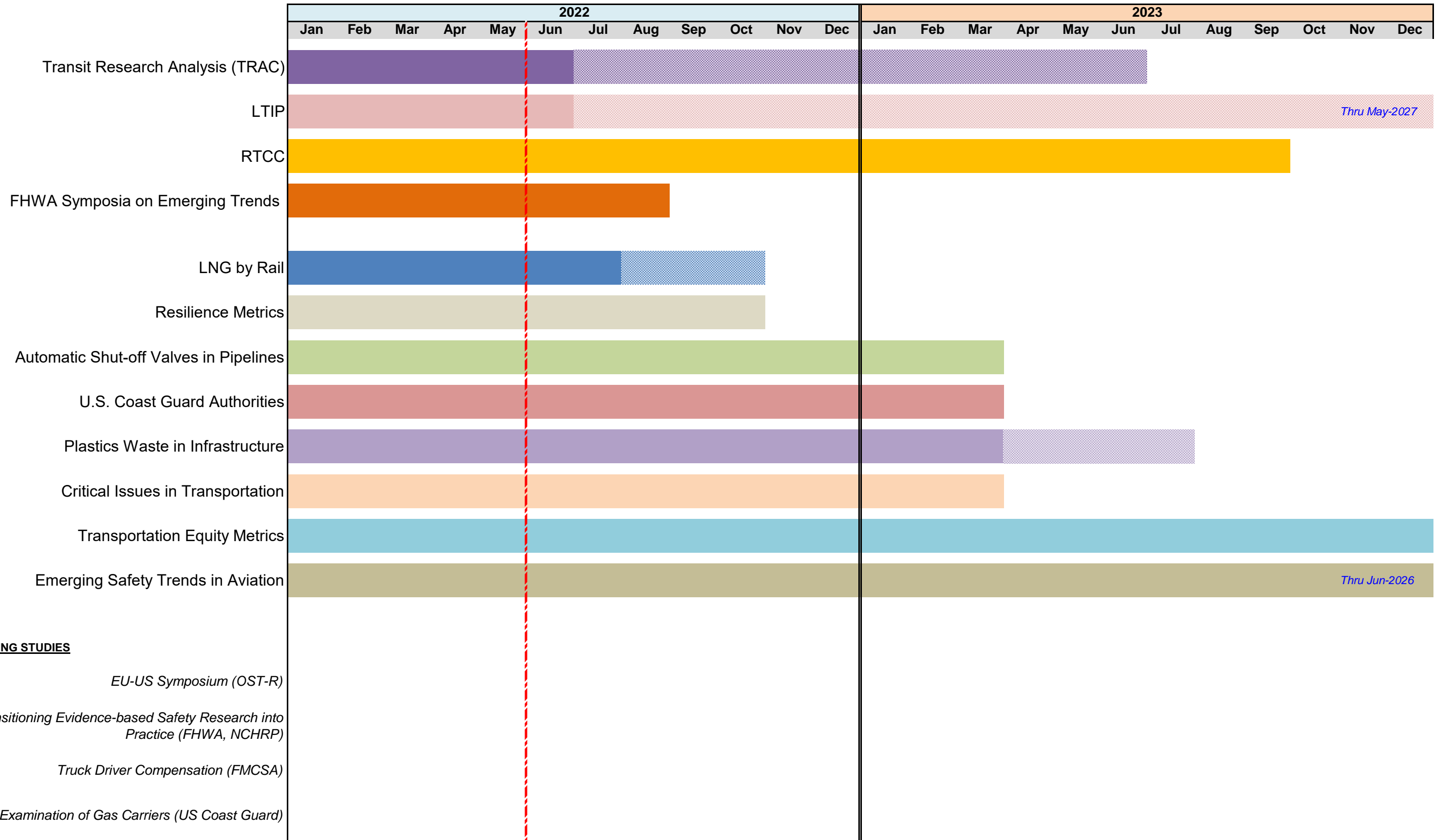
**SUMMARY OF PENDING STUDIES**

<u>Study</u>	<u>Sponsor</u>	<u>Scope</u>	<u>Status</u>
1. Certificate of Compliance Inspection Program for LNG tanker vessels	USCG	Evaluate the constraints and challenges to maintaining examination efficiency under the Certificate of Compliance program for bulk liquefied gases cargo, liquefied natural gas exports, and associated vessel traffic at United States ports.	Enacted in Section 8254, National Defense Authorization Act for FY 2021. <b>Anticipated start 7/2022</b>
2. Highway Safety Research to Practice	FHWA/NCHRP/IIHS	Options for ensuring evidence-based highway safety research informs safety practitioners	Approved by NCHRP. IIHS has contributed funds. FHWA funding anticipated June 2022
4. Commercial Motor Vehicle Driver Compensation Study	FMCSA	Impacts of methods of driver compensation on safety and driver retention	<b>Enacted in Sec. 23022 of BIL.</b> Waiting FMCSA review and approval of proposal
5. Impacts of Trains Longer than 7,500 feet	FRA	Potential impacts to safety, rail operations, and environment from freight trains that are longer than 7,500 feet	<b>Enacted in Sec. 22422 of BIL.</b> Discussions underway with FRA on study scope

