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via the Mobile App (see page 9)

TRB **95th Annual Meeting Final Program**

January 10–14, 2016 Washington, D.C.



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On behalf of the Transportation Research Board Executive Committee, we are pleased to welcome you to the TRB 95th Annual Meeting in Washington, D.C. This meeting, which attracts thousands of transportation professionals each year, offers an unparalleled opportunity to share knowledge and perspectives with your colleagues and to learn about the latest developments in transportation research, policy, and practice. More than 5,000 presentations will address topics of interest to policy makers, administrators, practitioners, and researchers, from government, industry, and academic institutions.

The five-day program features more than 800 sessions and workshops on all aspects of transportation, including more than 35 on this year's spotlight theme, "Research Convergence for a Multimodal Future." Some 75 sessions and workshops also address TRB's hot topics of transformational technology, transportation and health, and transportation resiliency.

The sessions and workshops—together with meet-the-author poster sessions, committee meetings, and exhibits—offer you a variety of opportunities for information sharing and interaction.

Noteworthy events include Sunday's Welcome and Attendee Orientation Session, Monday's Thomas B. Deen Distinguished Lecture and presentation of awards, and Wednesday's special session featuring U.S. Secretary of Transportation Anthony R. Foxx, followed by the TRB Chairman's Luncheon. Please join us for the opening of the exhibit hall on Sunday and enjoy light refreshments while visiting the more than 200 exhibitors. The exhibits are open Sunday through Tuesday, showcasing products and services of TRB sponsors and participating organizations. While there, stop by the TRB booth (No. 1003) to find a variety of helpful publications, information, and resources.

TRB volunteers from 220-plus standing committees have assembled this timely, informative, and wide-ranging program. The continuing support that TRB receives from its volunteers, its year-round sponsors and affiliates, and its Annual Meeting patrons and exhibitors helps make this event and other TRB programs possible.

We are delighted that you are participating and hope that you enjoy exploring all that the TRB Annual Meeting and the Washington, D.C., area have to offer.



A handwritten signature in black ink that reads "Dan Sperling".

Dan Sperling
Chair, Executive Committee



A handwritten signature in black ink that reads "Neil J. Pedersen".

Neil J. Pedersen
Executive Director

The **National Academy of Sciences** was established in 1863 by an Act of Congress, signed by President Lincoln, as a private, non-governmental institution to advise the nation on issues related to science and technology. Members are elected by their peers for outstanding contributions to research. Dr. Ralph J. Cicerone is president.

The **National Academy of Engineering** was established in 1964 under the charter of the National Academy of Sciences to bring the practices of engineering to advising the nation. Members are elected by their peers for extraordinary contributions to engineering. Dr. C. D. Mote, Jr., is president.

The **National Academy of Medicine** (formerly the Institute of Medicine) was established in 1970 under the charter of the National Academy of Sciences to advise the nation on medical and health issues. Members are elected by their peers for distinguished contributions to medicine and health. Dr. Victor J. Dzau is president.

The three Academies work together as the National Academies of Sciences, Engineering, and Medicine to provide independent, objective analysis and advice to the nation and conduct other activities to solve complex problems and inform public policy decisions. The Academies also encourage education and research, recognize outstanding contributions to knowledge, and increase public understanding in matters of science, engineering, and medicine.

Learn more about the National Academies of Sciences, Engineering, and Medicine at www.national-academies.org.

The **Transportation Research Board** is one of seven programs of the National Academies of Sciences, Engineering, and Medicine. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied committees, task forces, and panels annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation. www.TRB.org



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(Admiral, U.S. Coast Guard), Commandant, U.S. Coast Guard, U.S. Department of Homeland Security (ex officio)

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Registration

Convention Center, Level 2, L Street Bridge

Registration hours:

Saturday, 3:00 p.m.–7:00 p.m.

Sunday, 8:00 a.m.–6:30 p.m.

Monday, 7:00 a.m.–5:00 p.m.

Tuesday, 7:30 a.m.–4:00 p.m.

Wednesday, 7:30 a.m.–2:00 p.m.

Registration is required for all attendees, including those who register for any workshops.

The registration fee includes admission to workshops (except to the Human Factors workshops), sessions, and exhibits, as well as access to the TRB Annual Meeting Online (<http://AMOnline.TRB.org>). Additional fees and tickets are required for the Human Factors workshops, which have limits on attendance, and for the Chairman's Luncheon; the tickets are like cash and cannot be replaced if lost.

Admission to the sessions and exhibits is by registration badge only. For security reasons, each meeting attendee must wear a registration badge; the badge must be unobstructed—for example, not obstructed by business cards; people without badges may be escorted from the building.

The phone number for the TRB Registration Desk is 202-249-4004. This number is in operation only during the registration times listed above. Please note that TRB staff members are not able to page registrants or to deliver messages.

Wi-Fi

TRB has arranged for complimentary Wi-Fi Internet access in all meeting rooms and public areas of the convention center and the Marriott Marquis.

However, the capacity is not unlimited. Attendees are asked not to use Wi-Fi for streaming videos or audio, for video conferencing, or for other uses that would require high-level bandwidths.

Please use the appropriate network and password below to log into the Wi-Fi for the building in which you are located. If you move from the Marriott Marquis to the convention center, or vice versa, please update your Wi-Fi settings to be sure that you are using the correct network and getting the strongest possible signal for your location.

- **For the Convention Center**
Network name: TRB Convention Center
Password: Annual2016
- **For the Marriott Marquis**
Network name: TRB Marriott
Password: Annual2016

Social Media



Twitter

Share your onsite experiences with other attendees via the TRB Annual Meeting hashtag (#TRBAM). Also follow TRB on Twitter (@TRBofNA).



Facebook

Post comments about the meeting on TRB's Facebook page.



LinkedIn

Connect with TRB on LinkedIn.



Google+

Add TRB to your Google+ circles.

Navigation Tools

The following tools are provided to help registrants navigate the TRB Annual Meeting:

Mobile App

View the listings of sessions and events, navigate interactive floor plans, and create a personalized schedule with reminders. To download the app, go to the App Store or Google Play and search for "TRB 2016." When you run the app for the first time, you will be asked to enter your e-mail address, and you should enter the same address to which your Annual Meeting registration confirmation was sent.

Interactive Program

Look up events and build a personalized schedule. Go to www.TRB.org/AnnualMeeting and click the "Interactive Program" button. Then sign in with the same e-mail address that you used when registering for the Annual Meeting. (Note: the personalized schedule in the Interactive Program and the personalized schedule in the mobile app cannot be synchronized.)

TRB Annual Meeting Online

Get access to the following information resources at TRB Annual Meeting Online:

- 2016 Compendium of Papers—Free online access to more than 2,750 papers (available in January);
- 2016 Visual Aid Presentations—Slides from more than 3,000 lectern sessions, poster presentations, and committee meetings (available in March); and
- Archives—Compendium of Papers and Visual Aid Presentations from the 2011 to 2015 Annual Meetings.

To log in to TRB Annual Meeting Online, go to <http://AMOnline.TRB.org>, and click "Login." When prompted, enter the same e-mail address that you used when registering for the Annual Meeting. For the password, enter the six-digit ID number that appears on your Annual Meeting registration badge.

Exhibits

Convention Center, Level 2, Hall D

Come and see a variety of transportation-related products and services showcased by commercial organizations and TRB Sponsors. For exhibitor listings and a floor plan, see pages 103–133.

Exhibit hours:

Sunday, 4:00 p.m.–7:00 p.m. (*Opening and Reception*)

Monday, 9:00 a.m.–4:00 p.m.

Tuesday, 9:00 a.m.–4:00 p.m.

(continued on page 6)

Location Intelligence Powering Smarter Transportation Networks



HERE is the leading global provider of map data and navigation services that are behind location-enabled Enterprise applications for commercial and government markets. Our suite of products, from public transit and pedestrian routing to our traffic portfolio, power multi-modal systems across the US. With thirty years of experience, HERE has the right balance of software, technology and experts critical for safe and efficient transportation networks.

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Lectern Sessions and Workshops

More than 800 sessions and workshops will be presented at the meeting. For a complete list of session and workshop titles, see the “Sessions, Events, and Meetings” section on page 27. The full description for each session and workshop is available via the mobile app (see “Navigation Tools” section on page 4). See the schedule at a glance on page 25 for the general timetable.

Spotlight and Hot Topic Sessions



More than 35 sessions and workshops will focus on the spotlight theme for the 2016 Annual Meeting: **Research Convergence for a Multimodal Future.**

In addition, 75 sessions and workshops will look at one or more of the following hot topics identified by the TRB Executive Committee:

- **Transformational Technologies:** New technologies that have the potential to transform transportation as we know it.
- **Resilience:** How transportation agencies are becoming more adept at preparing for, absorbing, recovering from, and adapting to adverse events.
- **Transportation and Public Health:** Effects that transportation can have on public health by reducing transportation-related casualties, providing easy access to healthcare services, mitigating environmental impacts, and reducing the transmission of communicable diseases.

To find sessions on these topics, look for the Spotlight icon and the Hot Topic icon in the “Sessions, Events, and Meetings” section starting on page 27.

Poster Sessions

Convention Center, Level 2, Hall E



Poster Sessions provide an opportunity to interact with authors in a more personal setting than the conventional lecture. The papers presented in these sessions meet the same review criteria as lectern-session presentations. For a complete list of poster sessions, see the “Sessions, Events, and Meetings” section on page 27. The full description for each poster session—including the titles and locations of individual posters—is available via the mobile app (see “Navigation Tools” section on page 4). A floor plan of posters appears on page 16. You can enter the poster sessions through the Hall E entrance. Also, whenever exhibits are open, you can enter directly from Hall D.

Continuing Education Credits



Certification Maintenance

Nationally recognized Professional Development Hours (PDHs) may be claimed for attending the TRB Annual Meeting. Each hour of participation earns one (1) PDH. Attendees must maintain their own records of attendance. TRB will confirm an individual’s registration at the request of the licensing or certifying agency. A credit statement

form for PDHs is on page 26. Please note that neither TRB nor the 2016 Annual Meeting is certified at this time with the state licensing boards of New York and Florida. TRB is working with state boards to become an approved provider of continuing education credits.

The American Planning Association program to certify Continuing Maintenance (CM) credits for retaining American Institute of Certified Planners certification is offered for some sessions at the 2016 TRB Annual Meeting. In the Annual Meeting mobile app, tap the “Program” icon on the home screen, and then tap “CM Sessions,” for a list of sessions that have been approved for CM credits. Also, on the Annual Meeting Interactive Program, you can click the box on the left for “AICP Certification Maintenance Sessions,” to filter just for sessions with approved CM credits.

Discussions

After the TRB Annual Meeting, discussions may be submitted for papers that will be published in the *Transportation Research Record: Journal of the Transportation Research Board*. TRB policy is to publish the paper, the discussion, and the author’s closure in the same volume of the *Record*. Attendees interested in submitting a discussion of any paper must notify TRB no later than February 1, 2016. The criteria for discussions of papers and the directions for submittal are posted on TRB Annual Meeting Online (<http://AMOnline.TRB.org>).

Committee Meetings

Except for executive sessions, the meetings of TRB committees are open to all registrants. For details, see the “Committee Meetings” section (pages 62–78). Meeting titles and times also are listed in the “Sessions, Events, and Meetings” section starting on page 27. Also, you can access full information regarding meetings via the mobile app (see “Mobile App and Social Media,” page 9).

First-Time Attendees

If you’re a first-time attendee, you are encouraged to attend the **Welcome and Attendee Orientation Session** on Sunday, January 10, from 2:30 p.m. to 4:00 p.m., in Ballroom AB, on Level 3 of the Convention Center. The session will provide helpful information about how you can become involved in TRB committee activities, and how you can make the best use of your time at the Annual Meeting.

You also are encouraged to attach the white “New Attendee” ribbon to your name badge. (You can request this ribbon at registration or materials pickup.) Long-time attendees are encouraged to offer assistance in navigating the TRB Annual Meeting to participants wearing the New Attendee ribbon.

Newsroom

Convention Center, Level 3, Room 304

The Newsroom is open to media registrants only, during the following hours:

- Sunday, 7:30 a.m.–5:00 p.m.
- Monday, 7:30 a.m.–5:00 p.m.
- Tuesday, 7:30 a.m.–5:00 p.m.
- Wednesday, 7:30 a.m.–5:00 p.m.
- Thursday, 7:30 a.m.–11:00 a.m.

Media registrants may visit the newsroom to collect information about TRB programs and projects. Light refreshments are provided. Wi-Fi access is available from this room if you bring your own devices. The newsroom will not be secure—you are responsible for securing personal belongings while at the Annual Meeting.

Speaker Ready Room

Convention Center, Street Level, Salon F

The speaker ready room is open to session speakers and poster presenters only. The room provides them with the opportunity to upload their latest presentations (if they have not previously done so) for availability online to attendees. For lectern sessions, the uploaded presentations also will be ready to display when the speaker arrives in the session room. Hours are as follows:

- Saturday, 3:00 p.m.–7:00 p.m.
- Sunday, 8:00 a.m.–6:00 p.m.
- Monday, 7:00 a.m.–7:30 p.m.
- Tuesday, 7:00 a.m.–7:30 p.m.
- Wednesday, 7:00 a.m.–4:30 p.m.
- Thursday, Closed

No Smoking



The use of tobacco products is strictly prohibited. District of Columbia law prohibits smoking at all functions and events and in the public areas of the convention center and hotels. Thank you for not smoking at TRB events.

First Aid and Emergencies

- **In an emergency:**
 - In the *Convention Center*, call 202-249-3333 (or house phone number 3333).
 - In the *Marriott Marquis*, call 202-824-9667 (or house phone number 59667).
- Please use the above numbers (and not 911).
- **Nonemergency first aid** is available in the convention center during all event hours. When the exhibits are open, go to the first aid station in Exhibit Hall D (near booth 103). At other times, call 202-249-3109.

Nursing Mothers Room

TRB is providing a room in the convention center for use by nursing mothers. The room contains a refrigerator. For details, go to the Information Desk on the L-Street Bridge (Level 2).

Venues

The 2016 TRB Annual Meeting is being held at the following venues:

Walter E. Washington Convention Center

801 Mount Vernon Place, NW
Washington, DC 20001
(202) 249-3000

Marriott Marquis Washington, D.C.

901 Massachusetts Avenue, NW
Washington, DC 20001
(202) 824-9200

The two buildings are across the street from each other, and are connected by an underground walkway that links Level M2 of the Marriott Marquis with the Lower Level of the convention center.

Keep It Green!

TRB is committed to promoting green practices. Throughout the convention center and the MM you will find separate receptacles for paper, glass, compost, and other waste. Please use the appropriate receptacles.

When you depart from the meeting, please drop off your plastic badge holder in one of the badge recycling bins located by the exits for the convention center and the Marriott Marquis. Thank you for doing your part to protect the environment.

Shared Information Table

Convention Center, Level 2

TRB provides a shared information table, which may be used only by nonprofit associated groups and only for the purpose of displaying flyers to announce upcoming conferences; no posters are allowed. No other promotional material of any kind is permitted. TRB staff will remove and discard any non-TRB materials or signs placed in public areas of the convention center or hotels. The table is located along the corridor between the L Street Bridge and the Hall E Entrance.

Charging Stations

Cell phone charging stations are located in several concourse locations throughout the convention center. In addition, a charging station is located in each of the four networking zones in the exhibit hall.

Plan to Attend Next Year!

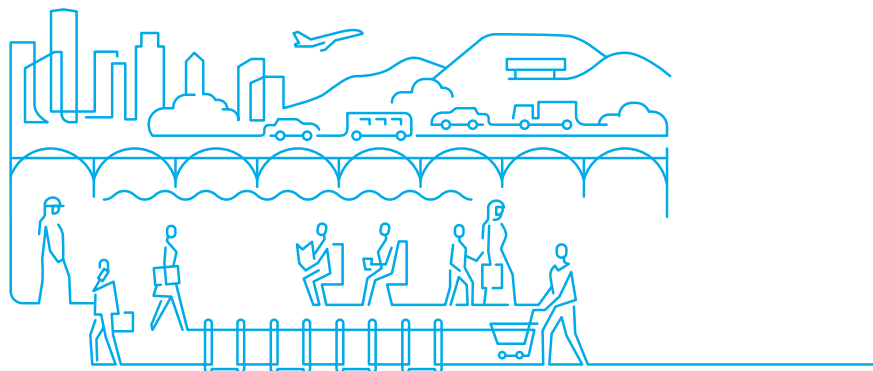
Mark your calendar for the TRB 96th Annual Meeting, at the Walter E. Washington Convention Center in Washington, D.C., January 8–12, 2017.

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The logo for CH2M, with 'ch' in lowercase and '2m' in lowercase, followed by a small 'SM' trademark symbol.

Convention Center



The convention center offers a variety of outlets from which you can purchase food and beverages. Look for these icons on the Convention Center floor plans (pages 14–15).

Downtown Food District

Lower Level, near the connection to Marriott Marquis
Serving Italian, Mexican, and Jamaican cuisine, Sunday through Wednesday, 11:00 a.m.–3:00 p.m.

Uptown Food District

Level 2, next to TRB registration
Serving American fare, including hamburgers, wings, southern style BBQ, pizza, sandwiches, salads, and hot and cold breakfasts, Sunday, 8:00 a.m.–5:00 p.m.; Monday and Tuesday, 7:30 a.m.–7:30 p.m.; and Wednesday, 7:30 a.m.–5:00 p.m. (*Hours for some food options may vary.*)

Poster Session Food Stations

Exhibit Hall E
Serving Peruvian, Indian, Jamaican, American, and hot and cold breakfasts, Monday and Tuesday, 8:30 a.m.–6:00 p.m.; and Wednesday, 8:30 a.m.–3:00 p.m. (*Hours for some food options may vary.*)

Networking Zones in Exhibit Hall

Exhibit Hall D
Networking Zone 1: Grab & Go Café;
Networking Zone 2: Asian fare, panini, and smoothies;
Networking Zones 3 and 4: Coffee and pastries.

Open during exhibit hours, Monday and Tuesday, 9:00 a.m.–4:00 p.m. (*Hours for some food options may vary.*)

Convention Center Coffee Carts

- Grand Hall
- Outside Salon B
- L Street North Lobby
- Hall D Concourse

Serving coffee, tea, and light fare, Sunday, 8:00 a.m.–3:00 p.m.; Monday, Tuesday, and Wednesday, 7:00 a.m.–3:00 p.m.; and Thursday, 7:00 a.m.–1:00 p.m.

Marriott Marquis



The Marriott Marquis offers a variety of outlets from which you can purchase food and beverages. Look for these icons on the Marriott floor plans (pages 17–20).

Anthem

Lobby Level, serving American fare and a special TRB lunch buffet; open for breakfast and lunch daily, 6:30 a.m.–2:00 p.m.

The Dignitary

Lobby Level, bar serving American fare. Open for dinner daily, 5:00 p.m.–midnight

High Velocity

Lobby Level, sports bar serving American fare. Open for lunch and dinner daily, 11:00 a.m.–1:00 a.m.

Lobby Bar

Lobby Level, serving to-go breakfast and lunch daily, 7:00 a.m.–4:00 p.m. Bar open, serving dinner daily, 4:00 p.m.–midnight.

Starbucks

Lobby Level; open for breakfast and lunch daily, 6:00 a.m.–6:00 p.m.

Coffee Cart

Level M4; Serving coffee, fruit, pastries, and snacks, Monday and Tuesday, 7:00 a.m.–3:00 p.m.



Use the Mobile App!

- **Get full session details:** The app provides more-detailed information than appears in this *Final Program*—including descriptions, individual presentation titles, and speaker names for all lectern sessions, poster sessions, and workshops.
- **See where you're going:** Click on the room name for any event, or on the booth number for any exhibitor, and you'll see exactly where it is on the floor plan.

- **Find what you're looking for:** Use the app's powerful search feature to locate any event, exhibitor, or presenter instantly by key word.
- **Build your personalized schedule:** Look up any event and add it to your personal schedule.*

To download the mobile app: Go to the App Store (for iOS) or Google Play (for Android) and search for "TRB 2016." Download and run the app. When prompted, enter the same e-mail address that you used when registering for the Annual Meeting.

Go Online!

TRB has arranged for free Wi-Fi Internet access in all meeting rooms and public areas of the convention center and the Marriott Marquis. However, the capacity is not unlimited, and attendees should not use Wi-Fi for streaming video/audio or other uses that would require high-level bandwidths.

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- Network for the Marriott Marquis:
TRB Marriott
- Password for either location (case sensitive):
Annual2016

Interactive Program

Look up events and build a personal schedule.* Go to www.TRB.org/AnnualMeeting and click the "Interactive Program" button.

TRB Annual Meeting Online

Get access to the following information resources at TRB Annual Meeting Online:

- **2016 Compendium of Papers**—Free online access to more than 2,750 papers (available in January);
- **2016 Visual Aid Presentations**—Slides from more than 3,000 lectern sessions, poster presentations, and committee meetings (available in March); and
- **Archives**—Compendium of Papers and Visual Aid Presentations from the 2011 to 2015 Annual Meetings.

To log in to TRB Annual Meeting Online, go to <http://AMOnline.TRB.org>, and click "Login." When prompted, enter the same e-mail address that you used when registering for the Annual Meeting. For the password, enter the six-digit ID number that appears on your Annual Meeting registration badge.

*Note: The personal schedule in the Interactive Program and the personal schedule in the mobile app cannot be synchronized.

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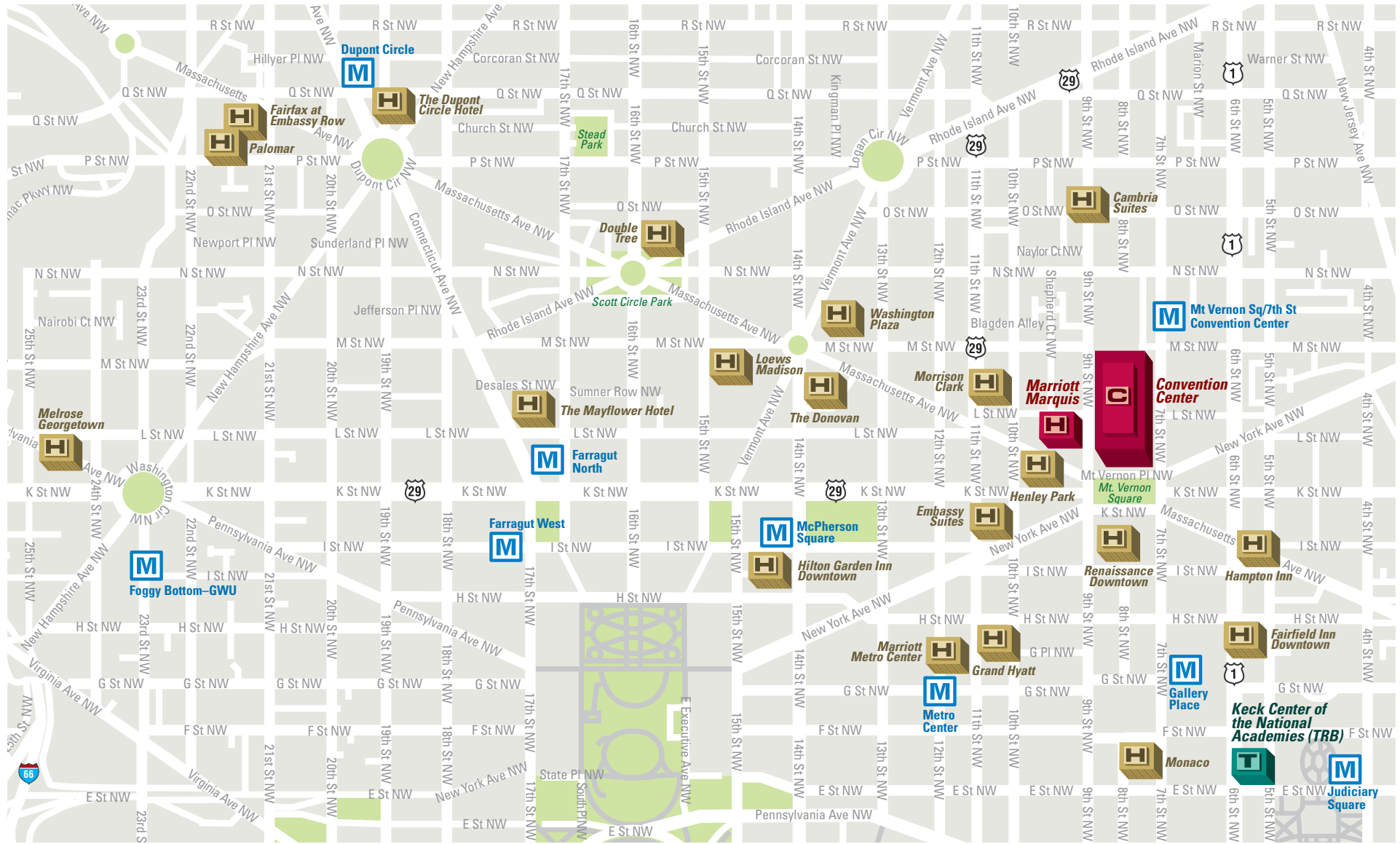
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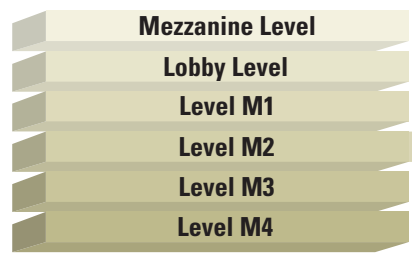
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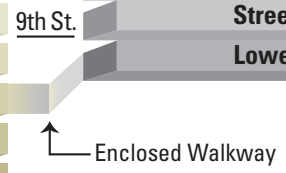


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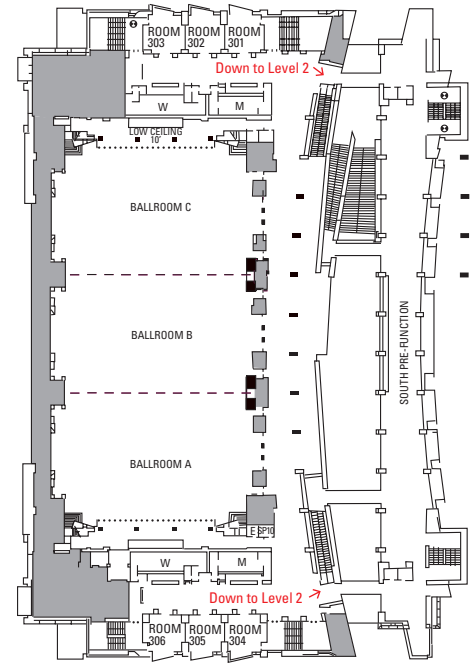


CONVENTION CENTER

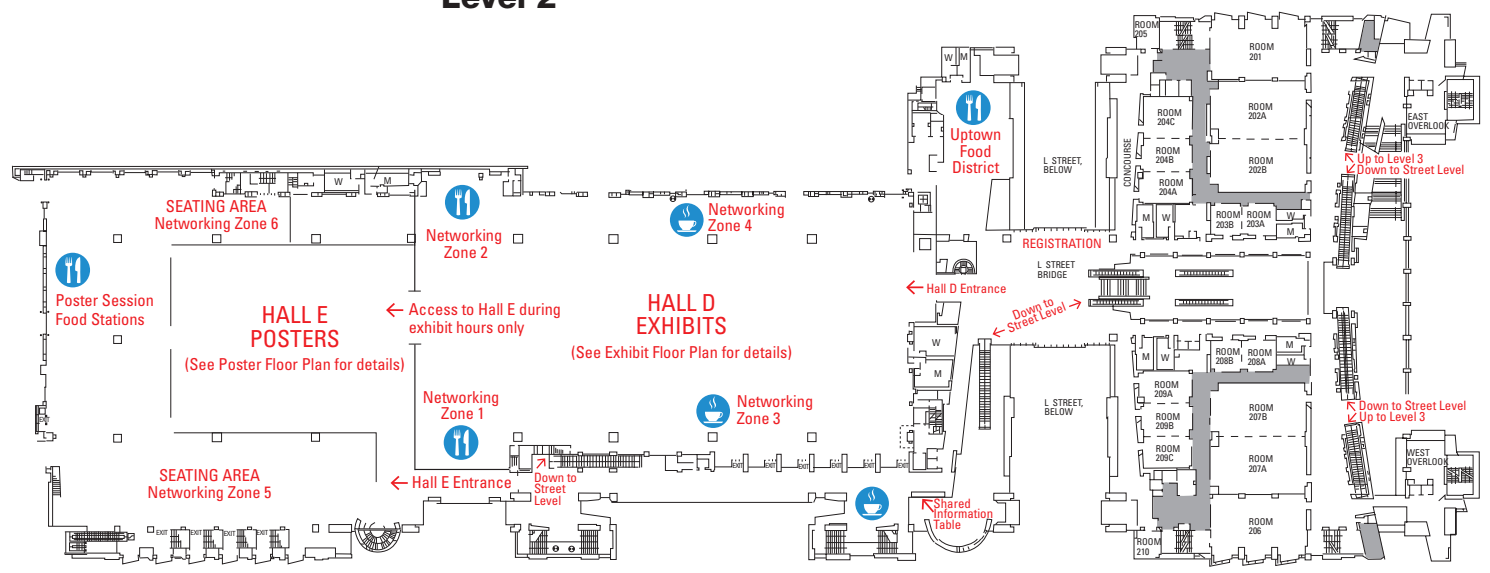


Convention Center Level Two

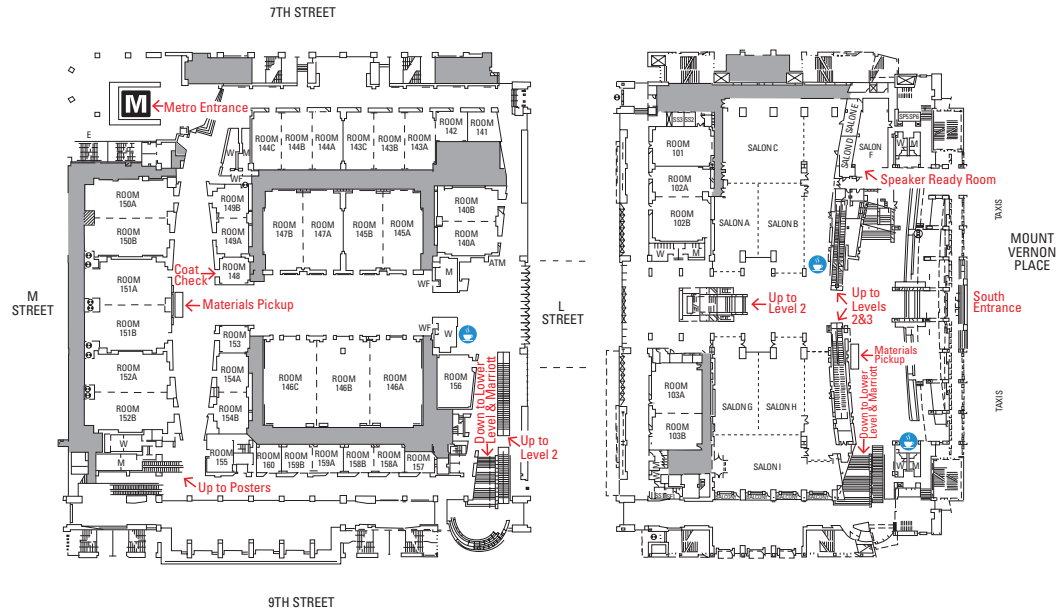
Level 3



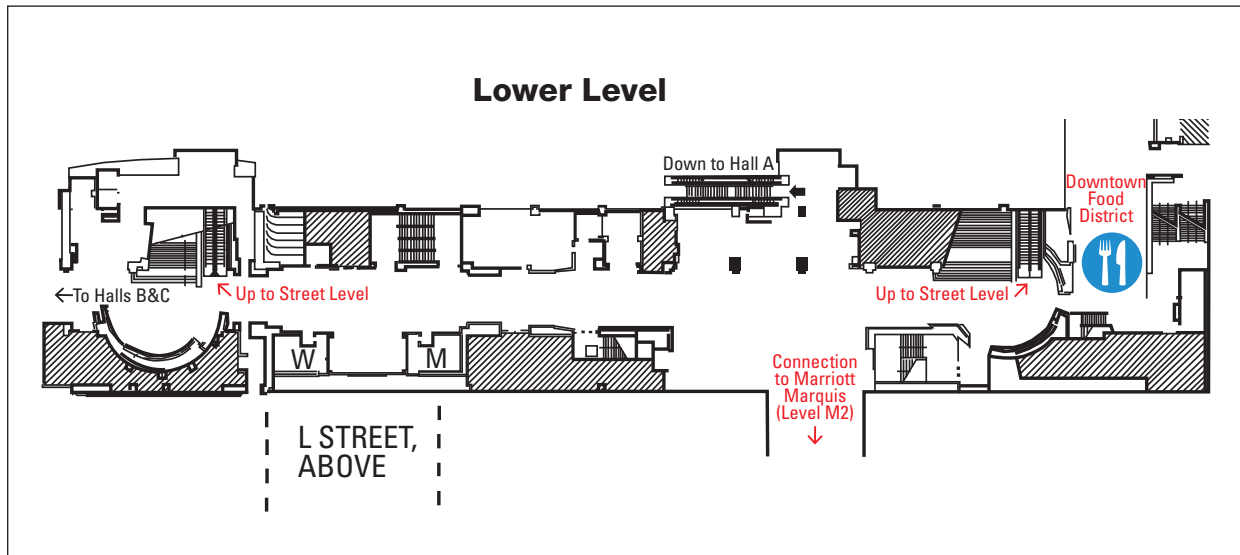
Level 2



Street Level

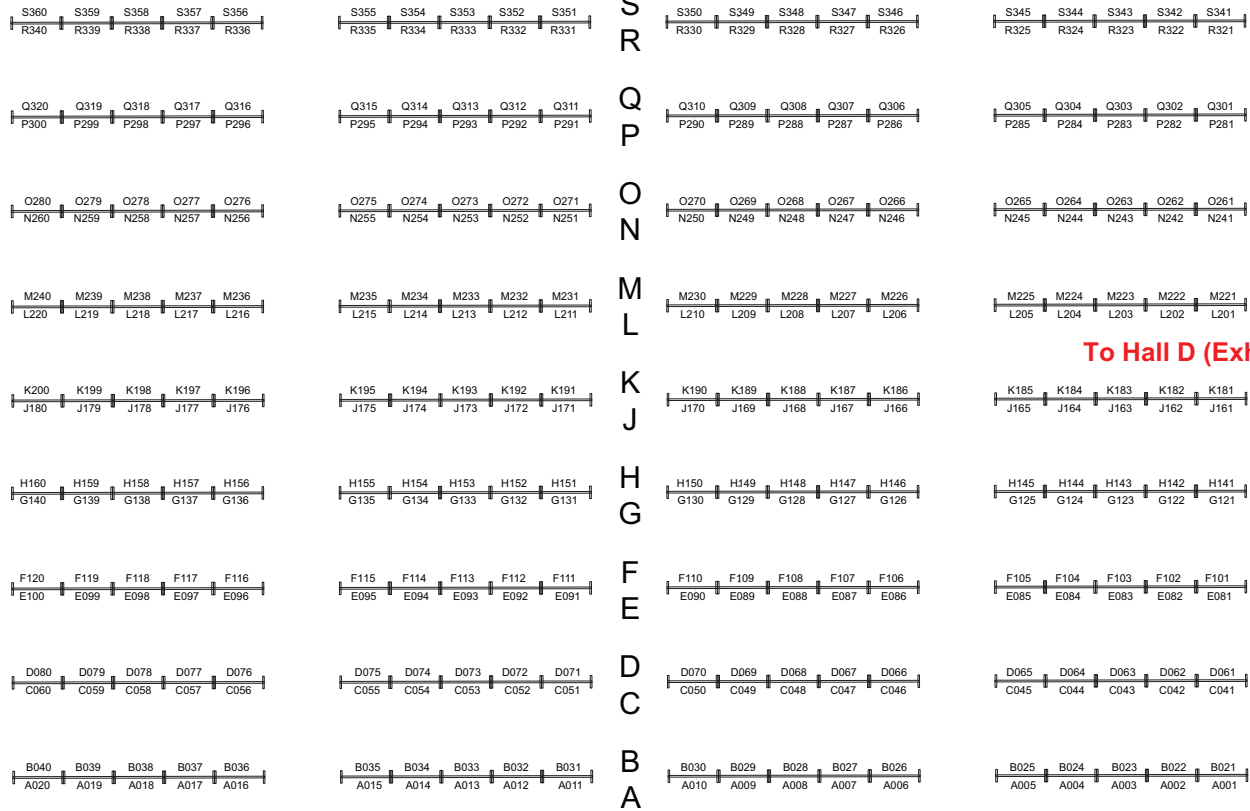


Lower Level



Poster Sessions Floor Plan

Floor Plan



To Hall D (Exhibits) →

Convention Center, Hall E

To Hall E Entrance
↓

3D-RADAR

The Ground is No Limit



Pavement Inspection



Airport Runway Inspection



Bridge Inspection



Railway Ballast Inspection



Utility Inspection



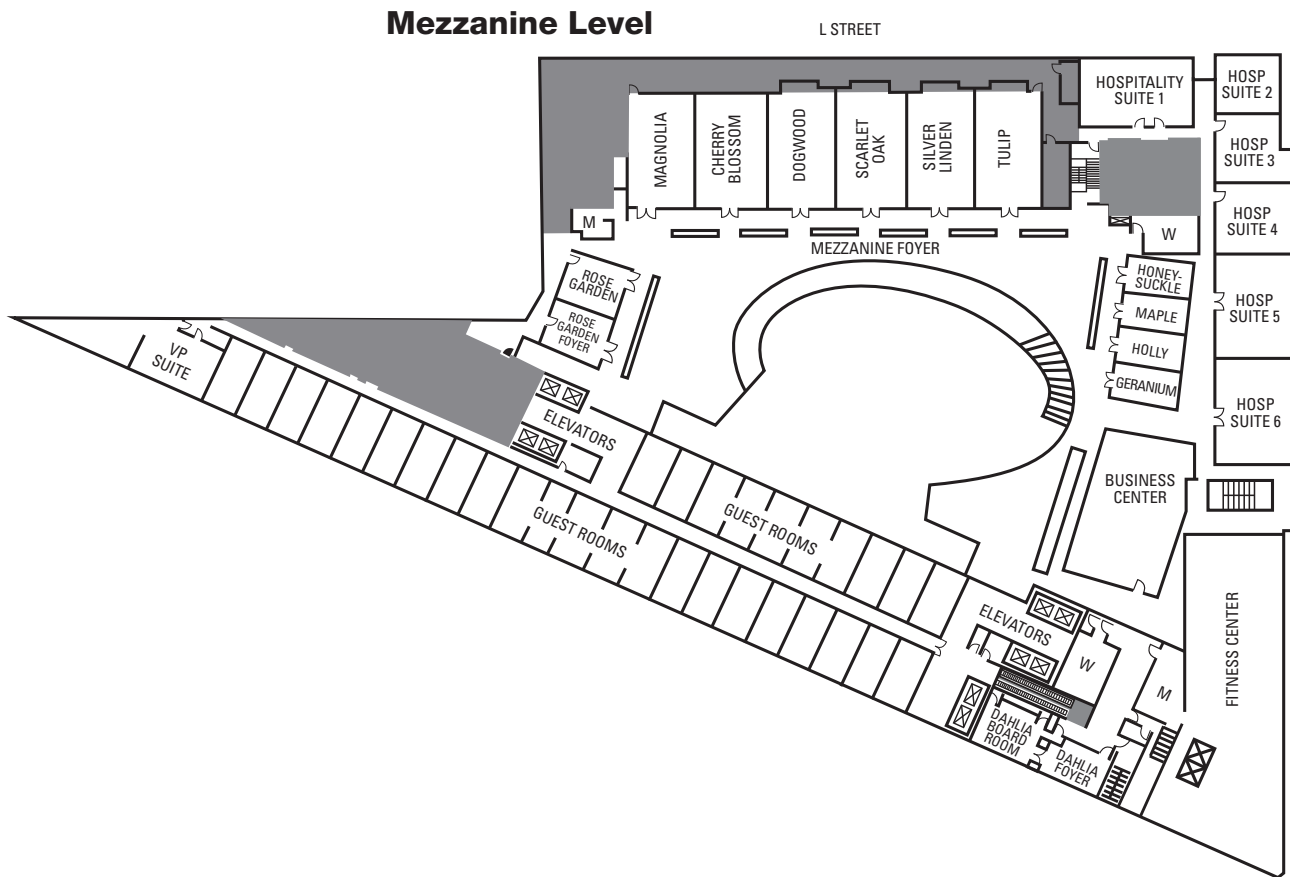
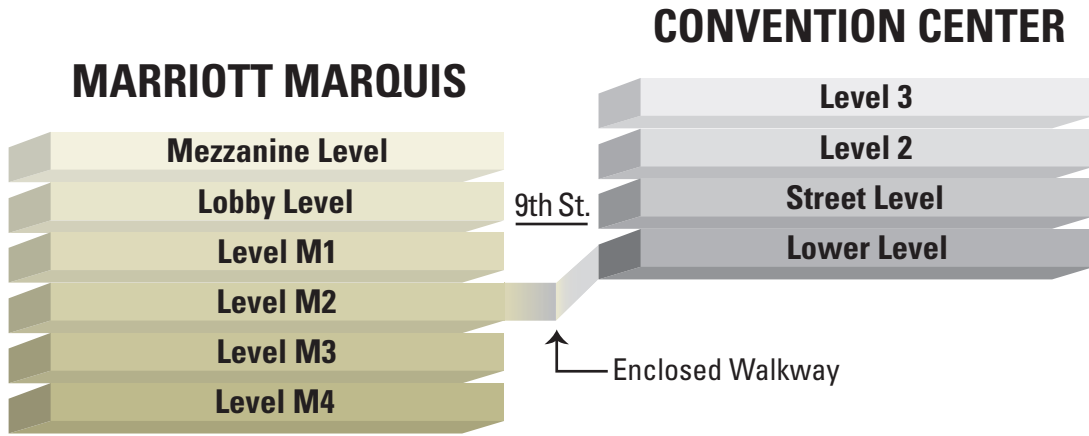
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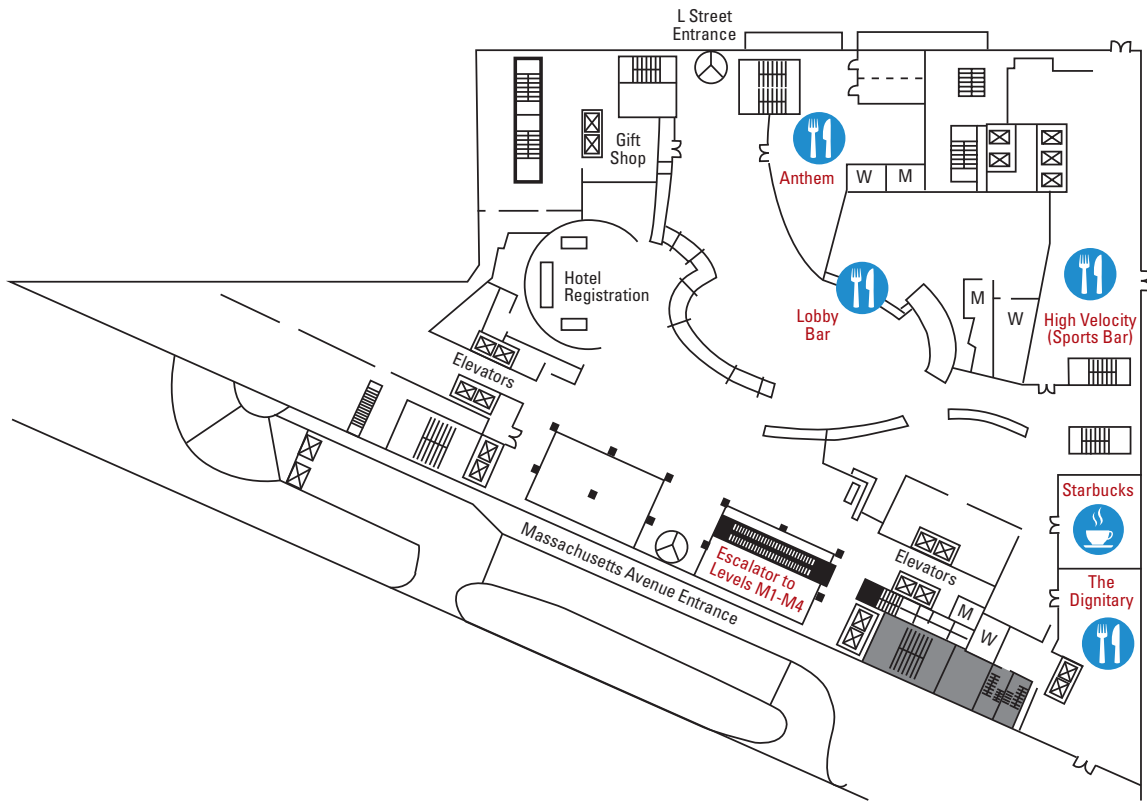
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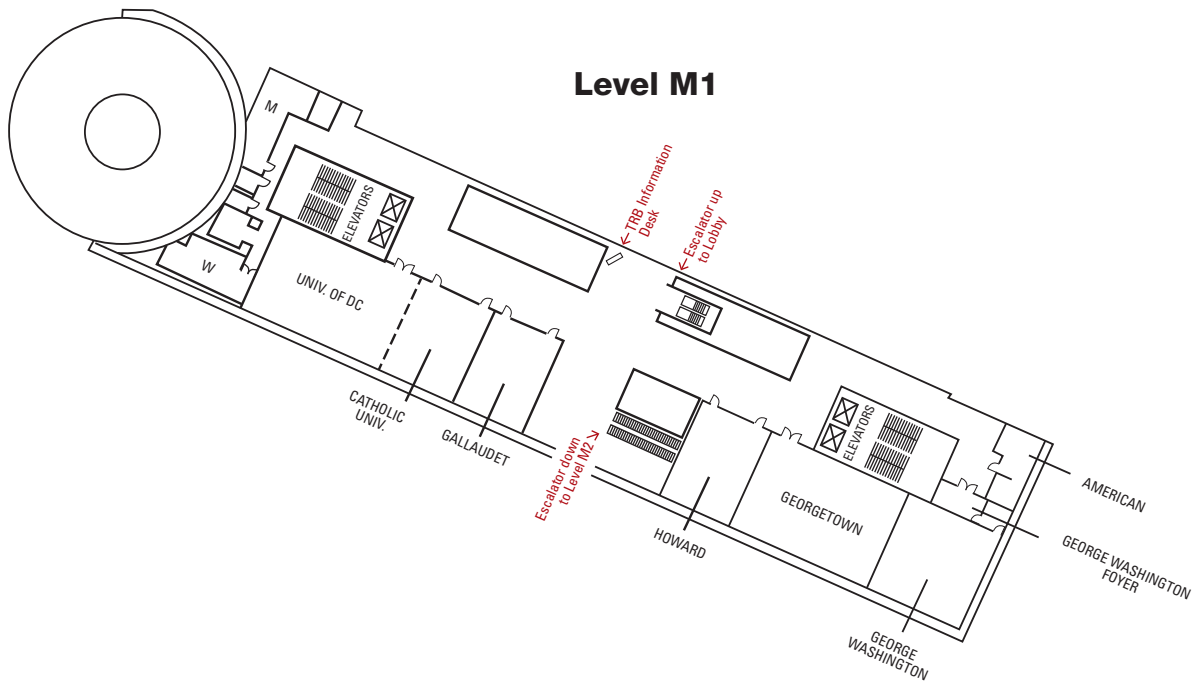
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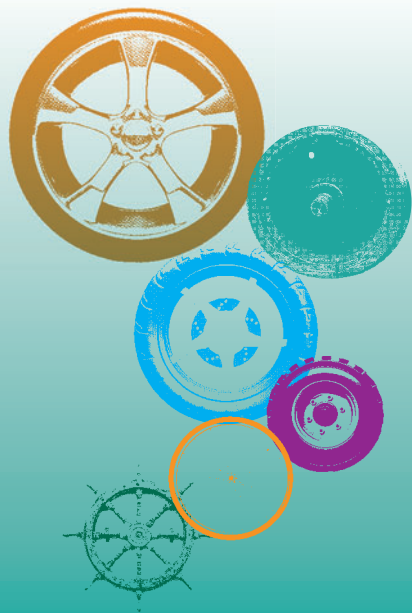
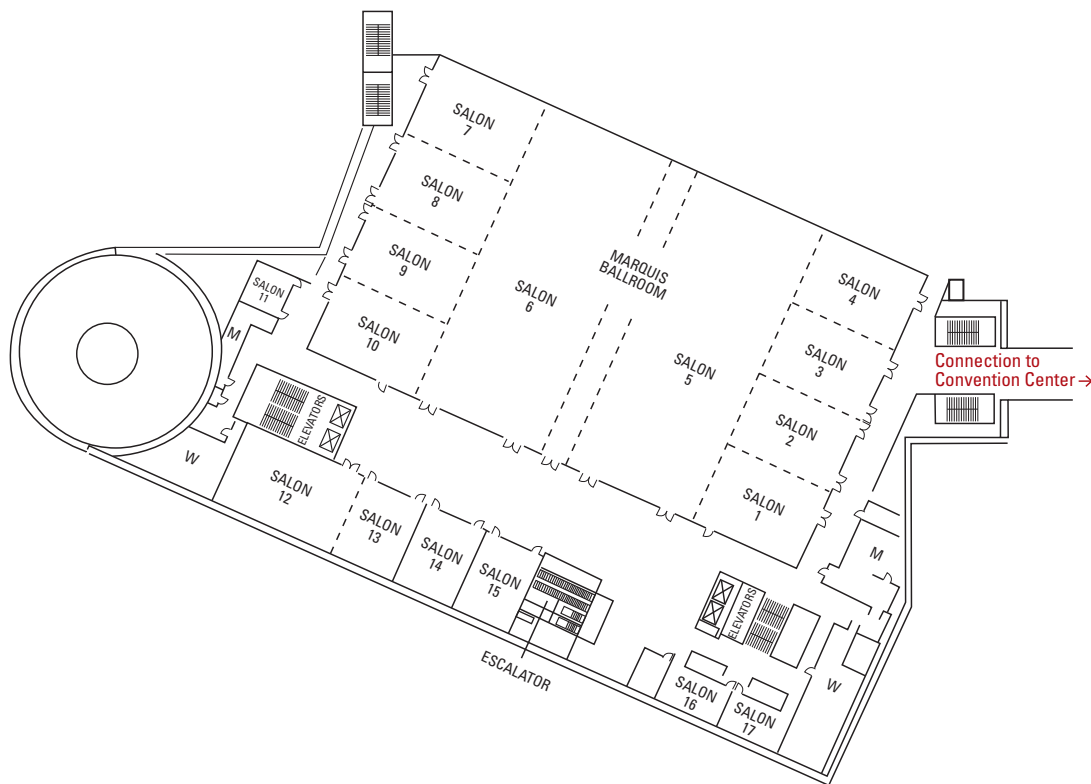
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Level M1



