Innovating an Equitable, Resilient, Sustainable, and Safe Transportation System

After an all-virtual conference in 2021, the Transportation Research Board’s (TRB’s) 101st Annual Meeting welcomed transportation professionals in person to the Walter E. Washington Convention Center in Washington, D.C., January 9–13, 2022. A smaller but motivated—and masked and vaccinated—crowd convened for committee meetings, poster and lectern sessions, and a keynote address from U.S. Department of Transportation (U.S. DOT) Secretary Pete Buttigieg.

Speaking via video teleconference in a “fireside chat” with TRB Executive Committee chair Susan Shaheen and vice chair Nathaniel Ford, Buttigieg discussed the role of research in fulfilling the promise of the recently passed Infrastructure Investment and Jobs Act of 2021 and the crucial need for equity, safety, and innovation in transportation now and in the future.


Details and highlights appear on the following pages.

Annual Meeting photographs by Risdon Photography.
Crowds flock to the Exhibit Hall to network and see the latest innovations in transportation technology and materials.

Rebekah Straub-Anderson and Noel Comeaux exchange insights during the All-Chairs Meeting.

Twenty-four students from 13 schools participated in the 2022 TRB Minority Student Fellows Program, with research backgrounds ranging from civil engineering to sustainable build environments to urban and regional planning. Pictured are (left to right) José Portillo, Ash Avila, Christopher Rocha, Valencia Stewart, Isaac Zuniga, Kamalen Santos-Diaz, Esther Bia, Jerianni Thompson, Jennifer Restrepo, Dunsin Fadojutimi, Daniel Romero, Isabel Gutierrez, Jesús Molina, Jayson Francois, Sarah De La O, Benson Long and Laura Camarena (2021 Alumni Scholarship Awardees), Omar Galicia, and Jeannine Mbabazi.

Valencia Stewart, Texas Southern University, participates in the Minority Student Fellows Orientation.

Walter (Jeff) Moore (left), chair of the Public Engagement and Communications Committee, and committee members Terri Parker and Pamela Lebeaux (second from right and far right, respectively) join the winners of the 15th Annual Competition for Communicating Transportation Concepts with John and Jane Q. Public. They are (left to right) Tim Halle, Rebecca Krawiec, Ryan Brown, Tara Andringa, Samantha Dubay, and Katie Caskey. The committee sponsors the competition.

At the TRB booth, participants browse through issues of the Transportation Research Record, in which their research papers may be published.

Overseeing the organization and activities of TRB’s standing committees, the 2022 Technical Activities Council (TAC) are (front row, left to right) Bob Hazlett, Pamela Keidel-Adams, Ann Brach, TAC Chair Avery Grimes, Libby Rushley, Michael Griffith, (back row, left to right) Stephen Maher, Kathryn Zimmerman, Mark Reno, Allison Yoh, Richard Bornhorst, Tara Cavalline, and Pasi Lautala.
Sessions and Workshops

1. TRB Executive Committee Chair Susan Shaheen (left) discusses a Tennessee case of alternative truck routing in freight intermodal connectors with student researchers Grace Mbaiji (center) and Jeannine Mbabazi, both of Tennessee State University.

2. Chaitanyaganesh Bhat (left), Asphalt Institute, and Milena Rangelov, FHWA, lead workshop attendees in a participation activity about the information needed to determine the potential environmental impact of pavement materials.

3. John Hildreth, Western Carolina University, comments on advancing low- and zero-emission marine vessel technology options.

4. Adam Schmidt, North Carolina State Transit, presents his research during the 3-Minute Thesis competition.

5. Esther Bia, University of New Mexico, shares details of the impact of bus rapid transit on traffic safety.

6. Lynn Scholl, Inter-American Development Bank, presents a workshop on socially inclusive transportation development in Latin America and the Caribbean.

7. Theresa Dao-Ngo, Port of Long Beach, participates in a panel discussion about public agency perspectives on supply chain disruptions.

8. John Myers, Missouri University of Science and Technology, presents one of several talks on innovative materials that extend the life of bridges.
Committees

1. Laurel Radow, member of the Transportation Systems Resilience Section, discusses the September–October 2021 issue of TR News, which focused on lessons the transportation industry learned during the 20 years since the 9/11 terrorist attacks.