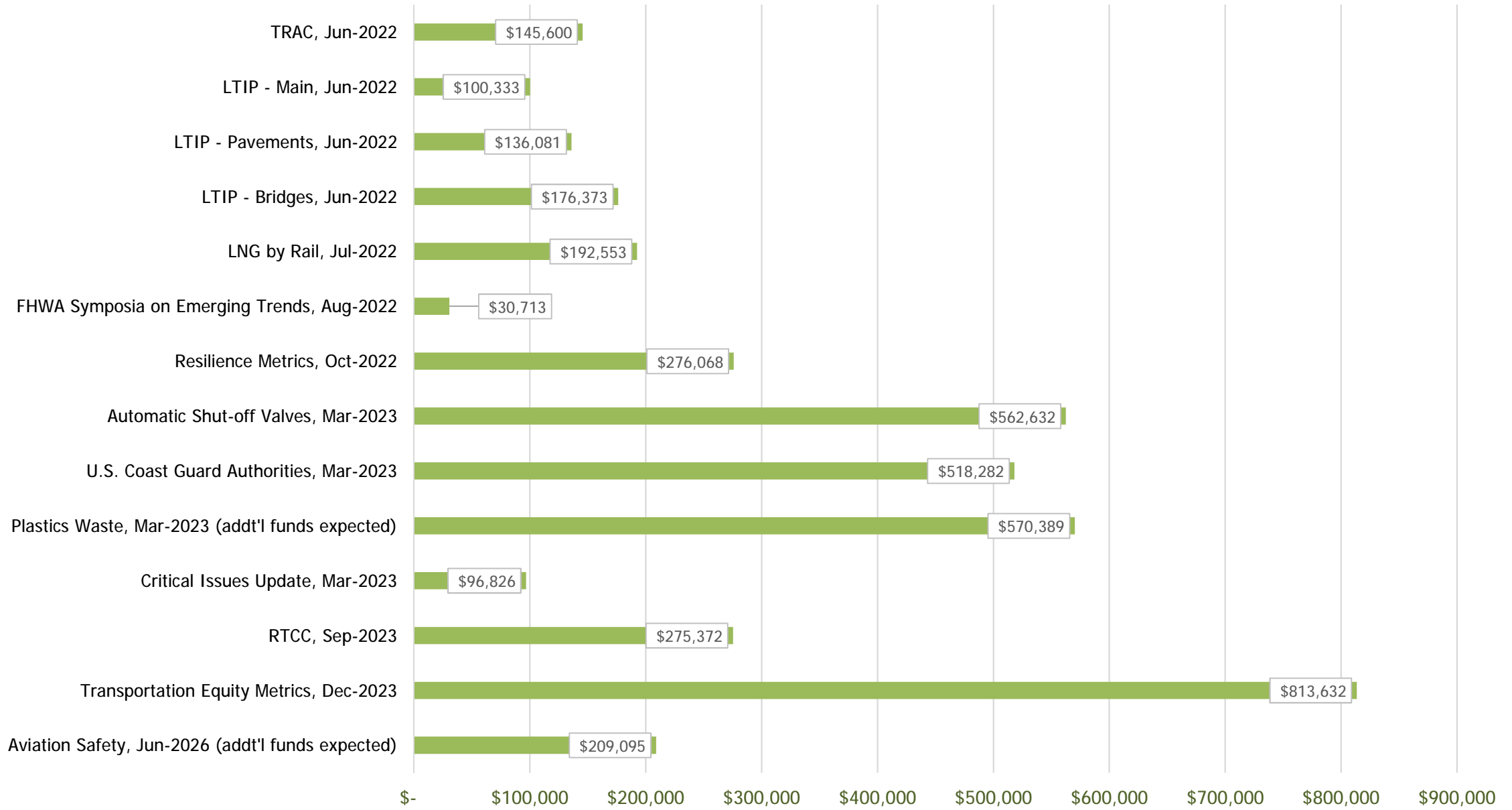
<p>6. Stormwater Best Management Practices</p>	<p>FHWA/EPA</p>	<p>Make recommendations on the evaluation and selection by state DOTs of transportation of potential stormwater management and total maximum daily load compliance strategies</p>	<p><b>Enacted in Sec. 11520 of BIL.</b> Discussion underway on scope with FHWA and EPA</p>
<p>7. Transportation ITS Workforce Development</p>	<p>OST-R</p>	<p>Workforce needs assessment that addresses the education and recruitment of technical workers for the intelligent transportation technologies and systems industry</p>	<p><b>Enacted in Sec. 25020 of BIL</b> Awaiting OST-R action.</p>
<p>8. Equity Metrics</p>	<p>OST-R</p>	<p>Identify, assess, and develop metrics for measuring the effectiveness of surface transportation projects in addressing the transportation challenges and barriers faced by historically disadvantaged communities, areas of persistent poverty, and public transportation-dependent populations.</p>	<p>\$1.5 million appropriated in FY2022 Omnibus Appropriations Act. Discussions underway with OST-R about options for using the new funds</p>

Transportation Research Board - Consensus and Advisory Studies

**Current Projects Timeline**



### CAAS Project Balances as of April 30, 2022



## **Study on Reversing Troubling Trends in Road Traffic Safety**

### **Statement of Task**

A consensus study committee will examine long-term trends and recent developments in U.S. road traffic safety to identify areas of progress, persistent challenges, and regression in efforts to reduce the number of people killed and injured in motor vehicle crashes. The committee will give particular consideration to the experience since the start of the pandemic in 2020. The committee will review the research and hypotheses on why traffic fatalities have increased sharply, and why the increases have occurred despite lower overall crash rates and levels of vehicle travel. It will be important to consider recent developments in the context of flattening improvements in traffic safety during the 2010s as well as broader societal that have included marked increases in deaths from opioid overdoses and homicide.

The committee will examine the public policy response to these troubling trends and developments. The U.S. Department of Transportation's (USDOT) National Roadway Safety Strategy, issued in January 2022, frames the challenge and proposes solutions using a public health approach, called Safe Systems. The committee will review this strategy, which focuses largely on how the USDOT and federal government can influence traffic safety using the Safe Systems framework. However, a broader look at solutions will be needed that includes actions and interventions that can be taken by state and local governments, regional planning organizations, public safety and traffic enforcement agencies, highway transportation service providers, motor vehicle manufacturers and their suppliers, and other parties.

Informed by its review of recent traffic safety trends and their causes, as well as evidence of success where Safe Systems strategies have been adopted in other countries, the committee will make recommendations on specific measures that should be taken, and supporting research that should be conducted in engineering, public health, and social sciences, to stem and reverse the troubling traffic safety trends. As the committee considers appropriate, the recommendations may be targeted broadly to include the executive and legislative branches of federal, state, and local governments, research institutions, and the private sector.

### **Background/Justification**

Motor vehicle crashes have long been a leading cause of death and injury in the United States. From the 1960s to into the 2000s, marked gains were made in reducing the number of fatalities on U.S. roadways. In 2010, 32,999 people died in traffic crashes, down from 52,670 in 1970, despite a nearly 200 percent increase in vehicle miles traveled (VMT). These safety gains can be attributed to a number of factors, including more divided and limited access highways, more crashworthy vehicles with improved occupant protection, increased seat belt use, and stricter prohibitions on impaired driving. By the mid-2010s, however, gains were slowing and the gap in progress compared to other high-income countries was growing.