Level M2



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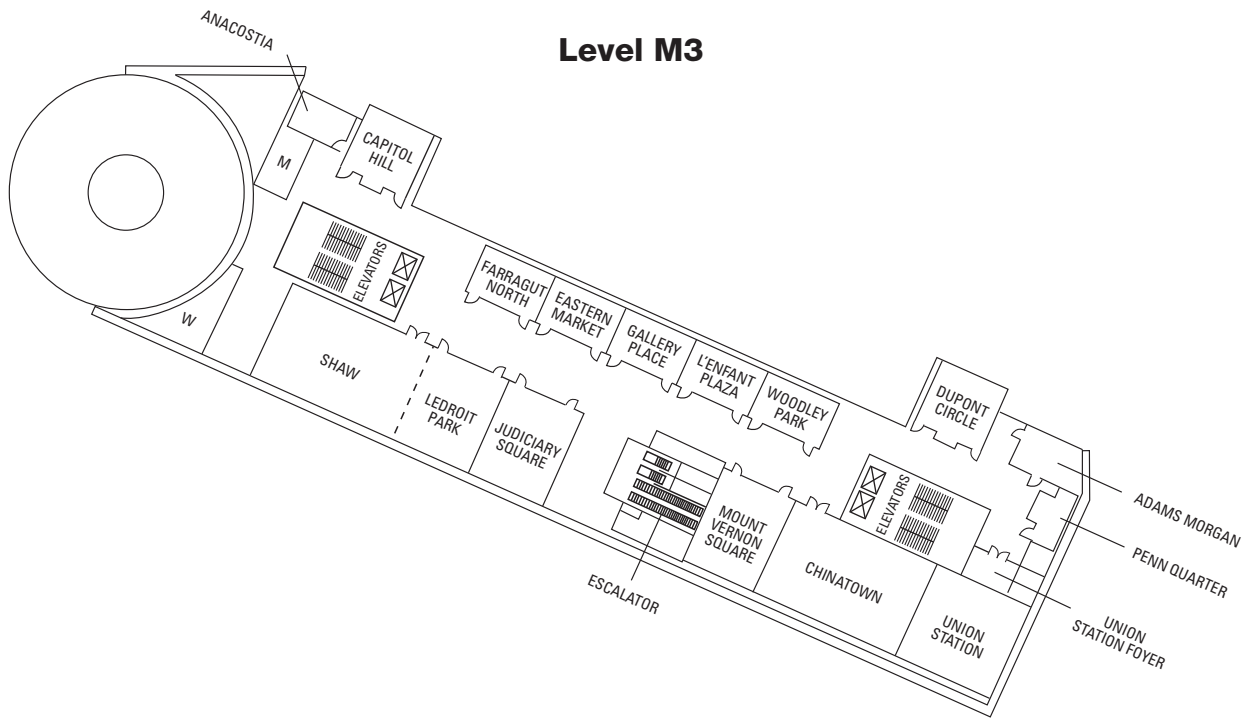
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Level M3



Level M4





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TRB Minority Student Fellows Program

The TRB Minority Student Fellows Program is a program intended to promote minority participation in transportation and in TRB. Now in its seventh year, the program provides financial assistance for minority students from a number of historically black colleges and universities and other minority-serving institutions to attend and present a research paper at the TRB Annual Meeting.

Each participating institution selects a graduate student or advanced undergraduate in a transportation-related curriculum to participate in the program. The institutions also designate a faculty member to oversee the work of each student and to accompany the student to the TRB Annual Meeting. Fourteen schools are participating in the 2015–2016 program:

- California State Polytechnic University, Pomona;
- City College of New York, New York City;
- Florida A&M University, Tallahassee;
- Florida International University, Miami;
- Howard University, Washington, D.C.;
- Jackson State University, Jackson, Mississippi;
- Morgan State University, Baltimore, Maryland;
- New Mexico State University, Las Cruces;

- North Carolina Agricultural and Technical State University, Greensboro;
- South Carolina State University, Orangeburg;
- Tennessee State University, Nashville;
- Texas Southern University, Houston;
- University of New Mexico, Albuquerque; and
- University of Texas at El Paso.

In addition to support from TRB, funding for this year’s program was provided by

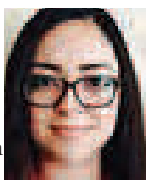
- U.S. Federal Highway Administration;
- North Central Texas Council of Governments;
- South Coast Air Quality Management District, California;
- Stantec, Inc.; and
- generous donations from Annual Meeting registrants.

Each contributing organization provided support for the student and faculty mentor from a participating school, as follows: North Central Texas Council of Governments—Texas Southern University; Stantec, Inc.—Howard University; and South Coast Air Quality Management District—California State Polytechnic University, Pomona.

The 2015–2016 recipients of the TRB Minority Student Fellowships are listed below and on the following pages.

TRB Minority Student Fellows, 2015–2016

Saydra Alvarez is a senior undergraduate at the University of New Mexico majoring in civil engineering with a specialty in transportation and geotechnical engineering. “Investigating Pedestrian Crash Risk in Albuquerque, New Mexico,” is the title of her research paper (Session 795). Gregory Rowangould is her faculty mentor.



Alvarez

Sergio Bracho is a senior undergraduate at City College of New York, where his major is civil engineering with an emphasis on transportation. His research paper is titled “A Case Study Analysis Assessing Open Data in Urban Passenger Transportation Systems” (Session 376). Candace Brakewood is his faculty mentor.



Bracho

Marcella Carnes is a Ph.D. candidate in civil engineering at Florida A&M University. She is specializing in structural engineering. Her research paper is “The Effect of Width for Multiple Strips on the De-Bonding Mechanism of Carbon Fiber Bonded to Concrete for Rehabilitation” (Session 314). Doreen Kobelo is her faculty mentor.



Carnes

Perry Chavez is a master’s degree student in urban and regional planning at California State Polytechnic University, Pomona, with an interest in transportation planning and policy. His paper is titled “Equity Implications of Different Transportation Impact Threshold Systems in Los Angeles County” (Session 530). Dohyung Kim is his faculty mentor.



Chavez

Alejandra Escajeda is a senior undergraduate at the University of Texas at El Paso where she is majoring in civil engineering. Her research paper examines “Service Life of Hot Mix Asphalt using PERMIT” (Session 724). Kelvin Cheu is her faculty mentor.



Escajeda

Oscar Gonzalez is a master’s degree student in civil engineering at the University of Texas at El Paso. His interest is in transportation engineering and sustainability. The focus of his research paper is “Quantification of the Impact of Roadway Condition on Gas Emissions” (Session 438). Kelvin Cheu is his faculty mentor.



Gonzalez

Nedrick Green is a master’s degree student in civil and mechanical engineering technology (transportation) at South Carolina State University. His paper is titled “Freeway Vehicle Occupancy Data Collection: A Modified Windshield Method” (Session 375). Judith Kwakalonge is his faculty mentor.



Green

Alesha Jackson is a senior undergraduate at Jackson State University majoring in civil engineering with a focus on geotechnical engineering. The title of her paper is “Laboratory Study of Discrete Fiber on Properties of Bio-Inspired Sandy Soil” (Session 319). Lin Li is her faculty mentor.



Jackson

Alasan Jarju is a master’s student in transportation and urban infrastructure at Morgan State University. His paper is focused on “Drivers’ Behavior Analysis Under Reduced Visibility Condition Using a Driving Simulator” (Session 725). Mansoureh Jeihani is his faculty mentor.



Jarju

SiVon Jiles is a senior undergraduate at Tennessee State University majoring in civil engineering with an emphasis on traffic and safety studies. Her paper is titled “Survival Analysis and Modeling of Debris Related Incidents” (Session 249). Deo Chimba is her faculty mentor.



Jiles

Minority Student Fellows (continued)

Cameron Johnson is a senior undergraduate at North Carolina A&T State University who is studying applied engineering technology. His paper is titled “Physiochemical and Rheological Characterization of Bio-Modified Gilsomite (BMG)” (Session 648). Elham Fini is his faculty mentor.



Johnson

Paquilla Jones is a master’s student in civil engineering (transportation) at Howard University. Her paper is titled “Quantifying the Effectiveness of the Use of Enforcement on Driver, Pedestrian, and Bicyclist Behaviors” (Session 389). Stephen Arhin is her faculty mentor.



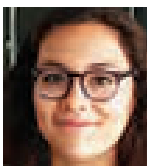
Jones

Stephen Lujan is a senior undergraduate at the University of New Mexico where he is majoring in civil engineering with a specialty in traffic studies. His paper is “Enhancing Safety Performance of Rumble Strips Through the Use of Reflective Striping: An Empirical Study on U.S. 285 in New Mexico” (Session 388). Guohui Zhang is his faculty mentor.



Lujan

Karina Macias is a master’s candidate in urban and regional planning at California State Polytechnic University, Pomona. Her specialty is in transportation planning and policy. Her research paper focuses on “Alternative Methods to Calculate Pedestrian Catchment Areas for Public Transit” (Session 573). Dohyung Kim is her faculty mentor.



Macias

Mark Manning recently completed his master’s degree in civil engineering (structural) at New Mexico State University. His research paper is titled “Behavior Comparison of Prestressed Channel Girders from High Performance Concrete and Locally Developed Ultra-High Performance Concrete” (Session 315). David Jauregui is his faculty mentor.



Manning

Andres McEwen is a master’s student in environmental engineering (hydraulic) at Florida International University. His research paper focused on “Groundwater Depletion: How Porous Surfaces and Bio-Swales Help to Mitigate This Trend” (Session 586). Berrin Tansel is his faculty mentor.



McEwen

Charles McKenzie recently completed his master’s degree in civil engineering (geotechnical) at Jackson State University. His paper is called “Laboratory Study of SediMeters in Determining Turbulent Sediment Accumulation During Dredging Operations” (Session 330). Lin Li is his faculty mentor.



McKenzie

Estefany Ramos is a master’s student in civil engineering at the University of Texas at El Paso with a special interest in geotechnical and pavement engineering. Her research paper focuses on “Developing a Digital Image Correlation Methodology to Better Understand Overlay Tester Protocol” (Session 648). Kelvin Cheu is her faculty mentor.

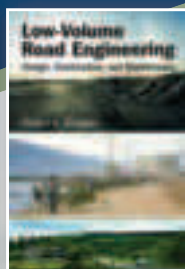


Ramos

(continued on next page)



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Minority Student Fellows (continued)

Mario Rojas recently began work toward a master's degree in civil engineering (transportation) at Florida International University. His paper is titled "A Comprehensive Review of Travel Behavior and Mobility Pattern Studies Using Mobile Phone Data" (Session 711). Berrin Tansel is his faculty mentor.



Rojas

Jeffrey Scruggs is a senior undergraduate at Morgan State University majoring in transportation systems. His paper is titled "Drivers' Behavior Analysis Under Reduced Visibility Condition Using a Driving Simulator" (Session 725). Mansoureh Jeihani is his faculty mentor.



Scruggs

Jacob Smith is a senior undergraduate at North Carolina A&T State University studying supply chain management. His paper is titled "Understanding the Pharmaceutical Supply Chain: A Holistic Approach" (Session 251). Kathryn Dobie is his faculty mentor.



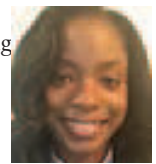
Smith

Karen Varela is a master's student in urban and regional planning at California State Polytechnic University, Pomona. Her specialty is transportation planning and policy. The title of her paper is "Pedestrian Safety at Intersections: An Examination of Intersection Safety in City of Los Angeles, California" (Session 592). Dohyung Kim is her faculty mentor.



Varela

Nailah Walters is a senior undergraduate at Tennessee State University where she is majoring in civil engineering with an emphasis on traffic and safety studies. Her paper is titled "Survival Analysis and Modeling of Debris-Related Incidents" (Session 249). Deo Chimba is her faculty mentor.



Walters

Rebecca Clemons Wright is a master's student in civil and mechanical engineering (transportation) at South Carolina State University. Her paper is titled "Driver's Comprehension of Distracted Driving Slogans: An Investigation" (Session 792). Judith Kwakalonge is her faculty mentor.



Wright

Abdou Salami Yaya is a senior undergraduate at North Carolina A&T State University where he is studying civil engineering highway construction. His paper is titled "Investigating the Effect of Processing Parameters on Bio-Binder Characteristics" (Session 643). Elham Fini is his faculty mentor.



Yaya

Jenise Young is a doctoral candidate in urban planning and policy at Texas Southern University. Her studies focus on environmental policy. Her paper is titled "Exclusivity and Shared Use: Examining the State of the Practice in U.S. High Intensity Bus Service" (Session 451). Earthea Nance is her faculty mentor.



Young



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Schedule at a Glance

TRANSPORTATION RESEARCH BOARD

95th Annual Meeting

	Sunday January 10	Monday January 11	Tuesday January 12	Wednesday January 13	Thursday January 14
8 a.m.		SESSIONS	SESSIONS	SESSIONS	SESSIONS
9 a.m.	WORKSHOPS	POSTERS	POSTERS	POSTERS	WORKSHOPS
10 a.m.		SESSIONS	SESSIONS	SESSIONS	SESSIONS
11 a.m.		POSTERS	POSTERS	SESSIONS	SESSIONS
Noon		EXHIBITS	EXHIBITS		
1 p.m.				Chairman's Luncheon	
2 p.m.	WORKSHOPS	SESSIONS	SESSIONS		
3 p.m.	New Attendee Welcome Session	POSTERS	POSTERS	SESSIONS	POSTERS
4 p.m.		SESSIONS	SESSIONS		
5 p.m.	Exhibit Hall Opening and Reception	POSTERS	POSTERS	SESSIONS	
6 p.m.		Thomas B. Deen Distinguished Lecture			
7 p.m.					
8 p.m.		SESSIONS	SESSIONS		
9 p.m.					
10 p.m.	Young Professionals Reception				
11 p.m.					

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TRANSPORTATION RESEARCH BOARD

Professional Development Hours Credit Statement for Registrant Records

Many licensure and certification agencies require the demonstration of continuing professional competency. Your attendance at this meeting entitles you to earn Professional Development Hour (PDH) units. This form is for your use in maintaining a record of the PDH units you have earned at this meeting. The hours shown are based on guidance published by the National Council of Examiners for Engineering and Surveying (NCEES). Complete this form and retain it for your records. **Do not return it to TRB.** We recommend that you save the entire *Final Program* for your records in case the licensure or certification agency requests information. Reporting is done on an honor basis, and members are responsible for maintaining their own records.

The table below shows the PDHs that I have earned for the continuing-education activities included in the 95th Annual Meeting of the Transportation Research Board, held in Washington, D.C., January 10–14, 2016.

I have attended the following Workshops ¹ (Saturday & Sunday):					Hours
Title:				Hours shown in Final Program:	
Title:				Hours shown in Final Program:	
Title:				Hours shown in Final Program:	
I have attended the following Lectern Sessions, Poster Sessions, and Workshops ¹ :					Hours
Day	Time	Number	Title	Hours	
Monday	8:00 a.m.–9:45 a.m.			1.75	
	8:30 a.m.–10:15 a.m.			1.75	
	10:15 a.m.–noon			1.75	
	10:45 a.m.–12:30 p.m.			1.75	
	1:30 p.m.–3:15 p.m.			1.75	
	2:00 p.m.–3:45 p.m.			1.75	
	3:45 p.m.–5:30 p.m.			1.75	
	4:15 p.m.–6:00 p.m.			1.75	
	7:30 p.m.–9:30 p.m.			2.00	
Tuesday	8:00 a.m.–9:45 a.m.			1.75	
	8:30 a.m.–10:15 a.m.			1.75	
	10:15 a.m.–noon			1.75	
	10:45 a.m.–12:30 p.m.			1.75	
	1:30 p.m.–3:15 p.m.			1.75	
	2:00 p.m.–3:45 p.m.			1.75	
	3:45 p.m.–5:30 p.m.			1.75	
	4:15 p.m.–6:00 p.m.			1.75	
	7:30 p.m.–9:30 p.m.			2.00	
Wednesday	8:00 a.m.–9:45 a.m.			1.75	
	8:30 a.m.–10:15 a.m.			1.75	
	10:15 a.m.–noon			1.75	
	2:30 p.m.–4:00 p.m.			1.50	
	2:45 p.m.–4:30 p.m.			1.75	
	4:30 p.m.–6:00 p.m.			1.50	
	Thursday	8:00 a.m.–9:45 a.m.			1.75
	10:15 a.m.–noon			1.75	
I am author of the following 2016 paper(s) found at TRB Annual Meeting Online (http://AMOnline.TRB.org):					Hours
Title:				5 or 10 ³	
Title:				5 or 10 ³	
I have served for the past year on the following TRB Standing Committees and Task Forces: ²					Hours
					2.00
					Total:

Name _____ Date _____

¹Workshop presenters should multiply number of hours by 2, but only if presenting for the first time and only if presenter is not full-time faculty.

²Appointed members only. Credits are not earned until the end of each year of service is completed.

³Five PDHs are earned for a paper published in the *Annual Meeting Compendium of Papers*, but not in the *Transportation Research Record (TRR)*. This may be increased to ten PDHs earned if the paper ultimately is published in the *TRR*.

Sessions and Events


9:00 a.m.–noon

- 101 Reviewing Progress and Achievements on EU–U.S. Transport Research Collaboration, *CC 159* 
- 102 Greenhouse Gas Analysis: Tools and Methodologies in Practice, *CC 207B*
- 103 Choosing and Navigating a Successful Career Path (What I Wish I Knew Starting Out): Workshop for Young and New Transportation Professionals, *CC 203*
- 104 Ignite Your Future: Scenario Planning, *CC 151A*
- 105 Designing Streets for Transit, *CC 151B*
- 106 Bringing Extraordinary Data to Your Everyday Work, *CC 147B* 
- 107 Expanding the Research Discussion on Women’s Issues in Transportation, *CC 154*
- 108 Innovative Doctoral Research from Dwight David Eisenhower Transportation Fellowship Program, *CC 202B*
- 109 Big Data Analytics and Applications: Role of Artificial Intelligence and Machine Learning, *CC 152B* 
- 110 Applied Three-Dimensional Technologies, Tools, and Trends for Digital Project Delivery of Transportation Infrastructure Projects, *CC 152A*
- 111 Resilience: Now That TRB Has a New Section, What’s the New Direction? *CC 150B* 
- 112 Tools to Improve Communication and Coordination in Meeting Mobility Needs of Veterans, *CC 140B*
- 113 Young People’s Life Choices and Travel Behavior, *CC 146B*
- 114 Analyze This! What Planners Want to Know, *CC 140A*
- 115 Measuring Sustainability: Using INVEST and Envision to Assess Transportation Projects and Plans, *CC 150A*
- 116 Why All the Interest in Good Data and Emissions Estimates for Congestion, Mitigation, and Air Quality Improvement Program Projects? *CC 145A*
- 117 Considerations in Respectful and Appropriate Treatment of Human Remains and Cultural Items, *CC 149*
- 118 Institutionalizing Health in Transportation Agency Practice, *CC 156*  
- 119 Key Stakeholder Implementation of MnROAD and NCAT Test-Track Findings, *CC 202A*
- 120 Ensuring Long-Term Performance of Cold Recycled Mixtures, *CC 204C*
- 121 Ultra-High-Performance Concrete Connections for Precast Bridge Elements, *CC 204A*
- 122 Direct Displacement-Based Seismic Bridge Design, *CC 204B*
- 123 Long-Life Concrete Pavements, *CC 201*
- 124 Doctoral Student Research in Asphalt Materials and Mixtures, *CC 207A*
- 125 Performance Testing to Characterize Fatigue Cracking of Asphalt Mixtures, *CC 206*
- 126 Use of Sensors in Highway Concrete Applications, Part 1 (Part 2, Session 175), *CC 209C*
- 127 Implementation of Data Interchange for Geotechnical and Geoenvironmental Specialists, *CC Salon C*
- 128 Use of Byproduct Fines and Recycled Materials for Sustainable Construction of Transportation Infrastructure, *CC 209A*
- 129 Full-Depth Reclamation: Developing Specifications from Field and Laboratory Testing Experience, *CC 209B*
- 130 The 10 Things That Matter Most: Effective Communication of Transportation Research in a BuzzFeed World, *CC Salon B*
- 131 Doctoral Student Research in Transportation Operations and Traffic Control, *CC 101*
- 132 How New Sources of Data and New Technologies Can Improve Traffic Incident Management Programs: Discussions with Data Providers and TIM Practitioners, *CC 102B*
- 133 Highlights from 2015 Automated Vehicles Symposium, *CC 146C* 
- 134 Toward Automation of Surface Transportation Networks: Opportunities and Challenges, *CC 102A*
- 135 Benefit-Cost Analysis to Inform Planning, Programming, and Design Decisions, *CC Salon A* 
- 136 Global Applications of the Safe System Approach: Aiming for Zero Road Deaths, *CC 103B*
- 137 Transportation and the ISO-55000 Series of Asset Management Standards: The Second Year, *CC 144C*
- 138 Recognizing Signs of Fatigue and Fitness for Duty, *CC 144B*
- 139 Multimodal Mobility and Sharing Economy: Shaping the Future Market Through Policy and Research, Part 1 (Part 2, Session 186), *CC 145B* 
- 140 Understanding Rail Planning Needs: Perspectives from Carriers and Public Agencies, *CC 143B*
- 141 Design of Concrete Crossties and Fastening Systems: Latest Advances in Research and Development, *CC 143C*
- 142 SHRP 2 C20, Part 1: Innovations in Local Freight Data Implementation Projects—Progress and Outcome (Part 2, Session 188), *CC 147A*
- 143 Food, Fuel, and Feed: Making the Right Freight Investments to Optimize Agricultural Supply-Chain Competitiveness, *CC 144A*
- 144 Unmanned Aircraft Systems, Part 1 (Part 2, Session 192), *CC 146A* 
- 145 Funding Port and Freight Infrastructure Investments, *CC 143A*

9:00 a.m.–12:30 p.m.










- 146 Doctoral Student Research in Transportation Safety, *CC 103A*

9:00 a.m.–5:00 p.m.

- 147A Legal and Institutional Review Board Issues in Naturalistic Driving Research (CANCELED) 

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- 147B Measuring Safety Culture Across Modes: Challenges and Strategies 
- 147C Highway Signs and Billboards: Getting the Research and Policies Right for Commercial Signage (CANCELED) 
- 147D Detecting Driver State 
- 147E Whodunit? Human Factors of Forensic Analysis 
- 147F Cross-Modal Distributed Simulation 
- 147G Distracted Walking: Emerging Problem in Need of Evidence-Based Solutions 
- 147H Measurement in Young Driver Research: Issues and Needs 
- 147I Mobility Solutions for Isolated Seniors: Challenges and Opportunities  

9:30 a.m.–noon

- 148 Long-Term Pavement Performance State Coordinators' Meeting, CC 208

1:30 p.m.–4:30 p.m.

- 149 Breaking News: How We Can Help Journalists Tell the Transportation Story, CC 152B
- 150 Toward Road Transport Automation: Opportunities in Public-Private Collaboration, CC 146C 
- 151 The Long Game for Performance Management: A CEO Conversation, CC 150B
- 152 Transportation Funding Prospects: Will Washington Ever Deliver, and How Are States and Regions Forging Ahead? CC 151A
- 153 Not the Cost, Not the Price: What's the Value of Your Parking Space? CC 143B
- 154 Collaborations, Data Collection Strategies, and Responding to Tribal Transportation Safety Needs, CC 154
- 155 Public Transport Policy, Planning, and Practice in the Developing Countries, CC 103B
- 156 Public Access, Open Access, and Open Data: New Requirements for Federally Funded Research, CC 202B 
- 157 Getting the Most Out of Asset Management Data, CC 152A
- 158 Leveraging Traffic Count Data and ITS Data for Shared Usage, CC 151B
- 159 2015–2016 National Household Travel Survey: What's New and How It Could Affect You, CC 203
- 160 Sensing Technologies for Transportation Applications, CC 159
- 161 Mega-regions: Surfing the Wave of the Future, CC 140B
- 162 Public Involvement Throughout the Project Life Cycle, CC 146B
- 163 Pollinators on the Verge: Policies, Practices, and Implications for Conservation in Roadside Habitats, CC 156
- 164 Meet the Regulators: Emerging Issues in Hazardous Materials Management and Climate Change, CC 150A
- 165 Renewable Fuels 2.0: Beyond Corn and Soy, CC 149

- 166 Mobility and Accessibility for Recovery After a Disaster: Social and Economic Resilience for Disadvantaged and Dislocated Populations, CC 140A 
- 167 Low-Volume Road Asset Management: International Experience, CC 207B
- 168 Sustainable Equals Maintainable: Designing and Managing Highway Roadsides, CC 204C
- 169 Roller-Compacted Concrete: Recent Research and Development—Now It Is the THIRD Pavement! CC 201
- 170 Designing Pole Structures to New AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, CC 204B
- 171 Structural Health Monitoring for Bridge Infrastructure Management: What Owners and Practitioners Should Know, CC 204A
- 172 Information Systems in Construction Management: Toward Cyber-Physical Systems in Construction, CC 208
- 173 Multimodal Project Delivery Practices: Facilitating Innovative Connections to the Future, CC 207A
- 174 Innovations in Asphalt Mix Design Procedures, CC 206
- 175 Use of Sensors in Highway Concrete Applications, Part 2 (Part 1, Session 126), CC 209C
- 176 Improving Communication Between Geologists and Engineers with Digital Data Technologies, CC 209A
- 177 Best Practices in Numerical Modeling, CC 209B
- 178 Innovative Methods in Transportation Education, CC East Overlook
- 179 Decision Support Systems for Transportation Systems Management and Operations, CC 102B
- 180 Managed Lanes 3.0: Applying Research to the Next Generation of Projects and Technologies, CC Salon A
- 181 Transportation System Simulation Manual, CC 102A
- 182 Introduction to SHRP 2 Roadway Information Database, CC 103A
- 183 Innovations in User Information Systems for Dynamic Freeway Management, CC 101
- 184 Automated and Connected Vehicles: Silver Bullet for Pedestrian and Bicycle Safety? CC Salon C 
- 185 Transformative Trends in Transit Data: General Transit Feed Specifications Bonanza, CC 144A
- 186 Multimodal Mobility and Sharing Economy: Shaping the Future Market Through Policy and Research, Part 2 (Part 1, Session 139), CC 145B 
- 187 Value-Added Supply Chain Interaction, CC 143A
- 188 SHRP 2 C20, Part 2: Regional Freight Data Collaboration and Standardization (Part 1, Session 142), CC 147A
- 189 On-Demand Economy and the Urban Environment: The Urban Freight Story, CC 144C 
- 190 Crude by Rail: Opportunities and Challenges in North America, CC 143C
- 191 Commercial Space: Exploring the Path Forward, CC 147B 
- 192 Unmanned Aircraft Systems, Part 2 (Part 1, Session 144), CC 146A 

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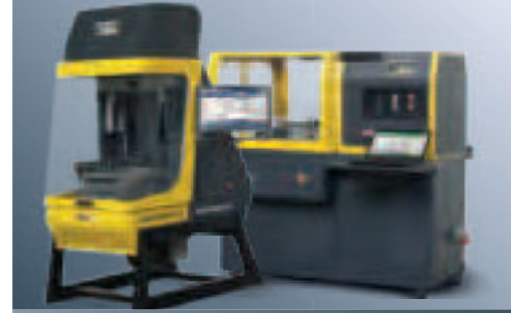
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1:30 p.m.–5:00 p.m.

193 Protected Bike Lanes in North America and the European Union: New FHWA Guide, Emerging Research and Research Gaps, and Lessons Learned, CC Salon B

1:30 p.m.–5:30 p.m.

- 194 Doctoral Student Research in Transportation Modeling, CC 145A**
- 195 Cracking the Implementation of MAP-21 Pavement Performance Measures: Successes and Challenges, CC 202A**
- 196 Economic Competition, Commercial Motor Vehicle Safety, and Driver Health, CC 144B**

2:30 p.m.–4:00 p.m.

Welcome and Attendee Orientation Session, CC Ballroom AB

4:00 p.m.–7:00 p.m.

Exhibit Hall Opening Reception, CC Hall D

5:30 p.m.–6:30 p.m.

Networking Reception for Committee Communication Coordinators and Committee Research Coordinators, MM University of DC (M1)

7:00 p.m.–8:30 p.m.

International Participants Welcome Reception, CC Ballroom South Pre Function A

9:00 p.m.–10:30 p.m.

Young Professionals Reception, CC Ballroom South Pre Function C

Meetings

8:00 a.m.–9:15 a.m.

- Unsignalized Intersections Subcommittee, AHB40 AHB40(3.2), MM Liberty J (M4)**
- User Liaison Subcommittee, AHB40(5.0), AHB40 MM Liberty I (M4)**

8:00 a.m.–noon

Technical Activities Council A0000 MM Cherry Blossom (Mezz)

9:00 a.m.–5:00 p.m.

Planning for the Conference on Small and Medium-Sized Communities Subcommittee, ADA30 ADA30(1), MM George Washington University (M1)

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9:30 a.m.–10:45 a.m.

Bike and Pedestrian Subcommittee, AHB40(4.2), AHB40
MM Liberty J (M4)

Active Traffic Management Subcommittee, AHB40
 AHB40(1.4), *MM Liberty I (M4)*

11:00 a.m.–12:15 p.m.

Interchanges Subcommittee, AHB40(3.4), AHB40
MM Liberty J (M4)

Planning and Preliminary Engineering Subcommittee, AHB40
 AHB40(4.1), *MM Liberty I (M4)*

1:30 p.m.–2:45 p.m.

Urban Streets Subcommittee, AHB40(3.3), AHB40
MM Liberty J (M4)

Two-Lane Highways Subcommittee, AHB40(2.2), AHB40
MM Liberty I (M4)

2:00 p.m.–3:00 p.m.

Emerging Freeway Operations Concepts Subcommittee, AHB20(6), AHB20
MM Farragut North (M3)

Asset Management for Traffic Signal Systems Subcommittee, AHB25(6), AHB25
Gallaudet University (M1)

2:00 p.m.–4:30 p.m.

Pavement Management Systems International Conferences Subcommittee, AFD10(3), AFD10
Tulip (Mezz)

3:00 p.m.–4:00 p.m.

Multimodal Traffic Signal Systems Subcommittee, AHB25(5), AHB25
MM Gallaudet University (M1)

3:00 p.m.–4:15 p.m.

Signalized Intersections Subcommittee, AHB40(3.1), AHB40
MM Liberty J (M4)

3:00 p.m.–5:00 p.m.

Freeways and Highways Subcommittee, AHB40(2.1), AHB40
MM Liberty I (M4)

Freeway Management Handbook Subcommittee, AHB20(1), AHB20
MM Marquis Ballroom Salon 12 (M2)

4:00 p.m.–5:00 p.m.

Traffic Signal Systems Education Subcommittee, AHB25(7), AHB25
MM Gallaudet University (M1)

Operations and Preservation Group Young Professionals Subcommittee, (AH000(1), AH000
MM Marquis Ballroom Salon 17 (M2)



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4:00 p.m.–5:30 p.m.

Design and Construction Group Younger Members Subcommittee, AF000(4), MM Silver Linden (Mezz) **AF000**

4:30 p.m.–5:45 p.m.

Traffic Simulation Applications Subcommittee, AHB40(1.2), MM Liberty I (M4) **AHB40**

Research Subcommittee, AHB40(1.1), MM Liberty J (M4) **AHB40**

4:45 p.m.–7:00 p.m.

Planning Committees for the International Symposium on Geometric Design and 5th Urban Street Symposium, MM Marquis Ballroom Salon 16 (M2) **AHB65**

5:00 p.m.–6:30 p.m.

Freeway Operations Research Needs Subcommittee, AHB20(3), MM Marquis Ballroom Salon 12 (M2) **AHB20**

5:30 p.m.–6:30 p.m.

Committee Communication Coordinators' and Committee Research Coordinators' Networking Reception, A0000(2), MM University of DC (M1) **A0000**

5:30 p.m.–7:00 p.m.

Design and Construction Group Leadership Reception, AF000(4), MM Independence DE (M4) **AF000**

5:30 p.m.–7:30 p.m.

Freight Systems and Marine Group Young Members Council Subcommittee, AT000(1), MM Woodley Park (M3) **AT000**

Joint Meeting of Freight Systems and Marine Group Executive Boards, MM Capitol Hill (M3) **AW000**

6:00 p.m.–8:00 p.m.

Transportation System Policy, Planning, and Process Section Executive Board, ADA00, MM George Washington University (M1) **ADA00**

6:30 p.m.–8:00 p.m.

Data and Information Systems Section Executive Board, MM Liberty N (M4) **ABJ00**

Freeway Operations Committee Planning and Meetings Subcommittee, AHB20(4), MM Marquis Ballroom Salon 12 (M2) **AHB20**

7:00 p.m.–8:15 p.m.

Uninterrupted-Flow Group Subcommittee, AHB40(2.0), MM Liberty I (M4) **AHB40**

Interrupted-Flow Group Subcommittee, AHB40(3.0), MM Liberty J (M4) **AHB40**

7:00 p.m.–9:00 p.m.

Hydrology Subcommittee, AFB60(1), MM Silver Linden (Mezz) **AFB60**

Pavement Management Section Executive Board, MM Tulip (Mezz) **AFD00**

7:30 p.m.–10:00 p.m.

Rockfall Management Subcommittee, AFP10(1), MM Cherry Blossom (Mezz) **AFP10**

Unbound Granular Materials Subcommittee, AFP70(1), MM Dogwood (Mezz) **AFP70**

8:00 p.m.–9:30 p.m.



Freeway Simulation Subcommittee, AHB20(2), MM Marquis Ballroom Salon 12 (M2) **AHB20**


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Sessions and Events


8:00 a.m.–9:45 a.m.

- 197 Getting Started with Knowledge Management, *CC 154*
- 198 Automated and Shared Vehicles: Market Penetration and Pricing, *CC 150B* 
- 199 Built for Success: What It Takes to Run a Modern Transportation Research Program, *CC 152B*
- 200 Advanced Computing Techniques for Detection, Estimation, and Prediction of Traffic Condition Parameters, *CC 151A*
- 201 Civil Integrated Management 3D Modeling and 3D Technologies: Guidance, Best Practices, and Trends for Digital Delivery of Transportation Infrastructure Projects, *CC 152A*
- 202 Commonsense Solutions for Cost-Effectively Combining Resilience and Port Operational Needs: Lessons from Katrina, Ike, and Sandy Applicable to All Ports and Inland Waterways, *CC 151B* 
- 203 Working Across Boundaries: Emergence and Evolution of Metropolitan Planning Organizations, *CC 145A*
- 204 Smartphones, Real-Time Information, and Travel Behavior, *CC 156*
- 205 Transportation Network Logistics, *CC 146B*
- 206 World's Next Top (Choice) Model, *CC 143B*
- 207 Transportation Planning Model Applications, *CC 140B*
- 208 Best Practices with Transportation Liaisons, *CC 140A*
- 209 Preservation and Aerospace: Evaluating, Documenting, and Reusing Historic Aviation and Astronautic Properties and Mitigating Effects of Aircraft Overflights, *CC 146A*
- 210 Application of Analytical Methods in Geometric Design, *CC 207A*
- 211 Rural Road Safety Research and Practical Applications, *CC 206*
- 212 Saving Agencies Time and Money: Standards for Asset Data Management, *CC 204A*
- 213 Pavement Monitoring and Evaluation: Innovations in Data Collection, *CC 202A*
- 214 LTPP-MEPDG and Long-Life Concrete Pavements, *CC 207B*
- 215 Advances in Bridge Loads and Safety Features, *CC 209B*
- 216 Bonding Characteristics of Asphalt Mixtures, *CC 201*
- 217 Differing Materials and Proportions for Different Concrete Applications, *CC 202B*
- 218 Determination of Soil Properties, Consolidation Properties, and Shear Stress Factors Including Resilient Modulus of Subgrade, *CC 208*
- 219 Field Measurements and Analyses of Modulus and Moisture of Pavement Subgrade and Unbound Layers, *CC 209A*
- 220 Future of Transportation Systems Management and Operations, Part 1: Perspectives on Social, Demographic, and Policy Influences (Part 2, Session 227), *CC Salon C*

- 221 Crowd Dynamics: Empirical Analyses, Modeling, Simulation, and Management, *CC 103B*
- 222 Work Zone Safety Assessment, *CC 101*
- 223 Access Management as Part of a Corridor Approach, *CC Salon A*
- 224 Laboratory and Field Evaluations of Hot-Poured Crack Sealant Performance, *CC 204B*
- 225 Operational Best Practices in Bridge Management Systems, *CC 204C*
- 226 Highway Safety Update: State of the Practice and HSM Version 2.0, *CC 203*
- 227 Learning to Drive Safely: Perspectives on Young Novice Drivers and Needed Research, *CC 103A*
- 228 Federal Motor Carrier Safety Administration Safety Activities and Priorities, *CC Salon B* 
- 229 Driver Behavior in Demanding Roadway Situations, *CC 102B*
- 230 Bus Transit Operations and Intelligent Transportation Systems, *CC 150A*
- 231 Paratransit, Demand-Responsive, Dial-a-Ride: A New Future, *CC 149*
- 232 Rail Transit in Large Cities, *CC 145B*
- 233 Best of the Best: Raising the Bar on Intercity Passenger Rail Performance, *CC 147A*
- 234 New Technologies for Ballast Condition Assessment and Management, *CC 143A*
- 235 Railroad Operational Safety Research, *CC 147B*
- 236 Current Research in International Trade and Transportation, *CC 144A*
- 237 Current Issues in Airfield and Airspace Capacity and Delay, *CC 144C*
- 238 Innovations in Airport Paving, *CC 144B*
- 239 Analyzing Marine Traffic, *CC 143C*

8:30 a.m.–10:15 a.m.

Poster Sessions, 240–254
CC Hall E 

- 240 Transport Planning, Nonmotorized Transport, and Socioeconomic Aspects in Developing Countries, *A014–A018, B032–B038*
- 241 Planning Challenges, Human Factors, and Safety with Mixed Traffic in Developing Countries, *A001–A013*
- 242 Traffic Safety and Management, Planning, and Forecasting in Developing Countries, *B021–B031*
- 243 State Departments of Transportation High-Value Research, *G121–G140, H154–157, H159* 
- 244 Advancement in the Construction Management of Transportation Facilities, *H141–H152*
- 245 Value for Money in P3 Project Financing Arrangements, *J161–J163*
- 246 Project Delivery Methods: Delivering Needed Infrastructure Through Increased Collaboration, *J164–J168*
- 247 Advances in Portland Cement Concrete Pavement Construction, *J169–J176*
- 248 Operational Considerations to Advance Quality Asphalt Construction and Reconstruction, *J177–J180*
- 249 Freeway Operations, *K181–K196*

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Poster Sessions *(continued)*, CC Hall E


- 250 Congestion Pricing and Managed Lanes Case Studies, L201–L219
- 251 Freight Modeling, C056–C059, D076–D079, E081–E100
- 253 Recent Advances in Trucking Industry Research, F101–F104
- 254 Current Issues in Aviation, C043–C055, D061–D075

9:00 a.m.–4:00 p.m.