2. Diversity, Equity, and Inclusion Committee Chair Carol Abel Lewis leads a discussion about equity in transportation.

Blue Ribbon for Best Practices

TAC Chair Avery Grimes presented Blue Ribbon Awards for best practices of outstanding technical activities committees in the following areas:

1. Identifying and Advancing Ideas for Research: Quality Assurance Management Committee, chaired by Tim Aschenbrener;
2. Attracting and Preparing the Next Generation of Professionals and Scholars in TRB: Urban Freight Transportation Committee, chaired by William (Bill) Eisele;
3. Moving Research Ideas into Transportation Practice: Transportation Needs of National Parks and Public Lands Committee, chaired by Natalie Villwock-Witte;
4. Moving Research Ideas into Transportation Practice: Low-Volume Roads Committee, chaired by Laura Fay (accepted by David Jones);
5. Contributing to Improving the Management and Operations of TRB Committees: Equity in Transportation Committee, chaired by Tracee Strum-Gilliam (left) and Gloria Jeff; and
6. Increasing the Committee Membership and Friends, Especially from Groups That Are Historically Underrepresented in Transportation: International Trade and Transportation Committee, chaired by Juan Carlos Villa (see Page 47).
Committees
(continued)

3 Irene Marion, U.S. DOT, addresses the Equity in Transportation Committee via Zoom during its standing-room-only business meeting.

4 Tracy Duval, FHWA, shares what it means to be successful in a transportation agency during the Minority Student Fellows Career Panel. Other panelists included (left to right) Karl Simon, U.S. Environmental Protection Agency; Ian Rowe, U.S. Department of Energy; and Latoya Jones (far right), FHWA.

Young Members Council on Aviation Vice Chair Ryan Dittoe gives a leadership update.

6 Engineering Geology Committee Chair Vanessa Bateman presides over a lectern session on stability problems.

Paper Awards

The Fred Burggraf Award is presented to researchers age 35 and younger. Recipients are shown from left to right.

1 Susan Hotle and Osama Alsalous, Virginia Polytechnic Institute and State University, received the Burggraf Award for best aviation paper.

2 Amir Golalipour, FHWA, and Varun Veginati, Engineering and Software Consultants, Inc., received the Burggraf Award for best transportation infrastructure design and construction paper. Not pictured: David J. Mensching.

3 Wesley Darling, University of California, Berkeley, received the William W. Millar Award for best paper in the field of public transportation. Not pictured: Candace Brakewood, Emily Carpenter, Tami Johnson-Praino, and Carole Turley Voulgaris.

4 Peter J. Kirsch of Kaplan, Kirsch, and Rockwell, received the John C. Vance Award for best paper on legal resources. Not pictured: Christian L. Alexander.

5 Edith Arámbula Mercado and Amy Epps Martin, Texas A&M Transportation Institute, shared the K.B. Woods Award for best design and construction paper with Fawaz M. Kaseer, Michigan Department of Transportation.
Major Awards

1. Director of Freight Planning for the New Jersey Transportation Planning Authority, Anne Strauss-Wieder is the recipient of the 2022 Thomas B. Deen Distinguished Lectureship. Her public- and private-sector experience over more than 40 years has involved supply chains, industrial and economic development, resilience, and multimodal freight movement. She has authored numerous assessments of emerging trends and issues and works proactively on addressing key regional freight issues and trends. Strauss-Wieder is recognized for her contributions to the transportation community in freight mobility, resilience, business continuity, and “freight as a good neighbor” effective practices.

2. Hani S. Mahmassani, the William A. Patterson Distinguished Chair at Northwestern University in Evanston, Illinois; director of the Northwestern University Transportation Center; and director of U.S. DOT’s Center of Excellence on Telemobility, is the 2021 recipient of the Roy W. Crum Distinguished Service Award. Named for TRB’s former director, who served from 1928 until his death in 1951, the award recognizes outstanding leadership in transportation research or research administration. Mahmassani is recognized for his distinguished achievements in modeling and understanding individual behavior in complex networks in order to plan, design, and operate these systems to achieve societal and sustainability objectives.

3. Recognized for his outstanding service to TRB and advancement of innovations in public transportation partnerships, Vincent Valdes is the 2021 recipient of the W.N. Carey, Jr. Distinguished Service Award. He is executive director of the Southwestern Pennsylvania Commission, the designated metropolitan planning organization for a 10-county region, including the city of Pittsburgh. He leads a team of planners, program managers, transportation specialists, and engineers who work to create a common regional vision and transportation implementation program for southwestern Pennsylvania communities. The award is named for TRB’s executive director from 1967 to 1980.