Highway safety trends and patterns in the United States have been especially troubling and perplexing since the pandemic. The National Highway Traffic Safety Administration (NHTSA) [reported](#) that in 2020, the first year of the pandemic, 38,824 people lost their lives in traffic crashes. This was the highest number of fatalities since 2007, despite a 22% decline in the

number of police-reported crashes, 17% decline in the number of people injured in crashes, and 11% decline in VMT. Given these other trends, one might have expected fatal crashes to have declined as well; yet, in 2020 the fatality rate (fatalities per VMT) increased by 21% over 2019.

A closer look at the crash data reveals certain developments indicative of risky, and even reckless, behaviors. Notably, fatalities in speeding-related crashes were up 17%; fatalities in alcohol-impaired crashes were up 14%, fatalities in hit-and-run crashes were up 26%, and fatalities among unrestrained occupants were up 14%. Furthermore, the number of fatalities among motorcyclists, bicyclists, and pedestrians increased 11%, 9%, and 4%, respectively. These latter traffic fatalities reached their highest levels in more than 40 years, contributing to a nearly 9 percent increase in fatalities in urban areas. According to [CDC data](#), unintentional injury deaths increase 27% in 2020 and were 80% higher than in 2010. Opioid overdoses and motor vehicle crashes dominate unintentional injury deaths

The traffic safety picture was similarly discouraging in 2021, when a steady increase in vehicle miles traveled combined with sustained higher crash rates to result in even more traffic fatalities. According to NHTSA, an estimated 42,915 people died in 2021 on the nation's roadways, representing 10.5% increase from 2020 and the highest total number of traffic fatalities since 2005. [Preliminary analyses](#) of the data suggests that many of the same behaviors that contributed to the rise in traffic fatalities in 2020 persisted in 2021, from speeding and alcohol impairment to failure to wear seat belts.

These trends do not jibe with developments in new vehicles being equipped with advanced technologies intended to aid in safe driving and to provide enhanced crash protection. At the same time, it is conceivable that the availability of these in-vehicle technologies may be giving drivers and occupants a false sense of safety assurance when engaging in risk behaviors. Newer vehicles also have increasingly more horsepower and mass, which may encourage faster driving and lead to more kinetic forces when crashes do occur. The increasingly higher ride height of vehicles may also be a contributing factor to the sharp increase in pedestrian traffic fatalities by reducing visibility of the portion of the road immediately in front of the vehicle.

Crashes are complex events involving a multitude of factors, including the driver, vehicle, and roadway. Concerned about recent traffic safety trends, the U.S. Department of Transportation (DOT) launched the National Roadway Safety Strategy in January 2022. At the core of this strategy is a Safe System Approach that focuses on furthering actions that DOT modal agencies can take, including NHTSA, the Federal Highway Administration, and Federal Motor Carrier Administration, to bring about safer people, roads, vehicles, and speeds, as well as on improving the quality and timeliness of post-crash care. The Safe System framework takes a public health approach to highway safety (with origins dating back to the 1960s and the Haddon Matrix). Examples of strategies include supporting R&D on technologies to detect and prevent alcohol and drug impaired driving, providing technical assistance to communities to build more pedestrian-friendly "complete streets," issuing regulations requiring pedestrian automatic emergency braking technologies on new passenger vehicles, and providing grants to pilot automated enforcement of speed limits.

However, a truly comprehensive Safe System approach will require coordinated efforts across the large and decentralized public and private sectors that influence traffic safety, including state and local transportation and motor vehicle departments, regional planning organizations, public

safety and traffic enforcement agencies, automotive manufacturers and suppliers, transportation service providers, safety advocacy groups, and the research and technology communities. They will need to employing a wide assortment of methods and tools, including education, technical assistance, technology, engineering, and enforcement.



## **Study on Attracting, Retaining, and Advancing Women in Transportation**

### **Statement of Task**

A consensus study committee will examine current trends and patterns of employment of women in the U.S. transportation sector. The study will consider female employment trends and patterns in management positions, engineering and other technical occupations, and in service, operations, and other frontline jobs in public and private transportation organizations across all major modes. Where women appear to be substantially underrepresented in occupations, including leadership positions, the committee will identify potential reasons, including known barriers such as cultural and social factors, concerns about safety and health, work-life balance issues, and traditionally male-based recruitment and promotional strategies. Consideration will be given to how the pandemic may have affected and added to the barriers and to the opportunities and challenges faced by women having diverse backgrounds, including women in marginalized communities.

The committee will consider the advantages to individuals, organizations, the design and structuring of transportation services, and society generally in reducing and removing these barriers and seeking to entice women to enter and remain in the transportation workforce. The committee will identify strategies for overcoming these barriers by reviewing the literature and consulting with organizations, both within and outside transportation, that have succeeded in recruiting, retaining, and furthering the careers of women in nontraditional and underrepresented occupations. It is expected that these strategies will span efforts to make transportation an attractive career path for women when making early educational choices to the strategies that are, or could, be employed by transportation organizations to retain female workers and offer them more opportunities for career advancement.

The committee will identify the data and research needed to understand how female participation in the transportation workforce is trending and to identify and assess the strategies needed to overcome emerging and persistent barriers. The committee may make recommendations about strategies and policies that could be pursued by public and private transportation agencies, as well as other institutions important to the transportation education and career pipeline, to attract, retain, and advance women in transportation.

### **Background/Justification**

According to the U.S. Bureau of Labor Statistics, women made up nearly half the U.S. labor force in 2019. Moreover, they earned the majority of certificates, associate degrees, and bachelor's degrees in the U.S. (National Center for Education and Statistics 2019). Yet, even as women making up more of the workforce, they have made only limited gains in many occupations, as some industries continue to struggle with attracting and retaining women.

The U.S. Labor Department's Women's Bureau defines a nontraditional occupation as one in which women make up 25 percent or less of the workforce. These nontraditional occupations are often higher paying than the occupations in which women are more likely to dominate, such as teaching and retail sales. The Women's Bureau has observed that women who work in nontraditional occupations, such as firefighting and engineering, increase their wages and opportunities for advancement relative to work in traditional occupations.

Transportation is one of the industries that has many occupations with low female participation. The U.S. Census Bureau's American Community Survey found women accounted for only 12 percent of positions in transportation in 2000. This percentage had increased by 2017, but only to 15 percent. The transportation occupations that were surveyed are wide-ranging, from managers, engineers, surveyors, and technicians to air traffic controllers, flight attendants, pilots, and operators of trucks, buses, trains, and ships.