Exhibits, CC Hall D

10:15 a.m.–noon

- 255 Transportation Transformation: Knowledge and Change Management, CC 154 
- 256 Analytical and Econometric Aspects of Congestion Pricing, CC 152A
- 257 Impact of Gender and Age on Mode Choice and Accessibility, CC 103B
- 258 Public Transport in Asia and Latin America, CC 150B
- 259 Who Makes It Happen in Transportation? Historical Look at the Role of Public- and Private-Sector Actors in Transportation Decision Making, CC 152B
- 260 Advanced Clustering and Optimization Tools for Traffic Operation and Control Applications, CC 151A
- 261 Cyber Security: We've Been Framed! CC 151B 
- 262 Public Lands Access for Changing Demographics, CC 140B
- 263 Social Networks, Crowdsourced Data, and Activity-Travel Choices, CC 156
- 264 Resilient and Sustainable Transportation Networks, CC 146B 
- 265 Modeling the Demand for New Mobility Concepts and Services, CC 145A
- 266 Diesel: Staying Focused on the Most Important Air Pollution Source, CC 146A
- 267 Hot Topics and Emerging Themes in Ecology and Transportation, CC 140A
- 268 Long-Term Pavement Performance Program: Pavement Preservation Experiment and Data Analysis Results, CC 208
- 269 Freeway and Interchange Design, CC 207A
- 270 Small Unmanned Aerial Systems: Flights of the Future, CC 204A
- 271 Pavement Monitoring and Evaluation, CC 202A
- 272 Adjacent-Member Bridges, CC 207B
- 273 FRP Composite Field Applications, Part 1: New Structures (Part 2, Session 840), CC 206
- 274 Putting QA to Work: Quality Assurance Practices in Highway Construction, CC 202B
- 275 Approaches for Determining Moisture Susceptibility of Asphalt Mixtures, CC 201
- 276 Use of Roadway Weather Information Systems and Vehicle Sensor Data in Surface Transportation, CC 204C 

- 277 Future of Transportation Systems Management and Operations, Part 2: Perspectives on Technology Trends Shaping the Future of TSMO (Part 1, Session 220), CC Salon C 

- 278 Calibration Validation and Sensitivity Analysis, CC 101
- 279 Access Management: Science and Standards, CC Salon A
- 280 Changes in Maintenance and Operations Workforce: New Paradigm, CC 209B
- 281 Concrete Joint Sealing, CC 204B
- 282 Settlement Techniques for Land Use and Eminent Domain Litigation: Beyond Mere Money, CC 203
- 283 Toward Zero Deaths Policies in Action at Local and Regional Levels, CC 103A 
- 284 Senior Mobility in Transit: Nothing Will Ever Be the Same Again, CC 102B 
- 285 Federal Motor Carrier Safety Administration Analysis, Research, and Technology Updates and Opportunities, CC Salon B
- 286 Current Research on Bus Rapid Transit and Operations Technology, CC 150A
- 287 Data Applications in the Taxi Industry, CC 149
- 288 Solving Rail Transit Congestion: Policy, Planning, and Operations, CC 145B
- 289 Future Trends in Railway Rolling Stock, CC 143A
- 290 New Technologies for Track Condition Assessment and Management, CC 143B
- 291 Solutions and Obstacles to Revitalizing Great Lakes Goods Transportation, CC 144B
- 292 From Farm to Market: The Agriculture Supply Chain Challenge, CC 143C
- 293 Emerging World of LNG Transportation and Distribution, CC 144C
- 294 Airport Collaborative Decision Making: Opportunities and Challenges, CC 147A
- 295 Contemporary Research Issues for Aviation-Mediated Disease, CC 147B 
- 296 Current Research on Port Resilience, Disruptions, Vulnerability, and Cargo Diversion, CC 144A 
- 297 Innovation, CC Ballroom B 

10:45 a.m.–12:30 p.m.






Poster Sessions, 298–331
CC Hall E 

- 298 How Are We Doing? State of the Art and Practice in Performance Management Around the World, C041–C048
- 299 Improving Decision Making in Transportation Asset Management, B033–B037, E092–E095
- 300 Long-Distance and Intercity Travel, B021–B026
- 301 Data Collection: Foundation of a Traffic Monitoring Program, C049–C056
- 302 Making Traffic Data Work: Techniques, Quality, and Customer Needs, D065–D078
- 303 Nonmotorized Travel Monitoring: Research Convergence in Bicycle and Pedestrian Modes, C057–C060, D061–D064

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Poster Sessions *(continued)*, CC Hall E

- 304 Information Technology Applications for Travel Monitoring and Connected Vehicles, D078–D080, E081–E091 
- 305 Geospatial Network Modeling and Analysis, B027–B032
- 306 Freight and Automatic Fare Collection Data Visualization, B038–B039
- 307 Logistics of Disaster Response and Business Continuity, A001–A005 
- 308 Research Trends in Evacuation Transportation Modeling and Analysis, A006–A018 
- 309 Innovations in Health and Transportation Research, F101–F107  
- 310 Transportation and Environmental Justice: Technical Papers and Practices, F108–F117
- 311 NCHRP IDEA Program: Sponsoring Innovation in Highway Transportation, L201–L214
- 312 Mechanistic–Empirical Pavement Design: Local Calibration Studies, K193–K200
- 313 New Advances in Mechanistic–Empirical Pavement Design, K185–K192
- 314 Select Papers from Basic Research and Emerging Technologies Related to Concrete, L215–L220, M235–M240
- 315 Concrete Materials and Testing, M226–M230
- 316 Defining Concrete Properties: Test Methods to Ensure Quality, M231–M234
- 317 Concrete: Materials to Workability to Curing, M221–M225
- 318 Characterization of Geologic Hazards, H141–H144
- 319 Geomaterials in Transportation Infrastructure: Deformation, Leaching, and Erosion, H145–H149
- 320 Seasonal Effects on Soils and Pavements, H150–H153
- 321 Unsaturated Geomaterials in Highway Embankment Design, H154–H157
- 322 Aggregate Properties and Modeling Behavior: Imaging, Polishing, and Pavement Skid Resistance, H158–H160, J175–J180
- 323 Freeway Traffic Control, N241–N258
- 324 Other Pavement Preservation Technologies, J161–J163
- 325 Pavement Maintenance Topics, J164–J167
- 326 Structures Maintenance: Inspection and Assessment, K181–K184
- 327 Best Practices in Data Collection and Applications for Bridge Management Systems, J168–J174
- 328 Current Research Advances in Maritime Transportation, G121–G126
- 329 Current Research in Inland Water Transportation, G131
- 330 Research on the Marine Environment, G127–G128
- 331 Modeling Safety in Marine Transportation, G129–G130



1:30 p.m.–3:15 p.m.

- 332 The Six-Minute Pitch: Transportation Start-up Challenge, CC Salon B
- 333 Complete Streets for Transit: Best Practices in City and Transit Agency Collaboration, CC 152A

- 334 Can We Keep Up? Accelerating Research Processes to Keep Pace with Disruptive Technologies, CC 152B
- 335 Crowdsourced Cyclist Information as Valuable Data Asset, CC 154
- 336 Adapting Agency IT Function for the Department of Transportation of the Future: CIO Perspectives, CC 151A
- 337 Evacuations as a Component of Transportation Resilience, CC 151B  
- 338 Data Science in Transportation, CC 145A 
- 339 What Do You Think? Surveys and How They Can Affect the Transportation Decision-Making Process, CC 146B
- 340 Transportation and the Environment: What's Hot in State DOTs? CC 146C
- 341 Approaches to Understanding and Controlling Rail-Generated Noise and Vibration, CC 146A 
- 342 Zero Emissions Freight: Road to Clean, Healthy, and Efficient Sustainable Transport, Part 1 (Part 2, Session 429), CC 147A
- 343 Role of Transit in Creating a More Equitable Society, Part 1 (Part 2, Session 403), CC 156
- 344 Can Shared, Connected, and Automated Vehicles Help Us Meet Sustainability and Energy Goals? CC 140B 
- 345 Roadside Safety Guidance, CC 202A
- 346 Pavement Surface Friction and Other Characteristics, CC 207B
- 347 Nondestructive Testing and Evaluation of Reinforced Concrete Structures, CC 204C
- 348 LRFD Seismic Design for Deep Foundations, CC 202B
- 349 Advances in Steel Bridge Fabrication, CC 208
- 350 NCHRP Synthesis 481: Current Practices to Set and Monitor DBE Goals on Design-Build Projects and Other Alternative Project Delivery Methods, CC 204A
- 351 Rejuvenators for Asphalt Mixtures: Current Developments and Use, CC 201
- 352 Characterization and Performance Prediction of Unbound Aggregates, CC 206
- 353 Intelligent Transportation Systems: State of the Industry 2016, CC Salon C
- 354 Work Zone Traffic Control Evaluations, CC Salon A
- 355 Innovations in Highway–Rail Crossing Safety, CC 101
- 356 Applications of Connected and Automated Vehicles to System Maintenance and Operations, CC 207A 
- 357 Structures Maintenance: Decks and Signs, CC 209B
- 358 This Ain't Your Parents' Vegetation Management, CC 204B
- 359 Construction Claim Update: Mega-Claims, New Trends, Contract Provisions, and Potential Consequences of False Claims, CC 203
- 360 Accident Investigations by National Transportation Safety Board, CC 103A
- 361 Renewing Progress in Reducing Alcohol-Related Fatalities, CC 103B
- 362 Bicycling by Choice, CC 102B

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- 363** New Federal Transit Safety Requirements and FTA's Path to Safety Management System Implementation, CC 150B
- 364** Bus Transit Systems Planning, Design, and Operations, CC 143B
- 365** New Directions in Rural and Small Urban Public Transportation, CC 144A
- 366** Planning and Politics in Streetcar and Light Rail Development, CC 143A
- 367** Current Research on Freight Rail Transportation, CC 149
- 368** The Opening of the Expanded Panama Canal, CC 145B
- 369** Integrating Freight Needs into Transportation Planning for Healthy and Active Communities, CC 144B 
- 370** Unmanned Platforms—The Next Transportation Revolution? Drones and the Future of Military Transportation, CC 143C 
- 371** The Human Side of Aviation: Exploring Next-Generation Workforce Challenges, CC 144C
- 372** Aviation Forecasting: Passengers and Planes—How Many? How Soon? CC 147B

2:00 p.m.–3:45 p.m.

Poster Sessions, 374–391
CC Hall E 





- 374** Current Trends in Transportation Funding and Financing, A001–A020, B021–B029
- 375** Managed Lanes and Congestion Pricing: Analysis and Operations, B030–B040, C041–C048
- 376** Statewide Data and Information Systems, G136–G138
- 377** Uses of Multiple Data Sets for Transportation Planning, C051–C059 
- 378** New Research in Travel Time, Speed, and Reliability, D074–D080, E081–E090
- 379** Innovations in Urban Transportation Data, F108–F120, G121–G123
- 380** New Directions in Travel Surveys: Big Data, Smartphones, and Stated Preference, D061–D073 
- 381** Innovative Uses of the National Household Travel Survey, G124–G135
- 382** Artificial Intelligence and Advanced Computing Tools in Transportation Applications, E091–E100, F101–F107
- 383** Geometric Design Research, H141–H151
- 384** Best of 5th International Symposium on Highway Geometric Design, J161–J168
- 385** Quantifying Pavement Sustainability, H152, J169–J173
- 386** Capacity and Level-of-Service Issues at Intersections, O261–O271, P281–P290
- 387** Operational Effects of Geometrics, N241–N259 (CANCELED)
- 388** Highway Safety Performance, K186–K198, L206–L218, M226–M235
- 389** Law Enforcement Research: Driver, Officer, Roadway, and Crashes, K181–K185, L201–L205
- 390** Research in Occupant Protection, M221–M224

3:45 p.m.–5:30 p.m.

- 392** International Trade Driving the Future Economy, CC 154 
- 393** Valuing Transportation Infrastructure for Public Policy Making, CC 152B 
- 394** Looking Forward, Acting Today, CC 152A
- 395** A 360 on Leadership Development, CC 146A
- 396** Fast-Forward 10 Years: How Information Technology Is Changing Transportation Planning, Engineering, and Operations, CC 146C
- 397** Innovations in Statistical Methods for Transportation Researchers and Practitioners, CC 150B
- 398** Leadership Skills for Disaster Response and Business Continuity: Results from TRB Table Top Exercise and Lessons from Private Industry, CC 146C 
- 399** Using Scenario-Based Planning Techniques to Address Uncertainty, CC 140B
- 400** Best Practices for Travel Demand Management in Military Communities, CC 146B
- 401** “Shiny and New” or “Tried and True”: Expansion Versus Reinvestment Dilemma of Transportation Agencies, CC 140A
- 402** Life-Cycle Effects on Travel Behavior, CC 145A
- 403** Housing, Opportunities, and Socioeconomic Factors in Creating a More Equitable Society, Part 2, (Part 1, Session 343), CC 156
- 404** Dialogue with Leaders in Design and Construction of Transportation Facilities, CC 201
- 405** Roadside Safety Hardware, CC 202A
- 406** Pavement Smoothness and Surface Textures, CC 207B
- 407** Applications of Structural Health Monitoring for Transportation Structures, CC 204C
- 408** Project-Specific Seismic Performance Criteria, CC 202B
- 409** National DBE Program Issues, CC 204A
- 410** Geotechnical Asset Management, CC 206
- 411** Reuse of Bridge Foundations, CC 209A
- 412** Performance of Traditional and Nontraditional Aggregates as Unbound Pavement Layers, CC 208
- 413** ITS in the World, CC Salon C
- 414** Integrated Traffic Flow Models and Analysis for Connected Automated Vehicles, CC 101
- 415** Work Zone Modeling and Data Analysis, CC Salon A
- 416** Structures Maintenance: Coatings and Scour, CC 209B
- 417** Infrastructure Corrosion Prevention Techniques, CC 204B
- 418** Connected Vehicles and Use of Sensor Data in Winter Maintenance Equipment, CC 207A
- 419** Legal Issues Related to Vulnerability of Transportation Facilities to Catastrophic Events, CC 203 
- 420** Truck Override Issues: Research and Regulatory Actions, CC 102B
- 421** New Research on Alcohol and Driving, CC 103A
- 422** Rider Choices and Preferences, CC 103B


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- 423 **Public Transportation Planning and Development: Food for Thought on Institutional Structure, Benefits, and Key Design Choices**, CC 145B
- 424 **Rail Line Electrification: Social, Environmental, and Technical Challenges of Electrifying Established Alignments**, CC 147B
- 425 **Rail Transit Updates**, CC 149
- 426 **Advancing Freight Fluidity: Report from Fluidity Workshop and FHWA Implementation Plan**, CC 143A
- 427 **Urban Freight Transportation: Innovations and Best Practices**, CC 143C 
- 428 **Hazardous Materials Transportation Research**, CC 144A
- 429 **Zero Emissions Freight: Road to Clean, Healthy, and Efficient Sustainable Transport, Part 2 (Part 1, Session 342)**, CC 147A
- 430 **Vulnerability Assessment: The First Step Toward Climate Resilience**, CC 144B 
- 431 **Contribution of Airfield Geometry to Airport Safety**, CC 144C
- 432 **Mississippi and Illinois River Lock Revitalization Using Public-Private Partnerships and Alternative Financing**, CC 143B
- 433 **Beyond Traffic**, CC Ballroom B 
- 434 **FHWA: Leadership in Innovation**, CC 150A 

4:15 p.m.–6:00 p.m.

**Poster Sessions, 435–459
CC Hall E** 

- 435 **Dwight David Eisenhower Transportation Fellowship Program, Part 1 (Part 2, Session 637)**, M221–M238
- 436 **SHRP 2 Education Connection, Part 1: Integrating SHRP 2 Products into University Curricula (Part 2, Session 833)**, A001–A009
- 437 **Current Issues in Environmental Analysis in Transportation**, B027–B030, C046–C053
- 438 **Current Issues in Transportation and Air Quality**, B036–B040, C054–C060, D066–D080, E086–E099, F106–F120
- 439 **Current Issues in Ecology and Transportation**, B021–B026, C041–C045
- 440 **Current Issues in Transportation-Related Noise and Vibration**, D061–D065 
- 441 **Current Issues in Historic and Archeological Preservation in Transportation**, B031–B035
- 442 **Current Issues in Resource Conservation and Recovery**, E082–E085, F101–F105
- 443 **Pavement Monitoring and Evaluation: Advances in the Science**, L201–L214
- 444 **New Approaches to Old Concrete Pavement Issues**, L215–L220, M239–M240
- 445 **Capacity and Level-of-Service Issues for Freeways and Other Facility Types**, R321–R339
- 446 **Case Studies in Performance-Based Analysis of Geometric Design**, S341–S354
- 447 **Case Studies in Access Management**, Q306–Q310

- 448 **Numbers in Safety: Revealing What's Behind Them Through Advances in Assembling, Analyzing, and Modeling Crash Data**, N241–N260, O261–O279, P286–P299
- 449 **Truck and Bus Safety Research**, P281–P285
- 450 **TRB's Transit IDEA Program: Sponsoring Innovation in Transit**, J175–J180 
- 451 **Bus Transit Research and Practices**, G121–G140, H143–H160
- 452 **Recent Developments in Paratransit and Taxi Research**, H141–H142, J161–J162
- 453 **Innovations in Rail Transit System Modeling, Optimization, and Simulation**, K181–K187
- 454 **Innovations and Lessons from Rail Transit Planning and Evaluation**, K188–K194
- 455 **Light Rail Transit**, J163
- 456 **Research in International Trade and Transportation**, J169–J172
- 457 **Fresh Ideas in Military Transportation**, J164–J165
- 458 **Contemporary Issues in Intermodal Freight Terminal Design and Operations**, J166–J168
- 459 **Student Competition Winners: Research Using SHRP 2 Safety Data**, A011–A016

5:00 p.m.–6:00 p.m.


Memorial for William Garrison, CC 151B

5:45 p.m.–7:15 p.m.

Aviation Caucus, CC Ballroom C

- 460 **Transit and Neighborhood Communities**, CC 140B

6:00 p.m.–7:15 p.m.

Thomas B. Deen Distinguished Lecture and Presentation of Awards, CC 146C
See pages 38–39 for additional information. 

7:30 p.m.–9:30 p.m.

- 461 **In the Wake of Hurricane Sandy: Toward a More Resilient Transportation System in Connecticut, New Jersey, and New York**, CC 146A 
- 462 **Relationship of Laboratory Mix Aging to Asphalt Mixture Performance**, CC 201
- 463 **Inverted Pavements**, CC 206
- 464 **State of the Practice for Characterization of Cementitious Stabilized Layers**, CC 207A
- 465 **Applications for a Connected Transportation System**, CC Salon A
- 466 **Warning Signs and Dynamic Message Signs**, CC 102B
- 467 **Latest Twists in Diverging Diamond Interchange Design**, CC 101
- 468 **Impact of Information on Transportation Users: "In'-n'-Out" of Vehicle**, CC Salon B
- 469 **Snapshot of Current Intercity Bus Issues and Initiatives in Serving Rural America**, CC 144A

(Sessions and events continue on page 40)

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6:00 p.m.–7:15 p.m.
CC 146C

Thomas B. Deen Distinguished Lecture and Presentation of Awards

Neil J. Pedersen, Transportation Research Board, presiding

Sponsored by Technical Activities Council

The recipient of the Thomas B. Deen Distinguished Lectureship is **Hani S. Mahmassani**, William A. Patterson Distinguished Chair in Transportation, at Northwestern University; Director, Northwestern University Transportation Center; Professor of Civil and Environmental Engineering, McCormick School of Engineering and Applied Science; and Professor of Managerial Economics and Decision Sciences, Kellogg School of Management. The award recognizes the career contributions and achievements of an individual in areas covered by the Board's Technical Activities Division. Honorees present overviews of their technical areas, including evolution, present status, and prospects for the future. Everyone participating in the Annual Meeting is encouraged to attend the lecture.



Mahmassani

Introduction of Deen Lecturer:

Daniel Sperling, Professor of Civil Engineering and Environmental Science and Policy, University of California, Davis, and Chair, TRB Executive Committee

Deen Lecture Presentation:

Micromodels and Megadata: Taming Complexity for Deep Insight and Robust Decisions
Hani S. Mahmassani

Presentations of Awards for Outstanding Papers for 2015

Daniel S. Turner, University of Alabama, and Chair, TRB Technical Activities Council

Pyke Johnson Award (planning and environment)

Exploratory Analysis of a Smartphone-Based Travel Survey in Singapore

Fang Zhao, Francisco Câmara Pereira, Rudi Ball, and Youngsung Kim, Singapore–MIT (Massachusetts Institute of Technology) Alliance for Research and Technology; and Yafei Han, Christopher Zegras, and Moshe Ben-Akiva, MIT, Cambridge, Massachusetts

Transportation Research Record: Journal of the Transportation Research Board, No. 2494

K. B. Woods Award (design and construction)

Effect of Number of Soil Strength Measurements on Reliability of Spread Footing Designs

J. Erik Loehr and Dan Ding, University of Missouri; and William J. Likos, University of Wisconsin, Madison

Transportation Research Record: Journal of the Transportation Research Board, No. 2511

D. Grant Mickle Award (operations and maintenance)
Resonant Cycles Under Various Intersection Spacing, Speeds, and Traffic Signal Operational Treatments

Felipe Ladron de Guevara, Kittelson & Associates, Inc.; Mark D. Hickman, University of Queensland, Australia; and Larry Head, University of Arizona

Transportation Research Record: Journal of the Transportation Research Board, No. 2488

Patricia F. Waller Award (safety and system users)
Evaluation of Intersection-Related Crash Screening Methods Based on Distance from Intersection

Raul E. Avelar, Karen K. Dixon, and Patricia Escobar, Texas A&M Transportation Institute

Transportation Research Record: Journal of the Transportation Research Board, No. 2514

William W. Millar Award (public transportation)
Transit Travel Time Reliability: Shifting the Focus from Vehicles to Customers

Patricia Hendren, Spy Pond Partners; Justin Antos, Yvonne Carney, and Richard Harcum, Washington Metropolitan Area Transit Authority

Transportation Research Record: Journal of the Transportation Research Board, No. 2535

Fred Burggraf Award (papers by young researchers)

- On planning and environment:
Lifestyle and Modal Choices: Defining, Measuring, and Using the Lifestyle Concept
Veronique Van Acker, University of Amsterdam, The Netherlands, and Ghent University Belgium
Transportation Research Record: Journal of the Transportation Research Board, No. 2495;
- On operations and maintenance:
Analysis of Vehicle Speeds and Speed Differentials in Curves
Michael Paul Pratt, Srinivas Reddy Geedipally, and Adam M. Pike, Texas A&M Transportation Institute
Transportation Research Record: Journal of the Transportation Research Board, No. 2486; and
- On safety and system users:
Using Bicycle Level of Service for Decision Making: Comparison of Common Bicycle Level-of-Service Measures, Roadway Characteristics, and Perceived Bike Route Suitability
Jeffrey J. LaMondia and Nathan Moore, Auburn University
Transportation Research Record: Journal of the Transportation Research Board, No. 2520

(continued on next page)

MON

*Presentation of TRB Outstanding Young Member Award
(Sponsored by Stantec, Inc.)*

Alison Jane Conway, City College of New York, and Chair, TRB Young Members Council; and Marsha Anderson Bomar, Stantec, Inc.

TRB Outstanding Young Member

Francis Gross, Jr., VHB, for demonstrated, exceptional service to TRB and achievements in transportation research, policy, or practice

Recognition of TRB Standing Committee Blue Ribbon Awards

The Technical Activities Council has established Blue Ribbon Awards to recognize exemplary best practices and the associated volunteer efforts in the activities of standing committees. The Blue Ribbon Award committees serve as role models, and the committee chairs and members are available to share their experiences with others. The Blue Ribbon Awards were presented to the committee chairs at the Technical Activities Council Luncheon, Sunday, January 10.

- *Community Building and Mentoring*
Rail Freight Transportation Committee, chaired by George Avery Grimes, Patriot Rail Company, for implementation of the SummerRail conference, creating capacity, mentoring, and interconnectedness across the entire Rail Group and beyond

- *Advancing Research*
Regional Transportation Systems Management and Operations Committee, chaired by Les Jacobson, WSP Parsons Brinckerhoff, for developing a coordinated Transportation Systems Management and Operations research program with peer organizations
- *Contributing to TRB and the Transportation Community*
Transportation Planning Applications Committee, chaired by Julie Dunbar, Dunbar Transportation Consulting, for planning and organizing the Transportation Planning Applications Conference
- *Communications*
 - Transportation History Committee, chaired by Asha Weinstein Agrawal, San Jose State University, for development of a transportation history blog, production of historical exhibits, and writing historical content for *TR News*
 - *Honorable Mention: Ecology and Transportation* Committee, chaired by Alexander F. Levy Arcadis-US, Inc., for creating a newsletter for internal and external audiences

MON

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The *Transportation Research Record: Journal of the Transportation Research Board* (TRR) has long been recognized as one of the leading sources for scholarly research and practical papers on all aspects of transportation. Papers published in the TRR have undergone rigorous peer review refereed by TRB technical committees.

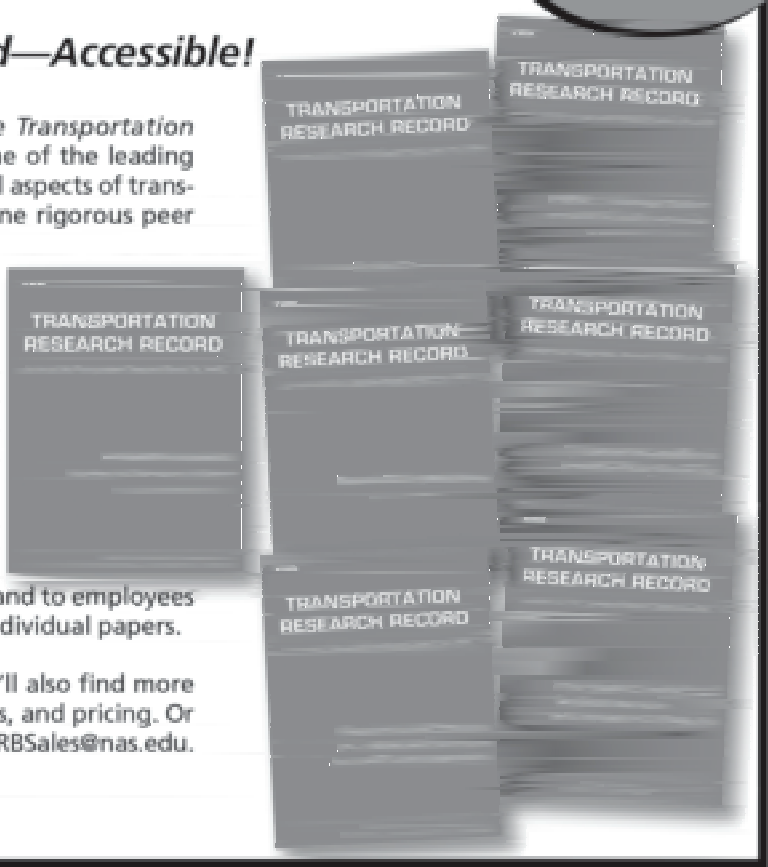
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- 470** Improving Light Rail Through Operational and Safety Analysis, CC 143A
- 471** Research Topics in Railroad Network Capacity, CC 144C
- 472** Current Research in the Trucking Industry, CC 143C
- 473** Space Traffic Management Today and in the Future, CC Ballroom C



7:30 p.m.–10:00 p.m.

- 474** Vision Zero: Pathways to the Safe City, CC 151B
- 475** Asphalt and Concrete Overlays, CC 207B

Meetings

7:00 a.m.–8:00 a.m.

- Policy and Organization Group Executive Board** (by invitation, continental breakfast), MM Gallery Place (M3) **AB000**

8:00 a.m.–9:00 a.m.

- Simulation of Traffic Signal Systems Subcommittee**, AHB25(3), MM Marquis Ballroom Salon 17 (M2) **AHB25**

8:00 a.m.–9:45 a.m.

- Parking Management Joint Subcommittee of ABE20**, ABE25, ABE50, MM Supreme Court (M4) **ABE20**
- Congestion Pricing Outreach Subcommittee**, ABE25(1), **ABE25**
MM Liberty K (M4)
- Technology Transfer Committee**, MM Liberty J (M4) **ABG30**
- Long-Distance and Intercity Travel Joint Subcommittee of ABJ10**, ABJ40, ABJ00, MM Liberty O (M4) **ABJ10**
- Weigh-in-Motion Subcommittee**, ABJ35(2), **ABJ35**
MM Liberty P (M4)
- Critical Issues Subcommittee**, ADA10(3), **ADA10**
MM Independence A (M4)
- Research for Transportation in National Parks and Public Lands Subcommittee**, ADA40(1), **ADA40**
MM Independence H (M4)
- Behavioral Processes: Qualitative and Quantitative Methods Subcommittee**, ADB10(4), MM Independence D (M4) **ADB10**
- Transportation Infrastructure, Facilities, and Rights-of-Way as Sustainable Resources Subcommittee**, ADC60(2), MM Independence C (M4) **ADC60**
- Transportation Energy Committee**, **ADC70**
MM Independence E (M4)
- Transportation and Land Development Research Subcommittee**, ADD30(1), MM Capitol (M4) **ADD30**
- Hydraulics Subcommittee**, AFB60(2), MM Marquis Ballroom Salon 2 (M2) **AFB60**
- Sustainable Pavements Subcommittee**, AFD00(1), **AFD00**
MM George Washington University (M1)
- Geophysics Subcommittee**, AFP20(1), MM Magnolia (Mezz) **AFP20**
- Planning for Operations Subcommittee**, AHB10(2), **AHB10**
MM Marquis Ballroom Salon 8 (M2)

- Roadside Maintenance Operations Committee**, MM Dogwood (Mezz) **AHD50**
- Signing and Marking Materials Committee**, MM Marquis Ballroom Salon 1 (M2) **AHD55**
- Transportation Safety Planning Subcommittee**, ANB10(3), MM Marquis Ballroom Salon 14 (M2) **ANB10**
- Medical Advisory Boards and Driver Licensing Subcommittee** ANB60(2), MM Marquis Ballroom Salon 16 (M2) **ANB60**
- Human Factors of In-Vehicle Systems Joint Subcommittee of AND20**, AND10, MM Marquis Ballroom Salon 13 (M2) **AND20**
- Pedestrian and Bicycle University Education Joint Subcommittee of ANF20**, ANF10, MM Marquis Ballroom Salon 7 (M2) **ANF20**
- Emerging Technology Law Committee**, MM Howard University (M1) **AL040**
- Emerging Ridesharing Solutions Joint Subcommittee of AP020**, AP025, AHB15, MM L'Enfant Plaza (M3) **AP020**
- Self-Powered Units Joint Subcommittee of AP070**, AR020, MM Pentagon (M4) **AP070**
- Intercity Passenger Rail Intermodal Interface Subcommittee**, AR010(1), MM Woodley Park (M3) **AR010**
- Intermodal Freight Transport Committee**, MM Chinatown (M3) **AT045**
- Intergovernmental Relations in Aviation Committee**, MM Mount Vernon Square (M3) **AV010**

8:00 a.m.–noon

- Data for Decisions and Performance Measures Special Task Force**, MM Liberty N (M4) **A0030T**
- Revenue and Finance Committee**, MM Liberty M (M4) **ABE10**
- Statewide Transportation Data and Information Systems Committee**, MM Liberty L (M4) **ABJ20**
- Transportation Programming and Investment Decision-Making Committee**, MM Monument (M4) **ADA50**
- Transportation and Sustainability Committee**, MM Independence B (M4) **ADD40**
- Context-Sensitive Design and Solutions Task Force**, MM Catholic University (M1) **AFB50T**
- Surface Properties – Vehicle Interaction Committee**, MM Marquis Ballroom Salon 4 (M2) **AFD90**
- Steel Bridges Committee**, MM Marquis Ballroom Salon 3 (M2) **AFF20**
- Field Testing and Nondestructive Evaluation of Transportation Structures Committee**, MM Silver Linden (Mezz) **AFF40**
- Application of Emerging Technologies to Design and Construction Committee**, MM Cherry Blossom (Mezz) **AFH30**
- Disadvantaged Business Enterprises Committee**, MM Gallaudet University (M1) **AFH80**
- Characteristics of Nonasphalt Components of Asphalt Paving Mixtures Committee**, MM Marquis Ballroom Salon 5 (M2) **AFK30**
- Intelligent Transportation Systems Committee**, MM Marquis Ballroom Salon 6 (M2) **AHB15**
- Highway Capacity and Quality of Service Committee**, MM Marquis Ballroom Salon 10 (M2) **AHB40**

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Traffic Control Devices Committee , <i>MM Marquis Ballroom Salon 9 (M2)</i>	AHB50	Alternative Transportation Fuels and Technologies Committee , <i>MM Independence E (M4)</i>	ADC80
Highway–Rail Grade Crossings Committee , <i>MM Marquis Ballroom Salon 15 (M2)</i>	AHB60	Climate Change, Energy, and Sustainability Impacts on the Transportation Infrastructure Subcommittee , AF000(3) , <i>MM Scarlet Oak (Mezz)</i>	AF000
Bridge Preservation Committee , <i>MM Georgetown University (M1)</i>	AHD37	Water Quality Subcommittee , AFB60(3) , <i>MM Marquis Ballroom Salon 2 (M2)</i>	AFB60
Safety Data, Analysis, and Evaluation Committee , <i>MM Marquis Ballroom Salon 12 (M2)</i>	ANB20	Mechanistic Characterization of Pavement Layers Subcommittee , AFD80(1) , <i>MM George Washington University (M1)</i>	AFD80
Transit Management and Performance Committee , <i>MM Mint (M4)</i>	AP010	Design and Construction of Roller-Compacted Concrete Pavements Subcommittee , AFH50(1) , <i>MM University of DC (M1)</i>	AFH50
Public Transportation Planning and Development Committee , <i>MM Union Station (M3)</i>	AP025	Contract Law Committee , <i>MM Howard University (M1)</i>	AL030
Rail Transit Infrastructure Committee , <i>MM Congress (M4)</i>	AR055	Operator Education and Regulation Committee , <i>MM Marquis Ballroom Salon 8 (M2)</i>	ANB30
Urban Freight Transportation Committee , <i>MM Archives (M4)</i>	AT025	Digital Billboards Joint Subcommittee of AND20, AND10, AND30, AND40 , <i>MM Marquis Ballroom Salon 13 (M2)</i>	AND20
Military Transportation Committee , <i>MM Judiciary Square (M3)</i>	AT035	Pedestrian Research Subcommittee , ANF10(1) , <i>MM Marquis Ballroom Salon 7 (M2)</i>	ANF10

9:00 a.m.–10:00 a.m.

Traffic Signal Systems Research Subcommittee , AHB25(2) , <i>MM Marquis Ballroom Salon 17 (M2)</i>	AHB25
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9:00 a.m.–11:30 a.m.

Transit Safety and Security Task Force , <i>MM Treasury (M4)</i>	AP018T
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10:00 a.m.–11:00 a.m.

Technology and Standards Subcommittee , AHB25(4) , <i>MM Marquis Ballroom Salon 17 (M2)</i>	AHB25
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10:15 a.m.–noon

International Research Needs Subcommittee , A0010(2) , <i>MM Liberty K (M4)</i>	A0010
Young Members Council Task Force , <i>MM Marquis Ballroom Salon 16 (M2)</i>	A0040T
Management and Productivity Committee , <i>MM Liberty I (M4)</i>	ABC20
Technology Subcommittee , ABE60(2) , <i>MM Supreme Court (M4)</i>	ABE60
New Technologies Subcommittee , ABJ40(4) , <i>MM Liberty P (M4)</i>	ABJ40
Information Systems and Technology Research Subcommittee , ABJ50(2) , <i>MM Liberty O (M4)</i>	ABJ50
Statewide Travel Demand Forecasting Joint Subcommittee of ADA10, ADB40 , <i>MM Independence A (M4)</i>	ADA10
Route Choice and Spatiotemporal Behavior Joint Subcommittee of ADB10, ADB30 , <i>MM Independence H (M4)</i>	ADB10
Special Travel Forecasting Resources Committee , <i>MM Independence D (M4)</i>	ADB45
Historic and Archeological Preservation Communications Subcommittee , ADC50(1) , <i>MM Independence G (M4)</i>	ADC50

Bicycle Research Subcommittee , ANF20(2) , <i>MM Marquis Ballroom Salon 14 (M2)</i>	ANF20
Shared-Use Vehicle Public Transport Systems Subcommittee , AP020(1) , <i>MM L'Enfant Plaza (M3)</i>	AP020
TRB Rural Public and Intercity Bus Transportation Conference Planning Subcommittee , AP055(1) , <i>MM Pentagon (M4)</i>	AP055
Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010 , <i>MM Woodley Park (M3)</i>	AR040
Intermodal Freight Terminal Design and Operations Committee , <i>MM Chinatown (M3)</i>	AT050
Aviation System Planning Committee , <i>MM Mount Vernon Square (M3)</i>	AV020
Environmental Impacts of Aviation Committee , <i>MM Capitol (M4)</i>	AV030

10:15 a.m.–1:15 p.m.

Resource Conservation and Recovery Committee , <i>MM Independence C (M4)</i>	ADC60
Soil Mechanics Section Executive Board , <i>MM Tulip (Mezz)</i>	AFS00

Noon–1:30 p.m.

Maintenance and Preservation Section Executive Board , <i>MM Magnolia (Mezz)</i>	AHD00
Aviation Group Executive Board , <i>MM Capitol Hill (M3)</i>	AV000

12:15 p.m.–1:15 p.m.

11th National Conference on Transportation Asset Management , <i>MM Gallery Place (M3)</i>	ABC99H
Research Subcommittee , ABE25 (6) , <i>MM Liberty I (M4)</i>	ABE25
Census for Transportation Planning Subcommittee , ABJ30(1) , <i>MM Liberty O (M4)</i>	ABJ30
Stated Response Surveys Subcommittee , ABJ40(3) , <i>MM Liberty P (M4)</i>	ABJ40

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Research Subcommittee, ABJ70(1), MM Liberty N (M4) **ABJ70**
 Civil Integrated Management Subcommittee, ABJ95(1), **ABJ95**
 MM Liberty L (M4)
 Planning and Environment Group Executive Board, **AD000**
 MM Geranium (Mezz)
 Social, Economic, and Cultural Issues Section **ADD00**
 Executive Board, MM Farragut North (M3)

1:30 p.m.–3:15 p.m.

Climate Change and Energy Task Force, **A0020T**
 MM Independence E (M4)
 Sensing Technologies Subcommittee, ABJ50(1), **ABJ50**
 MM Liberty P (M4)
 Air Quality Issues in Small and Medium-Sized
 Communities Subcommittee, ADA30(2), **ADA30**
 MM Independence A (M4)
 Time Use and Activity Patterns Subcommittee, **ADB10**
 ADB10(1), MM Independence C (M4)
 Network Equilibrium Modeling Subcommittee, **ADB30**
 ADB30(2), MM Capitol (M4)
 Emerging Methods Subcommittee, ADB40(1), **ADB40**
 MM Independence H (M4)
 Transportation Planning Applications Committee, **ADB50**
 MM Monument (M4)
 Accelerated Pavement Testing International
 Conferences Subcommittee, AFD40(1), MM Gallaudet
 University (M1) **AFD40**
 Methods for Analyzing Steel Bridges Subcommittee, **AFF20**
 AFF20(1), MM Catholic University (M1)
 Information Systems in Construction Management
 Joint Subcommittee of AFH10, ABJ50, MM Silver
 Linden (Mezz) **AFH10**
 Bridge Steel Coatings Subcommittee, AHD30(2), **AHD30**
 AHD30, MM Dogwood (Mezz)
 Transit and Intermodal Transportation Law Committee, **AL020**
 MM Howard University (M1)
 Animal-Vehicle Collisions Subcommittee, ANB20(2), **ANB20**
 MM Marquis Ballroom Salon 14 (M2)
 Truck and Bus Operator Health and Wellness
 Subcommittee, ANB70(3), MM Marquis Ballroom
 Salon 17 (M2) **ANB70**
 Truck and Bus Driver Training Subcommittee, **ANB70**
 ANB70(7), MM Marquis Ballroom Salon 16 (M2)
 Transit Capital Replacement Subcommittee, AP010(1), **AP010**
 MM L'Enfant Plaza (M3)
 Paratransit Research Subcommittee, AP060(1), **AP060**
 MM Pentagon (M4)
 Passenger Rail Equipment and Systems Integration
 Committee, MM Chinatown (M3) **AR020**
 Railway Maintenance Committee, MM Mount Vernon
 Square (M3) **AR060**
 Aviation Water Resources Subcommittee, AV030(3), **AV030**
 MM Woodley Park (M3)
 Unmanned Aircraft Systems Joint Subcommittee of
 AV060, AV020, AV010, MM Archives (M4) **AV060**

1:30 p.m.–5:30 p.m.

International Cooperation Committee, MM Liberty I (M4) **A0010**
 Transportation Asset Management Committee, **ABC40**
 MM Liberty L (M4)
 Transportation Economics Committee, **ABE20**
 MM Liberty M (M4)
 Accessible Transportation and Mobility Committee, **ABE60**
 MM Supreme Court (M4)
 Women's Issues in Transportation Committee, **ABE70**
 MM Liberty K (M4)
 Transportation in the Developing Countries
 Committee, MM Marquis Ballroom Salon 5 (M2) **ABE90**
 Transportation Education and Training Committee, **ABG20**
 MM Liberty J (M4)
 National Transportation Data Requirements and
 Programs Committee, MM Liberty O (M4) **ABJ10**
 Visualization in Transportation Committee, **ABJ95**
 MM Liberty N (M4)
 Transportation Needs of National Parks and Public
 Lands Committee, MM Independence D (M4) **ADA40**
 Strategic Issues Subcommittee, ADC10(1), **ADC10**
 MM Independence G (M4)
 Hydrology, Hydraulics, and Water Quality Committee, **AFB60**
 MM Marquis Ballroom Salon 2 (M2)
 Pavement Rehabilitation Committee, MM Marquis
 Ballroom Salon 4 (M2) **AFD70**
 Concrete Bridges Committee, MM Marquis Ballroom
 Salon 3 (M2) **AFF30**
 Nanotechnology-Based Concrete Materials Task
 Force, MM George Washington University (M1) **AFN15T**
 Physicochemical and Biological Processes in Soils
 Committee, MM Scarlet Oak (Mezz) **AFP40**
 Seasonal Climatic Effects on Transportation
 Infrastructure Committee, MM Cherry Blossom (Mezz) **AFP50**
 Cementitious Stabilization Committee, **AFS80**
 MM University of DC (M1)
 Chemical, Mechanical, and Asphalt Stabilization
 Committee, MM University of DC (M1) **AFS90**
 Regional Highway and Transit Integration
 Subcommittee, AHB10(11), MM Marquis Ballroom
 Salon 15 (M2) **AHB10**
 Traffic Signal Systems Committee, MM Marquis
 Ballroom Salon 6 (M2) **AHB25**
 System Simulation Task Force, **AHB80T**
 MM Marquis Ballroom Salon 9 (M2)
 Pavement Maintenance Committee, **AHD20**
 MM Marquis Ballroom Salon 1 (M2)
 Polymer Concretes, Adhesives, and Sealers
 Committee, MM Georgetown University (M1) **AHD40**
 Transportation Safety Management Committee, **ANB10**
 MM Marquis Ballroom Salon 8 (M2)
 Safe Mobility of Older Persons Committee, **ANB60**
 MM Marquis Ballroom Salon 7 (M2)
 Visibility Committee, MM Marquis Ballroom
 Salon 10 (M2) **AND40**
 Pedestrians Committee, MM Marquis Ballroom
 Salon 12 (M2) **ANF10**

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User Information Systems Committee, MM Marquis Ballroom Salon 13 (M2) **AND20**

Commuter Rail Transportation Committee, MM Mint (M4) **AP070**

Transit Capacity and Quality of Service Committee, MM Treasury (M4) **AP015**

Emerging and Innovative Public Transport and Technologies Committee, MM Union Station (M3) **AP020**

Trucking Industry Research Committee, MM Congress (M4) **AT060**

Inland Water Transportation Committee, MM Judiciary Square (M3) **AW020**

3:45 p.m.–5:30 p.m.

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10, MM Liberty P (M4) **ABJ35**

Effects of Information and Communication Technologies on Travel Choices, MM Monument (M4) **ADB20**

Integrated Modeling Subcommittee of ADB40, ADD30, MM Independence A (M4) **ADB40**

Transportation Planning Applications Conference Planning Subcommittee, ADB50(1), MM Independence H (M4) **ADB50**

Sustainability Measurement Subcommittee, ADD40(1), MM Independence B (M4) **ADD40**

Arterials and Public Health Task Force, MM Marquis Ballroom Salon 17 (M2) **ADD55T**

Roadside Safety Data Needs and Applications, MM Scarlet Oak (Mezz) **AFB20**

Pavement Management Systems in Local Governments Subcommittee, AFD10(1), MM Catholic University (M1) **AFD10**

Communications and Outreach Subcommittee, AHB10(4), MM Marquis Ballroom Salon 15 (M2) **AHB10**

Environmental Maintenance Subcommittee, AHD10(1), MM Silver Linden (Mezz) **AHD10**

Underwater Structures Inspection and Maintenance Subcommittee, AHD30(1), MM Dogwood (Mezz) **AHD30**

Tort Liability and Risk Management Committee, MM Howard University (M1) **AL070**

Human Factors in Road Vehicle Automation Joint Subcommittee of AND10, AHB15, AHB30, MM Marquis Ballroom Salon 14 (M2) **AND10**

Transit Fleet Maintenance Subcommittee, AP010(2), MM L'Enfant Plaza (M3) **AP010**

Railroad Operating Technologies Committee, MM Woodley Park (M3) **AR030**

Railroad Track Structure System Design Committee, MM Chinatown (M3) **AR050**

Aviation Economics and Forecasting Committee, MM Archives (M4) **AV040**

Airport Terminals and Ground Access Committee, MM Capitol (M4) **AV050**

Civil Helicopter Subcommittee, AV080(1), MM Judiciary Square (M3) **AV080**

Marine Safety and Human Factors Committee, MM Mount Vernon Square (M3) **AW040**

5:45 p.m.–7:15 p.m.