4. Jacqueline D. Grimshaw, vice president for Government Affairs at the Center for Neighborhood Technology in Chicago, Illinois, is the 2022 recipient of the Sharon D. Banks Award for Humanitarian Leadership in Transportation. She is recognized for championing the interests and concerns of—and the impacts felt by—those who are not usually at the decision table. She is honored for her thoughtful, effective, and people-oriented leadership style, her groundbreaking implementation of practical environmental justice initiatives, and the hundreds of colleagues she has mentored to become more effective professionals and better people. The biennial award was established in memory of Sharon D. Banks, former general manager of AC Transit in Oakland, California, and past TRB Executive Committee chair.

5. TRB’s Executive Committee established the Robert E. Skinner, Jr. Distinguished Transportation Research Management Award to recognize outstanding achievement in the management, administration, promotion, fostering, and implementation of transportation research. In addition to establishing the new award, the Executive Committee selected Robert E. Skinner, Jr., TRB executive director from 1994 to 2015, as its inaugural recipient. Under Skinner’s oversight, TRB significantly strengthened the multimodal and multidisciplinary range of its programs, inaugurated major communications initiatives, fostered international research partnerships and coordination, and worked proactively to enhance the diversity of TRB’s committees, programs, and staff.

6. Thomas B. Deen, who served from 1980 to 1994 as TRB’s eighth executive director, stands with Anne Strauss-Wieder, recipient of the award named for him. The lectureship recognizes the career contributions and achievements of an individual in one of the areas covered by TRB’s Technical Activities Division.
Each year, the TRB Executive Committee selects a topic worthy of deeper analysis to address in a policy session. The 2022 policy session topic was decarbonization in the transportation sector, with the following panel of experts (left to right):

1. **Chris T. Hendrickson**, Carnegie Mellon University;
2. **Young Tae Kim**, International Transport Forum; and

**New Leaders Steer the Executive Committee**

Nathaniel P. Ford, Sr., (right) is the 2022 chair of TRB’s Executive Committee. He is chief executive officer of the Jacksonville Transportation Authority (JTA) in Florida, a state agency responsible for multimodal public transportation and infrastructure programs. Under his guidance, JTA is developing the Ultimate Urban Circulator, a 10-mile autonomous vehicle network in downtown Jacksonville that will modernize and expand its Skyway automated people mover system.

Ford is an advocate of innovative multimodal transportation solutions, complete streets, walkable neighborhoods, public–private partnerships, and transit-oriented development. During his nine years at JTA, he has received numerous awards for his transformational and community-focused initiatives in the Northeast Florida community. In 2020, he was named the American Public Transportation Association (APTA) Outstanding Public Transportation Manager. That same year, JTA won the APTA Innovation Award for its response to the COVID-19 pandemic.

Ford holds an Executive MBA from the Davis School of Business at Jacksonville University and a Bachelor of Applied Sciences in organizational leadership from Mercer University in Macon, Georgia.

He served as the Executive Committee’s 2021 vice chair and also has served as chair of the committee’s International Activities Subcommittee, chair of its Task Force on Diversity and Inclusion, and chair of the American Public Transportation Association. Ford’s distinguished career includes tenures as chief executive officer of the San Francisco Municipal Transportation Authority and the Metropolitan Atlanta Rapid Transit Authority.

The 2022 TRB Executive Committee vice chair is Shawn Wilson, (left) Secretary of the Louisiana Department of Transportation and Development. He serves as chair of the National Cooperative Highway Research Program research panel on the Administration of Highway and Transportation Agencies. He also is president of the AASHTO Executive Committee.

James F. Albaugh, Joel Jundt, Drew K. Kodjak, Carol Abel Lewis, and Steward T.A. Pickett are new members of the Executive Committee. Reappointed members are Michael F. Ableson, Diane Gutierrez-Scaccetti, Stephen W. Hargarten, Chris T. Hendrickson, Ashby Johnson, Julie Lorenz, and Michael R. McClellan.
Executive Committee (continued)

1. 2021 TRB Executive Committee Chair Susan Shaheen hosts the Chair’s Plenary Session.
2. TRB Executive Director Neil Pedersen delivers a progress report on TRB’s initiatives.

Also participating in the Executive Committee’s agenda and deliberations are

3. Julie Lorenz, Kansas Department of Transportation;
5. Carol Abel Lewis, Texas Southern University, and Hani Mahmassani, Northwestern University;
6. Paul Skoutelas (left), American Public Transportation Association, and Randell Iwasaki, Amazon Web Services; and
7. Marie Therese Dominguez, New York State Department of Transportation.