Furthermore, even within transportation sectors and organizations where there is relatively large female workforce, there are notable disparities in the occupations filled by men and women. For example, according analyses of data collected by the U.S. Bureau of Labor Statistics, women made up 39 percent of the occupations of transit and ground passenger transportation in 2019; however, the percentage varied substantially depending on the line of work. Notably, women held only 11 percent and 21 percent of corporate management and supervisory positions (National Transportation Institute 2017). The experience is similar in the EU, where women hold less than 10 percent of the technical and operational jobs in urban public transport.

A recent TCRP synthesis pointed to certain occupational barriers to women in the transit industry. They include a general lack of outreach and promotional strategies that focus on women, social factors that lead to a message that men traditionally perform certain jobs, safety and health concerns applicable to women, and challenges with accommodating responsibilities outside of work. These barriers are likely to be found in many transportation industries in addition to transit.

The disparities resulting from such barriers are problematic on multiple levels. As noted, women miss out on higher paying jobs, creating a persistent equity issue. Moreover, the transportation sector is deprived of a vital source of talent. The trucking industry, for instance, claims there is a growing shortage of truck drivers; yet, women comprise less than 7 percent of all drivers. Once attracted, female talent must also be retained and tapped for leadership positions. Among workers over 25 years old in 2016, 39 percent of women had earned at least a bachelor's degree compared with 31 percent of men. Women have been increasingly earning degrees in STEM fields. For transportation firms that face the impending loss of retiring managers and engineers, it will be an imperative that they create desirable career paths that will attract, retain, and lead to the promotion of women.

### ***Key Sources for this Background***

Susan Hanson and Elaine Murakami, "Women in Transportation," *Public Roads*, March/April 2010

Jodi Godfrey and Robert L. Bertini, "Attracting and Retaining Women in the Transportation Industry," Mineta Transportation Institute, 2019.

Allison Alexander, "Attracting, Retaining, and Advancing Women in Transit, TCRP Synthesis 147, 2020.

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**Changes in Executive Committee Membership****New Officers**

**Mr. Nathaniel Ford, Sr.**, Chief Executive Officer, Jacksonville Transportation Authority (Chair)

**Dr. Shawn Wilson**, Secretary, Louisiana Department of Transportation and Development (Vice Chair)

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**Mr. James (Jim) F. Albaugh**, President and Chief Executive Officer of Boeing Integrated Defense Systems, The Boeing Company (Retired), President and Chief Executive Officer of Boeing Commercial Airplanes, The Boeing Company (Retired)

**Mr. Douglas (Doug) C. Ceva**, VP Customer Lead Solutions, Prologis, Inc.

**Mr. Joel M. Jundt**, Secretary of Transportation, South Dakota Department of Transportation

**Dr. Drew Kodjak**, Executive Director, International Council on Clean Transportation

**Dr. Carol A. Lewis**, Professor, Transportation Studies, Texas Southern University

**Dr. Steward T.A. Pickett**, Distinguished Senior Scientist, Cary Institute of Ecosystem Studies

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**Dr. Tristan Brown**, Deputy Administrator, Pipeline and Hazardous Materials Safety Administration

**Dr. Steven Cliff**, Deputy Administrator, National Highway Traffic Safety Administration

**Mr. Stephen M. Dickson**, Administrator, Federal Aviation Administration,

**Ms. Nuria I. Fernandez**, Administrator, Federal Transit Administration

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**Ms. Polly Trottenberg**, Deputy Secretary of Transportation, U.S. Department of Transportation

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- Annual Meeting Exhibit and Patron Programs
- Committee and Panel Approvals
- Communications
- Information Technology
- Transportation Research Information Services

### STRATEGIC PROGRAM DEVELOPMENT DIRECTOR

Patrice Davenport

- Revenue Development
- Strategic Initiatives

### SR. REPORT REVIEW OFFICER

Karen Febey

- Report Review
- Minority Student Fellows Program
- Inclusion & Diversity
- TRB Division Committee

### HR DIRECTOR

Claudette Louard-Clarke

- Human Resources
- Staff Development Training

### TECHNICAL ACTIVITIES

Ann Brach

- Annual Meeting Program
- Conferences and Workshops
- Marine Board
- Standing Technical Committees
- State Visits
- Transportation Research Record: Journal of the Transportation Research Board

### Consensus and Advisory Studies Division

Thomas Menzies

- Consensus Studies
- Forums and Roundtables
- Research Program Advisory Committees

### ADMINISTRATION AND FINANCE

Gary Walker

- Budgets and Finance
- Affiliates Accounts
- Publications Sales and Distribution
- Administrative Services

Note: organizationally is part of the Office of the Chief Financial Officer

### COOPERATIVE RESEARCH PROGRAMS

Christopher Hedges

- National Cooperative Highway Research Program
- Airport Cooperative Research Program
- Transit Cooperative Research Program
- Behavioral Traffic Safety Cooperative Research Program

## **DESCRIPTIONS OF TRB DIVISIONS**

	<b>Page</b>
<b>Executive Office</b>	<b>2</b>
<b>Technical Activities</b>	<b>5</b>
<b>Consensus and Advisory Studies</b>	<b>7</b>
<b>Cooperative Research Programs )</b>	<b>8</b>

## **EXECUTIVE OFFICE**

**Neil J. Pedersen, Executive Director**

### **TRB Executive Office**

TRB's Executive Office is headed by Executive Director Neil Pedersen. The TRB Executive Office provides policy and operational guidance for programs and activities; oversees committee and panel appointments and report review; provides support and direction for human resource issues and staffing needs; directs the Board's communications and information technology efforts; operates a bibliographic database of transportation research and provides library reference services; provides staff support to the Executive Committee and the TRB Division Committee; and maintains liaison with the executive offices of the National Academies of Sciences, Engineering, and Medicine, the Board's parent institution.

### **Oversight Activities**

The Executive Office supports the work of the TRB Executive Committee, which provides policy direction to TRB programs and activities within the overall policies of the Academies. Oversight of committee and panel appointments and of report review is the responsibility of the TRB Division Committee, which ensures that TRB meets institutional standards and that its activities are appropriate for the Academies. As part of its oversight function, the committee monitors the Board's progress in expanding the representation of minorities and women on TRB committees and panels.

Chris Hendrickson, Chair, TRB Division Committee, represents TRB as an ex officio member on the NRC Governing Board. The Executive Office processes the Board's large volume of committee and panel appointments and maintains committee membership records. A hallmark of the Academies is its institutional process to ensure the independent, rigorous review of reports. In maintaining these high standards, TRB follows Academies' guidelines that carefully match the review criteria and procedures to the type of report.