Congestion Pricing Economics Joint Subcommittee of ABE25, ABE20, MM Liberty I (M4) **ABE25**

Tribal Historical and Archeological Preservation Joint Subcommittee of ABE80, ADC50, MM Liberty K (M4) **ABE80**

Public-Private Partnerships Subcommittee, ABE10(1), MM Liberty M (M4) **ABE10**

Value of Transportation Infrastructure Task Force, MM Gallery Place (M3) **AB020T**

Design Section Executive Board, MM Geranium (Mezz) **AFB00**

Operations Section Executive Board, MM Independence C (M4) **AHB00**

Glossary Editorial Board Subcommittee, AHB10(10), MM Marquis Ballroom Salon 15 (M2) **AHB10**

Rail Group Executive Board, MM Capitol Hill (M3) **AR000**

5:45 p.m.–8:00 p.m.

Asphalt Materials Section Executive Board, MM Tulip (Mezz) **AFK00**

7:30 p.m.–9:30 p.m.

Committee Communication Coordinators and Committee Research Coordinators Networking Reception, MM Marquis Ballroom Salon 14 (M2) **A0000**

Mainstreaming International Perspectives and Promoting International Networking, Cooperation, and Collaboration Subcommittee, A0010(1), MM Liberty I (M4) **A0010**

Research Subcommittee, ABE60(4), MM Supreme Court (M4) **ABE60**

Freight Transportation Data Committee, MM Archives (M4) **ABJ90**

Roadway Safety Culture Subcommittee, AN000(1), MM Marquis Ballroom Salon 12 (M2) **AN000**

Surrogate Measures of Safety Subcommittee, ANB20(3), MM Marquis Ballroom Salon 13 (M2) **ANB20**

Young Drivers Subcommittee, ANB30(1), MM Marquis Ballroom Salon 8 (M2) **ANB30**

Public Transportation Group Young Members Subcommittee, AP000 (2), MM Union Station (M3) **AP000**

Transit State of Good Repair Joint Subcommittee of AP010, AR055, AP070, AP065, AP050, AP075, AP045, MM Treasury (M4) **AP010**

Research Needs and Progress in Rural Public and Intercity Bus Transportation Subcommittee, AP055(2), MM Mint (M4) **AP055**

Taxi Subcommittee, AP060(2), MM Capitol (M4) **AP060**

Shared Rail Corridors and Facilities Joint Subcommittee of AP065(3), AP045, AP070, AP075, AR010, AR040, MM Congress (M4) **AP065**

Subcommittee on Research, AP070(2), MM Judiciary Square (M3) **AP070**

Socioeconomic and Financial Aspects of Intercity Passenger Rail Subcommittee, AR010(2), MM L'Enfant Plaza (M3) **AR010**

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Freight Modeling Subcommittee, AT015(1), **AT015**
MM Woodley Park (M3)

Aviation Young Members Council, AV000(1), **AV000**
MM Mount Vernon Square (M3)

7:30 p.m.–10:00 p.m.

Risk Assessment and Planning Subcommittee, ABR10(2), **ABR10**
MM Liberty K (M4)

Fabrication and Inspection of Metal Structures Committee, MM Silver Linden (Mezz) **AFH70**

Pavement Management Systems for Airports Subcommittee, AFD10(2), **AFD10**
MM Howard University (M1)

Flexible Pavement Design Committee, MM Marquis Ballroom Salon 4 (M2) **AFD60**

Nondestructive Evaluation of Structures Subcommittee, AFF40(1), **AFF40**
MM George Washington University (M1)

Geoseismic Issues of Bridges Subcommittee, AFF50(1), **AFF50**
MM Dogwood (Mezz)

Construction Management Committee, MM Marquis Ballroom Salon 2 (M2) **AFH10**

Characteristics of Asphalt Materials Committee, MM Marquis Ballroom Salon 5 (M2) **AFK20**

Advanced Models to Understand Behavior and Performance of Asphalt Mixtures Subcommittee, AFK50(1), **AFK50**
MM Marquis Ballroom Salon 3 (M2)

Basic Research and Emerging Technologies Related to Concrete Committee, MM University of DC (M1) **AFN10**

Subsurface Drainage Committee, MM Scarlet Oak (Mezz) **AFS60**

Engineering Behavior of Unsaturated Soils Committee, MM Cherry Blossom (Mezz) **AFP60**

Geotechnical Asset Management Subcommittee, AFP10(2), **AFP10**
MM Catholic University (M1)

Transportation Incident Management Subcommittee, AHB10(8), **AHB10**
MM Marquis Ballroom Salon 17 (M2)

Active Traffic Management Joint Subcommittee of AHB20, AHB35, MM Marquis Ballroom Salon 9 (M2) **AHB20**

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20, MM Marquis Ballroom Salon 10 (M2) **AHB45**

Positive Protection in Work Zones Joint Subcommittee of AHB55, AFB20, AFH10, MM Marquis Ballroom Salon 15 (M2) **AHB55**

Structural Health Monitoring Joint Subcommittee of AHD30, AHD35, AFF40, MM Marquis Ballroom Salon 1 (M2) **AHD30**

Winter Maintenance Committee, MM Georgetown University (M1) **AHD65**

International Trade and Transportation Committee, MM Chinatown (M3) **AT020**

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Sessions and Events

8:00 a.m.–9:45 a.m.

- 476 Moving Transportation Forward: Imagining the Transformation, *CC 152A* 
- 477 Organizational Excellence: Managing People, Process, and Knowledge, *CC 151B*
- 478 Surviving Leadership Transitions: Sustaining Transportation Asset Management Programs, *CC 151A*
- 479 Assessing Specialized Transportation Needs: New Approaches and Findings, *CC 150B*
- 480 Effective, Practical Methods for Technology Transfer, *CC 152B* 
- 481 Long-Distance and Intercity Travel: Where Are We in 2016? *CC 154*
- 482 Is State Legislation Driving Change to a Performance-Based and Multimodal Future? *CC 156*
- 483 Ninth Annual Competition and Call for Communicating Concepts with John and Jane Q. Public, *CC 140B*
- 484 Methodological Advances in Travel Behavior Research, Part 1 (Part 2, Session 546), *CC 145A*
- 485 Traffic Network Management, *CC 146B*
- 486 Animal-Vehicle Collisions: Understanding and Reducing Risk for Driver Safety and Sustainability, *CC 140A*
- 487 Superfund: Department of Transportation Liability and Allocation Process, *CC 146A*
- 488 Best Papers from 11th International Conference on Low-Volume Roads, *CC 206*
- 489 Paradigm Shifts for Improving or Enhancing Utility Processes at Transportation Agencies, *CC 209C*
- 490 Key Benefits Developed from Accelerated Pavement Testing, Part 1 (Part 2, Session 553), *CC 204A*
- 491 In-service Performance of Steel Bridges, *CC 208*
- 492 Advancement in Construction Project Controls on Transportation Infrastructure Projects, *CC 207B*
- 493 How Asphalt Pavements Are Affected During Construction, *CC 202A*
- 494 PG Binder Specification Evolution, *CC 201*
- 495 Influence of Seasonal Climatic Effects on Pavements, *CC 209A*
- 496 Modeling and Monitoring Volume Change of Unsaturated Geomaterials, *CC 207A*
- 497 National Programs on Road Vehicle Automation in Europe and Asia, *CC Salon C* 
- 498 Managed Lanes: Strategies for More Sustainable Transportation Solutions, *CC Salon A*
- 499 Safety-Related Traffic Control Device Research, *CC 101*
- 500 State Maintenance Practice Case Studies, *CC 204C*
- 501 Deterioration and Condition Modeling for Bridge Management Systems, *CC 204B*
- 502 Pavement Marking Design and Evaluation, *CC 209B*
- 503 Emerging Trends in Project Delivery, *CC 203*
- 504 Traffic Law Enforcement Research: Countermeasure Evaluation, Data Analysis, and Officer Safety, *CC 103A*
- 505 Evaluation of Roundabout Safety Through Users' Experience, *CC 102B*

- 506 Pedestrian Safety Analysis, *CC Salon B*
- 507 On-road Applications and Outcomes for Motorcycles and Motorcyclists, *CC 103B*
- 508 Transit Quality of Service Evaluation: Four International Applications, *CC 144B*
- 509 Intersection of New Mobility Services and Public Transport: Empirical and Theoretical Insights, *CC 149* 
- 510 How to Bridge the Gap Between Research and Transit Planning Practice: Panel Discussion, *CC 144C* 
- 511 Case Studies for Improving Passenger Ferry Service, *CC 143C*
- 512 Improvements in Turnout Design, *CC 144A*
- 513 Rail Transit System Technical Issues, *CC 143B*
- 514 Freight Day, Part 1: Mega-ships, Mega-surges, Mega-congestion: Supply Chain Optimization Efforts (Part 2, Session 577; Part 3, Session 631; Part 4, Session 705), *CC 145B*
- 515 Vehicle Inventory and Use Surveys, *CC 147A*
- 516 Industry-Based Trucking Research, *CC 147B*
- 517 Evolving Commercial Ground Transportation Services: Implications for Long-Term Airport Planning, *CC 150A*
- 518 Contemporary Research Issues in Aviation Security and Safety, *CC 143A*

8:00 a.m.–noon

- 519 Dwight David Eisenhower Transportation Fellowship Program Research Showcase, *CC 202B*

8:30 a.m.–10:15 a.m.

Poster Sessions, 520–538
CC Hall E 

- 520 New Policy Tools for a Changing World, *B034–B037*
- 521 Transportation Issues and Solutions in Major Cities, *B031–B033*
- 522 Parking Management, *A009–A020*
- 523 Modeling Approaches in Transportation Demand Management, *B027–B030*
- 524 TDM at Work and Play: From Theory to Practice, *B021–B026*
- 525 Transportation Workforce's Changing Landscape: Educational Case Studies, *A003–A005*
- 526 Library and Information Science in Transportation, *A001–A002*
- 527 Looking Back, Projecting Forward: Highlights of Multimodal Future in Public Lands Setting, *P101–P106, G121–G125, H144–H145*
- 528 Current Issues in Transportation Energy and Climate Change, *D071–D079, E086–E096, F106–F108, G126, G128, G130–G131, G134, H152, H156–H158*
- 529 Current Issues in Alternative Transportation Fuels and Technologies, *E097–E100, F109–F120, G127, G129, G132–G133, G135–G140, H146–H151, H153–H155, H159–H160*
- 530 Recent Advances in Social and Economic Factors of Transportation, *D061–D070, E081–E083*

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Poster Sessions *(continued)*, **CC Hall E**


- 531 **Community Impact Assessment**, C051–C056
- 532 **Transportation and Sustainability: ADD40 Committee Highlighted Papers**, C041–C050
- 533 **Preparing, Planning, and Assessing Readiness of the Next Generation of Intelligent Transportation Systems**, P281–P295
- 534 **Advances in Adaptive Signal Control and Optimization**, Q301–Q319
- 535 **Innovations in Signal Timing Design and Coordination**, R321–R333
- 536 **Traffic Flow Theory and Characteristics, Part 1 (Part 2, Session 537; Part 3, Session 589)**, M221–M240, N241–N242
- 537 **Traffic Flow Theory and Characteristics, Part 2 (Part 1, Session 536; Part 3, Session 589)**, N244–N260, O261–O267
- 538 **Bicycling Research**, J161–J177, K181–K200, L201–L220






9:00 a.m.–4:00 p.m.

Exhibits, *CC Hall D*

10:15 a.m.–noon


- 539 **Connected and Autonomous Vehicles: Impacts on Users, Design, and Society**, CC 152A 
- 540 **Incorporating Risk in Transportation Asset Management Practices**, CC 151A
- 541 **Putting Technology to Work for Multimodal Accessibility**, CC 150B
- 542 **Native American Transportation Issues**, CC 151B
- 543 **Addressing the Changing Landscape of the Transportation Workforce: Demographics, Technologies, Career Pathways, and Workforce Needs**, CC 152B
- 544 **Emerging National Policy Data Needs**, CC 154 (CANCELED)
- 545 **U.S. National Parks and Forest Service: Celebrating 100 Years of Multimodal Innovation and Visioning for the Next 100 Years**, CC 146B 
- 546 **Methodological Advances in Travel Behavior Research, Part 2 (Part 1, Session 484)**, CC 145A
- 547 **From Ad Hoc to Scientific: Moderated Discussion on Improving Travel Forecasting Methods**, CC 156
- 548 **Decarbonizing Transportation Construction Materials: Opportunities and Barriers to Increased Use of Recycled Content**, CC 146A
- 549 **Rethinking Tools and Policies for Environmental Justice**, CC 140B
- 550 **Roadside Safety Design**, CC 207A
- 551 **Complete, Green, and Exceptional: Creating Streets of the Future**, CC 209A
- 552 **Innovations for Managing Utility Design, Construction, and Coordination During Project Development and Delivery**, CC 209C
- 553 **Key Benefits Developed from Accelerated Pavement Testing, Part 2 (Part 1, Session 490)**, CC 204A
- 554 **Steel Girder Bridge Design Topics**, CC 208
- 555 **Construction Risk Assessment and Management on Transportation Infrastructure Projects**, CC 207B

- 556 **Considerations for Design and Construction or Reconstruction of Asphalt Pavements**, CC 202A
- 557 **Long-Term Binder Aging and Recycled Engine Oil Bottoms**, CC 201
- 558 **Geosynthetics in Pavement Reinforcement**, CC 206
- 559 **Major International Automation Research Programs**, CC Salon C
- 560 **Performance-Based Practical Design**, CC Salon A
- 561 **Maintenance Data Analysis**, CC 204C
- 562 **Bridge Preservation**, CC 209B
- 563 **Chemical and Geothermal Innovations in Snow Melting for Winter Maintenance**, CC 204B
- 564 **Don't Worry, It's Just a Phase: Coordinating NEPA Decision Documents, Engineering, and Construction Contracting with Phased Project Development**, CC 203
- 565 **Emphasizing Human Factors in Highway Safety: Recognizing Road User Needs to Reduce Crashes**, CC 101
- 566 **Young Driver Research: Latest Findings**, CC 102B 

- 567 **Challenges in Adult Rear Seat Occupant Safety: Current Research and Trends**, CC 103A
- 568 **Senior Mobility Research: Individual and Community-Based Perspectives**, CC 103B 
- 569 **Innovative Pedestrian Planning and Design**, CC Salon B
- 570 **Federal Transit Administration Priorities for Workforce Development**, CC 144C
- 571 **Sociodemographic Effects on Transit Quality of Service Perceptions**, CC 144B
- 572 **Carsharing and Mobility as a Service: Research Understanding**, CC 149 
- 573 **Catchment Areas, Connectivity, Crime Avoidance, Costs, and Capacity: 5 C's of Passenger Station Planning**, CC 147A
- 574 **Natural Gas Fuels and Safe Ferries**, CC 143C
- 575 **Innovation in Passenger Rail Equipment and System Integration**, CC 144A
- 576 **Energy Efficiency Technologies for Rail Transportation**, CC 147B
- 577 **Freight Day, Part 2: Big Data and Freight Transportation—Private-Sector Applications and Agency Implications (Part 1, Session 514; Part 3, Session 631; Part 4, Session 705)**, CC 145B  
- 578 **Multimodal Connections: Passenger Accessibility**, CC 143A 
- 579 **Environmental Modeling in the Real World**, CC 143B
- 580 **Mainstreaming Innovative Technology**, CC Ballroom B 

10:45 a.m.–12:30 p.m.

Poster Sessions, 581–596
CC Hall E 

- 581 **Fresh Ideas for Statewide Multimodal Transportation Planning**, B023–B027, C043–C045 
- 582 **Planning Applications and Modeling Scenarios for Statewide Multimodal Transportation**, A001–A002, B021–B022, C041–C042





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Poster Sessions (continued), CC Hall E

- 583 Latest Research in Metropolitan Policy, Planning, and Processes, A003–A020
- 584 Innovations in Transportation Programming and Investment Decision Making, C046–C050
- 585 Public Involvement, B028–B040, C051–C060
- 586 Soil Erodibility and Sediment Basins and Barriers, F101–F105
- 587 Pavement Surface Characteristics, E F106–F116
- 588 Performance Evaluation of Signal Control Systems, K181–K191, L201–L211
- 589 Traffic Flow Theory and Characteristics, Part 3 (Part 1, Session 536; Part 2, Session 537), M221–M232, N241–N252
- 590 Traffic Control Device Research, O261–O273, P281–P292
- 591 Railroad Safety Analysis: Methods and Applications, E092–E099
- 592 Active Research on Safety of Pedestrian and Bicycle Transportation, H141–H145, J161–J169
- 593 Safety Analysis with Surrogate Measures, H146–H157, J171–J177
- 594 Research in Railroad Track Structure System Design, D061–D072
- 595 Rail Safety IDEA Program, E081–E085
- 596 Current Research in Railway Maintenance, E086–E091


1:30 p.m.–3:15 p.m.

- 597 Learning from the Winners: Competition Results for Best Practices in Communicating Data to Support Decisions, CC 154
- 598 Millennials and Our Connected Multimodal Future, Part 1: Travel Behavior (Part 2, Session 674), CC 103B 
- 599 New Attitudes, New Frameworks: Public Opinion and Funding Mechanisms for Infrastructure, CC 152A
- 600 Gender Differences in Driving: Safety and Mobility Implications, CC 150A 
- 601 Public Transport Mix: Challenges Around the World, CC 150B
- 602 Promise and Limits of Measuring Research Impacts: Federal, State, TRB, and Academic Perspectives, CC 152B 
- 603 Making the Case for Investing in Information: Demonstrating Value, CC 151A
- 604 Emerging Research in Emergency Evacuation, CC 151B 
- 605 Odd But Effective Bedfellows: Innovative and Fruitful Partnerships, CC 145A
- 606 Centennial Reflections on National Park Roads and the Federal-Aid Highway Act of 1916, CC 146B
- 607 Travel Behavior Across Modes, CC 140B
- 608 Best Papers from 15th TRB Transportation Planning Applications Conference, CC 156
- 609 Solving the Air-Quality Dilemma: Land Use, Vehicle Technology, Eco-driving, and Transit Service, CC 146A
- 610 Section 106 and Section 4(f): Fraternal Twins Turn 50, CC 140A

- 611 New Research Needs for the Rollout of Hydrogen Fueling Infrastructure, CC 144A
- 612 Bridge Scour: Predictions, Processes, and Programs, CC 204A
- 613 HPMS and Pavement Performance, Part 1 (Part 2, Session 687), CC 202A
- 614 Environmental Effects in Flexible Pavement Design, CC 207B
- 615 Best Practices for Dispute Resolution in Alternative Delivery Contracts, CC 201
- 616 Bridge Sliding: ABC Method to Reduce Construction Time, CC 146C
- 617 Field and Laboratory Monitoring of Unsaturated Geomaterials, CC 208
- 618 Driving Behavior Under Limited Visibility Conditions, CC 207A
- 619 Traffic Management Capabilities and the Next Generation of Traffic Management Systems and Centers, CC Salon A
- 620 Advances in Modeling and Traffic Management for Large-Scale Urban Networks, CC Salon C
- 621 Pavement Maintenance Applications and Needs Now and in the Future, CC 204C
- 622 Measuring Performance and Driving Conditions in Winter Maintenance, CC 204B
- 623 Tag, I'm It: Legal Issues Growing out of Expansion of NEPA Assignment Authority, CC 203
- 624 Choosing Safety: Perspectives from Recent Entrants to the Highway Safety Workforce, CC 102B
- 625 Advances in Highway Safety Performance, CC 103A
- 626 Dynamic Control and Assessment of Lighting for Visibility, CC 101
- 627 Emerging Research in Bicycling, CC Salon B
- 628 Applications of Unmanned Aircraft Systems Within the Rail Industry, CC 143B 
- 629 Soft Ground Considerations and Substructure Reinforcement for Railways, CC 149
- 630 Railroad Operating Employee Fatigue Update, CC 144B
- 631 Freight Day, Part 3: Key Freight Trends That Have Not Yet Shown Up in the Data (Part 1, Session 514; Part 2, Session 577; Part 4, Session 705), CC 145B
- 632 Advances in Freight Modeling, CC 144C
- 633 Cargo-Related Multimodal Connections, CC 143A
- 634 Current Topics in Air Carrier Competition, CC 147B
- 635 Using Data to Identify Waterway Risk Areas, CC 143C
- 636 Optimizing Passenger and Freight Mobility Through Multimodal Solutions, CC Ballroom B

2:00 p.m.–3:45 p.m.

Poster Sessions, 252, 391, 637–672, and 710
CC Hall E 

- 252 Urban Freight Innovations, H145–H156 
- 391 Public Transportation Infrastructure Protection and Resilience, A001–A006, B021–B025
- 637 Dwight David Eisenhower Transportation Fellowship Program, Part 2 (Part 1, Session 435), O261–O277
- 638 Statistical Methods in Transportation, A008–A020

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Poster Sessions *(continued)*, **CC Hall E**

- 639 Transportation Investments, Global Trade, and Economic Development Effects, B026–B030
- 640 LTPP InfoPave 2016, K181
- 641 Developments in Low-Volume Road Management, J161–J171
- 642 Binder Testing and Specifications, K182–K188, L201–L203
- 643 Asphalt Binders: Modifiers, Additives, Reclaimed Asphalt Pavement, and Warm-Mix Additives, L204–L219
- 644 Properties, Performance, and Applications of Warm-Mix Asphalt Additives, M221–M225
- 645 Design and Performance of Mixtures Containing Reclaimed Asphalt Pavement, M226–M231
- 646 Current Research Related to Asphalt Surface Mixtures, N241–N250
- 647 Fatigue Cracking Characteristics of Asphalt Mixtures, N251–N260, O278–O280
- 648 Fracture Properties and Characteristics of Asphalt Mixtures, M232–M240
- 649 Compaction and Modulus Evaluation of Subgrade and Unbound Pavement Layers and Mechanically Stabilized Earth Walls, J172–J175
- 650 Performance Data for Deep Foundations, K189–K192
- 651 Testing and Modeling of Moisture Effects for Pavement Evaluation and Design, J176–J180
- 652 Physical Applications of Geosynthetic Materials, K193–K195
- 653 Cementitious Stabilization, K196–K200
- 654 Regional Transportation Systems Management and Operations, R321–R326
- 655 Transportation Safety Management, P281–P295, Q305–Q315
- 656 School Transportation Research, Q301–Q304
- 657 Transformative Trends in Transit Data Analysis, F108–F112, G127–G133
- 658 Innovative Methods for Managing Public Transit Systems, E095, F113–F119, G134–G138
- 659 Transit Quality of Service: Crowding, Bus Reliability, and Service Quality Modeling, C041–C046
- 660 Emerging and Innovative Topics in Public Transport, C057–C060
- 661 Exploring Market Demand for Ridesharing and Shared Automated Vehicles, C053–C056
- 662 Carsharing: Latest Research, C047–C052
- 663 Public Transportation Policy: Governance, Priority-setting, and Perspectives, E084–E090
- 664 Measuring Impacts and Benefits of Public Transportation, D066–D070
- 665 Transit Planning—The Big Picture: Developing Networks and Measuring Accessibility, D077–D080, E097–E100
- 666 Transit Planning—The Detailed Picture: Service Planning Tools and Analyses, D071, E091–E094
- 667 Transit Fare Issues: Discounts, Equity, and Evasion, F105–F107, G126
- 668 Transit Fare Policy, Collection, and Impacts, F101–F102, G121–G123
- 669 Transit Marketing, Loyalty, and Satisfaction, F103–F104, G124–G125
- 670 Automated Transit and Shared Mobility, H141–H143

- 671 Design of Intermodal Passenger Facilities, D061–D065, E082–E083
- 672 Thinking Spatially: Managing and Planning Commuter Rail with Geographic Information Systems, F120, G139–G140
- 6710 Critical Transportation Infrastructure Protection and Resilience, A001–A006, B021–B025



3:45 p.m.–5:30 p.m.

- 673 Leveraging Knowledge Through Twinning of Research Projects: Three Twinned Projects from European Commission Horizon 2020 and FHWA, CC 151B
- 674 Millennials and Our Connected Multimodal Future, Part 2: Future Directions for Transportation Practice (Part 1, Session 598), CC 103B 
- 675 MAP-21 and Beyond in Transportation Performance Management, CC 154
- 676 Put Your Money Where Your Mouth Is: Role of Performance Management and Reporting to Secure Transportation Funding, CC 152A
- 677 Socioeconomic Aspects of Transport in China and Latin America, CC 150B
- 678 Innovation Management: Building a Foundation for Effective Technology Transfer Through Integration with the Research Process, CC 152B 
- 679 Strategic Vision for GIS: State Department of Transportation Perspective, CC 151A
- 680 Using Naturalistic Driving Study Data for Road Safety Analysis: Connecting Crashes to Safety-Critical Events, CC 101
- 681 Planning Applications of Statewide Travel Demand Models and Methods, CC 145A
- 682 Innovative Concepts and Tools Designed to Address Unique Travel Characteristics Faced by Various Small and Medium-Sized Communities, CC 156
- 683 Solutions to Urban Network Problems, CC 146B
- 684 Reducing Energy Consumption, Carbon Emissions, and Criteria Pollutants from Heavy-Duty Vehicles: Integrated Technology and Policy Approaches, CC 146A
- 685 Housing, Transit-Oriented Development, and Mobility, CC 140B
- 686 Solutions to Improved Highway Runoff Water Quality, CC 204A
- 687 HPMS and Pavement Performance, Part 2 (Part 1, Session 613), CC 202A
- 688 Flexible Pavement Modeling and Analysis, CC 207B
- 689 Current Concrete Bridge Topics, CC 207A
- 690 Risk Opportunities in Alternative Project Delivery, CC 201
- 691 Risk Management in Accelerated Bridge Construction, CC 202B
- 692 New Developments in Full-Depth Reclamation of Asphalt Pavements, CC 208
- 693 Active Traffic Management Applications Mitigating the Impacts of Nonrecurring Congestion, CC Salon A 
- 694 Theme: Macroscopic Features of Traffic Flow, CC Salon C

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- 695 Railroad Trespassing and Right-of-Way Fatality Prevention, CC 143B
- 696 Regulating the Groundbreaking Rise in Transportation Network Companies, CC 203 
- 697 Highway Safety Workforce Development: State of the Practice, CC 102B
- 698 Exploring Roundabout Operational Performance and Low-Cost Designs, CC 103A
- 699 Road Illumination, Signage, and Visibility, CC 140A
- 700 Pedestrian and Bicyclist Safety in a Danish Context, CC Salon B
- 701 Emerging Benefits from Transit Data, CC 144A 
- 702 Timely Topics in Transit Safety, CC 143C
- 703 Starting Over: The Challenge of Sustaining Passenger Rail Performance and Restoring Discontinued Services, CC 144B
- 704 Nonintrusive Testing of Track Structure and Substructure, CC 149
- 705 Freight Day, Part 4: Accommodating Freight Early and Often in the Planning Phases of City Redevelopment (Part 1, Session 514; Part 2, Session 577; Part 3, Session 631), CC 146C 
- 706 How Mega-trends Affect Aviation Systems Planning, CC 144C
- 707 Increasing Customer Satisfaction in Airport Terminals: Current Research and Innovative Practices, CC 147B
- 708 Sustainable Development Where Rivers Meet Open Water, CC 143A
- 709 Transportation System Resilience: Looking at the Past and Designing for the Future, CC Ballroom B  

4:15 p.m.–6:00 p.m.

**Poster Sessions, 711–734
CC Hall E**



- 711 Transportation Planning Applications: Models, Data, and More, A011–A020, B032–B040
- 712 Transportation and Land Development, A001–A008, B021–B029
- 713 Management of Pavement Networks, F106–F108, G121–G129
- 714 Pavement Performance in Pavement Management Systems, G130–G138
- 715 Innovative Work in Infrastructure Management: Best Papers from AISIM, F101–F105
- 716 Seismic Bridge Design, Analysis, and Research, H158–H160, J178–J179
- 717 Asphalt Binders, Mixtures, and Pavements, K181–K188
- 718 Analytical and New Testing Techniques Related to Asphalt Binders, H141–H153
- 719 Aging of Asphalt Binders, J161–J173
- 720 Alternative Aggregates and Asphalt Mixture Performance, H154–H155, J174–J175
- 721 Modifying Asphalt Mixtures for Performance, K189–K197
- 722 Moisture Susceptibility Issues in Asphalt Mixtures, H156–H157, J176–J177

- 723 Asphalt Mixture Characterization and Evaluation, L201–L212
- 724 Modeling and Evaluation of Asphalt Materials, K198, L213–L220
- 725 Surface Transportation Weather and Its Effects on Traffic Networks, E095–E100, F109–F120
- 726 Multimodal Traffic Signal Control, N241–N251
- 727 Pavement Marking and Signing Design, Maintenance, and Evaluation, E081–E086
- 728 Advances in Winter Maintenance Technology and Operations, E087–E091
- 729 Surface Processes Affecting Snow Accumulation on Roads, E092–E094
- 730 Research on Novice Driver Education, Behavior, and Performance, M226–M233
- 731 Older Road User Behavior and Safety: Recent Findings, M221–M225
- 732 Innovations in Intercity Passenger Rail Transportation, C041–C050
- 733 Research in Railway Operating Technologies, D061–D065
- 734 Current Research on Freight Rail Transportation, D066–D071

5:45 p.m.–7:15 p.m.

Marine and Intermodal Caucus, CC Ballroom South Pre-Function A
Rail and Public Transportation Caucus, CC Ballroom South, Pre-Function C

7:30 p.m.–9:30 p.m.

- 735 Achieving Measurable Environmental Benefit as a Direct Result of Alternative Project Delivery, CC 146A
- 736 Commute Distance and Its Role in Sustainability, CC 140B
- 737 Advances in Cementitious Stabilization of Soils, CC 207A
- 738 Variable Speed Limits and Cooperative Adaptive Control for Intelligent Transportation Management, CC Salon A
- 739 Airports and NextGen: Updates on Airport Cooperative Research Program NextGen Projects, CC 147B
- 740 Users of SHRP 2 Naturalistic Driving Safety Data: Research Topics, Preliminary Findings, Lessons Learned, CC 145B

7:30 p.m.–10:00 p.m.

- 741 Make Every Day a Holiday: The Future of Congestion Pricing, Managed Lanes, and Traffic Management, CC 151B
- 742 Asphalt Pavement Rehabilitation, CC 207B
- 743 Culvert Load Rating and Soil–Structure Interaction, CC 204A

Meetings

7:00 a.m.–8:00 a.m.

Computational Transportation and Society Subcommittee, ABJ30(2), MM Liberty N (M4)

ABJ30

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Transit Surveys Subcommittee, ABJ40(6), **ABJ40**
MM Liberty O (M4)

System Performance Subcommittee, ABJ95(2), **ABJ95**
MM Liberty L (M4)

Transportation Systems Resilience Section Executive Board, *MM Gallery Place (M3)* **ABR00**

8:00 a.m.–9:45 a.m.

ECTRI/TRB Action Plan Review Subcommittee, **A0010(4)**, *MM Liberty K (M4)*

Revenue and Finance Research Subcommittee, **ABE10(3)**, *MM Liberty I (M4)*

Mega-Regions Subcommittee **ADA20**, *MM Independence A (M4)*

Historic and Archeological Preservation Research Needs Subcommittee, **ADC50(2)**, *MM Independence C (M4)*

Roadside Safety Design Computational Mechanics Subcommittee, **AFB20(1)**, *MM Scarlet Oak (Mezz)*

Geospatial Control Subcommittee, **AFB80(1)**, *MM Gallaudet University (M1)*

Accelerated Bridge Construction Subcommittee, **AFF10(3)**, *MM Silver Linden (Mezz)*

RJSMO Data for Transportation Operations Subcommittee, **AHB10(3)**, *MM Marquis Ballroom Salon 13 (M2)*

Crowd Flow Dynamics, Modeling, and Management Subcommittee, **AHB45(2)**, *MM Marquis Ballroom Salon 17 (M2)*

Access Management Outreach Subcommittee, **AHB70(3)**, *MM Marquis Ballroom Salon 15 (M2)*

Rural Road Safety Policy, Programming, and Implementation Joint Subcommittee of **ANB10, AFB30**, *MM Eastern Market (M3)*

Older Women’s Activities Subcommittee, **ANB60(1)**, *MM Marquis Ballroom Salon 16 (M2)*

Public Transportation Marketing and Fare Policy Committee, **AP030**, *MM Judiciary Square (M3)*

Paratransit Committee, **AP060**, *MM Archives (M4)*

Subcommittee on Streetcars, **AP075(1)**, *MM Woodley Park (M3)*

Commercial Space Transportation Joint Subcommittee of **AV010, AV060, AV020, AV010**, *MM Congress (M4)*

Aviation Sustainability Subcommittee, **AV030(1)**, *MM Mount Vernon Square (M3)*

TRB Information Services Committee, **B0002**, *MM George Washington University (M1)*

8:00 a.m.–noon

Performance Measurement Committee, **ABC30**, *MM Liberty L (M4)*

Conduct of Research Committee, **ABG10**, *MM Liberty J (M4)*

Information Systems and Technology Committee, **ABJ50**, *MM Liberty N (M4)*

Artificial Intelligence and Advanced Computing Applications Committee, **ABJ70**, *MM Liberty O (M4)*

Statistical Methodology Committee, **ABJ80**, *MM Supreme Court (M4)*

Critical Transportation Infrastructure Protection Committee, **ABR10**, *MM Liberty M (M4)*

Transportation Planning for Small and Medium-Sized Communities Committee, **ADA30**, *Marriott Marquis, Monument (M4)*

Transportation-Related Noise and Vibration Committee, **ADC40**, *MM Independence E (M4)*

Transportation and Economic Development Committee, **ADD10**, *MM Independence B (M4)*

Transportation and Land Development Committee, **ADD30**, *MM Independence D (M4)*

Pavement Management Systems Committee, **AFD10**, *MM Marquis Ballroom Salon 10 (M2)*

Strength and Deformation Characteristics of Pavement Sections Committee, **AFD80**, *MM Marquis Ballroom Salon 4 (M2)*

Seismic Design and Performance of Bridges Committee, **AFF50**, *MM Marquis Ballroom Salon 2 (M2)*

Culverts and Hydraulic Structures Committee, **AFF70**, *MM Marquis Ballroom Salon 3 (M2)*

Management of Quality Assurance Committee, **AFH20**, *MM Marquis Ballroom Salon 1 (M2)*

Concrete Materials and Placement Techniques Committee, **AFN40**, *MM University of DC (M1)*

Soil and Rock Properties Committee, **AFP30**, *MM Cherry Blossom (Mezz)*

Rural Public and Intercity Bus Transportation Committee, **AP055**, *MM Treasury (M4)*

Freeway Operations Committee, Part 1, **AHB20**, *MM Marquis Ballroom Salon 5 (M2)*; [Part 2: 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 10 (M2)*]

Work Zone Traffic Control Committee, **AHB55**, *MM Marquis Ballroom Salon 9 (M2)*

Maintenance and Operations Personnel Committee, **AHD15**, *MM Catholic University (M1)*

Pavement Preservation Committee, **AHD18**, *MM Georgetown University (M1)*

Maintenance Equipment Committee, **AHD60**, *MM Dogwood (Mezz)*

Highway Safety Workforce Development Committee, **ANB23**, *MM Marquis Ballroom Salon 8 (M2)*

Alcohol, Other Drugs, and Transportation Committee, **ANB50**, *MM Marquis Ballroom Salon 14 (M2)*

Truck and Bus Safety Committee, **ANB70**, *MM Marquis Ballroom Salon 12 (M2)*

Simulation and Measurement of Vehicle and Operator Performance Committee, **AND30**, *MM Marquis Ballroom Salon 7 (M2)*

Rail Transit Systems Committee, **AP065**, *MM Union Station (M3)*

Intercity Passenger Rail Committee, **AR010**, *MM Capitol (M4)*

Railroad Environmental Research Issues Subcommittee, **AR020(1)**, *MM L’Enfant Plaza (M3)*

Railroad Operational Safety Committee, **AR070**, *MM Chinatown (M3)*

Transportation of Hazardous Materials Committee, **AT040**, *MM Mint (M4)*

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10:15 a.m.–noon

Mileage-Based User Fees Joint Subcommittee of ABE25, ABE10, MM Liberty K (M4)	ABE25
Safety Data Subcommittee, ABJ20(1), MM Liberty P (M4)	ABJ20
Network Models in Practice Subcommittee, ADB30(4), MM Independence H (M4)	ADB30
Research Topics Subcommittee, ADC10(2), MM Independence G (M4)	ADC10
Regional Air Quality Analysis Subcommittee, ADC20(2), MM Independence A (M4)	ADC20
Historic and Archeological Preservation Programs Subcommittee, ADC50(3), MM Independence C (M4)	ADC50
Sustainability Research Subcommittee, ADD40(2), MM Liberty I (M4)	ADD40
Geospatial Data Acquisition Using sUAS's, Subcommittee, AFB80(2), MM Gallaudet University (M1)	AFB80
Advanced Concrete Pavement Modeling Subcommittee, AFD50(1), MM Silver Linden (Mezz)	AFD50
Measuring and Quantifying Performance Subcommittee, AHB10(1), MM Marquis Ballroom Salon 13 (M2)	AHB10
Managed Lanes Meeting Planning Subcommittee, AHB35(3), MM Marquis Ballroom Salon 17 (M2)	AHB35
Access Management Research Subcommittee, AHB70(2), MM Marquis Ballroom Salon 15 (M2)	AHB70
Eminent Domain and Land Use Committee, MM Howard University (M1)	AL060
Emergency Medical Services Safety Subcommittee, ANB10(5), MM Marquis Ballroom Salon 16 (M2)	ANB10
Bicycle Membership and Communications Subcommittee, ANF20(3), MM Eastern Market (M3)	ANF20
Transformative Transit Data Joint Subcommittee of AP000, ABJ00, MM L'Enfant Plaza (M3)	AP000
International Light Rail Transit Developments Subcommittee, AP075(3), MM Woodley Park (M3)	AP075
Agricultural Transportation Committee, MM Judiciary Square (M3)	AT030
Air Cargo Subcommittee, AV040(1), MM Congress (M4)	AV040
Airfield and Airspace Capacity and Delay Committee, MM Mount Vernon Square (M3)	AV060
Regional and Commuter Airlines Subcommittee, AV080(3), MM Archives (M4)	AV080

Noon–1:30 p.m.

Environment and Energy Section Executive Board, MM Farragut North (M3)	ADC00
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Noon–2:00 p.m.

Concrete Materials Section Executive Board, MM Magnolia (Mezz)	AFN00
Public Transportation Group Executive Board, MM LeDroit Park (M3)	AP000

12:15 p.m.–1:15 p.m.

Transportation Policy Section Executive Board, MM Gallery Place (M3)	ABE00
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Travel Time, Speed, and Reliability Joint Subcommittee of ABJ30, ABJ35, MM Liberty O (M4)	ABJ30
Household Travel Surveys Subcommittee, ABJ40(1), MM Liberty P (M4)	ABJ40
Gaming and Participatory Simulation Subcommittee, ABJ95(3), MM Liberty N (M4)	ABJ95
Joint Meeting of RTSMO Subcommittee Chairs and Research Needs Subcommittee, AHB10(7), MM Marquis Ballroom Salon 13 (M2)	AHB10
National Conference on Access Management Subcommittee, AHB70(1), MM Marquis Ballroom Salon 15 (M2)	AHB70

12:15 p.m.–3:15 p.m.

Business Aviation Subcommittee, AV080(2), MM Archives (M4)	AV080
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1:30 p.m.–3:15 p.m.

International Activities Subcommittee, ABE60(1), MM Supreme Court (M4)	ABE60
Statewide Multimodal Transportation Planning Committee, MM Independence D (M4)	ADA10
Transit, Freight, and Logistics Modeling Subcommittee, ADB30(1), MM Independence H (M4)	ADB30
Aviation Noise and Vibration Joint Subcommittee of ADC40, AV030, MM Independence C (M4)	ADC40
Waste Management and Resource Efficiency Midyear Meeting Planning Subcommittee, ADC60(1), MM Independence G (M4)	ADC60
International Aspects of Transportation Energy Subcommittee, ADC70(1), MM Independence E (M4)	ADC70
Geometric Design Business Subcommittee, AFB10(3), MM Silver Linden (Mezz)	AFB10
Structures Collaboration Subcommittee, AFF00(1), MM Marquis Ballroom Salon 1 (M2)	AFF00
RTSMO Sustainability Subcommittee, AHB10(5), MM Marquis Ballroom Salon 13 (M2)	AHB10
Managed Lanes Research Subcommittee, AHB35(2), MM Marquis Ballroom Salon 17 (M2)	AHB35
Transportation Law Committee, MM Howard University (M1)	ALO10
Senior Mobility Options Joint Subcommittee, ANB60(3), MM Marquis Ballroom Salon 16 (M2)	ANB60
Ferry Transportation Committee, MM Judiciary Square (M3)	AP085
Intercity Passenger Rail Research Subcommittee, AR010(3), MM L'Enfant Plaza (M3)	AR010
Freight Transportation Economics and Regulation Committee, MM Mint (M4)	AT010
Development of Freight Fluidity Performance Measures Task Force, MM Woodley Park (M3)	AT017T
Aviation Geographic Information Systems and Data Joint Subcommittee of AV070, ABJ60, MM Capitol (M4)	AV070
Aviation Security and Emergency Management Committee, MM Congress (M4)	AV090
Marine Environmental Committee, MM Mount Vernon Square (M3)	AW030

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1:30 p.m.–5:30 p.m.

Data Privacy, Security, and Protection Policy Joint Subcommittee of AB000, AHB15, ABE25, AL040, MM Liberty O (M4)	AB000
Strategic Management Committee, MM Liberty K (M4)	ABC10
Native American Transportation Issues Committee, MM Liberty I (M4)	ABE80
Transportation History Committee, MM Liberty J (M4)	ABG50
Urban Transportation Data and Information Systems Committee, MM Liberty L (M4)	ABJ30
Understanding New Directions for the National Household Travel Survey Task Force, MM Liberty P (M4)	ABJ45T
Planning and Environment Group Young Member Council, MM Independence A (M4)	AD000
Public Involvement in Transportation Committee, MM Monument (M4)	ADA60
Landscape and Environmental Design Committee, MM Marquis Ballroom Salon 3 (M2)	AFB40
Utilities Committee, MM Catholic University (M1)	AFB70
Geospatial Data Acquisition Technologies in Design and Construction Committee, MM Marquis Ballroom Salon 4 (M2)	AFB80
Pavement Monitoring and Evaluation Committee, MM Marquis Ballroom Salon 10 (M2)	AFD20
Tunnels and Underground Structures Committee, MM George Washington University (M1)	AFF60
Portland Cement Concrete Pavement Construction Committee, MM Marquis Ballroom Salon 2 (M2)	AFH50
Properties of Concrete Committee, MM University of DC (M1)	AFN20
Subsurface Soil–Structure Interaction Committee, MM Cherry Blossom (Mezz)	AFS40
Vehicle–Highway Automation Committee, MM Marquis Ballroom Salon 5 (M2)	AHB30
Performance-Based Analysis Subcommittee, AHB65(3), MM Marquis Ballroom Salon 15 (M2)	AHB65
Sealants and Fillers for Joints and Cracks Committee, MM Dogwood (Mezz)	AHD25
Structures Maintenance Committee, MM Georgetown University (M1)	AHD30
Traffic Law Enforcement Committee, MM Marquis Ballroom Salon 8 (M2)	ANB40
Vehicle User Characteristics Committee, MM Marquis Ballroom Salon 7 (M2)	AND10
Motorcycles and Mopeds Committee, MM Marquis Ballroom Salon 12 (M2)	ANF30
Freight Rail Transportation Committee, MM Chinatown (M3)	AR040

2:00 p.m.–5:30 p.m.

Bus Transit Systems Committee, MM Union Station (M3)	AP050
Light Rail Transit Committee, MM Treasury (M4)	AP075

3:45 p.m.–5:30 p.m.

Accelerated Pavement Testing International Alliance Subcommittee, AFD40(2), MM Marquis Ballroom Salon 9 (M2)	AFD40
Interlayer Systems to Control Reflective Cracking Subcommittee, AFD70(1), MM Marquis Ballroom Salon 1 (M2)	AFD70
RTSMO Freight Subcommittee, AHB10(6), MM Marquis Ballroom Salon 13 (M2)	AHB10
Managed Lanes Outreach Subcommittee, AHB35(1), MM Marquis Ballroom Salon 17 (M2)	AHB35
High-Speed Roadways Subcommittee, AHB65(6), MM Marquis Ballroom Salon 15 (M2)	AHB65
Environmental Issues in Transportation Law Committee, MM Howard University (M1)	AL050
School Transportation Subcommittee, ANB10(6), MM Marquis Ballroom Salon 16 (M2)	ANB10
Bicycle and Pedestrian Safety Analysis Joint Subcommittee of ANB20, ANF10, ANF20, ANB25, MM Marquis Ballroom Salon 14 (M2)	ANB20
Motorcoach Safety Subcommittee, ANB70(2), MM Woodley Park (M3)	ANB70
International Rail Transit Subcommittee, AP065(2), MM L'Enfant Plaza (M3)	AP065
Truck Size and Weight Committee, MM Mount Vernon Square (M3)	AT055
Aviation Climate Change Subcommittee, AV030(2), MM Judiciary Square (M3)	AV030
Crude Oil Transportation Subcommittee, AT040(1), MM Archives (M4)	AT040
Aircraft–Airport Compatibility Committee, MM Capitol (M4)	AV070
Aviation Safety Subcommittee, AV090(1), MM Congress (M4)	AV090

3:45 p.m.–7:00 p.m.

Geology and Properties of Earth Materials Section Executive Board, MM Magnolia (Mezz)	AFP00
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3:45 p.m.–7:15 p.m.

TRANSED Conference Planning Subcommittee, ABE60(5), MM Supreme Court (M4)	ABE60
Transportation in Military Communities Joint Subcommittee of ADA20, AT035, AP055, MM Independence D (M4)	ADA20
International Travel Behavior Subcommittee, ADB10(3), MM Independence H (M4)	ADB10
Rail Noise and Vibration Joint Subcommittee of ADC40, AR055, MM Independence C (M4)	ADC40
Historic and Archeological Preservation in Transportation Committee, MM Independence E (M4)	ADC50
Health and Transportation Joint Subcommittee of ADD50, ADD40, ADB10, ABJ30, MM Independence B (M4)	ADD50
Traffic Structures Subcommittee, AFF10(1), MM Silver Linden (Mezz)	AFF10
Automated Transit Systems Committee, MM Mint (M4)	AP040

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5:45 p.m.–7:15 p.m.

Multimodal Pricing Implementation Joint Subcommittee of ABE25, AHB35, MM Liberty I (M4)	ABE25
Research and Education Section Executive Board, MM Holly (Mezz)	ABG00
Traffic Monitoring Conference (NATMEC) Task Force, MM Eastern Market (M3)	ABJ25T
Cyber Security Subcommittee, ABR10(7), MM Liberty K (M4)	ABR10
ITED 2018 Conference Planning Subcommittee, ADD10(1), MM Independence B (M4)	ADD10
Community Impact Assessment Joint Subcommittee of ADD20, ADA60, MM Liberty J (M4)	ADD20
Structures Section Executive Board, MM Geranium (Mezz)	AFF00
Regional Traffic Signal Operations Subcommittee, AHB10(9), MM Marquis Ballroom Salon 15 (M2)	AHB10

5:45 p.m.–8:00 p.m.

Construction Section Executive Board, MM Tulip (Mezz)	AFH00
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7:00 p.m.–8:45 p.m.

Legal Resources Group Executive Board, MM Howard University (M1)	AL000
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7:00 p.m.–9:30 p.m.

Climate Change Joint Subcommittee of ADC70, ADC80, ADD40, MM Independence E (M4)	ADC70
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7:30 p.m.–9:30 p.m.

Geographic Information Science and Applications Committee, MM Archives (M4)	ABJ60
Future Directions in Safety Analysis Joint Subcommittee of ANB20, ANB25, MM Marquis Ballroom Salon 14 (M2)	ANB20
Art and Design Excellence in Transportation Subcommittee, AP045(1), MM Mint (M4)	AP045

TRB Bus Rapid Transit Conference Planning Subcommittee, AP050(1), MM Treasury (M4)	AP050
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7:30 p.m.–10:00 p.m.

Supply Chain Security Subcommittee, ABR10(8), MM Liberty K (M4)	ABR10
Roadside Safety Design International Research Activities Subcommittee, AFB20 (2), MM Marquis Ballroom Salon 5 (M2)	AFB20
New AFD30 Committee Formation Discussion, MM Catholic University (M1)	AFD00
Full-Scale Accelerated Pavement Testing Committee, MM Marquis Ballroom Salon 1 (M2)	AFD40
Characteristics of Asphalt-Aggregate Combinations to Meet Surface Requirements Committee, MM Marquis Ballroom Salon 3 (M2)	AFK40
Integration of Asphalt Paving Mixture Characteristics with Flexible Pavement Structural Design Subcommittee, AFK50(2), MM Marquis Ballroom Salon 4 (M2)	AFK50
Durability of Concrete Committee, MM University of DC (M1)	AFN30
Exploration and Classification of Earth Materials Committee, MM Silver Linden (Mezz)	AFP20
Geotechnical Instrumentation and Modeling Committee, MM Cherry Blossom (Mezz)	AFS20
Foundations of Bridges and Other Structures Committee, MM George Washington University (M1)	AFS30
Freeway Operations Committee, Part 2, MM Marquis Ballroom Salon 10 (M2) [Part 1, 8:00 a.m.–noon, MM Marquis Ballroom Salon 5 (M2)]	AHB20
Intersections Joint Subcommittee of AHB65, AFB10, AHB70, ANB20, MM Marquis Ballroom Salon 9 (M2)	AHB65
Bridge Life-Cycle Cost Analysis Subcommittee, AHD35(2), MM Dogwood (Mezz)	AHD35
Safety and Security of Bridges and Structures Subcommittee, AHD35(1), MM Scarlet Oak (Mezz)	AHD35
Surface Transportation Weather Committee, MM Georgetown University (M1)	AH010
Ports and Channels Committee, MM Chinatown (M3)	AW010

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Sessions and Events

8:00 a.m.– 9:45 a.m.



- 744 **Climate Change and Transportation: Best Papers of 2016, CC 140A** 
- 745 **Congestion Pricing: Practical Applications of Roadway Pricing, CC 152A**
- 746 **Well, That Didn't Go Exactly as I Planned: Failures and Lessons Learned from Past City Transportation Officials, CC 151B**
- 747 **Parking and the City, CC 150B**
- 748 **Building a National Network for the Transportation Workforce: Job Needs and Priorities by Region, CC 152B**
- 749 **New Approaches for Urban Data, CC 154**
- 750 **Travel Survey Sample Size and Stated-Preference Survey Design, CC 151A**
- 751 **Planning for Multimodal Transportation in the 21st Century, CC 146B** 
- 752 **Starting the Conversation: Public Outreach Issues Surrounding Autonomous Vehicles and Transformative Technologies, CC 145A**  
- 753 **Hot Spots and the Air Pollution Bullseye: Understanding Near-Road Pollution and Exposure, CC 146A**
- 754 **International Perspectives on Transportation and Proposed Land Use, CC 156**
- 755 **Human and Organizational Considerations of Sustainable Transportation at Country, City, and Agency Levels, CC 140B**
- 756 **Research Progress on Cool Pavement Strategies, CC 207B**
- 757 **Advances in Network-Level Pavement Management, CC 202A**
- 758 **Structural Characteristics of Pavement Layers, CC 204B**
- 759 **Advances in Accelerated Bridge Construction, CC 203**
- 760 **Asphalt Mixture Cracking Performance, CC 201**
- 761 **Innovations in Concrete Properties Technology, CC 202B**
- 762 **Innovations in Bridge Approach Design and Construction, CC 207A**
- 763 **Development and Use of High-Quality Deep Foundation Load Test Databases, CC 208**
- 764 **Connected-Vehicle Pilot Projects, CC Salon C** 
- 765 **Signal Control with Priority for Multimodal Transportation Systems, CC 101**
- 766 **Thin Overlays for Pavement Preservation, CC 206**
- 767 **Implementing Fleet Asset Management Plans Through Innovative Use of Data and Analytics: Applications in DOT and Transit Fleets, CC 204C**
- 768 **Analysis of International Road Safety Data, CC 103A**
- 769 **Thinking Outside the Box When All the Funding Is in Boxes: Tools to Support Multidisciplinary Road Safety Decision Making, CC 102B**
- 770 **TRB Special Report 319: Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, CC 144C**  

- 771 **Transit Customer Satisfaction, Loyalty, Attitudes, and Behaviors, CC 149**
- 772 **Worldwide Inspirations in Automated Transit Systems, CC 144B**
- 773 **Transportation Infrastructure and Efficient Intermodal Freight Movement, CC 143C**
- 774 **Current Trends in Truck Size and Weight, CC 143B**
- 775 **Out with the Old, In with the New: The Future of Legacy Air Traffic Systems in a NextGen Environment, CC 143A**
- 776 **Current Research on the Marine Environment: Liquefied Natural Gas as Marine Fuel, CC 144A**


8:30 a.m.–10:15 a.m.

Poster Sessions, 777–795
CC Hall E




- 777 **Transportation Economics Topics: Cost-Benefit Analysis, Pricing, Mileage-Based User Fees, Elasticities, and More, A008–A020, B021–B040, C041–C043**
- 778 **Examining Accessible Mobility and Transport: Reaching New Conclusions for Multimodal Access, A001–A007** 
- 779 **Mobility Trends: Past, Present, and Future, O261–O263, O266–O267, O272– O273, O276, P298, R324**
- 780 **Behavioral Processes, O275, P281–P283, P285, P288, P293 P295, P297, P299, Q303 Q305, Q307, Q310–Q313, S344, S346–S347**
- 781 **New Insights into Mode Choice, S349–S360**
- 782 **Vehicle Ownership and Usage, O269–O271, P296, Q306, R323, R332, R336–R340, S343**
- 783 **Time Use and Activity Patterns, O264–O265, O268, O274, P286–P287, Q301–Q302, Q308–Q309, Q315, R321–R322, R325–R326, R329–R330, R333, S341–S342**
- 784 **Information and Communication Technologies and Activity Travel Choices, O277–O280, P284, P289–P292, P300, R334–R335**
- 785 **Travel Demand Models R Us, C050–C051, D061–D068, D070–D080, E081–E095, E097–E100, F101–F120**
- 786 **Integrated Modeling of Urban Systems: Expanding the Scope of Integration Beyond Land Use and Transportation, C044–C049, D069, E096**
- 787 **Current Research Findings in Vehicle–Highway Automation, H141–H150, J161–J169** 
- 788 **Comments on Legal Topics, G121–G125**
- 789 **Diversity of Roundabouts, K181–K185, L201–L204**
- 790 **Driver Distraction, Fatigue, and Attention, K191–K192, L206–L212**
- 791 **Driver Risk and Emotion, K186–K190**
- 792 **Research on User Information Systems, K193–K199**
- 793 **Evaluation of Operator Performance in a Simulator, L213–L220**
- 794 **Pedestrian Planning and Design, M221–M226, N241–N245**
- 795 **Pedestrian Safety, M227–M237, N246–N256**

10:15 a.m.–noon

- 796 **Surface Transportation System Resilience to Climate Change and Extreme Weather Events: Status and Path Forward, CC 146A** 

CC = Convention Center
MM = Marriott Marquis

373 The Road to Opportunity, CC Ballroom C
 U.S. Secretary of Transportation Anthony R. Foxx, *speaker*



Transportation plays a critical role in connecting Americans and communities to economic opportunity. Access to reliable, safe, and affordable transportation for all Americans is central to U.S. DOT's agenda. The choices that are made about transportation infrastructure at the federal, state and local levels can strengthen communities, create pathways to jobs and improve the quality of life for all Americans.

- 797 Fighting for Transportation Investment: Champions Needed, CC 151B**
- 798 TDM Strategies: Technology, Incentives, and Implementation, CC 150B**
- 799 National U.S. Department of Transportation Act at Age 50: Consequences and Lessons, CC 152B**
- 800 Innovative Mobility Services: 12th Annual Travel Data User Forum, CC 154** HOT TOPIC
- 801 Using Mobile Phone Data in Travel Surveys, CC 151A**
- 802 New Tools and Ideas for Visualizing, Exploring, and Communicating Performance at National, State, and Local Levels, CC 152A**
- 803 Logistics of International Humanitarian Relief Efforts in Africa and Nepal, CC 146B** HOT TOPIC
- 804 Transportation Technology in a Recreational Setting, CC 156**
- 805 Revisiting Fuel Economy: Midterm CAFE Review in the Context of Changing Technologies and Markets, CC 140A**
- 806 Transit, Congestion, and Its Effects on Business, CC 140B**
- 807 Pavement Performance Modeling and Measurement, CC 202A**
- 808 Structural Performance of Pavement Layers and Sections, CC 204B**
- 809 Current Topics in Performance of Reclaimed Asphalt Pavements and Recycled Asphalt Shingles, CC 207B**
- 810 Laboratory and Field Evaluation of Asphalt Mixtures, CC 201**
- 811 Concrete Performance: Ensuring Durability, CC 202B**
- 812 Three-Dimensional Modeling for Subsurface Characterization, CC 208**
- 813 Advances in Retaining Wall Technology and Soil Mechanics, CC 207A**
- 814 Best from the University Transportation Centres Spotlight Conference on Connected and Automated Vehicles, CC Salon A** HOT TOPIC
- 815 What Does Resilience Mean for Operations and What Do Operations Mean for Resilience? CC 101** HOT TOPIC
- 816 Cross-cutting Issues for Vehicle-Highway Automation, CC Salon C** HOT TOPIC
- 817 Bituminous Surface Treatments in Pavement Preservation, CC 206**
- 818 Critical Issues in Snow Removal Equipment and Operations: Pathways Toward Safety and Efficiency, CC 204C**

- 819 Strike a Pose: Coping with Sophisticated Litigation Challenges to Modeling Analyses of Impacts on Environmental and Socioeconomic Resources, CC 203**
- 820 Are Road Safety Research Results Used in Manuals, Policies, and Practices? CC 102B**
- 821 Emergency Response and Vulnerable Users: User Information System Aspects, CC 103A**
- 822 Riding the Emerging Mobility Waves: Federal Transit Administration Priorities from Rides to Wellness to Mobility on Demand CC 144C** HOT TOPIC
- 823 Where's My Ride? Putting Travel Time Research into Practice at Transit Agencies, CC 149**
- 824 Automating Public Mass Transportation in the Connected and Automated Era, CC 144B**
- 825 Enhancing Economic and Regulatory Decision Making Through Recent Advances in Data and Analysis, CC 145A**
- 826 Current Research in Agricultural Transportation, CC 143C**
- 827 Advances in Intermodal Freight Terminal Design and Operations, CC 144A**
- 828 Barbarians at the Gate: Airport Financing in the 21st Century, CC 143A**
- 829 Advances in Planning, Financing, and Management of Maritime Transportation, CC 143B**

Noon–2:00 p.m.

Chairman's Luncheon, *CC Ballroom AB*
 See pages 56–57 for additional information.

2:30 p.m.–4:00 p.m.

- 830 International Transport Research Collaboration in the Presence of Knowledge and Resource Asymmetry, CC 146B**
- 831 Breaking Down Barriers: Funding and Finance Issues and Innovations in Public Transportation Modes, CC 151B**
- 832 Traffic Safety and Evaluation in China, CC 150B**
- 833 SHRP 2 Education Connection, Part 2: Incorporating SHRP 2 Solutions into University Curricula (Part 1, Session 436), CC 152B** HOT TOPIC
- 834 Advances in Traffic Monitoring Technologies and Methods, CC 154**
- 835 Perspectives on the Future of the Commodity Flow Survey: Findings from the Commodity Flow Survey Workshop, CC Salon A**
- 836 Expanding the Scope of Resilience: Concerns About Human Trafficking and Hazardous Materials, CC 152A**
- 837 Model Transferability and Uncertainty in No Uncertain Terms, CC 145A**
- 838 Recent Developments in Understanding of Highway Noise and Implementation of Quieter Pavements, CC 143B** HOT TOPIC
- 839 Electric Vehicle Markets and Infrastructure: Moving Beyond Early Adopters, CC 140A**
- 840 FRP Composite Field Applications, Part 2: Existing Structures (Part 1, Session 273), CC 203**
(Sessions and events continue on page 58)

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Noon-2:00 p.m., Convention Center, Ballroom AB

Chairman's Luncheon TICKET

Sponsored by TRB Executive Committee

The program for the Chairman's Luncheon, hosted by 2015 Executive Committee Chair **Daniel Sperling**, includes the introduction of new Executive Committee members and officers; an address by featured speaker **Chris Urmson**, Director of the Google Self-Driving Car Program; and presentation of TRB's most prestigious awards. Urmson will speak on Google's ambitious and adventurous initiative and describe



Sperling



Urmson

the challenges and opportunities related to autonomous vehicles. Limited seating (without lunch) is available for attendees who do not purchase a luncheon ticket.

Awards

Roy W. Crum Distinguished Service Award

Named for Roy W. Crum, who served as the Board's director from 1928 until his death in 1951, the Crum Award recognizes outstanding leadership in transportation research or research administration.

Lance A. Neumann, Chairman of Cambridge Systematics, is the 2015 recipient of the Crum Award for his distinguished achievements in transportation research.



Neumann

For more than 40 years, Neumann has led research and implementation activities focused on performance management, asset management, multimodal planning, and data-driven investment programming and project selection. In addition to his own research activities, he has led Cambridge Systematics for 25 years, helping to build an organization that has conducted innovative planning and policy research and implementation in a range of subject areas, including travel demand forecasting, freight, safety, and transportation operations.

Nationally recognized as an expert in performance management, Neumann has assisted the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) in developing an approach for a performance-based federal transportation program and in assembling and delivering a training program on performance-based management. Neumann led the development of the first AASHTO asset management guide, was the primary author of a series of white papers on asset management for FHWA, and has advised several states on implementing asset management strategies.

For more than 35 years, Neumann has provided uninterrupted service to TRB as a chair or member of more than 24 groups, sections, committees, panels, and task forces. He has chaired or cochaired seven committees, including the steering committees for four national and international conferences on performance management, as well as national conferences on multimodal planning, investment programming, and asset management. He is an emeritus member of the Standing Committee on Performance Management and of the Standing Committee on Transportation Programming and Investment Decision-Making.

Neumann received Ph.D. and Master's degrees in Transportation Systems from the Massachusetts Institute of Technology and a B.S. degree in Civil Engineering from Brown University.

W. N. Carey, Jr., Distinguished Service Award

The Carey Award—named in honor of W. N. Carey, Jr., the Board's Executive Director from 1967 to 1980—recognizes individuals for leadership and distinguished service to TRB and transportation research. **Kirk T. Steudle**, Director of the Michigan Department of Transportation and Immediate Past Chair of the TRB Executive Committee, is the 2015 recipient of the award. In addition to leading the Executive Committee during a pivotal year, Steudle has served as chair or vice chair of six other TRB committees, panels, and task forces, including the Oversight Committee for the second Strategic Highway Research Program (SHRP 2), the Committee on SHRP 2 Implementation, and the Transformative Technologies Task Force. He is an active member of the Subcommittee for National Research Council Oversight; the Task Force on Mastering the Management of Transportation Research and Training Program; the Oversight Committee for Use and Oversight of SHRP 2 Safety Data, Phase I; and the TRB Executive Committee.



Steudle

During his tenure as Executive Committee Chair, Steudle helped oversee the development and adoption of a new strategic plan, enhanced coordination of TRB's efforts promoting research into connected and automated vehicles, oversaw the move of the TRB Annual Meeting from the Marriott Wardman Park and other Connecticut Avenue hotels to the Walter E. Washington Convention Center, and participated in the selection of Neil J. Pedersen as the successor to longtime TRB Executive Director Robert. E. Skinner, Jr. As chair of oversight and implementation activities related to SHRP 2, Steudle oversaw advances in the state of knowledge and practice in the areas of safety, capacity, renewal, and reliability. During his watch, SHRP 2 successfully conducted the Naturalistic Driving Study, the largest collection of data on driving behavior ever attempted. Steudle has helped foster the development of knowledge transfer processes to prepare TRB's partners at AASHTO and FHWA for the delivery and implementation of SHRP 2 products.

A National Associate of the National Academies of Sciences, Engineering, and Medicine, Steudle received a Bachelor of Science degree in construction engineering from Lawrence Technological University and serves on the Advisory Board of the university's College of Engineering.

Sharon D. Banks Award for Humanitarian Leadership in Transportation

The Sharon D. Banks Award is a biennial award established in the memory of Sharon D. Banks, who chaired the TRB Executive Committee in 1998. She died in 1999. The award recognizes innovative and successful leadership in people-oriented initiatives in transportation, sustained over an extended period, exemplifying Banks' ideals of humanity and service.

The 2016 recipient, **Carol Abel Lewis**, is Professor, Department of Transportation Studies, and Director of the Center for Transportation Training and Research at Texas Southern University. Lewis is recognized for her unique blend of transportation accomplishments, for her successes in mentoring and nurturing young people, and for her tireless promotion of responsible growth and the protection of neighborhoods.



Lewis

Lewis has earned the respect and the admiration of her colleagues and of the communities she has served with her people-oriented approach, her signature since the 1980s, when she proactively engaged community groups and individuals in Houston METRO's planning processes. She is known for treating people in all contexts with dignity, respect, openness, and fairness.

WED

Lewis has provided innovative leadership in many transportation projects and services involving individuals with diverse backgrounds. She has applied the same people-oriented skills and approach to her responsibilities at Texas Southern University, not only benefiting her students but the communities and agencies they later serve as professionals. Her community service includes appointments to advisory boards and commissions by three Houston mayors. During her tenure on the Houston Planning Commission, Lewis worked with a diverse group of civic leaders to promote responsible growth and protect neighborhoods. She has made a difference in the lives of her students, fellow researchers and professors, younger professionals, community groups, and transit riders throughout the Houston area.

Founding Contributors to the Sharon D. Banks Award

- AC Transit
- American Public Transportation Association
- California Transit Association
- Conference of Minority Transportation Officials
- Maritime Administration, U.S. DOT
- Office of the Assistant Secretary for Research and Technology, U.S. DOT
- Transportation Research Board

Emeritus Members of TRB Standing Committees, 2015

Emeritus membership recognizes the significant, long-term contributions of individuals who have provided outstanding service through participation on the Board's standing committees.

Gary Duncan

Traffic Signal Systems Committee

Walter M. Dunn, Jr.

Freeway Operations Committee

David W. Fowler

Polymer Concretes, Adhesives, and Sealers Committee

Ralph Gakenheimer

Transportation in the Developing Countries Committee

Barbara T. Harder

Conduct of Research Committee

Alan E. Pisarski

Transportation History Committee

Sandra L. Tucker

Library and Information Science for Transportation Committee

Carol A. Zimmerman

on Transportation Needs of National Parks and Public Lands Committee

Kathryn A. Zimmerman

Pavement Management Systems Committee

WED


Get Involved!

The standing committees within TRB are communities of individuals who share an interest and expertise in transportation.

With more than 200 committees, almost every transportation mode and topic is represented. Each committee proposes research, shares research findings, sponsors special activities, and provides a forum for transportation professionals to discuss today's and tomorrow's transportation issues.

Serving on TRB committees provides you with an opportunity to contribute to advancing the state of the art and the state of the practice in transportation. You will participate with individuals from around the world with diverse backgrounds. This broad representation provides a chance to contribute, to learn, and to interact with others who share your passion for transportation.

Go to www.MyTRB.org, establish your profile, and then select the committee(s) you wish to participate in.

- 841 The Larger View of Virtual Design and Construction, CC 207A
- 842 Constructing Concrete Pavement Roundabouts, CC 202B
- 843 Field Testing and Design for Deep Foundations, CC 208
- 844 Microscopic Traffic Flow Modeling, CC 101
- 845 National Highway Institute Training Courses on Bridge Preservation and Bridge Maintenance, CC 204C
- 846 National Highway Traffic Safety Administration Data Systems and Services: Changes Are Coming, CC Salon B 
- 847 User Characteristics Potpourri: Novel Analysis of Naturalistic Data, Legislation and Regulation, and Automated Driving, CC 102B
- 848 Simulator Validation, CC 103A
- 849 Let's Expand the Toolbox: Public Policy for Transit Management, CC 149
- 850 Art and Design Applications Across Transportation Modes, CC 144B
- 851 Underlying Factors Affecting General Aviation, CC 143A

2:30 p.m.–6:00 p.m.

Highway and Vehicle Safety Finite Element Modeling and Crash Simulation Forum: Modeling and Simulation Methods, CC 201

- 852 Transportation Asset Management Research Roadmap, CC 151A
- 853 ThinLays: State of the Practice, CC 202A

2:45 p.m.–4:30 p.m.

**Poster Sessions, 854–855
CC Hall E**



- 854 Route Choice and Traffic Equilibrium, G121–G132
- 855 Transportation Network Modeling, B021–B025, C041–C049, C054–C055, D061–D075, E081–E095, F101–F115

4:30 p.m.–6:00 p.m.

- 856 New Insurance Approaches: Ways to Help Ensure Critical Transportation Infrastructure Resilience, CC 151B 
- 857 Traffic Safety and Management in Asia and Africa, CC 150B
- 858 Succession Planning and Knowledge Management: Keys to Transportation's Future, CC 152B
- 859 Advances in Geospatial Technology Applications in Transportation, CC 152A
- 860 Approaches to Processing Collected GPS and Other Available Freight Data Sets and How to Apply Them, CC 144B
- 861 Travel Behavior and Advanced Vehicle Technology, CC 145A
- 862 Electric Vehicle Usage Patterns, Energy Consumption, and Emissions, CC 140A

- 863 Transportation, Gentrification, and Environmental Justice, CC 140B
- 864 National Highway Traffic Safety Administration Vehicle and Behavioral Safety Research, CC Salon B
- 865 Pedestrian Behavior and Safety at Roadway Crossings, CC 102B

Meetings

6:30 a.m.–9:00 a.m.

Operations and Preservation Group Executive Board, **AH000**
MM Marquis Ballroom Salon 17 (M2)

7:00 a.m.–8:00 a.m.

Management and Leadership Section Executive Board, MM Capitol Hill (M3) **ABC00**
 Research Subcommittee, ABJ00(1), **ABJ00**
 MM Liberty P (M4)
 Freight Surveys Subcommittee, ABJ40(2), **ABJ40**
 MM Liberty N (M4)

8:00 a.m.–9:45 a.m.

2018 Women's Issues in Transportation Conference Subcommittee, ABE70(1), MM Liberty K (M4) **ABE70**
 Public Transport, BRT, and Innovations Subcommittee, ABE90 ABE90(2), MM Supreme Court (M4) **ABE90**
 Emergency Evacuations Committee, **ABR30**
 MM Liberty I (M4)
 Understanding Big Data in Freight Transportation Task Force, MM Woodley Park (M3) **ABJ92T**
 Geometric Design Technical Subcommittee, AFB10(1), **AFB10**
 MM Catholic University (M1)
 Low-Volume Roads Committee, MM Silver Linden (Mezz) **AFB30**
 Bridge Aesthetics Subcommittee, AFF10(2), **AFF10**
 MM Howard University (M1)
 Regional Transportation Systems Management and Operations Committee, MM Marquis Ballroom Salon 12 (M2) **AHB10**
 Managed Lanes Committee, MM Independence (M4) **AHB35**
 Freeway Safety and Operations Subcommittee, AHB65(5), MM Marquis Ballroom Salon 15 (M2) **AHB65**
 Traffic Speed and Safety—Cross-Cutting Issues Joint Subcommittee of ANB20, AHB65, ANB10, MM Marquis Ballroom Salon 7 (M2) **ANB20**
 Occupant Protection Committee, MM Marquis Ballroom Salon 8 (M2) **ANB45**
 Motor Carrier Alternative Compliance Joint Subcommittee of ANB70, ANB30, MM Marquis Ballroom Salon 13 (M2) **ANB70**
 Guided and Electric Trolley Bus Joint Subcommittee of AP065(1), AP075, MM Mount Vernon Square (M3) **AP065**
 TRB Light Rail Transit Conference Planning Subcommittee, AP075(2), MM Judiciary Square (M3) **AP075**

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8:00 a.m.–11:45 a.m.

TRB Executive Committee (by invitation), **E0000**
MM Liberty LM (M4)

8:00 a.m.–noon

Knowledge Management Task Force, **AB010T**
MM Liberty N (M4)

Library and Information Science for Transportation Committee, **ABG40**
MM Liberty J (M4)

Metropolitan Policy, Planning, and Processes Committee, **ADA20**
MM Monument (M4)

Transportation Network Modeling Committee, **ADB30**
MM Independence D (M4)

Ecology and Transportation Committee, **ADC30**
MM Independence C (M4)

Alternative Aviation Fuels Joint Subcommittee of ADC80, AV030, **ADC80**
MM Independence G (M4)

Environmental Justice in Transportation Committee, **ADD50**
MM Independence B (M4)

Highway Traffic Monitoring Committee, **ABJ35**
MM Shaw (M3)

Roadside Safety Design Committee, **AFB20**
MM University of DC (M1)

Rigid Pavement Design Committee, **AFD50**
MM Marquis Ballroom Salon 4 (M2)

Structural Fiber-Reinforced Polymers Committee, **AFF80**
MM Scarlet Oak (Mezz)

Project Delivery Methods Committee, **AFH15**
MM Marquis Ballroom Salon 2 (M2)

Construction of Bridges and Structures Committee, **AFH40**
MM Marquis Ballroom Salon 3 (M2)

Flexible Pavement Construction and Rehabilitation Committee, **AFH60**
MM Marquis Ballroom Salon 10 (M2)

Mineral Aggregates Committee, **AFP70**
MM George Washington University (M1)

Geosynthetics Committee, **AFS70**
MM Cherry Blossom (Mezz)

Traffic Flow Theory and Characteristics Committee, **AHB45**
MM Marquis Ballroom Salon 5 (M2)

Access Management Committee, **AHB70**
MM Marquis Ballroom Salon 9 (M2)

Transportation Issues in Major Cities Committee, **ABE30**
MM Monument (M4)

Maintenance and Operations Management Committee, **AHD10**
MM Marquis Ballroom Salon 1 (M2)

Bridge Management Committee, **AHD35**
MM Georgetown University (M1)

Corrosion Committee, **AHD45**
MM Dogwood (Mezz)

Truck and Bus Technology Subcommittee, ANB70(6), **ANB70**
MM Marquis Ballroom Salon 16 (M2)

Bicycle Transportation Committee, **ANF20**
MM Marquis Ballroom Salon 6 (M2)

Intermodal Transfer Facilities Committee, **AP045**
MM Archives (M4)

Freight Transportation Planning and Logistics Committee, **AT015**
MM Union Station (M3)

TRB Executive Committee (by invitation), **E0000**
MM Liberty LM (M4)

10:15 a.m.–noon

Congestion Pricing Committee, **ABE25**
MM Liberty I (M4)

Tribal Safety Issues Subcommittee, ABE80(1), **ABE80**
MM Liberty K (M4)

Traffic Safety and Traffic Management Subcommittee, ABE90(1), **ABE90**
MM Supreme Court (M4)

WSTLUR Conference Subcommittee, ADB10(5), **ADB10**
MM Independence H (M4)

Project-Level Air Quality Analysis Subcommittee, ADC20(3), **ADC20**
MM Independence G (M4)

Highway Noise and Vibration Subcommittee, ADC40(3), **ADC40**
MM Independence E (M4)

Computer Image Technology for Pavement Evaluation Subcommittee, AFD20(1), **AFD20**
MM Howard University (M1)

Flexible Pavement Design Meeting for Young Professionals, **AFD60**
MM Catholic University (M1)

Low- to Moderate-Speed Roadways Subcommittee, AHB65(4), **AHB65**
MM Marquis Ballroom Salon 15 (M2)

Toward Zero Deaths Goal Subcommittee, ANB10(9), **ANB10**
MM Marquis Ballroom Salon 7 (M2)

Truck and Bus Data Subcommittee, ANB70(4), **ANB70**
MM Woodley Park (M3)

Human Factors Road Design Guides Subcommittee, AND10(2), **AND10**
MM Marquis Ballroom Salon 14 (M2)

Pedestrian Modeling and Simulation Subcommittee, ANF10(2), **ANF10**
MM Marquis Ballroom Salon 13 (M2)

Transportation and Energy Sector Developments Subcommittee, AT000(2), **AT000**
MM Judiciary Square (M3)

Committee Research Coordinators Council—Aviation, AV000(3), **AV000**
MM Mount Vernon Square (M3)

12:15 p.m.–2:15 p.m.

Travel Analysis Methods Section Executive Board, **ADB00**
MM Capitol Hill (M3)

User Liaison and Technology Facilitation Subcommittee, ANB25(3), **ANB25**
MM Marquis Ballroom Salon 8 (M2)

International Research Subcommittee, ANB25(5), **ANB25**
MM Marquis Ballroom Salon 7 (M2)

12:15 p.m.–4:00 p.m.

Travel Survey Methods Committee, **ABJ40**
MM Shaw (M3)

2:30 p.m.–4:00 p.m.

Traveler Behavior and Values Committee, **ADB10**
MM Independence D (M4)

Social and Economic Factors of Transportation Committee, **ADD20**
MM Independence B (M4)

Global Road Safety Subcommittee, ANB10(8), **ANB10**
MM Marquis Ballroom Salon 7 (M2)

Truck and Bus Technology Subcommittee, ANB70(6), **ANB70**
MM Marquis Ballroom Salon 16 (M2)

Emerging Vehicles for Low Speed Transportation Joint Subcommittee of ANF20, ANF10, ANB40, ANF30, AP020, ANF20, **ANF20**
MM Marquis Ballroom Salon 14 (M2)

2:30 p.m.–6:00 p.m.

Transportation Issues in Major Cities Committee, **ABE30**
MM Monument (M4)

Transportation Demand Management Committee, **ABE50**
MM Supreme Court (M4)

WED

Logistics of Disaster and Business Continuity Committee, MM Liberty K (M4) **ABR20**

Environmental Analysis in Transportation Committee, MM Archives (M4) **ADC10**

Transportation and Air Quality Committee, MM Independence E (M4) **ADC20**

Pavement Materials and the Urban Climate Subcommittee, AF000(2), MM Marquis Ballroom Salon 4 (M2) **AF000**

Geometric Design Committee, MM Marquis Ballroom Salon 2 (M2) **AFB10**

General Structures Committee, MM Marquis Ballroom Salon 3 (M2) **AFF10**

Characteristics of Asphalt Paving Mixtures to Meet Structural Requirements Committee, MM Marquis Ballroom Salon 5 (M2) **AFK50**

Engineering Geology Committee, MM Cherry Blossom (Mezz) **AFP10**

Transportation Earthworks Committee, MM Silver Linden (Mezz) **AFS10**

Regional Transportation Systems Management and Operations Committee, MM Marquis Ballroom Salon 12 (M2) **AHB10**

Intelligent Transportation Systems Committee, CC Salon C **AHB15**

Operational Effects of Geometrics Committee, MM Marquis Ballroom Salon 9 (M2) **AHB65**

Highway Safety Performance Committee, MM Marquis Ballroom Salon 8 (M2) **ANB25**

Rollover Crashworthiness Subcommittee, ANB45(1), MM Marquis Ballroom Salon 13 (M2) **ANB45**

Roundabouts Committee, MM Marquis Ballroom Salon 10 (M2) **ANB75**

Emerging Vehicles for Low-Speed Transportation Joint Subcommittee of ANF20, ANF10, ANB40, ANF20 ANF30, AP020, MM Marquis Ballroom Salon 14 (M2) **ANF20**

TRB Executive Committee (by invitation), MM Liberty LM (M4) **E0000**

4:30 p.m.–6:00 p.m.

Physical Security Subcommittee, ABR10(3), MM Independence B (M4) **ABR10**

Transportation Demand Forecasting Committee, MM Independence D (M4) **ADB40**

6:15 p.m.–7:15 p.m.

Policy and Legal Aspects Subcommittee, ANB25(1), MM Marquis Ballroom Salon 12 (M2) **ANB25**

Conferences and Meetings Subcommittee, ANB25(4), MM Marquis Ballroom Salon 13 (M2) **ANB25**

7:00 p.m.–9:00 p.m.

Safety and System Users Group Executive Board, MM Marquis Ballroom Salon 14 (M2) **AN000**

7:30 p.m.–10:00 p.m.

Training, Education, and Technology Transfer Subcommittee, ABR10(5), MM Independence B (M4) **ABR10**

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Access Management Manual— New, Updated, and Expanded!

TRB's *Access Management Manual*, second edition, provides a comprehensive, coordinated approach to transportation and community design to enhance mobility, mode choice, and environmental quality. The interdisciplinary guidance addresses access management as a critical part of network and land use planning and pertains to government decision makers at all levels, as well as to pedestrians, bicyclists, and operators of motorized vehicles. The revised and expanded new edition includes the following key updates:

- Network and circulation planning and modal considerations;
- Frameworks and strategies for applications in a variety of contexts;
- Performance measures and monitoring;
- Corridor management planning, alternative funding, and cooperative agreements;
- Network planning, regional policies and programs, interchange areas, auxiliary lane warrants, rights-of-way, and access controls;
- Program development, staffing, training, internal coordination, and roles for transportation agencies; and

- Methods to improve coordination and cooperation between state agencies, local jurisdictions, and private developers—plus sample cooperative agreements.



Most chapters coordinate with sections of a companion volume in preparation, the *Access Management Application Guidelines (AMAG)*, which offers additional technical information, design criteria, and practical guidance, along with case examples. The AMAG is scheduled for publication in early 2016 and will be sold separately.

Order your copy of *Access Management Manual*, second edition, today for \$120 (TRB affiliates \$90) from the TRB Online Bookstore:
<https://www.mytrb.org/Store/Product.aspx?ID=7507>.

For more information, send an e-mail to TRBSales@nas.edu or visit www.trb.org/main/blurbs/171852.aspx.

Sessions and Events

8:00 a.m.–noon

Highway and Vehicle Safety Finite Element Modeling and Crash Simulation Forum: Roadside Safety Simulations, CC 201

- 866 **Avoiding the Unmanageable: Policy Research Role in Mitigating Climate Change Impacts on the Transport Sector**, CC 204C
- 867 **The Future of Toll Financing and Its Policy Ramifications**, CC 101
- 868 **Freight Transport and Logistics in the Developing Countries: Challenges and Possible Solutions**, CC 102B
- 869 **Ahead of the Curve: Mastering the Management of Transportation Research and Innovation**, CC 206 
- 870 **Cyber Security and Resilience in a Connected and Automated World**, CC Salon B 
- 871 **National Environmental Policy Act and Climate Change: Greenhouse Gas Guidance of Council on Environmental Quality**, CC 208
- 872 **Transportation Modeling: Effects of Changes to U.S. Environmental Protection Agency Guideline on Air Quality Models**, CC 209A
- 873 **Health Effects of Transportation Noise and Air Quality and Mitigation Strategies**, CC 209B 
- 874 **Alternative Fuel Use: Multimodal Perspective**, CC 209C
- 875 **Sustainability in Transportation: Making It Count**, CC 204B

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- 876 **Service Life Engineering for Durable Steel Bridges (CANCELED)**
- 877 **Design, Testing, and Performance of Open-Graded Asphalt Mixtures**, CC 202A
- 878 **Tools and Techniques for Evaluation of Thermal Cracking Properties of Asphalt Mixtures**, CC 202B
- 879 **Interferometric Synthetic Aperture Radar: Promising New Tool for Networkwide Transportation Infrastructure Monitoring**, CC 207B
- 880 **Status of Long-Term Bridge Performance Program**, CC 207A

Meetings

7:30 a.m.–11:00 a.m.

Design and Construction Group Executive Board, AF000
MM Liberty I (M4)

8:00 a.m.–noon

Challenges and Opportunities of Road Vehicle Automation Joint Subcommittee of AHB30, AHB15, AHB30
MM Salon C

Highway Safety Performance Committee, ANB25
MM Liberty JK (M4)

TRB Executive Committee (by invitation), E0000
MM Liberty LM (M4)

Mark Your Calendar!
TRB 96th Annual Meeting
January 8–12, 2017
Walter E. Washington Convention Center
Washington, D.C.

Committee Meetings

Meetings are listed by organization number. Meetings designated “by invitation” are executive sessions, and attendance is restricted. Visitors are welcome at other meetings at the discretion of the chair.