### **Program Development and Strategic Initiatives**

In addition, the Executive Office is responsible for ensuring stable, long term revenue streams for TRB and for coordinating strategic initiatives across the board's various divisions. To carry out these responsibilities, the EO helps facilitate the increased use of technology to deliver TRB products and services; oversees the development and implementation of action plans for strategic, long term, cross cutting, and critical issues; encourages the exploration of new and innovative ways to facilitate information transfer within the rules of the Academies; helps promote the value of TRB products and services; oversees TRB's international participation strategy; administers the Minority Student Fellows Program; and is responsible for helping to ensure the continued development of the next generation of TRB volunteers.

## Communications

The Executive Office is charged with developing, coordinating, and carrying out communications activities that span the entire organization. The following communications activities conducted by the NASEM's Office of the Chief Communications Officer are overseen by the Executive Office:

- The [Transportation Research E-Newsletter](#) is a free weekly electronic service designed to keep individuals up-to-date on TRB activities and to highlight selected transportation research related activities taking place at the federal and state levels, and within the academic and international transportation communities. More than 67,000 people from around the world receive the E-Newsletter.
- The [TRB Webinar Series](#) produces approximately 100 webinars per year on a variety of topics. TRB's webinars are produced with funding received from TRB Sponsors and TRB Sustaining Affiliates. Accordingly, employees of TRB Sponsors and TRB Sustaining Affiliates may attend the session without a fee. TRB is authorized to issue Professional Development Hours (PDH) for select, live webinars. TRB is also a registered with the American Planning Association's professional institute, the American Institute of Certified Planners (AICP), to provide Certification Maintenance credits.
- TRB uses [Social Media](#) such as Twitter, Facebook, and LinkedIn to help our audience stay connected to transportation research. Social media also helps TRB to better understand how its reports and products are being used.

## Information Technology and Research Services

TRB has a consolidated Information Technology (IT) and Transportation Research Information Services (TRIS) department. Both groups had key responsibilities that included the development, maintenance, and application of software in support of various TRB missions.

The IT group's primary focus systems operation, maintenance, and management. The focus aligns with the TRIS staff's responsibilities in relation to the Transport Research International Documentation ([TRID](#)) database, the Research in Progress ([RiP](#)) database and website, the Research Needs Statements ([RNS](#)) database, and the TRB [Publications Index](#).

The responsibilities of the IT and Research Services groups include customer support for internal and external users of TRB's software systems; software enhancement and development; server and website monitoring and security; general IT support activities, such as training, documentation, and troubleshooting; and management and operation of transportation research services, bibliographic databases, and the [TRB Library](#).

### [TRID](#)

In January 2011, TRB and [ITRD](#) released [TRID](#), the TRIS and ITRD Database. TRID is the world's largest and most comprehensive bibliographic resource on transportation research information. It is produced and maintained by the Transportation Research Board of the US

National Academies with sponsorship by State Departments of Transportation, the various administrations at the U.S. Department of Transportation, and other sponsors of TRB's core technical activities. ITRD is produced by ITRD member organizations under the sponsorship of Joint Transport Research Centre (collectively JTRC) of the International Transport Forum and Organisation for Economic Cooperation and Development (OECD) and ITRD. The records comprise published or ongoing research in English, German, French, or Spanish; more than 200,000 records link to full-text publications. The service offers simple and advanced searching and allows users to download and e-mail results, as well as to share via social media. TRID is available free of charge on TRB's website.

### **Publications Index**

The TRB Publications Index includes more than 65,000 citations and abstracts for all TRB, Highway Research Board (HRB), SHRP, and Marine Board publications since 1923. The index offers simple and advanced searching and allows users to download and e-mail the results in a variety of formats. Records contain links to available full-text documents and to ordering information.

### **Research Needs Statements Database**

The RNS database is a dynamic collection of highest-priority topics developed by TRB technical standing committees. The database serves as a tool for reviewing research needs, setting research priorities, and identifying gaps in current research.

### **Research in Progress Database**

RiP is a searchable database of records of active or recently completed research projects from State Departments of Transportation, the modal administrations at the U.S. Department of Transportation, the Transportation Research Board, and university transportation centers. The current awareness service notifies users about new and updated project records in specified subject areas. [TRID](#) offers users an option for searching the [RiP](#) database or the [RiP](#) and [TRID](#) databases simultaneously.

### **TRB Library**

The TRB Library provides research and reference services to TRB sponsors, committee members, and staff. The library subscribes to almost 250 serial titles and contains the complete collection of TRB, HRB, SHRP, and Marine Board publications.

The TRB Library participates in the Eastern Transportation Knowledge Network and in the National Transportation Knowledge Network.

## TECHNICAL ACTIVITIES

**Ann Brach, Director**

### About the Technical Activities Division

#### Who We Are

The Technical Activities Division provides a forum for transportation professionals to identify, facilitate, and share research and information related to transportation. The Division carries out activities on behalf of TRB sponsors and the transportation community through a network of over 200 [standing committees](#) comprised of more than 5,000 volunteers.

#### Our Mission

The Technical Activities Division supports TRB's mission of promoting innovation and progress in transportation through research and information exchange by identifying [needed research](#) and [research in progress](#), and disseminating [completed research results](#).

#### Our Staff

The [Technical Activities Division staff](#) consists of specialists within each transportation mode and topic, as well as specialists in publishing, meeting logistics, and business operations. They oversee the activities of the Division's network of volunteers, who carry out the following activities:

#### Our Activities

- **Standing committees and task forces** provide an opportunity for you to network with others in your field, and stay current on emerging issues while contributing to the continuing evolution of transportation research and practice. Learn [how to get involved in standing committees](#)
- **Technical Activities Council**, consisting of the overall Chair and the Chairs of each of the [Groups of committees](#), provides a forum for interchange between the Groups of committees. They assist in identifying emerging topics of interest to the transportation community and cross-cutting issues, and foster outreach efforts to other transportation organizations.
- **Conferences, Meetings, Webinars, and Workshops** are sponsored and cosponsored by many of the Division's standing committees.
- **TRB Annual Meeting** is hosted every year and is the largest transportation conference in the world with over 700 sessions, workshops and 300 meetings that attracts over 14,000 professionals from around the globe. The Annual Meeting is held in January of every year in Washington, DC.
- **Supporting State DOT Representatives & Our Field Visit Program** serves as a major source of information collected and disseminated by TRB. Transportation professionals on the TRB staff meet on site with representatives of state departments of transportation,



and with representatives of universities, transit and other modal agencies and industry. Annual results of field visits are published each year

- **Publications** are disseminated by the Technical Activities Division that showcase transportation research results through [Transportation Research Records](#), [Conference Proceedings](#), and [Transportation Research Circulars](#).

July 8, 2021

## **CONSENSUS AND ADVISORY STUDIES**

**Tom Menzies, Director**

### **Consensus and Advisory Studies Division**

The Consensus and Advisory Studies Division conducts consensus and advisory studies at the request of the U.S. Congress, executive branch agencies, states, and other sponsors.

## **CONSENSUS AND ADVISORY STUDIES**

With the guidance of committees drawn from the nation's leading experts, [the Consensus and Advisory Studies unit](#) produces reports examining complex and controversial transportation issues. Studies cover all modes of transportation and a variety of safety, economic, environmental, and research policy issues. The U.S. Congress and the executive branch have adopted many recommendations from the reports, attesting to the substantive value of the studies. The TRB Executive Committee's Subcommittee on Planning and Policy Review provides oversight for the unit. All completed consensus reports, dating from 1982, are posted on the [TRB website](#). (can this link be added to this red text?: <http://www.trb.org/Publications/PubsPolicyStudiesSpecialReports.aspx>

## **Cooperative Research Programs Division**

### **Christopher Hedges, Director**

The Cooperative Research Programs Division of the TRB, led by Director Christopher Hedges, administers a number of major research programs sponsored by other organizations.

#### **National Cooperative Highway Research Program**

Sponsored by the member departments of the American Association of State Highway and Transportation Officials (AASHTO) in cooperation with the Federal Highway Administration, the NCHRP was created in 1962 as a means to accelerate research on problems that affect highway planning, design, construction, operation, and maintenance nationwide. All of the state highway and transportation departments contribute to an annual cooperative pool to fund the program's activities. AASHTO committees and member departments and the Federal Highway Administration recommend research topics each year, and the AASHTO Special Committee on Research and Innovation (R&I) determines both the projects to be funded and the levels of funding for those projects. A close working relationship with AASHTO during execution of the projects and the participation of experienced practitioners on project panels help ensure the application of completed NCHRP study results.

#### **Transit Cooperative Research Program**

The TCRP was initiated in 1992 by three cooperating organizations: the Federal Transit Administration, the program sponsor; the Transit Development Corporation, a nonprofit educational and research organization established by the American Public Transportation Association, which provides program governance through the TCRP Oversight and Project Selection (TOPS) Committee; and the National Academies of Sciences, Engineering, and Medicine, acting through TRB, which serves as program manager. Under TCRP, the transit industry develops innovative near-term solutions to operating problems and adapts appropriate new technologies and approaches to help meet the demands placed on the nation's public transit systems. The program's research covers topics relating to all aspects of public transportation, including planning, service configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices. Each year, the TOPS Committee selects a program of research from the large number of candidate research problem statements submitted by organizations and individuals in the transit community.

#### **Airport Cooperative Research Program**

The ACRP was authorized in federal aviation legislation and funding is made available through the annual federal appropriations process. ACRP, which began in 2006, is an industry-driven applied research program that develops near-term, practical solutions to problems faced by airport operators. The program is sponsored by the Federal Aviation Administration (FAA). Research topics are selected by an independent governing board appointed by the U.S. Secretary of Transportation that includes individuals from airports, universities, FAA, and the aviation industry..

## **PURPOSES AND DUTIES OF THE TRB EXECUTIVE COMMITTEE**

The TRB Executive Committee is the senior policy body of TRB, composed of approximately 25 members appointed by the Chairman of the National Research Council (NRC). These members are selected so as to provide balanced representation of transportation modes, academic disciplines, private and public sectors, levels of government, geographical regions, and other relevant factors. Members are appointed for a term of three years and may be reappointed for one term. In addition, approximately 20 *ex officio* members serve on the Executive Committee; these members have no vote but otherwise participate fully in Executive Committee activity. *Ex officio* members include the representatives of the Board's various sponsoring organizations.

The Executive Committee meets twice a year, once at TRB's Annual Meeting in Washington each January and once in June. The Chair of TRB's Executive Committee, appointed by the Chairman of the NRC, serves a one-year term, and presides over the Committee discussions, which are directed toward obtaining consensus on issues wherever possible. When formal rules of debate are required, Roberts' Rules of Order are employed.

The Executive Committee performs a number of functions in serving four different constituencies — the National Research Council (NRC), TRB, TRB's sponsors, and itself.

### **Executive Committee Responsibilities to the NRC**

The TRB Executive Committee is officially an advisory group to the Chairman and the Governing Board of the NRC, who look to the Executive Committee to provide oversight of TRB's activities. Such oversight is intended to ensure that TRB's activities are appropriate for the NRC and constructive to the transportation system and the nation. Reports (both written and oral) regarding ongoing and proposed TRB projects are brought to the Executive Committee at each meeting and are approved, rejected, or accepted after modification. The Board is also expected to note new opportunities for TRB to provide its services or projects and, where appropriate, to find ways to bring such projects into being.

The TRB Division Committee is charged to ensure that NRC procedures and policies are faithfully employed with respect to study and project committee appointments and report review. The membership of the TRB Division Committee is drawn from the membership of the TRB Executive Committee. The Division Committee is chaired by the TRB Division Chair, who must be a member of the National Academy of Sciences or the National Academy of Engineering and a member of the TRB Executive Committee. The TRB Division Chair serves as an *ex officio* member of the NRC Governing Board.

The Executive Committee has a Subcommittee on Planning and Policy Review (SPPR), which reviews and approves proposed projects and studies, develops lists of Critical Issues in Transportation, plans and develops opportunities for new Executive Committee initiatives, and generally handles those substantive transportation issues that require action during the interval between the twice-yearly meetings of the Executive Committee. The SPPR generally meets in April and October in Washington, DC.

The Executive Committee has a Subcommittee on International Activities, which provides oversight of TRB's international activities, including review of Memoranda of Understanding and Letters of Intent with international organizations, and monitoring progress in implementation of the Executive Committee's Strategic Plan for International Activities.