TRB Executive Committee

- TRB Executive Committee** **E0000**
 Daniel Sperling, chair
 Wednesday, 8:00 a.m.–11:45 a.m. (by invitation),
MM Liberty LM (M4)
 Wednesday, 2:30 p.m.–6:00 p.m. (by invitation),
MM Liberty LM (M4)
 Thursday, 8:00 a.m.–noon (by invitation), *MM Liberty LM (M4)*
Subcommittee for NRC Oversight SC001
 Tuesday, 1:30 p.m.–2:45 p.m. (by invitation),
MM Dahlia Board Room
Executive Committee New Members Orientation
 Tuesday, 3 p.m.–3:45 p.m. (by invitation),
MM Dahlia Board Room

Technical Activities Council

- Technical Activities Council** **A0000**
 Daniel Turner, chair, Sunday, 8:00 a.m.–noon
 (by invitation), *MM Cherry Blossom (Mezz)*
**Committee Communication Coordinators and
 Committee Research Coordinators Networking
 Reception**
 Stephanie Camay and Jeffrey Western, cochairs, and
 Mia Zmud, vice chair, Sunday, 5:30 p.m.–6:30 p.m.,
MM University of DC (M1)
Communication Coordinators Council, A0000(2)
 Stephanie Camay and Jeffrey Western, cochairs, and
 Mia Zmud, vice chair, Monday, 7:30 p.m.–9:30 p.m.,
MM Marquis Ballroom Salon 14 (M2)
International Cooperation Committee **A0010**
 O. A. Elrahman and George Giannopoulos, cochairs,
 Monday, 1:30 p.m.–5:30 p.m., *MM Liberty I (M4)*
**Mainstreaming International Perspectives and
 Promoting International Networking, Cooperation,
 and Collaboration Subcommittee, A0010(1)**
 John Munro and Barbara Lenz, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Liberty I (M4)*
International Research Needs Subcommittee, A0010(2)
 Jorge Prozzi and Dario Menichetti, cochairs, Monday,
 10:15 a.m.–noon, *MM Liberty K (M4)*
**ECTRI/TRB Action Plan Review Subcommittee,
 A0010(4)**
 Angel Aparicio, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Liberty K (M4)
Climate Change and Energy Task Force **A0020T**
 Robert Noland, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Independence E (M4)
**Special Task Force on Data for Decisions
 and Performance Measures** **A0030T**
 Joseph Schofer, chair, Monday, 8:00 a.m.–noon,
MM Liberty N (M4)
Young Members Council Task Force **A0040T**
 Alison Conway, chair, Monday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 16 (M2)

Policy and Organization Group

- Policy and Organization Group Executive Board** **AB000**
 Hyun-A Park, chair, Monday, 7:00 a.m.–8:00 a.m.,
MM Gallery Place (M3)

**Data Privacy, Security, and Protection Policy Joint
 Subcommittee of AB000, AHB15, ABE25, AL040**
 Johanna Zmud, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty
 O (M4)*

- Knowledge Management Task Force** **AB010T**
 Leni Oman, chair, Wednesday, 8:00 a.m.–noon,
MM Liberty N (M4)
Value of Transportation Infrastructure Task Force **AB020T**
 Paul Bingham, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Gallery Place (M3)

Management and Leadership Section

- Management and Leadership Section Executive Board** **ABC00**
 Daniela Bremmer, chair, Wednesday, 7:00 a.m.–8:00 a.m.,
MM Capitol Hill (M3)
Strategic Management Committee **ABC10**
 Robert Paddon, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Liberty K (M4)
Management and Productivity Committee **ABC20**
 Maureen Hammer and Mary Raulerson, cochairs, Monday,
 10:15 a.m.–noon, *MM Liberty I (M4)*
Performance Measurement Committee **ABC30**
 Mara Campbell, chair, Tuesday, 8:00 a.m.–noon,
MM Liberty L (M4)
Transportation Asset Management Committee, **ABC40**
 Kathryn Zimmerman, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Liberty L (M4)
**11th National Conference on Transportation
 Asset Management** **ABC99H**
 Kathryn Zimmerman, chair, Monday, 12:15 p.m.–1:15 p.m.,
MM Gallery Place (M3)

Transportation Policy Section

- Transportation Policy Section Executive Board** **ABE00**
 Mark Muriello, chair, Tuesday, 12:15 p.m.–1:15 p.m.,
MM Gallery Place (M3)
Revenue and Finance Committee **ABE10**
 Jennifer Mayer and James Bass, cochairs, Monday,
 8:00 a.m.–noon, *MM Liberty M (M4)*
Public-Private Partnerships Subcommittee, ABE10(1)
 Lowell Clary, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Liberty M (M4)
**Revenue and Finance Research Subcommittee,
 ABE10(3)**
 Thomas Boast, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Liberty I (M4)
**Mileage-Based User Fees Joint Subcommittee of
 ABE25, ABE10**
 Adrian Moore, chair, Tuesday, 10:15 a.m.–noon,
MM Liberty K (M4)
Transportation Economics Committee **ABE20**
 Mark Burris, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Liberty M (M4)
**Congestion Pricing Economics Joint Subcommittee
 of ABE25, ABE20**
 Darren Timothy, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Liberty I (M4)
**Parking Management Joint Subcommittee of ABE50,
 ABE20, ABE25, AP020**
 Rachel Weinberger, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Supreme Court (M4)
Congestion Pricing Committee **ABE25**
 David Ungemah and Kenneth Buckeye, cochairs,
 Wednesday, 10:15 a.m.–noon, *MM Liberty I (M4)*
**Data Privacy, Security, and Protection Policy Joint
 Subcommittee of AB000, AHB15, ABE25, AL040**
 Johanna Zmud, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Liberty O (M4)

Mileage-Based User Fees Joint Subcommittee of ABE25, ABE10

Adrian Moore, chair, Tuesday, 10:15 a.m.–noon, *MM Liberty K (M4)*

Congestion Pricing Economics Joint Subcommittee of ABE25, ABE20

Darren Timothy, chair, Monday, 5:45 p.m.–7:15 p.m., *MM Liberty I (M4)*

Congestion Pricing Outreach Subcommittee, ABE25(1)

Richard Baker, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Liberty K (M4)*

Research Subcommittee, ABE25(6)

Kenneth Buckeye, Monday, 12:15 p.m.–1:15 p.m., *MM Liberty I (M4)*

Multimodal Pricing Implementation Joint Subcommittee of ABE25, AHB35

Donald Samdahl, chair, Tuesday, 5:45 p.m.–7:15 p.m., *MM Liberty I (M4)*

Transportation Issues in Major Cities Committee ABE30

Rina Cutler, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Monument M (M4)*

Transportation Demand Management Committee ABE50

William Loudon, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Supreme Court (M4)*

Parking Management Joint Subcommittee of ABE50, ABE20, ABE25, AP020

Rachel Weinberger, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Supreme Court (M4)*

Accessible Transportation and Mobility Committee ABE60

Joey Goldman and Julie Babinard, cochairs, Monday, 1:30 p.m.–5:30 p.m., *MM Supreme Court (M4)*

International Activities Subcommittee, ABE60(1)

Ann Frye and Nina Frid, cochairs, Tuesday, 1:30 p.m.–3:15 p.m., *MM Supreme Court (M4)*

Technology Subcommittee, ABE60(2)

Aaron Steinfeld and Daniel Blais, cochairs, Monday, 10:15 a.m.–noon, *MM Supreme Court (M4)*

Research Subcommittee, ABE60(4)

Karen Wolf-Branigin and Anabela Simoes, cochairs, Monday, 7:30 p.m.–9:30 p.m., *MM Supreme Court (M4)*

TRANSED Conference Planning Subcommittee, ABE60(5)

Ann Frye and Nina Frid, cochairs, Tuesday, 3:45 p.m.–5:30 p.m., *MM Supreme Court (M4)*

Women's Issues in Transportation Committee ABE70

Dawn Spanhake, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Liberty K (M4)*

Women's Issues in Transportation 2018 Conference Subcommittee, ABE70(1)

Dawn Spanhake, chair, Wednesday, 8:00 a.m.–9:45 a.m., *MM Liberty K (M4)*

Native American Transportation Issues Committee ABE80

Raquelle Myers and Cindi Ptak, cochairs, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty I (M4)*

Tribal Safety Issues Subcommittee, ABE80(1)

Raquelle Myers, cochair, Wednesday, 10:15 a.m.–noon, *MM Liberty K (M4)*

Tribal Historical and Archeological Preservation Joint Subcommittee of ABE80, ADC50

Stephanie Stoermer, chair, Monday, 5:45 p.m.–7:15 p.m., *MM Liberty K (M4)*

Transportation in the Developing Countries Committee ABE90

Om Agarwal, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 5 (M2)*

Traffic Safety and Traffic Management Subcommittee, ABE90(1)

YanYan Chen, chair, Wednesday, 10:15 a.m.–noon, *MM Supreme Court (M4)*

Public Transport, BRT, and Innovations Subcommittee, ABE90(2)

Dario Hidalgo, chair, Wednesday, 8:00 a.m.–9:45 a.m., *MM Supreme Court (M4)*

Research and Education Section

Research and Education Section Executive Board ABG00

Laurie McGinnis, chair, Tuesday, 5:45 p.m.–7:15 p.m., *MM Holly (Mezz)*

Conduct of Research Committee ABG10

Susan Sillick and Hau Hagedorn, cochairs, Tuesday, 8:00 a.m.–noon, *MM Liberty J (M4)*

Transportation Education and Training Committee ABG20

Victoria Beale and Diana Long, cochairs, Monday, 1:30 p.m.–5:30 p.m., *MM Liberty J (M4)*

Technology Transfer Committee ABG30

Patrick Casey, chair, Monday, 8:00 a.m.–noon, *MM Liberty J (M4)*

Library and Information Science for Transportation Committee ABG40

Kendra Levine and Leighton Christiansen, cochairs, Wednesday, 8:00 a.m.–noon, *MM Liberty J (M4)*

Transportation History Committee ABG50

Asha Agrawal, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty J (M4)*

Data and Information Systems Section

Data and Information Systems Section Executive Board ABJ00

Joseph Schofer, chair, Sunday, 6:30 p.m.–8:00 p.m., *MM Liberty N (M4)*

Research Subcommittee, ABJ00(1)

Harvey Miller, chair, Wednesday, 7:00 a.m.–8:00 a.m., *MM Liberty P (M4)*

Long-Distance and Intercity Travel Joint Subcommittee of ABJ10, ABJ40, ABJ00

Lisa Aultman-Hall, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Liberty O (M4)*

Transformative Transit Data Joint Subcommittee of AP000, ABJ00

Catherine Lawson, chair, Tuesday, 10:15 a.m.–noon, *MM L'Enfant Plaza (M3)*

National Transportation Data Requirements and Programs Committee ABJ10

Steven Polzin and Shashi Nambisan, cochairs, Monday, 1:30 p.m.–5:30 p.m., *MM Liberty O (M4)*

Long-Distance and Intercity Travel Joint Subcommittee of ABJ10, ABJ40, ABJ00

Lisa Aultman-Hall, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Liberty O (M4)*

Statewide Transportation Data and Information Systems Committee ABJ20

Coco Briseno, chair, Monday, 8:00 a.m.–noon, *MM Liberty L (M4)*

Safety Data Subcommittee, ABJ20(1)

Nancy Lefler, chair, Tuesday, 10:15 a.m.–noon, *MM Liberty P (M4)*

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10

Scott Brady, chair, Monday, 3:45 p.m.–5:30 p.m., *MM Liberty P (M4)*

Traffic Monitoring Conference (NATMEC) Task Force ABJ25T

Philomena Lockwood, chair, Tuesday, 5:45 p.m.–7:15 p.m., *MM Eastern Market (M3)*

Urban Transportation Data and Information Systems Committee ABJ30

Stacey Bricka, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty L (M4)*

Census for Transportation Planning Subcommittee, ABJ30(1)

Clara Reschovsky and Mara Kaminowitz, cochairs, Monday, 12:15 p.m.–1:15 p.m., *MM Liberty O (M4)*

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10

Scott Brady, chair, Monday, 3:45 p.m.–5:30 p.m., *MM Liberty P (M4)*

Computational Transportation and Society Subcommittee, ABJ30(2)

Harvey Miller and Piyushimita Thakuriah, cochairs, Tuesday, 7:00 a.m.–8:00 a.m., *MM Liberty N (M4)*

Travel Time, Speed, and Reliability Joint Subcommittee of ABJ30, ABJ35

Michael Fontaine and Karl Petty, cochairs, Tuesday, 12:15 p.m.–1:15 p.m., *MM Liberty O (M4)*

Health and Transportation Joint Subcommittee of ADD50, ADD40, ADB10, ABJ30

Edward Christopher and Eloisa Raynault, cochairs, Tuesday, 3:45 p.m.–5:30 p.m., *MM Independence B (M4)*

Highway Traffic Monitoring Committee

Jonathan Regehr, chair, Wednesday, 8:00 a.m.–noon, *MM Shaw (M3)*

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10

Scott Brady, chair, Monday, 3:45 p.m.–5:30 p.m., *MM Liberty P (M4)*

Travel Time, Speed, and Reliability Joint Subcommittee of ABJ30, ABJ35

Michael Fontaine and Karl Petty, cochairs, Tuesday, 12:15 p.m.–1:15 p.m., *MM Liberty O (M4)*

Weigh-in-Motion Subcommittee, ABJ35(2)

Anne-Marie McDonnell, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Liberty P (M4)*

Travel Survey Methods Committee

Guy Rousseau, chair, Wednesday, 12:15 p.m.–4:00 p.m., *MM Shaw (M3)*

Household Travel Surveys Subcommittee, ABJ40(1)

Stacey Bricka and Jimmy Armoogum, cochairs, Tuesday, 12:15 p.m.–1:15 p.m., *MM Liberty P (M4)*

Freight Surveys Subcommittee, ABJ40(2)

Matthew Roorda, chair, Wednesday, 7:00 a.m.–8:00 a.m., *MM Liberty N (M4)*

Stated Response Surveys Subcommittee, ABJ40(3)

Eric Molin and John Rose, cochairs, Monday, 12:15 p.m.–1:15 p.m., *MM Liberty P (M4)*

New Technologies Subcommittee, ABJ40(4)

Elaine Murakami and Abolfazl Mohammadian, cochairs, Monday, 10:15 a.m.–noon, *MM Liberty P (M4)*

Transit Surveys Subcommittee, ABJ40(6)

Mark McCourt and Kevin Tierney, cochairs, Tuesday, 7:00 a.m.–8:00 a.m., *MM Liberty O (M4)*

Understanding New Directions for the National Household Travel Survey Task Force

Jean-Daniel Saphores and Krishnan Viswanathan, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty P (M4)*

Information Systems and Technology Committee

Frances Harrison, chair, Tuesday, 8:00 a.m.–noon, *MM Liberty N (M4)*

Sensing Technologies Subcommittee, ABJ50(1)

Colin Brooks, chair, Monday, 1:30 p.m.–3:15 p.m., *MM Liberty P (M4)*

Information Systems in Construction Management Joint Subcommittee of AFH10, ABJ50

Edward Jaselskis, chair, Monday, 1:30 p.m.–3:15 p.m., *MM Silver Linden (Mezz)*

Research Subcommittee, ABJ50(2)

Tim Schmidt, chair, Monday, 10:15 a.m.–noon, *MM Liberty O (M4)*

Geographic Information Science and Applications Committee

James Hall, chair, Tuesday, 7:30 p.m.–9:30 p.m., *MM Archives (M4)*

Aviation Geographic Information Systems and Data Joint Subcommittee of AV070, ABJ60

Randall Murphy and Mark Ricketson, cochairs, Tuesday, 1:30 p.m.–3:15 p.m., *MM Capitol (M4)*

Artificial Intelligence and Advanced Computing Applications Committee

Sherif Ishak and Adel Sadek, cochairs, Tuesday, 8:00 a.m.–noon, *MM Liberty O (M4)*

Research Subcommittee, ABJ70(1)

David Reinke, chair, Monday, 12:15 p.m.–1:15 p.m., *MM Liberty N (M4)*

Statistical Methodology Committee

Linda Boyle, chair, Tuesday, 8:00 a.m.–noon, *MM Supreme Court (M4)*

Freight Transportation Data Committee

Donald Ludlow, chair, Monday, 7:30 p.m.–9:30 p.m., *MM Archives (M4)*

Understanding Big Data in Freight Transportation Task Force

Donald Ludlow, chair, Wednesday, 8:00 a.m.–9:45 a.m., *MM Woodley Park (M3)*

Visualization in Transportation Committee

Patricia Hu and Michael Pack, cochairs, Monday, 1:30 p.m.–5:30 p.m., *MM Liberty N (M4)*

Civil Integrated Management Subcommittee, ABJ95(1)

Charles Hixon and Kevin Gilson, cochairs, Monday, 12:15 p.m.–1:15 p.m., *MM Liberty L (M4)*

System Performance Subcommittee, ABJ95(2)

Robert Hranac and Daniela Bremmer, cochairs, Tuesday, 7:00 a.m.–8:00 a.m., *MM Liberty L (M4)*

Gaming and Participatory Simulation Subcommittee, ABJ95(3)

Sebastiaan Meijer, chair, Tuesday, 12:15 p.m.–1:15 p.m., *MM Liberty N (M4)*

Transportation Systems Resilience Section

Transportation Systems Resilience Section Executive Board

Thomas Wakeman, chair, Tuesday, 7:00 a.m.–8:00 a.m., *MM Gallery Place (M3)*

Critical Transportation Infrastructure Protection Committee

Laurel Radow and John Contestabile, cochairs, Tuesday, 8:00 a.m.–noon, *MM Liberty M (M4)*

Risk Assessment and Planning Subcommittee, ABR10(2)

Silvana Croope, chair, Monday, 7:30 p.m.–10:00 p.m., *MM Liberty K (M4)*

Physical Security Subcommittee, ABR10(3)

John Contestabile, chair, Wednesday, 6:15 p.m.–7:15 p.m., *MM Independence B (M4)*

Training, Education, and Technology Transfer Subcommittee, ABR10(5)

John Contestabile, chair, Wednesday, 7:30 p.m.–10:00 p.m., *MM Independence B (M4)*

Cyber Security Subcommittee, ABR10(7)

Michael Dinning, chair, Tuesday, 5:45 p.m.–7:15 p.m., *MM Liberty K (M4)*

Supply Chain Security Subcommittee, ABR10(8)

Maria Burns, chair, Tuesday, 7:30 p.m.–10:00 p.m., *MM Liberty K (M4)*

Logistics of Disaster and Business Continuity Committee

Anne Strauss-Wieder, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Liberty K (M4)*

ABJ60

ABJ70

ABJ80

ABJ90

ABJ92T

ABJ95

ABJ35

ABJ40

ABJ45T

ABJ50

ABR00

ABR10

ABR20

Emergency Evacuations Committee **ABR30**
 Brian Wolshon, chair, Wednesday, 8:00 a.m.–9:45 a.m.,
MM Liberty I (M4)

Planning and Environment Group

Planning and Environment Group Executive Board **AD000**
 Ram Pendyala, chair, Monday, 12:15 p.m.–1:15 p.m.,
MM Geranium (Mezz)

Planning and Environment Group Young Member Council
 Shana Johnson and Eduardo Maeyama, cochairs, Tuesday,
 1:30 p.m.–5:30 p.m., *MM Independence A (M4)*

Transportation System Policy, Planning, and Process Section

Transportation System Policy, Planning, and Process Section Executive Board **ADA00**
 Elizabeth Rushley, chair, Sunday, 6:00 p.m.–8:00 p.m.,
MM George Washington University (M1)

Statewide Multimodal Transportation Planning Committee **ADA10**
 Jerri Bohard, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Independence D (M4)

Critical Issues Subcommittee, ADA10(3)
 Mark Nelson, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence A (M4)
Statewide Travel Demand Forecasting Joint Subcommittee of ADA10, ADB40
 Niels Bostrom and Phillip Mescher, cochairs, Monday,
 10:15 a.m.–noon, *MM Independence A (M4)*

Metropolitan Policy, Planning, and Processes Committee **ADA20**
 Robert Hazlett, chair, Wednesday, 8:00 a.m.–noon,
MM Monument (M4)

Mega-Regions Subcommittee of ADA20
 Frederick Ducca, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Independence A (M4)
Transportation in Military Communities Joint Subcommittee of ADA20, AT035, AP055
 Thera Black and David Metcalf, cochairs, Tuesday,
 3:45 p.m.–5:30 p.m., *MM Independence D (M4)*

Transportation Planning for the Small and Medium-Sized Communities Committee **ADA30**
 Jerry Everett, chair, Tuesday, 8:00 a.m.–noon,
MM George Washington University (M1)

Planning for Conference on Small and Medium-Sized Communities Subcommittee, ADA30(1)
 William Frawley, chair, Sunday, 9:00 a.m.–5:00 p.m.,
MM George Washington University (M1)
Air Quality Issues in Small and Medium-Sized Communities Subcommittee, ADA30(2)
 Evelyn Kimbrough, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Independence A (M4)

Transportation Needs of National Parks and Public Lands Committee **ADA40**
 Steven Suder, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Independence D (M4)

Research for Transportation in National Parks and Public Lands Subcommittee, ADA40(1)
 Eric Plosky, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence H (M4)

Transportation Programming and Investment Decision-Making Committee **ADA50**
 Alix Bockelman, chair, Monday, 8:00 a.m.–noon,
MM Monument (M4)

Public Involvement in Transportation Committee **ADA60**
 Claudia Bilotto, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Monument (M4)

Community Impact Assessment Joint Subcommittee of ADD20, ADA60
 Teresa Townsend, chair, Tuesday, 5:45 p.m.–7:15 p.m.,
MM Liberty J (M4)

Travel Analysis Methods Section

Travel Analysis Methods Section Executive Board **ADB00**
 Chandra Bhat, chair, Wednesday, 12:15 p.m.–2:15 p.m.,
MM Capitol Hill (M3)

Traveler Behavior and Values Committee **ADB10**
 Abolfazl Mohammadian, chair, Wednesday, 2:30 p.m.–4:00 p.m., *MM Independence D (M4)*

Time Use and Activity Patterns Subcommittee, ADB10(1)
 Juan Carrasco and Karthik Konduri, cochairs, Monday,
 1:30 p.m.–3:15 p.m., *MM Independence C (M4)*

International Travel Behavior Subcommittee, ADB10(3)
 Yoram Shiftan, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Independence H (M4)

Behavioral Processes: Qualitative and Quantitative Methods Subcommittee, ADB10(4)
 Maren Outwater, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence D (M4)

WSTLUR Conference Subcommittee, ADB10(5)
 Corinne Mulley, chair, Wednesday, 10:15 a.m.–noon,
MM Independence H (M4)

Route Choice and Spatiotemporal Behavior Joint Subcommittee of ADB10, ADB30
 Joseph Chow, chair, Monday, 10:15 a.m.–noon,
MM Independence H (M4)

Health and Transportation Joint Subcommittee of ADD50, ADD40, ADB10, ABJ30
 Edward Christopher and Eloisa Raynault, cochairs,
 Tuesday, 3:45 p.m.–5:30 p.m., *MM Independence B (M4)*

Effects of Information and Communication Technologies on Travel Choices **ADB20**
 Sivaramakrishnan Srinivasan, chair, Monday,
 3:45 p.m.–5:30 p.m., *MM Monument (M4)*

Transportation Network Modeling Committee **ADB30**
 Elise Miller-Hooks, chair, Wednesday, 8:00 a.m.–noon,
MM Independence D (M4)

Route Choice and Spatiotemporal Behavior Joint Subcommittee of ADB10, ADB30
 Joseph Chow, chair, Monday, 10:15 a.m.–noon,
MM Independence H (M4)

Transit, Freight, and Logistics Modeling Subcommittee, ADB30(1)
 Yanfeng Ouyang, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Independence H (M4)

Network Equilibrium Modeling Subcommittee, ADB30(2)
 Xuesong Zhou, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Capitol (M4)

Network Models in Practice Subcommittee, ADB30(4)
 Jon Bottom, chair, Tuesday, 10:15 a.m.–noon,
MM Independence H (M4)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20
 George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Transportation Demand Forecasting Committee **ADB40**
 Joan Walker, chair, Wednesday, 4:30 p.m.–6:00 p.m.,
MM Independence D (M4)

Statewide Travel Demand Forecasting Joint Subcommittee of ADA10, ADB40
 Niels Bostrom and Phillip Mescher, cochairs, Monday,
 10:15 a.m.–noon, *MM Independence A (M4)*

Emerging Methods Subcommittee, ADB40(1)
 Aruna Sivakumar and Amanda Stathopoulos, cochairs,
 Monday, 1:30 p.m.–3:15 p.m., *MM Independence H (M4)*

Integrated Modeling Joint Subcommittee of ADB40, ADD30
Abdul Pinjari, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Independence A (M4)

Special Travel Forecasting Resources Committee ADB45
Ram Pendyala and Rick Donnelly, cochairs, Monday,
10:15 a.m.–noon, *MM Independence D (M4)*

Transportation Planning Applications Committee ADB50
Julie Dunbar, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Monument (M4)

Transportation Planning Applications Conference Planning Subcommittee, ADB50(1)
Erin Morrow, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Independence H (M4)

Environment and Energy Section

Environment and Energy Section Executive Board ADC00
Jonathan Rubin, chair, Tuesday, noon–1:30 p.m.,
MM Farragut North (M3)

Environmental Analysis in Transportation Committee ADC10
Martin Palmer, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Archives (M4)

Strategic Issues Subcommittee, ADC10(1)
Richard Record, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Independence G (M4)

Research Topics Subcommittee, ADC10(2)
Marianne Hatzopoulou, chair, Tuesday, 10:15 a.m.–noon,
MM Independence G (M4)

Transportation and Air Quality Committee ADC20
Jane Lin, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Independence E (M4)

Project Level Air Quality Analysis Subcommittee, ADC20(1)
Christopher Voigt, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence G (M4)

Regional Air Quality Analysis Subcommittee, ADC20(2)
Douglas Eisinger, chair, Tuesday, 10:15 a.m.–noon,
MM Independence A (M4)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20
George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Ecology and Transportation Committee ADC30
Alexander Levy, chair, Wednesday, 8:00 a.m.–noon,
MM Independence C (M4)

Animal–Vehicle Collisions Subcommittee, ANB20(2)
Keith Knapp and Fraser Shilling, cochairs, Monday,
1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 14 (M2)*

Transportation-Related Noise and Vibration Committee ADC40
Hugh Saurenman, chair, Tuesday, 8:00 a.m.–noon,
MM Independence E (M4)

Aviation Noise and Vibration Joint Subcommittee of ADC40, AV030
Natalia Sizov, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Independence C (M4)

Rail Noise and Vibration Joint Subcommittee of ADC40, AR055
Jason Ross, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Independence C (M4)

Highway Noise and Vibration Subcommittee, ADC40(3)
Adam Alexander, chair, Wednesday, 10:15 a.m.–noon,
MM Independence E (M4)

Historic and Archeological Preservation in Transportation Committee ADC50
Emily Pettis, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Independence E (M4)

Tribal Historical and Archeological Preservation Joint Subcommittee of ABE80, ADC50
Stephanie Stoermer, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Liberty K (M4)

Historic and Archeological Preservation Communications Subcommittee, ADC50(1)
Hope Luhman, chair, Monday, 10:15 a.m.–noon,
MM Independence G (M4)

Historic and Archeological Preservation Research Needs Subcommittee, ADC50(2)
Jeannine Russell, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Independence C (M4)

Historic and Archeological Preservation Programs Subcommittee, ADC50(3)
Mary Alfson Tinsman, chair, Tuesday, 10:15 a.m.–noon,
MM Independence C (M4)

Resource Conservation and Recovery Committee ADC60
Edward Wallingford, chair, Monday, 10:15 a.m.–1:15 p.m.,
MM Independence C (M4)

Waste Management and Resource Efficiency Midyear Meeting Planning Subcommittee, ADC60(1)
Jennie Armstrong, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Independence G (M4)

Transportation Infrastructure, Facilities, and Rights-of-Way as Sustainable Resources Subcommittee, ADC60(2)
Andrew Alden, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence C (M4)

Transportation Energy Committee ADC70
Paul Leiby, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Independence E (M4)

International Aspects of Transportation Energy Subcommittee, ADC70(1)
Lewis Fulton and Drew Kodjak, cochairs, Tuesday,
1:30 p.m.–3:15 p.m., *MM Independence E (M4)*

Climate Change Joint Subcommittee of ADC70, ADC80, ADD40
Richard Baldauf, chair, Tuesday, 7:00 p.m.–9:30 p.m.,
MM Independence E (M4)

Alternative Transportation Fuels and Technologies Committee ADC80
Timothy Lipman, chair, Monday, 10:15 a.m.–noon,
MM Independence E (M4)

Climate Change Joint Subcommittee of ADC70, ADC80, ADD40
Richard Baldauf, chair, Tuesday, 7:00 p.m.–9:30 p.m.,
MM Independence E (M4)

Alternative Aviation Fuels Joint Subcommittee of ADC80, AV030
Prem Lobo and Roger Wayson, cochairs, Wednesday,
8:00 a.m.–9:45 a.m., *MM Independence G (M4)*

Social, Economic, and Cultural Issues Section

Social, Economic, and Cultural Issues Section Executive Board ADD00
Leigh Lane, chair, Monday, 12:15 p.m.–1:15 p.m.,
MM Farragut North (M3)

Transportation and Economic Development Committee ADD10
Sharada Vadali and Konstantina Gkritza, cochairs, Tuesday,
8:00 a.m.–noon, *MM Independence B (M4)*

ITED 2018 Conference Planning Subcommittee, ADD10(1)
Tuesday, 5:45 p.m.–7:15 p.m., *MM Independence B (M4)*

Social and Economic Factors of Transportation Committee ADD20
Mark Horner, chair, Wednesday, 2:30 p.m.–4:00 p.m.,
MM Independence B (M4)

Community Impact Assessment Joint Subcommittee of ADD20, ADA60
Teresa Townsend, chair, Tuesday, 5:45 p.m.–7:15 p.m.,
MM Liberty J (M4)

Transportation and Land Development Committee ADD30
John Renne, chair, Tuesday, 8:00 a.m.–noon,
MM Independence D (M4)

Integrated Modeling Joint Subcommittee of ADB40, ADD30
Abdul Pinjari, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Independence A (M4)

Transportation and Land Development Research Subcommittee, ADD30(1)
Ilona Kastenhofer, committee research coordinator,
Monday, 8:00 a.m.–9:45 a.m., *MM Capitol (M4)*

Transportation and Sustainability Committee ADD40
Josias Zietsman, chair, Monday, 8:00 a.m.–noon,
MM Independence B (M4)

Climate Change Joint Subcommittee of ADC70, ADC80, ADD40
Richard Baldauf, chair, Tuesday, 7:00 p.m.–9:30 p.m.,
MM Independence E (M4)

Sustainability Measurement Subcommittee, ADD40(1)
Henrik Gudmundsson, Monday, 3:45 p.m.–5:30 p.m.,
MM Independence B (M4)

Sustainability Research Subcommittee, ADD40(2)
Ralph Hall, committee research coordinator, Tuesday,
10:15 a.m.–noon, *MM Liberty I (M4)*

Health and Transportation Joint Subcommittee of ADD50, ADD40, ADB10, ABJ30
Edward Christopher and Eloisa Raynault, cochairs,
Tuesday, 3:45 p.m.–5:30 p.m., *MM Independence B (M4)*

Environmental Justice in Transportation Committee ADD50
David Kuehn and Anne Morris, cochairs, Wednesday,
8:00 a.m.–noon, *MM Independence B (M4)*

Health and Transportation Joint Subcommittee of ADD50, ADD40, ADB10, ABJ30
Edward Christopher and Eloisa Raynault, cochairs,
Tuesday, 3:45 p.m.–5:30 p.m., *MM Independence B (M4)*

Arterials and Public Health Task Force ADD55T
Edward Christopher, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 17 (M2)

Design and Construction Group

Design and Construction Group Executive Board AF000
D. Stephen Lane, chair, Thursday, 7:30 a.m.–11:00 a.m.,
MM Liberty I (M4)

Design and Construction Group Leadership Reception,
D. Stephen Lane, chair, Sunday, 5:30 p.m.–7:00 p.m.,
MM Independence DE (M4)

Pavement Materials and the Urban Climate Subcommittee, AF000(2)
Kamil Kaloush, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Marquis Ballroom Salon 4 (M2)

Climate Change, Energy, and Sustainability Impacts on Transportation Infrastructure Subcommittee, AF000(3)
Marie Venner, chair, Monday, 10:15 a.m.–noon,
MM Scarlet Oak (Mezz)

Design and Construction Group Younger Members Subcommittee, AF000(4)
Jason Gregorie, chair, Sunday, 4:00 p.m.–5:30 p.m.,
MM Silver Linden (Mezz)

Design Section

Design Section Executive Board AFB00
Brian Ray, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Geranium (Mezz)

Geometric Design Committee AFB10
Eric Donnell, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Marquis Ballroom Salon 2 (M2)

Geometric Design Technical Subcommittee, AFB10(1)
Hermanus Steyn and Brian Toombs, cochairs, Wednesday,
8:00 a.m.–9:45 a.m., *MM Catholic University (M1)*

Geometric Design Business Subcommittee, AFB10(3)
David Wolf, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Silver Linden (Mezz)

Planning Committees for the International Symposium on Geometric Design; and 5th Urban Street Symposium, AHB65 and AFB10
Douglas Harwood and Kay Fitzpatrick, Sunday,
4:45 p.m.–7:00 p.m., *MM Marquis Ballroom Salon 16 (M2)*

Intersections Joint Subcommittee of AHB65, AFB10, AHB70, ANB20
Jeffrey Shaw and Brandon Nevers, cochairs, Tuesday,
7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 9 (M2)*

Roadside Safety Design Committee AFB20
Roger Bligh, chair, Wednesday, 8:00 a.m.–noon,
MM University of DC (M1)

Roadside Safety Design Computational Mechanics Subcommittee, AFB20(1)
Malcolm Ray, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Scarlet Oak (Mezz)

Roadside Safety Design International Research Activities Subcommittee, AFB20(2)
Rod Troutbeck and Michael Dreznes, cochairs, Tuesday,
7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 5 (M2)*

Positive Protection in Work Zones Joint Subcommittee of AHB55, AFB20, AFH10
Melisa Finley, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 15 (M2)

Roadside Safety Data Needs and Applications
Christine Carrigan, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Scarlet Oak (Mezz)

Low-Volume Roads Committee AFB30
David Jones, chair, Wednesday, 8:00 a.m.–noon,
MM Silver Linden (Mezz)

Rural Road Safety Policy, Programming, and Implementation Joint Subcommittee of ANB10, AFB30
Keith Knapp, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Eastern Market (M3)

Landscape and Environmental Design Committee AFB40
Keith Robinson, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 3 (M2)

Context-Sensitive Design and Solutions Task Force AFB50T
Keith Harrison, chair, Monday, 8:00 a.m.–noon,
MM Catholic University (M1)

Hydrology, Hydraulics, and Water Quality Committee AFB60
Beatrice Hunt, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 2 (M2)

Hydrology Subcommittee, AFB60(1)
George Herrmann, chair, Sunday, 7:00 p.m.–9:00 p.m.,
MM Silver Linden (Mezz)

Hydraulics Subcommittee, AFB60(2)
Paul Clopper, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 2 (M2)

Water Quality Subcommittee, AFB60(3)
Scott Taylor, chair, Monday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 2 (M2)

Utilities Committee AFB70
Cesar Quiroga, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Catholic University (M1)

Geospatial Data Acquisition Technologies in Design and Construction Committee AFB80
L. Bradley Foltz, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 4 (M2)

Geospatial Control Subcommittee, AFB80(1)
Joseph Evjen, chair, Tuesday,
8:00 a.m.–9:45 a.m., *MM Gallaudet University (M1)*
**Geospatial Data Acquisition Using sUAS’s
Subcommittee, AFB80(2)**
Curtis Clabaugh, cochair, Tuesday,
10:15 a.m.–noon, *MM Gallaudet University (M1)*

Pavement Management Section

Pavement Management Section Executive Board **AFD00**
Cheryl Richter, chair, Sunday, 7:00 p.m.–9:00 p.m.,
MM Tulip (Mezz)

Sustainable Pavements Subcommittee, AFD00(1)
Gerardo Flintsch, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM George Washington University (M1)

New AFD30 Committee Formation Discussion
Cheryl Richter, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Catholic University (M1)

Pavement Management Systems Committee **AFD10**
Edgardo Block, chair, Tuesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 10 (M2)

**Pavement Management Systems in Local Governments
Subcommittee, AFD10(1)**
Thomas Van, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Catholic University (M1)

**Pavement Management Systems for Airports
Subcommittee, AFD10(2)**
Leanne Whiteley-Lagace, chair, Monday, 7:30 p.m.–
10:00 p.m., *MM Howard University (M1)*

**Pavement Management Systems International
Conferences Subcommittee, AFD10(3)**
Kieran Feighan, chair, Sunday, 2:00 p.m.–4:30 p.m.,
MM Tulip (Mezz)

Pavement Monitoring and Evaluation Committee **AFD20**
Jonathan Groeger, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 10 (M2)

**Computer Image Technology for Pavement Evaluation
Subcommittee, AFD20(1)**
Hosin Lee, chair, Wednesday, 10:15 a.m.–noon,
MM Howard University (M1)

Full-Scale Accelerated Pavement Testing Committee **AFD40**
Benjamin Worel, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 1 (M2)

**Accelerated Pavement Testing International
Conferences Subcommittee, AFD40(1)**
Luis Loria-Salazar, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Gallaudet University (M1)

**Accelerated Pavement Testing International Alliance
Subcommittee, AFD40(2)**
Louw du Plessis and Raymond Powell, cochairs, Tuesday,
3:45 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 9 (M2)*

Rigid Pavement Design Committee **AFD50**
Georgene Geary, chair, Wednesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 4 (M2)

**Advanced Concrete Pavement Modeling
Subcommittee, AFD50(1)**
Jeffery Roesler, chair, Tuesday, 10:15 a.m.–noon,
MM Silver Linden (Mezz)

Flexible Pavement Design Committee **AFD60**
David Timm, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 4 (M2)

Flexible Pavement Design Meeting for Young Professionals
Mena Souliman, chair, Wednesday, 10:15 a.m.–noon,
MM Catholic University (M1)

Pavement Rehabilitation Committee **AFD70**
Kurt Smith, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 4 (M2)

**Interlayer Systems to Control Reflective Cracking
Subcommittee, AFD70(1)**
Bouzid Choubane, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 1 (M2)

**Strength and Deformation Characteristics of
Pavement Sections Committee** **AFD80**

Charles Schwartz, chair, Tuesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 4 (M2)

**Mechanistic Characterization of Pavement Layers
Subcommittee, AFD80(1)**
Lynne Irwin, chair, Monday, 10:15 a.m.–noon,
MM George Washington University (M1)

Surface Properties–Vehicle Interaction Committee **AFD90**
George Chang, chair, Monday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 4 (M2)

Structures Section

Structures Section Executive Board **AFF00**
Barney Martin, chair, Tuesday, 5:45 p.m.–7:15 p.m.,
MM Geranium (Mezz)

Structures Collaboration Subcommittee, AFF00(1)
Barney Martin, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Marquis Ballroom Salon 1 (M2)

General Structures Committee **AFF10**
Ronald Medlock, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Marquis Ballroom Salon 3 (M2)

Traffic Structures Subcommittee, AFF10(1)
Carl Macchietto, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Silver Linden (Mezz)

Bridge Aesthetics Subcommittee, AFF10(2)
Michael Fitzpatrick, chair, Wednesday, 8:00 a.m.–
9:45 a.m., *MM Howard University (M1)*

**Accelerated Bridge Construction Subcommittee,
AFF10(3)**
Benjamin Beerman, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Silver Linden (Mezz)

Steel Bridges Committee **AFF20**
Domenic Coletti, chair, Monday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 3 (M2)

**Methods for Analyzing Steel Bridges Subcommittee,
AFF20(1)**
Wagdy Wassef, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Catholic University (M1)

Concrete Bridges Committee **AFF30**
Hussam Fallaha, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 3 (M2)

**Field Testing and Nondestructive Evaluation of
Transportation Structures Committee** **AFF40**
Sreenivas Alampalli, chair, Monday, 8:00 a.m.–noon,
MM Silver Linden (Mezz)

**Nondestructive Evaluation of Structures
Subcommittee, AFF40(1)**
Herbert Wiggerhauser, chair, Monday, 7:30 p.m.–
10:00 p.m., *MM George Washington University (M1)*

Seismic Design and Performance of Bridges Committee **AFF50**
Elmer Marx, chair, Tuesday, 8:00 a.m.–noon, *MM Marquis
Ballroom Salon 2 (M2)*

**Geoseismic Issues of Bridges Joint Subcommittee of
AFF50 and AFS30**
Sharid Amiri, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Dogwood (Mezz)

Tunnels and Underground Structures Committee **AFF60**
Conrad Felice, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM George Washington University (M1)

Culverts and Hydraulic Structures Committee **AFF70**
Jesse Beaver, chair, Tuesday, 8:00 a.m.–noon, *MM Marquis
Ballroom Salon 3 (M2)*

Structural Fiber-Reinforced Polymers Committee **AFF80**
Wael Zatar, chair, Wednesday, 8:00 a.m.–noon,
MM Scarlet Oak (Mezz)

Construction Section

- Construction Section Executive Board** AFH00
Thomas Kazmierowski, chair, Tuesday, 5:45 p.m.–8:00 p.m., *MM Tulip (Mezz)*
- Construction Management Committee** AFH10
Paul Goodrum, Monday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 2 (M2)*
- Information Systems in Construction Management Joint Subcommittee of AFH10, ABJ50**
Edward Jaselskis, chair, Monday, 1:30 p.m.–3:15 p.m., *MM Silver Linden (Mezz)*
- Positive Protection in Work Zones Joint Subcommittee of AHB55, AFB20, AFH10**
Melisa Finley, chair, Monday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 15 (M2)*
- Project Delivery Methods Committee** AFH15
Douglas Gransberg, chair, Wednesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 2 (M2)*
- Management of Quality Assurance Committee** AFH20
Kevin Hall, chair, Tuesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 1 (M2)*
- Application of Emerging Technologies to Design and Construction Committee** AFH30
John Hannon, chair, Monday, 8:00 a.m.–noon, *MM Cherry Blossom (Mezz)*
- Construction of Bridges and Structures Committee** AFH40
Michael LaViolette, chair, Wednesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 3 (M2)*
- Portland Cement Concrete Pavement Construction Committee** AFH50
Sabrina Garber, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 2 (M2)*
- Design and Construction of Roller-Compacted Concrete Pavements Subcommittee, AFH50(1)**
Corey Zollinger, chair, Monday, 10:15 a.m.–noon, *MM University of DC (M1)*
- Flexible Pavement Construction and Rehabilitation Committee** AFH60
Victor Gallivan, chair, Wednesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 10 (M2)*
- Fabrication and Inspection of Metal Structures Committee** AFH70
Justin Ocel, chair, Monday, 7:30 p.m.–10:00 p.m., *MM Silver Linden (Mezz)*
- Disadvantaged Business Enterprises Committee** AFH80
Theresa Canales, chair, Monday, 8:00 a.m.–noon, *MM Gallaudet University (M1)*

Asphalt Materials Section

- Asphalt Materials Section Executive Board** AFK00
Rebecca McDaniel, chair, Monday, 5:45 p.m.–8:00 p.m., *MM Tulip (Mezz)*
- Characteristics of Asphalt Materials Committee** AFK20
Darren Hazlett, chair, Monday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 5 (M2)*
- Characteristics of Nonasphalt Components of Asphalt Paving Mixtures Committee** AFK30
Stacey Diefenderfer, chair, Monday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 5 (M2)*
- Characteristics of Asphalt-Aggregate Combinations to Meet Surface Requirements Committee** AFK40
Danny Gierhart, chair, Tuesday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 3 (M2)*
- Characteristics of Asphalt Paving Mixtures to Meet Structural Requirements Committee** AFK50
Elie Hajj, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Marquis Ballroom Salon 5 (M2)*

- Advanced Models to Understand Behavior and Performance of Asphalt Mixtures Subcommittee, AFK50(1)**
Amit Bhasin, chair, Monday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 3 (M2)*
- Integration of Asphalt Paving Mixture Characteristics with Flexible Pavement Structural Design Subcommittee, AFK50(2)**
Nathan Morian, chair, Tuesday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 4 (M2)*

Concrete Materials Section

- Concrete Materials Section Executive Board** AFN00
Mohammad Khan, chair, Tuesday, noon–2:00 p.m., *MM Magnolia (Mezz)*
- Basic Research and Emerging Technologies Related to Concrete Committee** AFN10
John Kevern, chair, Monday, 7:30 p.m.–10:00 p.m., *MM University of DC (M1)*
- Nanotechnology-Based Concrete Materials Task Force** AFN15T
Georgene Geary, chair, Monday, 1:30 p.m.–5:30 p.m., *MM George Washington University (M1)*
- Properties of Concrete Committee** AFN20
Norbert Delatte, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM University of DC (M1)*
- Durability of Concrete Committee** AFN30
Donald Streeter, chair, Tuesday, 7:30 p.m.–10:00 p.m., *MM University of DC (M1)*
- Concrete Materials and Placement Techniques Committee** AFN40
Mark Felag, chair, Tuesday, 8:00 a.m.–noon, *MM University of DC (M1)*

Geology and Properties of Earth Materials Section

- Geology and Properties of Earth Materials Section Executive Board** AFP00
Nancy Whiting, chair, Tuesday, 3:45 p.m.–7:00 p.m., *MM Magnolia (Mezz)*
- Geotechnical Asset Management Joint Subcommittee of AFP00 and AFS00**
David Stanley and Scott Anderson, cochairs, Monday, 7:30 p.m.–10:00 p.m., *MM Catholic University (M1)*
- Engineering Geology Committee** AFP10
Lucas Ortiz, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Cherry Blossom (Mezz)*
- Rockfall Management Subcommittee, AFP10(1)**
Ben Arndt, chair, Sunday, 7:30 p.m.–10:00 p.m., *MM Cherry Blossom (Mezz)*
- Exploration and Classification of Earth Materials Committee** AFP20
Krystle Pelham, chair, Tuesday, 7:30 p.m.–10:00 p.m., *MM Silver Linden (Mezz)*
- Geophysics Subcommittee, AFP20(1)**
Benjamin Rivers, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Magnolia (Mezz)*
- Soil and Rock Properties Committee** AFP30
Mohammed Mulla, chair, Tuesday, 8:00 a.m.–noon, *MM Cherry Blossom (Mezz)*
- Physicochemical and Biological Processes in Soils Committee** AFP40
Burak Tanyu, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Scarlet Oak (Mezz)*
- Seasonal Climatic Effects on Transportation Infrastructure Committee** AFP50
Steve Saboundjian, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Cherry Blossom (Mezz)*

Engineering Behavior of Unsaturated Soils Committee **AFP60**
 Claudia Zapata, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Cherry Blossom (Mezz)

Mineral Aggregates Committee **AFP70**
 Erol Tutumluer, chair, Wednesday, 8:00 a.m.–noon,
MM George Washington University (M1)

Unbound Granular Materials Subcommittee, AFP70(1)
 Andrew Dawson, chair, Sunday, 7:30 p.m.–10:00 p.m.,
MM Dogwood (Mezz)

Soil Mechanics Section

Soil Mechanics Section Executive Board **AFS00**
 Anand Puppala, chair, Monday, 10:15 a.m.–1:15 p.m.,
MM Tulip (Mezz)

Geotechnical Asset Management Joint Subcommittee of AFP00 and AFS00
 David Stanley and Scott Anderson, cochairs, Monday,
 7:30 p.m.–10:00 p.m., *MM Catholic University (M1)*

Transportation Earthworks Committee **AFS10**
 James Brennan, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Silver Linden (Mezz)

Geotechnical Instrumentation and Modeling Committee **AFS20**
 Paola Bandini, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Cherry Blossom (Mezz)

Foundations of Bridges and Other Structures Committee **AFS30**
 Kenneth Fishman, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM George Washington University (M1)

Geoseismic Issues of Bridges Joint Subcommittee of AFF50 and AFS30
 Sharid Amiri, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Dogwood (Mezz)

Subsurface Soil–Structure Interaction Committee **AFS40**
 Kevin White, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Cherry Blossom (Mezz)

Subsurface Drainage Committee **AFS60**
 Maureen Jensen, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Scarlet Oak (Mezz)

Geosynthetics Committee **AFS70**
 Robert Burnett, chair, Wednesday, 8:00 a.m.–noon,
MM Cherry Blossom (Mezz)

Cementitious Stabilization Committee **AFS80**
 Robert Parsons, chair, Monday (joint meeting with
 AFS90), 1:30 p.m.–5:30 p.m., *MM University of DC (M1)*

Chemical, Mechanical, and Asphalt Stabilization Committee **AFS90**
 David Jones, chair, Monday (joint meeting with AFS80),
 1:30 p.m.–5:30 p.m., *MM University of DC (M1)*

Operations and Preservation Group

Operations and Preservation Group Executive Board **AH000**
 Peter Briglia, chair, Wednesday, 6:30 a.m.–9:00 a.m.,
MM Marquis Ballroom Salon 17 (M2)

Young Professionals Subcommittee, AH000(1)
 Nikola Ivanov, Sunday, 4:00 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 17

Surface Transportation Weather Committee **AH010**
 Kathy Ahlenius, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Georgetown University (M1)

Operations Section

Operations Section Executive Board **AHB00**
 Robert Bertini, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Independence C (M4)

Regional Transportation Systems Management and Operations Committee **AHB10**
 Leslie Jacobson, chair, Wednesday, 8:00 a.m.–9:45 a.m. and
 2:30 p.m.–6:00 p.m., *MM Marquis Ballroom Salon 12 (M2)*

Measuring and Quantifying Performance Subcommittee, AHB10(1)
 Robert Winick, chair, Tuesday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 13 (M2)

Planning for Operations Subcommittee, AHB10(2)
 Wayne Berman, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 8 (M2)

Data for Transportation Operations Subcommittee, AHB10(3)
 Nikola Ivanov, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 13 (M2)

Communications and Outreach Subcommittee, AHB10(4)
 Lisa Burgess, committee communications coordinator,
 Monday, 3:45 p.m.–5:30 p.m., *MM Marquis Ballroom
 Salon 15 (M2)*

Sustainability Subcommittee, AHB10(5)
 Keith McCabe, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Marquis Ballroom Salon 13 (M2)

Freight Subcommittee, AHB10(6)
 Richard Easley, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 13 (M2)