The Executive Committee has also established a Special Committee on Diversity, Equity, and Inclusion, which provides oversight of implementation of the Executive Committee's Diversity, Equity, and Inclusion Strategic Plan.

### **TRB's Expectations of the Executive Committee**

Most TRB projects and activities are conducted by expert volunteers who agree to serve on TRB technical standing committees, study committees, panels, task forces, and other similar groups. At any one time, about 500 such groups are in existence, composed of more than 7,000 professionals serving without compensation. The Executive Committee, either directly or through the TRB Division Committee or the CAAS, provides oversight on the formation, termination, and membership of committees and on the review of projects undertaken and reports produced. The Executive Committee can also influence committee and other TRB activities by developing and monitoring strategic plans, preparing the critical transportation issues, and undertaking special activities of its own. From time to time, Executive Committee members are also called on to perform special duties, such as assisting with report review or fundraising for special projects.

The Executive Committee also serves as a symbol of the prestige attached to serving on TRB committees. Executive Committee members are selected in part because they occupy some of the most prestigious and influential positions in the industry. Their participation on the Executive Committee demonstrates support for research and cross-modal dialogue at the highest levels, and thereby provides motivation for the uncompensated service of otherwise highly paid experts on whom TRB depends for its products and services.

### **Sponsors' Expectations**

At the core of TRB, and perhaps its most visible feature, is a collection of Technical Activities, which include more than 175 TRB standing committees, the TRB Annual Meeting, publications programs, field visits to organizations conducting transportation research, and information services. About \$17 million—approximately one-fifth of TRB's total budget—is spent annually on these activities, supported by funding from individual states, federal agencies, private transportation organizations, local governments, individual affiliates, publication sales, and conference registration fees. These funds are pooled and spent in accordance with budgets approved by the Executive Committee. TRB's sponsors look to the Executive Committee to ensure that these funds are spent in ways appropriate to TRB's mission and in ways that encourage research and its dissemination.

### **Executive Committee's Own Expectations**

Although the responsibilities summarized above indicate that the Executive Committee has more than enough duties for a group that only assembles twice a year, members often comment that their greatest personal satisfaction in serving comes from participating in discussions of substantive transportation issues and that they would like to devote more time at meetings to such discussion. The caliber and diversity of

talent represented on the Executive Committee make serving on it a unique experience for most members, providing an unusual opportunity to share different perspectives in far-reaching discussions of major transportation issues. Thus, an effort is made to conduct the Executive Committee's official business expeditiously at meetings, in order to leave time for these other important activities of the Board. Executive Committee policy sessions and other discussions of substantive issues have led to the initiation of important TRB projects and other activities.

Last updated June 3, 2022

## TRB STANDING OVERSIGHT COMMITTEES

### **TRB Division Committee**

#### **Composition**

The Division Committee's membership, drawn from the TRB Executive Committee, consists of a chair who is an *ex officio* member of the Governing Board, a member of one of the Academies, the chair of the TRB Executive Committee, and a representative from a state department of transportation. The chair of the TRB Executive Committee serves a one-year term as a full member, while the other full members serve three-year terms. The Division Committee also includes the TRB Executive Committee's vice chair and immediate past chair as *ex officio* non-voting members who serve one-year terms.

#### **Function**

To ensure that TRB meets NRC standards for objectivity and that its activities are appropriate for the NRC; to monitor TRB with respect to specially funded project committee and panel appointments, report review, and the summary of Division programs presented to the NRC Governing Board. The Division Committee Chair serves as the TRB Division Chair for NRC Oversight and as an *ex officio* member of the NRC Governing Board.

#### **Appointment Procedure**

Appointed by NRC Chair upon recommendation of Executive Director in consultation with NRC and Chair of TRB Executive Committee, subject to approval of the NRC Governing Board. Appointment letters signed by NRC Chair. Selection of members complies with TRB *Terms of Reference*.

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

#### **Composition**

Subcommittee of the TRB Executive Committee, composed of 11 members. The Chair and 10 other members serve 3-year terms.

#### **Function**

To advise the Executive Committee and staff on matters relating to selection, scope, and execution of policy-oriented studies within TRB; establish goals and directions for those parts of TRB engaged in policy studies; plan and develop opportunities for new Executive Committee initiatives; identify critical transportation issues warranting TRB consideration; act for Executive Committee on all matters requiring its attention between regular Executive Committee meetings; advise the Chairs of the Executive Committee and the Division Committee of actions taken; and report to the Executive Committee on all of its activities at each Executive Committee meeting. The SPPR is also charged to identify major transportation problems, with particular attention to multimodal and intermodal issues; propose action plans for TRB that address these problems; and suggest sources for the funds needed to pursue these plans. The SPPR also oversees TRB's strategic planning process,

including development of TRB Strategic Plans, and develops policy session agendas and other program initiatives of the TRB Executive Committee.

#### **Appointment Procedure**

Appointed by Chair of the TRB Executive Committee following guidelines approved by the Executive Committee. Bias/conflict-of-interest statements are not required.

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## **Technical Activities Council (TAC)**

#### **Composition**

The Technical Activities Council consists of the overall Chair, the Chairs of each of the eleven Groups, and one or more at-large members. All serve 3-year terms. Members who are in the second year of their 3-year term serve as the Council's representatives to the TRB Executive Committee, along with the Technical Activities Council Chair.

#### **Function**

***Program Function:*** Provides a forum for interchange and interaction among the Groups, between the Groups and the TRB Executive Committee, and between the Groups and TRB staff. Assists in identifying emerging topics of interest to the transportation community and cross-cutting issues. Facilitates interaction among Groups, Sections, and committees to address cross-cutting issues and opportunities. Fosters outreach efforts to other transportation organizations and groups.

***Administrative Function:*** Plays a significant role in refining and implementing processes and techniques for improving the quality of meetings and publications emanating from Technical Activities Division volunteer activities. Serves as a focal point for the continuing review in each of the Group Executive Boards of the need for establishing new committees and for discharging those that are no longer necessary.

#### **Appointment Procedure**

Appointed by the TRB Executive Director with approval by Division Committee Chair. Bias/conflict of interest statements are required.

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## **MARINE BOARD**

### **Composition**

15-20 members. The Chair and the other members serve 3-year terms.

### **Function**

To identify research and policy study needs and provide a forum for the exchange of information relating to new technologies, laws and regulations, economics, the environment, and other issues affecting the marine transportation system, port operations, coastal engineering, and marine governance. Also, to oversee standing technical committees in related areas.