Joint Meeting of RTSMO Subcommittee Chairs and Research Needs Subcommittee, AHB10(7)
 Thomas Jacobs, committee research coordinator,
 Tuesday, 12:15 p.m.–1:15 p.m., *MM Marquis
 Ballroom Salon 13 (M2)*

Transportation Incident Management Subcommittee, AHB10(8)
 Eileen Singleton and Pat Noyes, cochairs, Monday,
 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 17 (M2)*

Regional Traffic Signal Operations Subcommittee, AHB10(9)
 Eddie Curtis, Tuesday, 5:45 p.m. 7:15 p.m.,
MM Marquis Ballroom Salon 15 (M2)

Glossary Editorial Board Subcommittee, AHB10(11)
 Louis Neudorff, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Marquis Ballroom Salon 15 (M2)

Regional Highway and Transit Integration Subcommittee, AHB10(11)
 Robert Sheehan and Michael Harris, Monday,
 1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 15*

Intelligent Transportation Systems Committee **AHB15**
 Jane Lappin, chair
 Monday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 6 (M2)*
 Wednesday, 2:30 p.m.–6:00 p.m., *MM Salon C*

Data Privacy, Security, and Protection Policy Joint Subcommittee of AB000, AHB15, ABE25, AL040
 Johanna Zmud, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty
 O (M4)*

Challenges and Opportunities of Road Vehicle Automation Joint Subcommittee of AHB30, AHB15
 Robert Denaro, chair, Thursday, 8:00 a.m.–noon,
MM Salon C

Human Factors in Road Vehicle Automation Joint Subcommittee of AND10, AHB15, AHB30
 Natasha Merat and Michael Manser, cochairs, Monday,
 10:15 a.m.–noon, *MM Marquis Ballroom Salon 8 (M2)*

Freeway Operations Committee (Parts 1 and 2) **AHB20**
 Jon Obenberger, chair
 Part 1: Tuesday, 8:00 a.m.–noon, *MM Marquis Ballroom
 Salon 5 (M2)*
 Part 2: Tuesday, 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom
 Salon 10 (M2)*

Freeway Management Handbook Subcommittee, AHB20(1)
Joel Marcuson, chair, Sunday,
3:00 p.m.–5:00 p.m., *MM Marquis Ballroom Salon 12 (M2)*

Freeway Simulation Subcommittee, AHB20(2)
Panos Prevedouras, chair, Sunday, 8:00 p.m.–9:30 p.m.,
MM Marquis Ballroom Salon 12 (M2)

Freeway Operations Research Needs Subcommittee, AHB20(3)
James Colyar and Christopher Poe, cochairs, Sunday,
5:00 p.m.–6:30 p.m., *MM Marquis Ballroom Salon 12 (M2)*

Freeway Operations Committee Planning and Meetings Subcommittee, AHB20(4)
Jon Obenberger and Daniel Baxter, cochairs, Sunday,
6:30 p.m.–8:00 p.m., *MM Marquis Ballroom Salon 12 (M2)*

Emerging Freeway Operations Concepts Subcommittee, AHB20(6)
Philip Masters and Gordon Paesani, cochairs, Sunday,
2:00 p.m.–3:00 p.m., *MM Farragut North (M3)*

Active Traffic Management Joint Subcommittee of AHB20, AHB35
Beverly Kuhn, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 9 (M2)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20

George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Traffic Signal Systems Committee **AHB25**
Peter Koonce, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 6 (M2)*

Traffic Signal Timing Subcommittee, AHB25(1)
James Powell, chair, Monday, 11:00 a.m.–noon,
MM Marquis Ballroom Salon 17 (M2)

Traffic Signal Systems Research Subcommittee, AHB25(2)
Aleksandar Stevanovic, chair, Monday, 9:00 a.m.–
10:00 a.m., *MM Marquis Ballroom Salon 17 (M2)*

Simulation of Traffic Signal Systems Subcommittee, AHB25(3)
Byungkyu Park, chair, Monday, 8:00 a.m.–9:00 a.m.,
MM Marquis Ballroom Salon 17 (M2)

Technology and Standards Subcommittee, AHB25(4)
Gregory Barlow, chair, Monday, 10:00 a.m.–11:00 a.m.,
MM Marquis Ballroom Salon 17 (M2)

Multimodal Traffic Signal Systems Subcommittee, AHB25(5)
Kevin Lee, Sunday, 3:00 p.m.–4:00 p.m.,
MM Gallaudet University (M1)

Asset Management for Traffic Signal Systems Subcommittee, AHB25(6)
Paul Olson, chair, Sunday, 2:00 p.m.–3:00 p.m.,
MM Gallaudet University (M1)

Traffic Signal Systems Education Subcommittee, AHB25(7)
Peter Koonce, chair, Sunday, 4:00 p.m.–5:00 p.m.,
MM Gallaudet University (M1)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20

George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Vehicle-Highway Automation Committee **AHB30**
Steven Shladover, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 5 (M2)

Challenges and Opportunities of Road Vehicle Automation Joint Subcommittee of AHB30, AHB15
Robert Denaro, chair, Thursday, 8:00 a.m.–noon,
MM Salon C

Human Factors in Road Vehicle Automation Joint Subcommittee of AND10, AHB15, AHB30
Natasha Merat, chair, Monday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 8 (M2)

Managed Lanes Committee **AHB35**
Charles Fuhs and Casey Emoto, cochairs, Wednesday,
8:00 a.m.–9:45 a.m., *MM Independence E (M4)*

Multimodal Pricing Implementation Joint Subcommittee of ABE25, AHB35
Donald Samdahl, chair, Tuesday, 5:45 p.m.–7:15 p.m.,
MM Liberty I (M4)

Multimodal Pricing Implementation Joint Subcommittee of ABE25, AHB35
Donald Samdahl, chair, Tuesday, 5:45 p.m.–7:15 p.m.,
MM Liberty I (M4)

Outreach Subcommittee, AHB35(1)
Tim Haile, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 17 (M2)

Managed Lanes Research Subcommittee, AHB35(2)
Myron Swisher and Randall Guensler, cochairs, Tuesday,
1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 17 (M2)*

Managed Lanes Meeting Planning Subcommittee, AHB35(3)
Patty Rubstello and Lisa Klein, cochairs, Tuesday,
10:15 a.m.–noon, *MM Marquis Ballroom Salon 17 (M2)*

Highway Capacity and Quality of Service Committee **AHB40**
Lily Elefteriadou, chair, Monday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 10 (M2)

Research Workshops for Highway Capacity and Quality of Service Committee
Lily Elefteriadou, Scott Washburn, and Yin Hai Wang,
cochairs, Saturday, 1:00 p.m.–5:00 p.m., *MM Georgetown University (M1)*

HCQS Leadership Subcommittee, AHB40(0.0)
Lily Elefteriadou, chair, Saturday, 11:30 a.m.–1:00 p.m.,
MM Liberty K (M4)

HCQS Mentoring Subcommittee, AHB40(0.2)
Saturday, 11:30 a.m.–1:00 p.m., *MM Liberty J (M4)*

Research Subcommittee, AHB40(1.1)
Yin Hai Wang, chair, Sunday, 4:30 p.m.–5:45 p.m.,
MM Liberty J (M4)

Traffic Simulation Applications Subcommittee, AHB40(1.2)
Alexander Skabardonis, chair, Sunday, 4:30 p.m.–5:45 p.m.,
MM Liberty I (M4)

Performance Measures Subcommittee, AHB40(1.3)
Richard Margiotta, chair, Saturday, 5:15 p.m.–6:30 p.m.,
MM Georgetown University (M1)

Active Traffic Management Subcommittee, AHB40(1.4)
Kevin Hanley, chair, Sunday, 9:30 a.m.–10:45 a.m.,
MM Liberty I (M4)

Uninterrupted-Flow Group Subcommittee, AHB40(2.0)
Loren Bloomberg, chair, Sunday, 7:00 p.m.–8:15 p.m.,
MM Liberty I (M4)

Freeways and Highways Subcommittee, AHB40(2.1)
Alexandra Kondyli, chair, Sunday, 3:00 p.m.–4:15 p.m.,
MM Liberty I (M4)

Two-Lane Highways Subcommittee, AHB40(2.2)
Manuel Romana, chair, Sunday, 1:30 p.m.–2:45 p.m.,
MM Liberty I (M4)

Interrupted-Flow Group Subcommittee, AHB40(3.0)
Robert Bryson, chair, Sunday, 7:00 p.m.–8:15 p.m.,
MM Liberty J (M4)

Signalized Intersections Subcommittee, AHB40(3.1)
Darcy Bullock, chair, Sunday, 3:00 p.m.–4:15 p.m.,
MM Liberty J (M4)

Unsignalized Intersections Subcommittee, AHB40(3.2)
Peter Terry, chair, Sunday, 8:00 a.m.–9:15 a.m.,
MM Liberty J (M4)

Urban Streets Subcommittee, AHB40(3.3)
Janice Daniel, chair, Sunday, 1:30 p.m.–2:45 p.m.,
MM Liberty J (M4)

Interchanges Subcommittee, AHB40(3.4)
Christopher Kinzel, chair, Sunday, 11:00 a.m.–12:15 p.m.,
MM Liberty J (M4)

Planning and Preliminary Engineering Subcommittee, AHB40(4.1)
Brian Dunn, chair, Sunday, 11:00 a.m.–12:15 p.m.,
MM Liberty I (M4)

Bike and Pedestrian Subcommittee, AHB40(4.2)
Peyton Mcleod, chair, Sunday, 9:30 a.m.–10:45 a.m.,
MM Liberty J (M4)

User Liaison Subcommittee, AHB40(5.0)
Scott Washburn, chair, Sunday, 8:00 a.m.–9:15 a.m.,
MM Liberty I (M4)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20
George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Traffic Flow Theory and Characteristics Committee AHB45
Soyoung Ahn, chair, Wednesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 5 (M2)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20
George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Crowd Flow Dynamics, Modeling, and Management Subcommittee, AHB45(2)
Serge Hoogendoorn and Shae Zanto, Tuesday,
8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 17 (M2)*

Traffic Control Devices Committee AHB50
Paul Carlson, chair, Monday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 9 (M2)*

Work Zone Traffic Control Committee AHB55
Timothy Baughman, chair, Tuesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 9 (M2)

Positive Protection in Work Zones Joint Subcommittee of AHB55, AFB20, AFH10
Melisa Finley, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 15 (M2)

Traffic Simulation Models Joint Subcommittee of AHB45, AHB40, AHB25, AHB20, ADB30, AHB55, ADC20
George List, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 10 (M2)

Highway–Rail Grade Crossings Committee AHB60
Aemal Khattak, chair, Monday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 15 (M2)

Operational Effects of Geometrics Committee AHB65
Kay Fitzpatrick, chair, Wednesday, 2:30 p.m.–6:00 p.m.,
MM Marquis Ballroom Salon 9 (M2)

Planning Committees for the International Symposium on Geometric Design; and 5th Urban Street Symposium, AHB65 and AFB10
Douglas Harwood and Kay Fitzpatrick, Sunday, 4:45 p.m.–7:00 p.m., *MM Marquis Ballroom Salon 16 (M2)*

Intersections Joint Subcommittee of AHB65, AFB10, AHB70, ANB20
Jeffrey Shaw and Brandon Nevers, cochairs, Tuesday,
7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 9 (M2)*

Performance-Based Analysis Subcommittee, AHB65(3)
Geoffrey Millen and Richard Porter, cochairs, Tuesday,
1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 15 (M2)*

Low- to Moderate-Speed Roadways Subcommittee, AHB65(4)
Ingrid Potts, chair, Wednesday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 15 (M2)

Freeway Safety and Operations Subcommittee, AHB65(5)
Howard Lubliner, chair, Wednesday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 15 (M2)

High-Speed Roadways Subcommittee, AHB65(6)
Larry Sutherland, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 15 (M2)

Access Management Committee AHB70
Marc Butorac, chair, Wednesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 9 (M2)

Intersections Joint Subcommittee of AHB65, AFB10, AHB70, ANB20
Jeffrey Shaw and Brandon Nevers, cochairs, Tuesday,
7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 9 (M2)*

National Conference on Access Management Subcommittee, AHB70(1)
Barbara De Ste. Croix, chair, Tuesday, 12:15 p.m.–1:15 p.m., *MM Marquis Ballroom Salon 15 (M2)*

Access Management Research Subcommittee, AHB70(2)
Stuart Samberg, chair, Tuesday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 15 (M2)

Access Management Outreach Subcommittee, AHB70(3)
Chris Huffman, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 15 (M2)

System Simulation Task Force AHB80T
Calvin Leggett, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 9 (M2)

Maintenance and Preservation Section

Maintenance and Preservation Section Executive Board AHD00
John Burkhardt, chair, Monday, noon–1:30 p.m.,
MM Magnolia (Mezz)

Maintenance and Operations Management Committee AHD10
Mark Robinson, chair, Wednesday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 1 (M2)

Environmental Maintenance Subcommittee, AHD10(1)
Gary McVoy, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Silver Linden (Mezz)

Maintenance and Operations Personnel Committee AHD15
William Bushman, chair, Tuesday, 8:00 a.m.–noon,
MM Catholic University (M1)

Pavement Preservation Committee AHD18
Judith Corley-Lay, chair, Tuesday, 8:00 a.m.–noon,
MM Georgetown University (M1)

Pavement Maintenance Committee AHD20
Anita Bush, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 1 (M2)

Sealants and Fillers for Joints and Cracks Committee AHD25
James McGraw, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Dogwood (Mezz)

Structures Maintenance Committee AHD30
George Hearn chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Georgetown University (M1)

Underwater Structures Inspection and Maintenance Subcommittee, AHD30(1)
Daniel Stromberg, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Dogwood (Mezz)

Bridge Steel Coatings Subcommittee, AHD30(2)
James Ault, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Dogwood (Mezz)

Structural Health Monitoring Joint Subcommittee of AHD30, AHD35, AFF40
John Duke, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Marquis Ballroom Salon 1 (M2)

Bridge Management Committee AHD35
Bruce Johnson, chair, Wednesday, 8:00 a.m.–noon,
MM Georgetown University (M1)

Safety and Security of Bridges and Structures Subcommittee, AHD35(1)
 Bojidar Yanev, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Scarlet Oak (Mezz)
Bridge Life-Cycle Cost Analysis Subcommittee, AHD35(2)
 Paul Thompson, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
MM Dogwood (Mezz)

Bridge Preservation Committee AHD37
 Michael Johnson, chair, Monday, 8:00 a.m.–noon,
MM Georgetown University (M1)

Polymer Concretes, Adhesives, and Sealers Committee AHD40
 Michael Stenko, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Georgetown University (M1)

Corrosion Committee AHD45
 David Meggers, chair, Wednesday, 8:00 a.m.–noon,
MM Dogwood (Mezz)

Roadside Maintenance Operations Committee AHD50
 John Rowen, chair, Monday, 8:00 a.m.–noon, *MM Dogwood (Mezz)*

Signing and Marking Materials Committee AHD55
 Gordon Thompson, chair, Monday, 8:00 a.m.–noon,
MM Marquis Ballroom Salon 1 (M2)

Maintenance Equipment Committee AHD60
 Lisa Kunzman, chair, Tuesday, 8:00 a.m.–noon,
MM Dogwood (Mezz)

Winter Maintenance Committee AHD65
 Max Perchanok, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Georgetown University (M1)

Legal Resources Group

Legal Resources Group Executive Board AL000
 Robert Shea, chair, Tuesday, 7:00 p.m.–8:45 p.m.,
MM Howard University (M1)

Transportation Law Committee AL010
 Frederick Schranck, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Howard University (M1)

Transit and Intermodal Transportation Law Committee AL020
 Dorval Carter, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Howard University (M1)

Contract Law Committee AL030
 Edward Harris, chair, Monday, 10:15 a.m.–noon,
MM Howard University (M1)

Emerging Technology Law Committee AL040
 Bryant Smith, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Howard University (M1)

Data Privacy, Security, and Protection Policy Joint Subcommittee of AB000, AHB15, ABE25, AL040
 Johanna Zmud, Tuesday, 1:30 p.m.–5:30 p.m., *MM Liberty O (M4)*

Environmental Issues in Transportation Law Committee AL050
 Fred Wagner, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Howard University (M1)

Eminent Domain and Land Use Committee AL060
 William James, chair, Tuesday, 10:15 a.m.–noon,
MM Howard University (M1)

Tort Liability and Risk Management Committee AL070
 Pamela Leslie, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Howard University (M1)

Safety and Systems Users Group

Safety and Systems Users Group Executive Board AN000
 Paul Jovanis, chair, Wednesday, 7:00 p.m.–9:00 p.m.
 (dinner), *MM Marquis Ballroom Salon 14 (M2)*

Roadway Safety Culture Subcommittee, AN000(1)
 Joseph Toole, chair, Monday, 7:30 p.m.–9:30 p.m.,
MM Marquis Ballroom Salon 12 (M2)

Transportation Safety Management Committee ANB10
 Susan Herbel, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 8 (M2)

Transportation Safety Planning Subcommittee, ANB10(3)
 Nicole Waldheim and Timothy Chelius, cochairs,
 Monday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 14 (M2)*

Emergency Medical Services Safety Subcommittee, ANB10(5)
 Nadine Levick, chair, Tuesday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 16 (M2)

School Transportation Subcommittee, ANB10(6)
 Kevin Chang, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 16 (M2)

Global Road Safety Subcommittee, ANB10(8)
 Kimberly Silverman, Lori Mooren, and Offer Grembek,
 cochairs, Wednesday, 2:30 p.m.–4:00 p.m.,
MM Marquis Ballroom Salon 7 (M2)

Toward Zero Deaths Goal Subcommittee, ANB10(9)
 Marie Walsh, chair, Wednesday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 7 (M2)

Rural Road Safety Policy, Programming, and Implementation Joint Subcommittee of ANB10, AFB30
 Keith Knapp, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Eastern Market (M3)

Safety Data, Analysis, and Evaluation Committee ANB20
 Bhagwant Persaud and Christopher Monsere, cochairs,
 Monday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 12 (M2)*

Animal–Vehicle Collisions Subcommittee, ANB20(2)
 Keith Knapp and Fraser Shilling, cochairs, Monday,
 1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 14 (M2)*

Intersections Joint Subcommittee of AHB65, AFB10, AHB70, ANB20
 Jeffrey Shaw and Brandon Nevers, cochairs, Tuesday,
 7:30 p.m.–10:00 p.m., *MM Marquis Ballroom Salon 9 (M2)*

Rural Road Safety Policy, Programming, and Implementation Joint Subcommittee of ANB10, AFB30
 Keith Knapp, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Eastern Market (M3)

Future Directions in Safety Analysis Joint Subcommittee of ANB20, ANB25, ANB20(1), ANB25
 John Ivan, Tuesday, 7:30 p.m.–9:30 p.m., *MM Marquis Ballroom Salon 14 (M2)*

Surrogate Measures of Safety Subcommittee, ANB20(3)
 Andrew Tarko and Nicolas Saunier, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Marquis Ballroom Salon 13 (M2)*

Bicycle and Pedestrian Safety Analysis Joint Subcommittee of ANB20, ANF10, ANF20, ANB25
 Shane Turner, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 14 (M2)

Traffic Speed and Safety—Cross-Cutting Issues Joint Subcommittee of ANB20, AHB65, ANB10
 Libby Thomas and Hillel Bar-Gera, cochairs, Wednesday,
 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 7 (M2)*

Highway Safety Workforce Development Committee ANB23
 Terecia Wilson and Barbara Harsha, cochairs, Tuesday,
 8:00 a.m.–noon, *MM Marquis Ballroom Salon 8 (M2)*

Highway Safety Performance Committee ANB25
 John Milton, chair, Thursday, 2:00 p.m.–6:00 p.m.,
MM Marquis Ballroom Salon 8 (M2)

Future Directions in Safety Analysis Joint Subcommittee of ANB20, ANB25, ANB20(1), ANB25
 John Ivan, Tuesday, 7:30 p.m.–9:30 p.m., *MM Marquis Ballroom Salon 14 (M2)*

Policy and Legal Aspects Subcommittee, ANB25(1)
 Brelend Gowan, chair, Wednesday, 6:15 p.m.–7:15 p.m.,
MM Marquis Ballroom Salon 12 (M2)

User Liaison and Technology Facilitation

Subcommittee, ANB25(3)

Michael Dimaiuta, chair, Wednesday, 12:15 p.m.–2:15 p.m., *MM Marquis Ballroom Salon 8 (M2)*

Conferences and Meetings Subcommittee, ANB25(4)

John Nitzel, chair, Wednesday, 6:15 p.m.–7:15 p.m., *MM Marquis Ballroom Salon 13 (M2)*

International Research Subcommittee, ANB25(5)

Jennifer Ogle, chair, Wednesday, 12:15 p.m.–2:15 p.m., *MM Marquis Ballroom Salon 7 (M2)*

Operator Education and Regulation Committee

ANB30

Bruce Simons-Morton, chair, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 14 (M2)*

Young Drivers Subcommittee, ANB30(1)

Robert Foss, chair, Monday, 7:30 p.m.–9:30 p.m., *MM Marquis Ballroom Salon 8 (M2)*

Motor Carrier Alternative Compliance Joint Subcommittee of ANB70, ANB30

Gene Bergoffen, chair, Wednesday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 13 (M2)*

Traffic Law Enforcement Committee

ANB40

Keith Williams, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 8 (M2)*

Occupant Protection Committee

ANB45

Ruth Shults and JoAnn Wells, cochairs, Wednesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 8 (M2)*

Rollover Crashworthiness Subcommittee, ANB45(1)

Raphael Grzebieta, chair, Wednesday, 2:30 p.m.–6:00 p.m., *MM Marquis Ballroom Salon 13 (M2)*

Alcohol, Other Drugs, and Transportation Committee

ANB50

Douglas Beirness, chair, Tuesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 14 (M2)*

Safe Mobility of Older Persons Committee

ANB60

Loren Staplin and Lesley Ross, cochairs, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 7 (M2)*

Older Women's Activities Subcommittee, ANB60(1)

Fei Yang, chair, Tuesday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 16 (M2)*

Medical Advisory Boards and Driver Licensing Subcommittee, ANB60(2)

Jamie Dow, Monday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 16 (M2)*

Senior Mobility Options Joint Subcommittee, ANB60(3)

Moon Choi and Katherine Freund, cochairs, Tuesday, 1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 16 (M2)*

Truck and Bus Safety Committee

ANB70

Brenda Lantz, chair, Tuesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 12 (M2)*

Motor Carrier Alternative Compliance Joint Subcommittee of ANB70, ANB30

Gene Bergoffen, chair, Wednesday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 13 (M2)*

Motorcoach Safety Subcommittee, ANB70(2)

Thomas Yager, chair, Tuesday, 3:45 p.m.–5:30 p.m., *MM Woodley Park (M3)*

Truck and Bus Operator Health and Wellness Subcommittee, ANB70(3)

Jeffrey Hickman, chair, Monday, 1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 17 (M2)*

Truck and Bus Data Subcommittee, ANB70(4)

Robert Scopatz, chair, Wednesday, 10:15 a.m.–noon, *MM Woodley Park (M3)*

Truck and Bus Technology Subcommittee, ANB70(6)

George Reagle, Wednesday, 2:30 p.m.–4:00 p.m., *MM Marquis Ballroom Salon 16 (M2)*

Truck and Bus Driver Training Subcommittee, ANB70(7)

Thomas Weakley, chair, Monday, 1:30 p.m.–3:15 p.m., *MM Marquis Ballroom Salon 16 (M2)*

Roundabouts Committee

ANB75

Eugene Russell and Brian Walsh, cochairs, Wednesday, 2:30 p.m.–6:00 p.m., *MM Marquis Ballroom Salon 10 (M2)*

Users Performance Section

Vehicle User Characteristics Committee

AND10

William Horrey, chair, Tuesday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 7 (M2)*

Human Factors of In-Vehicle Systems Joint Subcommittee of AND20 and AND10

Timothy Brown, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 14 (M2)*

Human Factors Road Design Guides Subcommittee, AND10(2)

Samuel Tignor, chair, Wednesday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 14 (M2)*

Human Factors in Road Vehicle Automation Joint Subcommittee of AND10, AHB15, AHB30

Natasha Merat and Michael Manser, cochairs, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 8 (M2)*

User Information Systems Committee

AND20

C. Y. David Yang, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 13 (M2)*

Human Factors of In-Vehicle Systems Joint Subcommittee of AND20 and AND10

Timothy Brown, chair, Monday, 8:00 a.m.–9:45 a.m., *MM Marquis Ballroom Salon 14 (M2)*

Digital Billboards Joint Subcommittee of AND20, AND10, AND30, AND40

Jerry Wachtel, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 13 (M2)*

Simulation and Measurement of Vehicle and Operator Performance Committee

AND30

Omar Ahmad and Donald Fisher, cochairs, Tuesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 7 (M2)*

Digital Billboards Joint Subcommittee of AND20, AND10, AND30, AND40

Jerry Wachtel, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 13 (M2)*

Visibility Committee

AND40

John Bullough, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 10 (M2)*

Digital Billboards Joint Subcommittee of AND20, AND10, AND30, AND40

Jerry Wachtel, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 13 (M2)*

Pedestrians and Cycles Section

Pedestrians Committee

ANF10

Robert Schneider, chair, Monday, 1:30 p.m.–5:30 p.m., *MM Marquis Ballroom Salon 12 (M2)*

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10

Scott Brady, chair, Monday, 3:45 p.m.–5:30 p.m., *MM Liberty P (M4)*

Pedestrian Research Subcommittee, ANF10(1)

Daniel Goodman, committee research coordinator, Monday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 7 (M2)*

Pedestrian Modeling and Simulation Subcommittee, ANF10(2)

Karim Ismail, chair, Wednesday, 10:15 a.m.–noon, *MM Marquis Ballroom Salon 13 (M2)*

Bicycle Transportation Committee

ANF20

Ralph Buehler, chair, Wednesday, 8:00 a.m.–noon, *MM Marquis Ballroom Salon 6 (M2)*

Bicycle and Pedestrian Data Joint Subcommittee of ABJ35, ABJ20, ABJ30, ABJ40, ANF20, ANF10

Scott Brady, chair, Monday, 3:45 p.m.–5:30 p.m., *MM Liberty P (M4)*

Bicycle Research Subcommittee, ANF20(2)
 Jamie Parks, chair, Monday, 10:15 a.m.–noon,
MM Marquis Ballroom Salon 8 (M2)

Bicycle Membership and Communications Subcommittee, ANF20(3)
 Richard Schaffer, chair, Tuesday, 10:15 a.m.–noon,
MM Eastern Market (M3)

Emerging Vehicles for Low-Speed Transportation Joint Subcommittee of ANF20, ANF10, ANB40, ANF30, AP020
 Geoff Rose and Christopher Cherry, cochairs,
 Wednesday, 2:30 p.m.–4:00 p.m., *MM Marquis Ballroom Salon 14 (M2)*

Pedestrian and Bicycle University Education Joint Subcommittee of ANF20, ANF10
 Daniel Hess, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Marquis Ballroom Salon 7 (M2)

Motorcycles and Mopeds Committee ANF30
 Sherry Williams, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Marquis Ballroom Salon 12 (M2)

Public Transportation Group

Public Transportation Group Executive Board AP000
 David Wilcock, chair, Tuesday, noon–2:00 p.m.,
MM LeDroit Park (M3)

Transformative Transit Data Joint Subcommittee of AP000, ABJ00
 Catherine Lawson, chair, Tuesday, 10:15 a.m.–noon,
MM L'Enfant Plaza (M3)

Public Transportation Group Young Members Subcommittee, AP000(2)
 Candace Brakewood and Theodore Rosenbaum, cochairs,
 Monday, 7:30 p.m.–9:30 p.m., *MM Union Station (M3)*

Transit Management and Performance Committee AP010
 Amy Van Doren, chair, Monday, 8:00 a.m.–noon,
MM Mint (M4)

Transit Capital Replacement Subcommittee, AP010(1)
 Robert Peskin, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM L'Enfant Plaza (M3)

Transit Fleet Maintenance Subcommittee, AP010(2)
 Sabyasachee Mishra, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM L'Enfant Plaza (M3)

Transit State of Good Repair Joint Subcommittee of AP010, AR055, AP070, AP065, AP050, AP075, AP045
 William Robert, chair, Monday, 7:30 p.m.–9:30 p.m.,
MM Treasury (M4)

Transit Capacity and Quality of Service Committee AP015
 Paul Ryus, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Treasury (M4)

Transit Safety and Security Task Force AP018T
 Amber Reep, chair, Monday, 9:00 a.m.–11:30 a.m.,
MM Treasury (M4)

Emerging and Innovative Public Transport and Technologies Committee AP020
 Caroline Rodier, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Union Station (M3)

Parking Management Joint Subcommittee of ABE50, ABE20, ABE25, AP020
 Rachel Weinberger, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Supreme Court (M4)

Shared-Use Vehicle Public Transport Systems Subcommittee, AP020(1)
 Susan Shaheen, chair, Monday, 10:15 a.m.–noon,
MM L'Enfant Plaza (M3)

Emerging Ridesharing Solutions Joint Subcommittee of AP020, AP025, AHB15
 Paul Minett, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM L'Enfant Plaza (M3)

Public Transportation Planning and Development Committee AP025
 Brendon Hemily, chair, Monday, 8:00 a.m.–noon,
MM Union Station (M3)

Public Transportation Marketing and Fare Policy Committee AP030
 Jeffrey Busby, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Judiciary Square (M3)

Automated Transit Systems Committee AP040
 Walter Kulyk, chair, Tuesday, 3:45 p.m.–7:15 p.m.,
MM Mint (M4)

Intermodal Transfer Facilities Committee AP045
 Richard Clarke, chair, Wednesday, 8:00 a.m.–noon,
MM Archives (M4)

Art and Design Excellence in Transportation Subcommittee, AP045(1)
 Anthony Loui, chair, Tuesday, 7:30 p.m.–9:30 p.m.,
MM Mint (M4)

Bus Transit Systems Committee AP050
 Dennis Hinebaugh, chair, Tuesday, 2:00 p.m.–5:30 p.m.,
MM Union Station (M3)

TRB Bus Rapid Transit Conference Planning Subcommittee, AP050(1)
 Dennis Hinebaugh, chair, Tuesday, 7:30 p.m.–9:30 p.m.,
MM Treasury (M4)

Rural Public and Intercity Bus Transportation Committee AP055
 Patricia Weaver, chair, Tuesday, 8:00 a.m.–noon,
MM Treasury (M4)

Transportation in Military Communities Joint Subcommittee of ADA20, AT035, AP055
 Thera Black and David Metcalf, cochairs, Tuesday,
 3:45 p.m.–5:30 p.m., *MM Independence D (M4)*

TRB Rural Public and Intercity Bus Transportation Conference Planning Subcommittee, AP055(1)
 Jacklyn Montgomery and Patricia Monahan, cochairs,
 Monday, 10:15 a.m.–noon, *MM Pentagon (M4)*

Research Needs and Progress in Rural Public and Intercity Bus Transportation Subcommittee, AP055(2)
 Nathan Belz and J. Rodman, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mint (M4)*

Paratransit Committee AP060
 David Chia, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Archives (M4)

Paratransit Research Subcommittee, AP060(1)
 Steve Yaffe and David Rishel, cochairs, Monday,
 1:30 p.m.–3:15 p.m., *MM Pentagon (M4)*

Taxi Subcommittee, AP060(2)
 James Cooper and Annette Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Capitol (M4)*

Rail Transit Systems Committee AP065
 Wendy Jia, chair, Tuesday, 8:00 a.m.–noon, *MM Union Station (M3)*

Guided and Electric Trolley Bus Joint Subcommittee of AP065(1), AP075
 Thomas Potter, chair, Wednesday, 8:00 a.m.–9:45 a.m.,
MM Mount Vernon Square (M3)

International Rail Transit Subcommittee, AP065(2)
 Gregory Newmark, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM L'Enfant Plaza (M3)

Shared Rail Corridors and Facilities Joint Subcommittee of AP065(3), AP045, AP070, AP075, AR010, AR040
 Mark Walbrun, chair, Monday, 7:30 p.m.–9:30 p.m.,
MM Congress (M4)

Commuter Rail Transportation Committee AP070
 Michael Loehr, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Mint (M4)

Self-Powered Units Joint Subcommittee of AP070, AR020
 David Nelson, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Pentagon (M4)

Subcommittee on Research, AP070(2)
 Michael Loehr, chair, Monday, 7:30 p.m.–9:30 p.m.,
MM Judiciary Square (M3)
Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010
 David Clarke, chair, Monday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Light Rail Transit Committee **AP075**
 Gregory Thompson, chair, Tuesday, 2:00 p.m.–5:30 p.m.,
MM Treasury (M4)

Subcommittee on Streetcars, AP075(1)
 Monica Meade, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Woodley Park (M3)

TRB Light Rail Transit Conference Planning Subcommittee, AP075(2)
 John Wilkins, chair, Wednesday, 8:00 a.m.–9:45 a.m.,
MM Judiciary Square (M3)

International Light Rail Transit Developments Subcommittee, AP075(3)
 Graham Currie, chair, Tuesday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Ferry Transportation Committee **AP085**
 Stephanie Camay, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Judiciary Square (M3)

Rail Group

Rail Group Executive Board **AR000**
 Stephen Popkin, chair, Monday, 5:45 p.m.–7:15 p.m.,
MM Capitol Hill (M3)

Intercity Passenger Rail Committee **AR010**
 David Simpson, chair, Tuesday, 8:00 a.m.–noon,
MM Capitol (M4)

Intercity Passenger Rail Intermodal Interface Subcommittee, AR010(1)
 Eric Peterson, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Woodley Park (M3)
Socioeconomic and Financial Aspects of Intercity Passenger Rail Subcommittee, AR010(2)
 Dominic Spaethling, chair, Monday, 7:30 p.m.–9:30 p.m.,
MM L'Enfant Plaza (M3)

Intercity Passenger Rail Research Subcommittee, AR010(3)
 Valerio Oricchio, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM L'Enfant Plaza (M3)
Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010
 David Clarke, chair, Monday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Passenger Rail Equipment and Systems Integration Committee **AR020**
 Eloy Martinez, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Chinatown (M3)

Railroad Environmental Research Issues Subcommittee, AR020(1)
 J. Hutchins, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM L'Enfant Plaza (M3)

Railroad Operating Technologies Committee **AR030**
 Yung-Cheng Lai, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Woodley Park (M3)

Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010
 David Clarke, chair, Monday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Freight Rail Transportation Committee **AR040**
 George Grimes, chair, Tuesday, 1:30 p.m.–5:30 p.m.,
MM Chinatown (M3)

Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010
 David Clarke, chair, Monday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Railroad Track Structure System Design Committee **AR050**
 J. Riley Edwards, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Chinatown (M3)

Rail Transit Infrastructure Committee **AR055**
 Anthony Bohara, chair, Monday, 8:00 a.m.–noon,
MM Congress (M4)

Rail Noise and Vibration Joint Subcommittee of ADC40, AR055
 Jason Ross, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Independence C (M4)

Railway Maintenance Committee **AR060**
 Dwight Clark, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Mount Vernon Square (M3)

Railroad Operational Safety Committee **AR070**
 Ann Mills, chair, Tuesday, 8:00 a.m.–noon,
MM Chinatown (M3)

Freight Systems Group

Joint Meeting of Freight Systems and Marine Group Executive Boards **AT000**
 Barbara Ivanov and Eric Shen, cochairs, Sunday, 5:30 p.m.–7:30 p.m.,
MM Capitol Hill (M3)

Freight Systems and Marine Group Young Members Council Subcommittee, AT000(1)
 Matthew Campo, chair, Sunday,
 5:30 p.m.–7:30 p.m.,
MM Woodley Park (M3)

Transportation and Energy Sector Developments Subcommittee, AT000(2)
 Katherine Turnbull, chair, Wednesday, 10:15 a.m.–noon,
MM Judiciary Square (M3)

Freight Transportation Economics and Regulation Committee **AT010**
 Karen White, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Mint (M4)

Rail Capacity Joint Subcommittee of AR040, AR030, AP070, AT010, AR010
 David Clarke, chair, Monday, 10:15 a.m.–noon,
MM Woodley Park (M3)

Freight Transportation Planning and Logistics Committee **AT015**
 Edward Strocko and Bruce Wang, cochairs, Wednesday,
 8:00 a.m.–noon,
MM Union Station (M3)

Freight Modeling Subcommittee, AT015(1)
 J. Lahsene, Bruce Wang, and Joseph Chow, cochairs,
 Monday, 7:30 p.m.–9:30 p.m.,
MM Woodley Park (M3)

Development of Freight Fluidity Performance Measures Task Force **AT017T**
 Joseph Schofer, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Woodley Park (M3)

International Trade and Transportation Committee **AT020**
 Michael Bomba, chair, Monday, 7:30 p.m.–10:00 p.m.,
MM Chinatown (M3)

Urban Freight Transportation Committee **AT025**
 Theodore Dahlburg, chair, Monday, 8:00 a.m.–noon,
MM Archives (M4)

Agricultural Transportation Committee **AT030**
 Caroline Mays, chair, Tuesday, 10:15 a.m.–noon,
MM Judiciary Square (M3)

Military Transportation Committee **AT035**
 Jonathan Kaskin, chair, Monday, 8:00 a.m.–noon,
MM Judiciary Square (M3)

Transportation of Hazardous Materials Committee **AT040**
 Richard Bornhorst, chair, Tuesday, 8:00 a.m.–noon,
MM Mint (M4)

Crude Oil Transportation Subcommittee, AT040(1)
 David Willauer, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Archives (M4)

Intermodal Freight Transport Committee **AT045**
 Richard Easley and Anne Goodchild, cochairs, Monday,
 8:00 a.m.–9:45 a.m.,
MM Chinatown (M3)

Intermodal Freight Terminal Design and Operations Committee **AT050**
 Nathan Huynh, chair, Monday, 10:15 a.m.–noon,
MM Chinatown (M3)

Truck Size and Weight Committee **AT055**
 John Woodrooffe, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Mount Vernon Square (M3)

Trucking Industry Research Committee **AT060**
 Stephen Burks, chair, Monday, 1:30 p.m.–5:30 p.m.,
MM Congress (M4)

Aviation Group

Aviation Group Executive Board **AV000**
 Mary Ellen Eagan, chair, Monday, noon–1:30 p.m.,
MM Capitol Hill (M3)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Intergovernmental Relations in Aviation Committee **AV010**
 Pamela Keidel-Adams, chair, Monday, 8:00 a.m.–9:45 a.m.,
MM Mount Vernon Square (M3)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Commercial Space Transportation Joint Subcommittee of AV010, AV060, AV020
 William Laska, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Congress (M4)

Unmanned Aircraft Systems Joint Subcommittee of AV060, AV020, AV010
 Jonathan Oliver, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Archives (M4)

Aviation System Planning Committee **AV020**
 Seth Young, chair, Monday, 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Unmanned Aircraft Systems Joint Subcommittee of AV060, AV020, AV010
 Jonathan Oliver, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Archives (M4)

Commercial Space Transportation Joint Subcommittee of AV010, AV060, AV020
 William Laska, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Congress (M4)

Environmental Impacts of Aviation Committee **AV030**
 Jennifer Salerno, chair, Monday, 10:15 a.m.–noon,
MM Capitol (M4)

Aviation Noise and Vibration Joint Subcommittee of ADC40, AV030
 Natalia Sizov, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
MM Independence C (M4)

Aviation Sustainability Subcommittee, AV030(1)
 Ryan Spicer, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Mount Vernon Square (M3)

Aviation Climate Change Subcommittee, AV030(2)
 Kristin Lemaster, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Judiciary Square (M3)

Aviation Water Resources Subcommittee, AV030(3)
 Dean Mericas, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Woodley Park (M3)

Aviation Economics and Forecasting Committee **AV040**
 Paul Aussendorf, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Archives (M4)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Air Cargo Subcommittee, AV040(1)
 Liying Gu, chair, Tuesday, 10:15 a.m.–noon,
MM Congress (M4)

Airport Terminals and Ground Access Committee **AV050**
 Andrew Kirchhoff, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Capitol (M4)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Airfield and Airspace Capacity and Delay Committee **AV060**
 Christopher Oswald, chair, Tuesday, 10:15 a.m.–noon,
MM Mount Vernon Square (M3)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Unmanned Aircraft Systems Joint Subcommittee of AV060, AV020, AV010
 Jonathan Oliver, chair, Monday, 1:30 p.m.–3:15 p.m.,
MM Archives (M4)

Commercial Space Transportation Joint Subcommittee of AV010, AV060, AV020
 William Laska, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
MM Congress (M4)

Aircraft–Airport Compatibility Committee **AV070**
 Geoffrey Baskir, chair, Tuesday, 3:45 p.m.–5:30 p.m.,
MM Capitol (M4)

Aviation Geographic Information Systems and Data Joint Subcommittee of AV070, ABJ60
 Randall Murphy and Mark Ricketson, cochairs, Tuesday,
 1:30 p.m.–3:15 p.m., *MM Capitol (M4)*

Light Commercial and General Aviation Committee **AV080**
Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Moniqua Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., *MM Mount Vernon Square (M3)*

Committee Research Coordinators Council—Aviation, AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, *MM Mount Vernon Square (M3)*

Civil Helicopter Subcommittee, AV080(1)
 Ronnie Ries, chair, Monday, 3:45 p.m.–5:30 p.m.,
MM Judiciary Square (M3)

Business Aviation Subcommittee, AV080(2)
 Jens Hennig, chair, Tuesday, 12:15 p.m.–3:15 p.m.,
MM Archives (M4)

Regional and Commuter Airlines Subcommittee, AV080(3)
 Moira Harvey, chair, Tuesday, 10:15 a.m.–noon,
 MM Archives (M4)

Aviation Security and Emergency Management Committee **AV090**

Richard Bloom, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
 MM Congress (M4)

Aviation Young Members Council, AV000(1)
 Elaine McKenzie and Monique Williams, cochairs, Monday,
 7:30 p.m.–9:30 p.m., MM Mount Vernon Square (M3)
 Committee Research Coordinators Council—Aviation,
 AV000(3)
 Verne Skagerberg and Laurie Cullen, cochairs, Wednesday,
 10:15 a.m.–noon, MM Mount Vernon Square (M3)
 Aviation Safety Subcommittee, AV090(1)
 Bart Elias, Tuesday, 3:45 p.m.–5:30 p.m.,
 MM Congress (M4)

Ports and Channels Committee **AW010**

Mihalis Gkolias, chair, Tuesday, 7:30 p.m.–10:00 p.m.,
 MM Chinatown (M3)

Inland Water Transportation Committee **AW020**

Elizabeth Burkhart, chair, Monday, 1:30 p.m.–3:15 p.m.,
 MM Judiciary Square (M3)

Marine Environmental Committee **AW030**

Carl Kruse, chair, Tuesday, 1:30 p.m.–3:15 p.m.,
 MM Mount Vernon Square (M3)

Marine Safety and Human Factors Committee **AW040**

Alexander Landsburg, chair, Monday, 3:45 p.m.–5:30 p.m.,
 MM Mount Vernon Square (M3)

TRB Information Services Committee

TRB Information Services Committee **B0002**

Birgitta Sandstedt, chair, Tuesday, 8:00 a.m.–9:45 a.m.,
 MM George Washington University (M1)

Marine Group

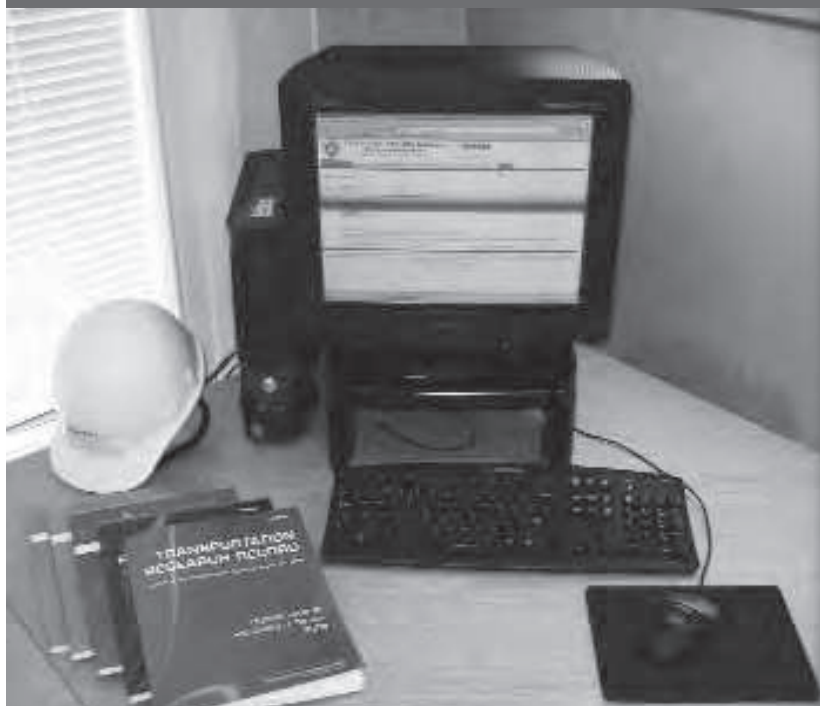
Joint Meeting of Freight Systems and Marine Group **AW000**

Executive Boards
 Barbara Ivanov and Eric Shen, cochairs, Sunday, 5:30 p.m.–
 7:30 p.m., MM Capitol Hill (M3)

Committees



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Transportation Research Board, Booth 1003

Affiliates and Publications Services

Gary Walker,
500 Fifth Street NW, Keck 474
Washington, DC 20001
202-334-1313; fax 202-334-2519; TRBSales@NAS.edu
Cydni Wolfinger, Supervisor, Publications and Subscription Sales;
202-334-3072; fax 202-334-2519; TRBSales@NAS.edu
Kelvin Jordan, Affiliates Coordinator; 202-334-3216;
fax 202-334-2519; TRBAffiliates@NAS.edu

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TRIS Databases, including TRID and Research in Progress (RiP)

Bill McLeod, Manager
500 Fifth Street NW, Keck 440
Washington, DC 20001
202-334-2947; wmcLeod@nas.edu

At the TRIS Booth, TRB's research databases will be demonstrated:

- TRID, the TRIS and ITRD Database (trid.trb.org), contains more than 1.1 million records of published information covering all modes and disciplines of transportation.
- The Research in Progress (RiP) website (rip.trb.org) provides a database of current or recently completed transportation research projects and an alerting service of new projects in specified subject areas. Registered users may also enter projects in the database.
- The TRB Publications Index (pubsindex.trb.org) contains records for all papers, articles, reports, and conference proceedings published by the Transportation Research Board, the Highway Research Board, the Strategic Highway Research Program, and the Marine Board from 1923 to date.
- The Practice-Ready Paper (PRP) Database (prp.trb.org) contains papers in which the research and information presented is ready for immediate implementation or requires minimal additional research or implementation effort.
- The Research Needs Statement (RNS) Database (rns.trb.org) is a searchable database of research problems or needs developed by TRB's technical committees.