### **Appointment Procedure**

Appointed by NRC Chair following recommendation of TRB Executive Director in consultation with NRC and members of Marine Board. Appointment letters are signed by the TRB Executive Director. Bias/conflict of interest statements are required.

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## **COOPERATIVE RESEARCH PROGRAM OVERSIGHT COMMITTEES**

### **Composition**

Varies according to program and origin. Some oversight bodies (NCHRP, TCRP, and ACRP) are entities that are appointed and exist outside the NRC/TRB. Others may be internally appointed.

### **Function**

To select research problems and program the funding for them, on behalf of the constituent user groups associated with the program.

### **Appointment Procedure**

Varies according to program and origin. Internally appointed committees are appointed by TRB Executive Director following approval by SNO Chair and, as appropriate, by NRC Chair. Appointment letters are signed by the TRB Executive Director. Bias/conflict of interest statements are required.

## TRB PROJECT APPROVAL PROCESSES

### **Policy Studies and Program Reviews**

#### Description

Projects conducted by NRC-appointed committees that provide consensus findings, recommendations, advice

#### Approval Steps

Approval by TRB Executive Committee or Subcommittee on Planning and Policy Review; approval by Executive Committee of NRC Governing Board

#### Product

Full-length study reports, interim reports, letter reports

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### **Conferences and Workshops**

#### **I. Organized by TRB Standing Technical Committees**

##### Description

Outgrowth of standing committee activity; no significant outside funding; often self-supporting; no consensus findings, recommendations, or advice

##### Approval Steps

Approval by TRB Executive Committee or Subcommittee on Planning and Policy Review

##### Product

Transportation Research Circular

#### **II. Organized by Other Organizations and Cosponsored by TRB**

##### Description

Conference formats vary, but TRB must have a role in conference planning

##### Approval Steps

Approval by TRB Executive Committee or Subcommittee on Planning and Policy Review

##### Product

No TRB publication

#### **III. Organized by Specially Appointed (“Ad Hoc”) TRB/NRC Committee**

Description

Supported by outside funding; may or may not lead to consensus findings, recommendations, or advice (most are not authorized to do so)

Approval Steps

Approval by TRB Executive Committee or Subcommittee on Planning and Policy Review; approval by Executive Committee of NRC Governing Board

Product

Conference or workshop report, summary, or proceedings (in the TRB Conference Proceedings series)

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**Cooperative Research Program Projects**Description

Supported by NCHRP, TCRP, ACRP, NCFRP, or HMCRP funding; projects selected by NRC/TRB-appointed oversight committees or by non-NRC/TRB entities representing the user communities; research conducted by contractors selected by individual project panels, which oversee the work and review final report

Approval Steps

Approval by the TRB Division Committee Chair of research problems selected by the non-NRC/TRB entities (SCOR, TOPS, and AOC Committees)

Product

CRP Reports, Research Results Digests

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**Synthesis Projects**Description

Supported by NCHRP, TCRP, ACRP, or FMCSA funding; projects selected by oversight panels representing the user communities; research conducted by contractors under the guidance of individual topic panels. Umbrella panels review final documents.

Approval Steps

Approval by the TRB Executive Director of research topics selected by oversight panels.

Product

Synthesis report

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**TRB POLICY ON EXECUTIVE COMMITTEE PARTICIPATION IN  
COOPERATIVE RESEARCH PROGRAM (CRP) PROJECTS  
Revised 1/8/2021**

In the administration of its contract research programs, TRB wishes to maximize both the substance and the appearance of fairness in the selection and management of its contractors, at the same time ensuring the quality and expanding the number of potential researchers as much as possible.

It is in TRB's interest to use the expertise of the best qualified individuals and organizations available to perform its research programs, where no actual or apparent conflicts of interest exist. However, conflicts may arise or appear to exist if members of TRB's Executive Committee or organizations with which they are affiliated submit proposals on projects.

To prevent such problems in the administration of the Cooperative Research Programs (CRP) administered by TRB, members of the Executive Committee are not permitted to serve as principal investigators on any CRP projects. Additionally, the following rules will apply to all members of the Executive Committee:

1. No involvement is permitted in the selection process for CRP contractors, where the individual Executive Committee member or an affiliated organization is being considered.
2. No involvement is permitted in TRB's administration of a contract in which the individual or an affiliated organization is involved.
3. No involvement is permitted in setting or modifying administrative policies that would directly or materially affect either the administration of existing contracts with the individual or affiliate organization, or the individual's or affiliate organization's ability to submit proposals.

The Chair of the TRB Executive Committee, serving a one-year term; the Chair of the TRB Division Committee, serving a three-year term; and the Vice Chair of the Division Committee, serving a three-year term, have close ties to the Executive Director and to the activities of TRB. Neither of the Chairs nor the Vice Chair has any role in the selection of contractors for CRP projects. Nevertheless, because of these special relationships, the following additional rules also will apply to their activities on CRP projects during their terms as Executive Committee Chair, Division Committee Chair, and Division Committee Vice Chair:

4. Individuals serving in these positions may not personally propose on any CRP project during their years of service as Executive Committee Chair, Division Committee Chair, and Division Committee Vice Chair. This limitation on their right to propose on a CRP project as an individual does not extend to a governmental or academic entity with which they are affiliated provided that the individuals in question do not hold a significant financial interest (other than their salaries) in the governmental entity or academic institution of higher learning. Affiliated organizations in which an Executive Committee Chair, Division Committee Chair, or Division Committee Vice Chair holds a significant financial interest, other than a salary derived from a position in a governmental entity or an academic institution of higher learning, may also propose, but only in accordance with case-specific guidelines established by the Division Committee in advance of that individual's appointment as Executive Committee Chair, Division Committee Chair, or Division Committee Vice Chair to ensure that there is neither actual nor perceived conflict of interest.
5. They may not be personally consulted or participate in any way in the preparation of a proposal, or otherwise provide information that would be advantageous to a proposal team.
6. They may not work on a project as a member of the research team or as a consultant to the team.

Where a newly appointed Chair of the Executive Committee, Chair of the Division Committee, Vice Chair of the Division Committee, or other member of the Executive Committee has existing activities or commitments covered in the foregoing list of rules on a CRP project at the time of appointment, those activities will be reviewed and recommendations made on a case-by-case basis by the members of the Division Committee (exclusive of a newly appointed chair, vice chair, or member if his/her activities are being considered).

June 3, 2022