Stop by the Information Services exhibit to learn more about these research tools and see demonstrations of these valuable resources.

MyTRB

Lisa Loyo, Director
500 Fifth Street NW, Keck 440
Washington, DC 20001
202 334 2990; lloyo@nas.edu
Michael DeCarmine, Business Analyst
202 334 2952 ; mdecarmine@nas.edu
Alan Rezaei, End User Support Specialist
202 334 1738; arezaei@nas.edu

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- Order publications;
- Search the online directory of TRB's more than 7,000 volunteers;
- Review Annual Meeting Calls for Papers (~May to August 1);
- Submit a paper for presentation at the Annual Meeting or publication in *Transportation Research Record: Journal of the Transportation Research Board* (June 1 to August 1); and
- Access special features available only to standing committee members and chairs, as well as TRB state and federal representatives.

Cooperative Research Programs (CRP)

Christopher W. Jenks, Director
500 Fifth Street, NW, Keck 456
Washington, DC 20001
202-334-3089; fax 202-334-2006; CJenks@NAS.edu

The National Cooperative Highway Research Program (NCHRP), Transit Cooperative Research Program (TCRP), Airport Cooperative Research Program (ACRP), National Cooperative Freight Research Program (NCFRP), Hazardous Materials Cooperative Research Program (HMCRRP), and the National Cooperative Rail Research Program (NCRRP) are applied, contract research programs that develop near-term, practical solutions to problems facing transportation agencies. Under the sponsorship of NCHRP, TCRP, and ACRP, TRB also prepares syntheses of current practice in the respective fields. To learn more about these programs, please visit the CRP booth. (<http://www.trb.org/CRP/About/DivD.asp>.)

Convention Center
2nd Floor, Hall D

Exhibit Hours

- Sunday, January 10 4:00 p.m.–7:00 p.m.
(Opening and Reception)
- Monday, January 11 9:30 a.m.–4:00 p.m.
- Tuesday, January 12 9:30 a.m.–4:00 p.m.

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299 Jefferson Road
Parsippany, NJ 07054
Phone: 973-929-8453; e-mail: danielle.deluccia@evonik.com
evonik.com/degaroute

Evonik, the global leader in methacrylate (MMA) resin technology, offers DEGAROUTE as a cost-efficient solution for durable, safe, and eco-friendly road markings and DEGADUR for the repair and preservation of bridges and other concrete structures. DEGAROUTE-based spray, structured, high friction, and area marking systems are all available through Evonik's traffic paint partners.



Expanded Shale, Clay and Slate Institute

1116

Abigail Gabbard
35 E Wacker Drive, Suite 850
Chicago, IL 60601
Phone: 801-272-7070; e-mail: info@escsi.org
www.escsi.org

ESCSI is the international trade association for manufacturers of rotary kiln-produced expanded shale, expanded clay, and expanded slate lightweight aggregate. ESCSI promotes the extensive use of rotary kiln-produced lightweight aggregate in the lightweight concrete masonry and structural lightweight concrete markets, as well as use in asphalt, geotechnical, and other applications.

FAA UAS Integration Office

1527

Meredith Tracey
490 L'Enfant Plaza, SW, Suite 7225
Washington, DC 20024
Phone: 202-267-6556
Email: 9-AFS-UAS-Inquiries@faa.gov
www.faa.gov/uas/

The UAS Integration Office is the focal point for all things UAS within the FAA. Our mission is safe, timely, and efficient integration of UAS into the National Airspace System (NAS).

Federal Motor Carrier Safety Administration

611

Elizabeth Davies-Sekle
1200 New Jersey Avenue, SE
Washington, D.C. 20590
Phone: 202-366-2170; e-mail: Elizabeth.Sekle@dot.gov
www.fmcsa.dot.gov

The Federal Motor Carrier Safety Administration's mission is to reduce fatalities, crashes, and injuries involving large trucks and buses.



U.S. Department of Transportation

Federal Railroad Administration

Federal Railroad Administration

818

Sarah Feinberg
Office of Administrator, Office of Public Engagement
1200 New Jersey Avenue SE, Room W33-320
Washington, D.C. 20590
Phone: 202-493-1305; e-mail: timothy.barkley@dot.gov
www.fra.dot.gov/

The U.S. Department of Transportation's Federal Railroad Administration (FRA) enables the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. FRA is the chief safety regulator for all passenger and freight railroads nationwide and is committed to continuous safety improvement.



U.S. Department of Transportation
Federal Highway Administration

FHWA

1029

TaM McCrae
Turner-Fairbank Highway Research Center,
6300 Georgetown Pike
McLean, VA 22101
Phone: 202-493-3382
www.fhwa.dot.gov/

FHWA Center for Accelerating Innovation

825

Through the Every Day Counts initiative, FHWA works with state and local transportation agencies and industry stakeholders to identify a new collection of innovations to champion every two years. Innovations are selected collaboratively by stakeholders from across the highway community, considering market readiness, impacts, benefits, and ease of adoption of the innovation.

FHWA Connection Corner

925

Visit the FHWA Connection Corner to catch your breath and have another opportunity to review handout material that you may have missed while visiting the agency's individual exhibits, all in one location!

FHWA Dwight David Eisenhower Transportation Fellowship Program

1129

The Dwight David Eisenhower Transportation Fellowship Program (DDETFP) provides optimum opportunities for the nation's brightest minds to enter the Transportation Education pipeline and shapes the transportation workforce of tomorrow. The DDETFP has multiple Fellowship categories and encompasses all modes of Transportation.

FHWA Office of Corporate Research, Technology, and Innovation Management, Exploratory Advanced Research (EAR) Program

1122

The Federal Highway Administration's Exploratory Advanced Research (EAR) Program sponsors longer term and higher risk breakthrough research with the potential for dramatic improvements to the surface transportation system. FHWA works with research partners on topics where breakthroughs are most needed and there is high potential for long-term, higher-risk research.

FHWA Office of Freight Management and Operations

1126

The Office of Freight Management and Operations promotes efficient, seamless, and secure freight flows on the U.S. transportation system and across our borders. The smooth and secure flow of freight is important to our nation's economy and to our global connectivity.

FHWA Office of Highway Policy Information

1229

The Office of Highway Policy Information establishes data-collection policy and guidelines, facilitates the application of technology, and collects and analyzes highway-related information from throughout the United States, including information about highway financing, motor-fuel use, driver's licensing, vehicle registration, traffic, and travel. <http://www.fhwa.dot.gov/policyinformation/>

FHWA Office of Infrastructure Research and Development, Long-Term Bridge Performance Program

1027

The objective of the Long-Term Bridge Performance Program (LTBP) is to compile a comprehensive database of quantitative information from a representative sample of bridges nationwide, using every bridge element and taking a holistic approach to analyze all of the physical and functional variables that affect bridge performance and health.

FHWA Office of Infrastructure Research and Development, Long-Term Pavement Performance Program

1025

The Long-Term Pavement Performance Program (LTPP) is a comprehensive research program monitoring in-service pavement test sections across the United States and Canada. LTPP pavement performance data and improved technology are resulting in better-performing and more cost-effective pavements. Information on the program, database, and products are available at the booth.

FHWA Office of Operations

1124

The Office of Operations provides national leadership for the management and operations of the surface transportation system. Reshaping traditional transportation approaches into 21st Century Operations using 21st Century Technologies is the focus of our key program areas.

FHWA Office of Operations Research and Development

1328

This booth will feature information about ongoing FHWA Office of Operations Research and Development projects and facilities, including the Saxton Transportation Operations Laboratory.

FHWA Office of Planning, Congestion Mitigation, and Air Quality Improvement Program—CMAQ 1224
 The air quality and noise abatement team administers air quality and noise programs designed to lessen the impacts of transportation-related noise and exhaust emissions. The CMAQ program provides support for transportation programs and projects that reduce air pollution in EPA-designated non-attainment and maintenance areas. Assistance and guidance is provided to MPOs, DOTs, and other transportation-related planning organizations in the development of transportation conformity demonstrations to minimize the air quality impacts of changes to the transportation network. Noise abatement or the most effective control of highway traffic noise requires a three-part approach: noise compatible planning, source control, and highway project noise mitigation.

FHWA Office of Planning, Environment and Realty 1222
 The Office of Planning, Environment, and Realty is committed to conducting and promoting research that strengthens transportation decision making and promotes efficiency while protecting and enhancing communities and the environment. This exhibit provides information on the latest HEP research topics associated with comprehensive intermodal and multimodal transportation planning, accelerated project delivery, enhancement of community and social benefits of highway transportation, and improvements to the quality of the natural and human environment by reducing highway-related impacts and by protecting and enhancing ecosystems. Additionally, research on the fair and prudent acquisition and management of real property is carried out.

FHWA Office of Project Development and Environmental Review 1228
 Office of Project Development and Environmental Review is committed to advance environmental stewardship and streamlining for FHWA-funded projects through application of National Environmental Policy Act (NEPA) principles and the NEPA process at the project level. The exhibit will provide information and show demonstrations of FHWA's eNEPA Web tool, which promotes interagency collaboration and coordination during the project development process.

FHWA Office of Safety 1223
 The mission of FHWA's Office of Safety is to reduce highway fatalities by making roads safer through a data-driven, systematic approach to putting safety first when applying engineering, education, enforcement, and emergency medical services. Focus areas include comprehensive strategic planning, roadway departure, intersections, and pedestrians safety. Visit: <http://safety.fhwa.dot.gov>.

FHWA Office of Safety Research and Development, Human Factors Research 1324
 Learn about research into the impacts of driver behavior on safety. Discuss the tools and capabilities of the Human Factors Laboratory, including FHWA's full-scale Highway Driving Simulator, which is used for human factors evaluations of novel intersection designs, road markings and signage, and other types of behavioral studies. The new Human Factors Field Research Vehicle will be demonstrated in the Large Equipment area of the exhibition hall.

FHWA Office of Safety Research and Development, Roadway Safety Research 1322
 Keeping vehicles on the road and minimizing the negative consequences of a vehicle leaving the roadway are the core objectives of FHWA's roadway safety research program. Find out about the latest research into the prevention and mitigation of roadway departure crashes, advanced-crash simulation and analysis, intersection safety, protecting pedestrians, speed management, and the effectiveness of low-cost safety countermeasures.

FHWA Office of Safety Research and Development, Safety Data and Analysis Tools 1326
 Learn about the Safety Training and Analysis Center (STAC), where researchers can find assistance using SHRP 2 Safety data sets. See the latest release of IHSDM, a software suite for evaluating geometric design decisions to support AASHTO's Highway Safety Manual and explore the Highway Safety Information System (HSIS), a multistate database combining crash, roadway inventory, and traffic volume data to guide decisions about safety improvements.

FHWA Office of Technical Services, Local Technical Assistance Program and Tribal Technical Assistance Program 1128
 The Local and Tribal Technical Assistance Program (LTAP/TTAP) provides local and tribal transportation agencies the essential tools to improve the quality and condition of their transportation networks. LTAP/TTAP Centers provide cost-effective and accessible training sessions, technical assistance, and information exchange to meet customers' needs.

FHWA Office of Technical Services, National Highway Institute 1127
 The National Highway Institute, housed within FHWA's Office of Technical Services, provides technical training to the transportation highway workforce to build skills and enhance job performance to improve the conditions and safety of the nations' roads, highways and bridges. We train personnel from federal agencies, state DOTs, local public agencies, industry, and academia.

FHWA Research, Development, and Technology 1023
 Visit the FHWA Office of Research, Development, and Technology booth to learn more about the Turner-Fairbank Highway Research Center and the exciting research that is being conducted.

FHWA Resource Center, Office of Technical Services 1123
 The FHWA Resource Center staff is an on-call, national team of technical experts. The staff focuses on air quality, civil rights, construction and project management, environment and realty, finance services, geotechnical engineering, hydraulics, operations, pavement and materials, planning and freight, safety and design, and structures. The Resource Center works closely with Headquarters and field offices.

FHWA Sustainability and Climate Change 1226
 This booth showcases FHWA's sustainability self-assessment tool, INVEST, and FHWA tools to help state, regional, and local agencies reduce transportation greenhouse gas emissions and prepare the U.S. transportation system for the impacts of climate change.

FHWA Turner-Fairbank Highway Research Center Large Equipment Vehicles 1325
 Visit the Federal Highway Administration Large Equipment Booth to learn more about the exciting research that is being conducted at the Turner-Fairbank Highway Research Center and get a close look at equipment from our Office of Operations and Infrastructure, Research and Development Laboratories.



Scott Nazar
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 Grove City, PA 16038
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www.fortacorp.com

1135

FORTA-FI is a high tensile strength synthetic fiber blend formulated to reinforce asphalt mixes. FORTA-FI helps to control and reduce rutting and thermal and reflective cracking. The blend contains aramid and polyolefin fibers, which provide the same durability as conventional mixes and a life-cycle cost reduction when placed at conventional asphalt pavement thickness, extending the pavement life.



Forum8

306

Brendan Hafferty
The Leadenhall Building, Level 30, 122 Leadenhall Street
London, EC3V 4AB
United Kingdom
Phone: +44 (0)203 7535391; e-mail: brendan@forum8.com
www.forum8.com

Forum8 is a Japanese software house specializing in real-time Interactive 3-D VR Urban and Transport Simulation and Modeling software. This software (VR-Design Studio) is typically used to aid consensus building via stakeholder consultation. Apart from being able to mimic the real world in 3-D, we have plug-ins that provide added value to third-party 2-D traffic and flood simulation and modeling software



FP2 Inc.

919

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8100 West Court
Austin, TX 78759
Phone: 866-862-4587
www.fp2.org

FP2 Inc. is a nonprofit trade association, organized under the Internal Revenue Code Section 501(c)6, and is supported by the pavement preservation industry, contractors, material suppliers, and equipment manufacturers. It supports the adoption of pavement preservation at all levels of government and works to ensure that pavement preservation becomes a part of road programs from coast-to-coast.



Fugro

225

Valerie Mittica
2505 Meadowvale Boulevard
Mississauga, ON L5N 5S2
Canada
Phone: 905-567-2874; e-mail: roadware@fugro.com
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Fugro Roadware is the world's leading provider of pavement data-collection services and survey equipment with the world renowned ARAN. With more than 45 years of experience delivering industry-leading pavement survey equipment and services to federal, state, and municipal government agencies, we are focused on helping you manage your roads and associated assets more effectively.



GCTS Testing Systems

333

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GCTS provides a full line of computer servo-controlled testing systems for soils, rocks, pavements, and construction materials. Advanced systems for asphalt-mix performance testing, including gyratory compactors, flexural beam fatigue, indirect tension, and dynamic modulus.



Technologies to manage risk
to infrastructure

Geocomp Corporation

405

Michelle Byrne
125 Nagog Park
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Geocomp provides comprehensive geotechnical design and performance monitoring services to clients across the United States and around the globe. Our professional staff combine in-depth understanding of structural and geotechnical material behavior with the latest in performance monitoring technologies to provide innovative and sound geotechnical solutions—resulting in better control of risk and cost of projects.

Germann Instruments, Inc.

337

Mariana Lara
8845 Forest View Road
Evanston, IL 60203
Phone: 847-329-9999
Email: germann@germann.org
germann.org/

Germann Instruments is the leader in the field of test systems for nondestructive testing (NDT) of reinforced concrete structures. The test systems cover important aspects of concrete construction and investigation, such as: durability of new structures, in-place strength, service-life estimation, fast-track construction, structural Integrity, corrosion investigation, and repair-quality monitoring.



Giatec Scientific Inc.

1412

Pouria Ghods
301 Moodie Drive, Suite 302
Ottawa, ON K2H 9C4
Canada
Phone: 613-240-7451
Email: pouria@giatec.ca

Giatec Scientific Inc. is a knowledge-based company that provides advanced concrete testing solutions to the construction industry. Giatec offers novel methods and devices for the performance-based quality control of concrete and accurate condition assessment of concrete infrastructure. These products include RCON, Surf, Perma, and XCell.

Gibraltar Cable Barrier Systems

711

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Gilson Company, Inc.

824

James Bibler
P.O. Box 200
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In 1939, Gilson introduced its testing screen to the mining and highway construction industry for greater control of construction materials. For the 75 years since, Gilson has provided sieve shakers, test sieves, sample splitters, asphalt, concrete, and aggregate and soils testing equipment throughout the world. We pride ourselves on equipment quality, customer service, product innovation, and expertise.



Greenroads

1239

Jeralee Anderson
17371 NE 67th Court, Suite B202
Redmond, WA 98052
Phone: 888-693-2012
Email: media@greenroads.org
www.greenroads.org

Greenroads International is an independent 501(c)(3) non-profit corporation located in the Seattle metro area. Greenroads International advances sustainability education and initiatives for transportation infrastructure. As the developer of the Greenroads Rating System, the Foundation manages education and rating processes for sustainable transportation projects in the United States and internationally.



Greenwood Engineering A/S

1035

Jorgen Krarup
H. J. Holst Vej 3-5C
Brøndby
Denmark
Phone: 45-363-602-09; e-mail: jk@greenwood.dk
www.greenwood.dk

Structural evaluation of pavements can be made with the traffic speed deflectometer (TSD) offered by Greenwood Engineering. Our products include pavement and railroad monitoring equipment. We meet specific requirements of our customers worldwide: from the handy portable LaserProf to BikeLane profilers, MultiFunctional survey vehicles, and MiniProf systems for railroads.



Gregory Highway Products

511

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www.gregorycorp.com

Gregory Highway Products manufactures and supplies roadside safety metal barrier products, which include the w-beam and thrie beam guardrail, end treatments, and SAFENCE High Tension Cable System, Gregory Mini-Spacer System, TTMA-100 Trailer Truck Mounted Attenuator, and the NatureRail Scenic Guardrail System.



GSSI

512

Jami Harmon
40 Simon Street
Nashua, NH 03060
Phone: 603-893-1109; e-mail: sales@geophysical.com
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GSSI is the world leader in the development, manufacture, and sale of GPR equipment, primarily for the markets of concrete inspection, utility mapping and locating, road and bridge deck evaluation, geophysics, and archaeology markets. GSSI created the first commercial GPR system nearly 45 years ago and continues to provide the widest range and highest quality GPR equipment in the world.



Highway Care USA

732

Sam Arnold
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BarrierGuard 800 steel barrier manufactured by Highway Care is the most widely used barrier for bridge rehabilitation in the world. Featuring a narrow 21-inch footprint, numerous anchoring options, and internal wheels, the barrier allows rapid repositioning with no lifting equipment. Multiple barrier lengths of 10 ft. (3m), 20 ft. (6m), and 40 ft. (12m) provide versatility to complete your project on time and under budget.



Hill & Smith Inc.

205

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Hill & Smith Inc. is the manufacturer and supplier of the country's leading portable steel barrier system, Zoneguard. Having been tested and accepted by FHWA to NCHRP 350 and MASH standards, Zoneguard meets maximum safety standards and offers superior protection for installers, road workers, and drivers.

HUESKER

1410

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A strong foundation for our transport route, the roads and pavements business area offers innovative geosynthetic products, systems, and solutions for traditional highway engineering applications. This business area is broken down into the base reinforcement and asphalt reinforcement segments.

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525

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Humboldt is a leading manufacturer and provider of material testing equipment for concrete, cement, aggregate, asphalt, and soil. Humboldt is known worldwide for its nuclear and nuclear-free moisture-density gauges and extensive line of geotechnical testing equipment. Visit our website at: <http://www.humboldtmfg.com> or call: 1.800.544.7220.



ICL Advanced Additives

1113

Jerry Daniel McLaughlin
622 Emerson Road, Suite 500
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ICL's global manufacturing delivers advanced products primarily derived from potash and phosphorous mining. With individual business units, ICL combines people and experience to help solve the world's needs. ICL's polyphosphoric acid for asphalt improves rutting and moisture resistance for paving applications. For the asphalt shingle markets it improves performance and expand asphalt source compatibility.

IDS North America

915

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IDS's world-leading GPRs are designed for underground mapping applications. From the most advanced dual frequency locator on the market, the Opera Duo, to the Stream family of multichannel array solutions for full-resolution, large-scale mapping, a range of ground-penetrating and interferometric radar systems for both civil and mining engineering are commercialized in North America by IDS NA.

Industrial Visualizations

1408

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Industrial Visualizations combines extensive experience with the latest technology to offer a one-stop solution for the transportation industry's 3-D visualization needs. From BIM integration to public outreach, the company's highly accurate and visually appealing animation and video services are invaluable assets for communicating value and understanding to project stakeholders, managers, and users.



Information Logistics Inc.

828

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Information Logistics designs and develops Web and mobile technology products that assist roadway operations, tolling, and agency communications with the public. From its "hands-free, eyes-free" mobile apps to its "511-in-a-box" suite of services, the company focuses on reliably and efficiently distributing your information to your customers in the most cost-effective way.

InfraTest

1315

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INRO

217

Daniel Florian
376 Victoria Avenue, Suite 200
Montreal, QC H3Z 1C3
Canada
Phone: 514-369-2023; e-mail: info@inrosoftware.com
www.inrosoftware.com

INRO designs and develops the world's most powerful and proven transport planning technology. The Emme travel demand forecasting software and Dynameq wide-area traffic simulation software are collectively used in more than 1,000 organizations in more than 80 countries, including half of the world's largest cities.



InstroTek, Inc.

913

Maurice Arbelaez
5908 Triangle Drive
Raleigh, NC 27617
Phone: 919-875-8371; e-mail: marbelaez@instrotek.com
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InstroTek continues to lead the materials-testing industry through product innovation and instrumentation technology. Come visit us at Booth 913 to see the latest innovative products for materials performance testing, density determination, and asphalt moisture sensitivity. InstroTek's focus is to continue to develop the next generation of materials-testing and analysis equipment.



Intelligent Automation, Inc.

1529

George Zhao
15400 Calhoun Drive, Suite 190
Rockville, MD 20855
Phone: 301-294-5232; e-mail: xzhao@i-a-i.com
www.i-a-i.com

IAI is a technology innovation company headquartered in Rockville, Maryland, that specializes in providing advanced technology solutions and R&D services to U.S. federal agencies and corporations. Exhibitions include airspace redesign, UAS traffic analysis, bridge structural health monitoring, dilemma zone detection–warning, tractor-trailer wireless communication, etc. For more information, please visit www.i-a-i.com.

International Access Corporation

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Nobuhiro Sato
1050 Connecticut Avenue, NW, 5th Floor, Suite 500
Washington, D.C. 20036
Phone: 202-223-7040; e-mail: info@iacdc.com
www.iacdc.com

IAC was established in 1991 with offices in Washington, D.C., and Tokyo, Japan. We are a “value-added” research and consulting company that provides comprehensive information analysis and management consulting to primarily Japanese and international clients from the public and private sectors. We will showcase Japan’s infrastructure plans toward the Tokyo 2020 Olympic and Paralympic Games.



International Cybernetics Corp.

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Robert Olenoski
P.O. Box 17246
Clearwater, FL 33762
Phone: 727-547-0696
intlcybernetics.com

Since 1975 ICC has been manufacturing nondestructive pavement testing equipment for government agencies and transportation consultants around the world. ICC is one of the industry leaders for survey vehicles that collect longitudinal and transverse profiles, rutting, roughness, faulting, texture, cross slope, GPS, geometrics, video logging, distress, friction, deflection, and LiDAR point clouds.



International Road Dynamics

1217

Donna Bergan
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Saskatoon, SK S7K 3T9
Phone: 306-653-6600
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IRD is a highway traffic management products and systems technology company that operates in the ITS Industry, offering experts in advanced technologies to detect and weigh vehicles at highway speeds and the integration of these and other complementary ITS technologies into systems that are designed to solve traffic problems, as well as supplying custom designed systems.



IPC Global

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Kieran
4 Wadhurst Drive
Boronia, Victoria 3155
Australia
Phone: +61 3 9800 2200; e-mail: sales@ipcglobal.com.au
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IPC Global is the researcher’s choice for advanced pavement-testing equipment. On display is their world-leading AMPT—Integrated Asphalt Mixture Performance Tester. Find out how their advanced dynamic materials-testing machines for asphalt, unbound, and other pavement materials can help you analyze materials, design better pavements, and ultimately build higher quality and more economical roads.



ITEM Ltd.

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ITEM Ltd. specializes in LaneLight LED in-road marker systems for delineation, hazard warning, curves, and pedestrian crossings, as well as ITS systems for Bluetooth Travel Time, LED warning devices, and enhanced signage.



Iteris, Inc.

627

Scott Perley
1700 Carnegie Avenue, Suite 100
Santa Ana, CA 92705
Phone: 570-470-4081; e-mail: sip@iteris.com
www.iteris.com

Iteris is a leader in information solutions for the traffic management market, providing measurement, management, and predictive traffic and weather analytics to improve the safety of surface transportation systems. Products include Vantage vehicle and bicycle detection and the performance measurement software iPeMS. Iteris offers a broad range of intelligent transportation solutions worldwide.



ITS America

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Sabrina Sussman
1100 New Jersey Street, SE, Ste. 850
Washington, D.C. 20036
Phone: 202-721-4226; e-mail: ssussman@itsa.org
www.itsa.org

Focusing on technology transforming transportation, the Intelligent Transportation Society of America (ITS America) is the nation’s only organization dedicated to advancing the research, development, and deployment of intelligent transportation systems (ITS) to improve the nation’s surface transportation system.



JAMAR Technologies, Inc.

1516

Kelly Cupps
1500 Industry Road, Suite C
Hatfield, PA 19440
Phone: 800-776-0940; e-mail: sales@jamartech.com
www.jamartech.com

For more than 30 years, JAMAR Technologies has been providing solutions for the problem of how to best collect traffic data. As we enter 2016, one of the new focuses for JAMAR is helping its customers collect bicycle data. It now provides equipment that collects this data using road tubes, loops, piezoes, radar, as well as manual collection, covering all the ranges of possible applications.

James Cox and Sons

418

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James Cox and Sons, based in Colfax, California, designs and manufactures equipment for asphalt, concrete, and soil testing that conforms to various ASTM, AASHTO, and Californian specifications. James Cox and Sons manufactures and supplies a full-product range of Superpave Equipment, including Superpave Gyrotory Compactor, Hamburg Wheel Tracker, Four Point Bending Machine, UTM's, RTFO, and Texas Overlay Tester.



Jet Filter System, LLC

1515

Doug Stoutin
14 N. Central Avenue, Suite 101, P.O. Box 31
Casey, IL 62420
Phone: 800-475-2029; e-mail: info@jetfiltersystem.com
www.jetfiltersystem.com/

Dewatering filtration and drainage are a vital part of designing earth retaining structures, including coastal retaining walls, bridge abutments, wing walls, all types of sheet piles, etc. The vast majority of retaining structure failures occur because of a build-up of excessive hydrostatic (water) pressures caused by either a lack of adequate drainage or impermeability of the backfill materials.

Kessler Soils Engineering Products, Inc.

724

Virginia Aicken
17775 Running Colt Place
Leesburg, VA 20175
Phone: 571-291-2284; e-mail: sales@kesslerdcp.com
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KSE Testing Equipment, a Kessler Soils Engineering Products company, manufactures and distributes testing devices for soils, asphalt, and concrete. KSE is the leading Dynamic Cone Penetrometer manufacturer. Distributor for Zorn Light Weight Deflectometer, which measures modulus, a nonnuclear alternative. Distributors for the MIT-SCAN2-BT dowel bar scanner and MIT-SCAN-T2 pavement thickness NDT devices.

Kwik Bond Polymers

531

Sheila Cherry
923 Teal Drive
Benicia, CA 94510
Phone: 720-202-5682
www.kwikbondpolymers.com



Lindsay Transportation Solutions

916

Paul Grant
180 River Road
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Phone: 707-374-6800
www.barriersystemsinc.com

Lindsay Transportation Solutions is the manufacturer of The Road Zipper system, which quickly reconfigures the roadway to provide more lanes in the peak traffic direction. The system eliminates cross-over accidents and provides traffic congestion relief. Lindsay Transportation Solutions also manufactures crash cushions, specialty barriers, terminal ends, and railroad products.

Mandli Communications, Inc.

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Madison, WI 53718
Phone: 608-835-3500
www.mandli.com

Mandli Communications has been providing the transportation industry with cutting-edge data collection solutions since 1983. We implement scanning and imaging technologies into a mobile platform, as well as develop customizable software applications for the acquisition, reduction, and inventory of a robust data set.



McTrans Center

513

William Sampson
University of Florida, P.O. Box 116585
Gainesville, FL 32611
Phone: 800-226-1013; e-mail: mctrans@ce.ufl.edu
mctrans.ce.ufl.edu

The McTrans Center at the University of Florida distributes and supports software programs for traffic engineering and transportation planning applications, including the Highway Capacity Software (HCS 2010), TSIS-CORSIM and TRANSYT-7F, with training courses and the highest level of technical support provided for these packages.



Metal Fatigue Solutions

506

Ricky Morgan
125 16th Street, No. 11
Huntington Beach, CA 92648
Phone: 714-612-0411; e-mail: morgan@metal-fatigue-solutions.com
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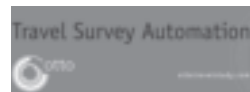
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4800 Cao'an Road
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Phone: 972-740-7150
www.trafficware.com

TraFFix Devices, Inc

Jim Marshall
160 Avendia La Pata
San Clemente, CA 92673
Phone: 949-361-5663
www.traffixdevices.com

We manufacture traffic control products and crash attenuators and are currently celebrating our 30th year. The Scorpion Truck and Trailer Attenuator is considered the best mobile attenuator in the world. The SLED, the SLED Euro-Terminal, the Sentry Water-Cable Barrier, and the Compressor are other attenuator products manufactured by TraFFix Devices.



Transmetric America Inc.

Stephen Cropley
8613 Cross Park Drive
Austin, TX 78754
Phone: 512-977-1822; e-mail: jim.bryson@transmetric.com
transmetric.com

Transmetric provides answers to transportation policy makers, researchers, data collectors, and the public through powerful cloud-based solutions such as Traffic Server 7 and GEOCOUNTS. See how Transmetric helps agencies like yours at Booth 368 or visit us online at transmetric.com.



Transpo Industries, Inc.

Michael Stenko
20 Jones Street
New Rochelle, NY 10801
Phone: 914-636-1000; e-mail: mstenko@transpo.com
www.transpo.com

Breakaway supports for signs and light poles; polymer bridge overlays; preservation and maintenance materials; high-friction surfacing; color pavement-marking materials for roads and airfields; highway glare screen for permanent and WZ protection from debris, gawking, and glare.

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Transport Research Arena 2016

Karin Peeters
2175 K Street, NW
Washington, D.C. 20037-1831
Phone: 202-862-9531

Transportation Research Board

Reggie Gillum
500 Fifth Street, K458
Washington, D.C. 20001
Phone: 202-334-2382; e-mail: rgillum@nas.edu
www.trb.org

The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal.

TransSTEM Academy, Francis L. Cardozo Education Campus

Shirley McCall
1200 Clifton Street, NW
Washington, D.C. 20009
Phone: 202-673-7385; e-mail: shirley.mccall@dc.gov
www.transstechacademy.com/

TransSTEM Academy is the Transportation and STEM Academy located at Cardozo Education Campus. Established in 1991, it is the first transportation studies academy in the Washington metropolitan area. It enables students to learn about, visit, and work in various areas of the transportation industry, particularly in transportation-related STEM pathways.

TRC, Inc.

Jesse Downey
10820 State Route 347, P.O. Box B-67
East Liberty, OH 43319-0367
Phone: 937-666-2011; e-mail: info@trcpg.com
www.trcpg.com

TRC Inc. specializes in research and testing services, conducting brake, crashworthiness, durability, fuel economy, handling, and performance testing at the independent automotive proving ground. TRC, Inc., collaborates with the Ohio State University to develop future mobility solutions for passenger and commercial vehicles, including autonomous and active safety technologies.



TREDIS Software

Kirsten Hughes
155 Federal Street, Suite 600
Boston, MA 02110
Phone: 617-303-0424; e-mail: khughes@tredis.com
www.tredis.com

TREDIS—the Transportation Economic Development Impact System—provides economic impact and benefit–cost analysis of transportation investments spanning highway, bus, rail, aviation, and marine modes. TREDIS covers both freight and passenger transport at community, region, and state levels. It is used for program assessment, alternatives analysis, EIS, and project selection processes.

801

1003

1029

530

216

1531

113

727

517

Trimble

Kelly Liberi
10368 Westmoor Drive
Westminster, CO 80021
Phone: 303-635-8606; e-mail: geospatial@trimble.com
www.trimble.com

1117

Uretex USA Inc

Candy Carney
P.O. Box 1929
Tomball, TX 77377
Phone: 281-351-7800; e-mail: ccarney@uretekusa.com
www.uretekusa.com

912

Uretex specializes in returning your pavement system to its original design, with a stronger sub-base and improved foundation soil structure. We're the sustainable solution that preserves your assets using our superior technology that revolutionized the industry. We're the sensible solution that requires significantly less energy, time, expense, and operational disruption than replacement.



Trinity Highway

Mary Beth Klein
2525 North Stemmons Freeway
Dallas, TX 75207
Phone: 214-589-7495; e-mail: marybeth.klein@trin.net
www.highwayguardrail.com

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Trinity Highway and its brands Energy Absorption, Safe-Hit, and Yodock are leading innovators of solutions for both domestic and international roadways. Its portfolio features several proprietary products, including guardrail, cable barrier, crash cushions, truck/trailer mounted attenuators, steel and water filled barriers, sign supports, flexible delineators, and other transportation products.



U.S. Coast Guard—Office of Bridge Programs

835

Arvind Patel
Office of Bridge Programs (CG-BRG), U.S. Coast Guard Stop 7418
2703 Martin Luther King Jr. Ave., SE
Washington, D.C. 20593-7418
Phone: 202-372-1522; e-mail: arvind.patel@uscg.mil
www.uscg.mil

Troxler Electronic Laboratories, Inc.

325

Ryan Kirkendall
3008 Cornwallis Road, P.O. Box 12057
Research Triangle Park, NC 27709
Phone: 919-719-1821
www.troxlerlabs.com

The Coast Guard's Bridge Program is responsible for approval of the location and plans of bridges and causeways constructed across navigable waters of the United States, approval of drawbridge operating regulations, and the alteration of bridges found to be unreasonable obstructions to navigation. The Bridge Program contributes to the development of a safer and more efficient Marine Transportation System.



TSS—Transport Simulation Systems

431

Alex Gerodimos
20 West 22nd Street, Suite 612
New York, NY 10010
Phone: 917-267-8534; e-mail: info@aimsun.com
www.aimsun.com

TSS—Transport Simulation Systems—develops, markets, and supports Aimsun traffic modeling software: travel demand modeling, static and dynamic traffic assignment with mesoscopic, microscopic, and hybrid simulation, all within a single application. Aimsun Online is the market's only simulation-based decision support system for real-time traffic management.

U.S. Department of the Interior, National Park Service

1235

Nola Chavez
Denver Service Center—Transportation Division
12795 West Alameda Parkway, P.O. Box 25287
Denver, CO 80225-0287
Phone: 303-349-4830; e-mail: nola_chavez@nps.gov
www.nps.gov

The hundredth anniversary of the founding of the National Park Service affords a unique opportunity to reflect on its contributions to transportation history and the American experience in general. National park road builders pioneered advances in context-sensitive design by melding social, aesthetic, and technical concerns in highly sensitive landscapes.

uGRIDD Corporation

1517

Zhong Chen
205 W. Wacker Drive, Suite 1450
Chicago, IL 60606
Phone: 312-262-2500; e-mail: zchen@ugridd.com
www.ugridd.com

uGRIDD is a web-based platform that analyzes, organizes, hosts, shows, and processes BIG DATA in the transportation field. The website specializes its services in the area of public and private infrastructure. The uGRIDD technology uniquely connects users and BIG DATA by interrelating the referencing grid of data. uGRIDD offers solutions including enterprise data management and project data sharing.



U.S. Department of Transportation
Office of the Assistant Secretary for
Research and Technology

**U. S. Department of Transportation
Office of the Assistant Secretary for
Research and Technology (USDOT/OST-R)**

1019, 1219

Michele Janis
USDOT/OST-R
1200 New Jersey Avenue, SE; E36-326
Washington, DC 20590
Phone: 202-366-0589
Email: Michele.Janis@dot.gov
www.rita.dot.gov

USDOT Office of the Assistant Secretary of Research and Technology 1019

The OST-R coordinates multimodal research and education programs to produce results for the American people. Celebrating USDOT's 50th anniversary!

- Intelligent Transportation Systems Joint Program Office** 1019
The ITS-JPO leads and coordinates multimodal research to advance intelligent and connected vehicles, infrastructure, and transportation operations.
- Bureau of Transportation Statistics** 1219
BTS supplies data, statistics, and analysis and the resources of the National Transportation Library to support transportation decisions.
- University Transportation Centers** 1219
The UTC Program sponsors research and education at over 125 universities through competitive, multiyear grants.
- The Volpe Center** 1219
The Volpe Center provides innovative analysis and R&D and explores new technologies to define and inform transportation's multimodal future.



Vector Corrosion Technologies 613
David Whitmore
3822 Turman Loop, Suite 102
Winnipeg, MB R3Y 1G4
Canada
Phone: 204-489-9611
www.vector-corrosion.com/

Vector provides innovative solutions for concrete corrosion repair and protection, including embedded galvanic anodes, galvanic jackets, activated arc-spray zinc metallizing, evaluation, and repair and mitigation services for post-tension corrosion.

VESAM Group 504
Pedro Santos
Zona Industrial Cantanhede, Lote 69
Cantanhede, 3060-197
Portugal
Phone: +351-231419320; e-mail: pedro.santos@vesamgroup.com
www.vesamgroup.com

The VESAM Group provides integrated solutions in steel and mixed construction worldwide, including the design, fabrication, erection, monitoring, and maintenance works. Our core businesses are residential and services buildings, industrial units, bridges, and special structures. We are the creators of the SIGMA structural health monitoring system and the planning and management software, MERP.

Viasys VDC Inc. 316
Pekka Pakkala
604 Arizona Avenue
Santa Monica, CA 90401
Phone: 310-800-7966; e-mail: pekka.pakkala@viasys.com
www.viasys.com

Viasys VDC is your one-stop solution for unleashing the full potential on VDC/3D modeling capability for cost and time savings. VDC is applicable for DOTs, cities, engineers, and contractors. VDC provides tools for VDC/3D Modeling and better collaboration, productivity, and avoiding design conflicts early—without changing your existing design software. Viasys VDC makes your projects run smoothly.



Virginia Department of Transportation 719
Ann Overton
530 Edgemount Road
Charlottesville, VA 22903-2454
Phone: 434-293-1912

Worcester Polytechnic Institute 1334
Agata Lajoie
100 Institute Road
Worcester, MA 01609
Phone: 508-831-5301; e-mail: alajoie@wpi.edu
grad.wpi.edu

Founded in 1865, Worcester Polytechnic Institute is one of the leading engineering and technology universities in the United States. The university has offered graduate programs since 1893 and is well-regarded for its research in optimum utilization of natural resources and sustainable construction related to the pavement industry. Classes are small and provide for close student-faculty relationships.

WSP|Parsons Brinckerhoff 911
Amy Gilleece
One Penn Plaza
New York, NY 10119
Phone: 212-631-3785; e-mail: gilleece@yahoo.com
www.pbworld.com/usa

WSP | Parsons Brinckerhoff, a leader in the transportation industry since 1885, draws on the skills of 34,500 professionals worldwide to provide a full range of services for transit and rail, highways, airports and ports. The firm's services include strategic consulting, program management, planning, engineering design, construction management, and operations and maintenance. www.wspgroup.com/usa.



ZOYON 1210
Liping Zhang
NO.6 Four Street in Wuhan Science and Technology Park of the East Lake High-tech Zone
WUHAN, HUBEI 430223
China
Phone: 86-27-87196222; e-mail: market@zoyon.com.cn
en.zoyon.com.cn/en

Zoyon is renowned for its excellence in science and technology and as a full solution provider in the areas of road data collection, processing, analysis, and decision-making. Our premier products include the Road Detection System, the Fast Laser Dynamic Deflection measurement system and the Tunnel Fast Measurement System.



Zydex Inc. 1211
Radhika Kiran
106 Kitty Hawk Drive
Morrisville, NC 27560
Phone: 919-744-6468
Email: radhika@zydexindustries.com
www.zydexindustries.com

Zydex has developed a broad-range of Nanotechnology green products that provide sustainable eco-friendly materials for the road construction industry for the 21st Century. ZycoTherm—Multiple applications such as Anti-Strip, WMA, Coating/Workability/Compaction Aid, used with polymer modified asphalts. NanoTac, less tracking tack coat. TerraSil, and ZycoBond—dust mitigation and soil stabilization..

EXHIBITORS BY SUBJECT

Administration and Management

Asset Works 1012

Aviation

Dynatest Consulting Inc. 424
 Engineering and Research Int'l, Inc. 137
 Pavemetrics Systems 427
 PaveTesting 503

Bituminous Materials

FP2 Inc. 919
 HUESKER 1410
 IPC Global 107
 James Cox and Sons 418
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 Testquip LLC 304

Bridges and Other Structures

Advanced Infrastructure Design, Inc. 207
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 AgileAssets Inc. 817
 American Galvanizers Association 1017
 BDI: Bridge Diagnostics, Inc 1112
 Blastrac 838
 Campbell Scientific, Inc. 412
 Chase Construction Products 319
 Contractors Materials Company 1336
 CTS Cement Mfg Co 313
 Dayton Superior 836
 Dewberry 519
 Earth Wall Products, LLC 805
 Evonik Corporation 710
 Geocomp Corp. 405
 GSSI 512
 Highway Care USA 732
 Hill & Smith Inc. 205
 IDS North America 915
 Intelligent Automation, Inc. 1529
 International Road Dynamics 1217
 Jet Filter System, LLC 1515
 Metal Fatigue Solutions 506
 MISTRAS Group 416
 Neel Company, T-WALL 432
 NEXCO-West USA, Inc. 1212
 Olson Engineering, Inc. 310
 Proceq USA, Inc. 230
 Reinforced Earth Company 211
 Roadscanners Oy 411
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 3D-Radar 624
 Transpo Industries, Inc. 517
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 Campbell Scientific, Inc. 412
 Evonik Corporation 710
 Gilson Company, Inc. 824
 Highway Care USA 732
 Hill & Smith Inc. 205
 James Cox and Sons 418
 Kessler Soils Engineering Products, Inc. 724
 TenCate Geosynthetics 632
 Traffix Devices, Inc 113
 Trinity Highway 413

VESAM Group 504

Data and Information Technology

American Concrete Pipe Association 816
 ARRB Group 1134
 Asset Works 1012
 Citilabs 213
 CoVal Systems, Inc. 212
 CycloMedia Technology 1236
 Deighton Associates Limited 1419
 Diamond Traffic Products 1417
 Digiwest 232
 Dynatic Solutions Inc. 904
 Eco-Counter 311
 Information Logistics Inc. 828
 INRO 217
 International Cybernetics Corp. 210
 Iteris, Inc. 627
 ITS America 826
 Mandli Communications, Inc. 111
 Midwestern Software Solutions 206
 Minitab, Inc 537
 Miovision Technologies Inc. 630
 Numetric 302
 Persen Technologies Incorporated 726
 PowerTrunk Inc. 617
 Teledyne Optech 1216
 Terrasolid Ltd. 610
 TomTom 236
 Transmetric America Inc. 727
 TREDIS Software 216
 uGRIDD Corporation 1517
 Viasys VDC Inc. 316

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 Engineering and Research Int'l, Inc. 137
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 Industrial Visualizations 1408
 Numetric 302
 Rodel Interactive North America LLC 1010
 Route 66 Alliance 1309
 SIDRA SOLUTIONS 410
 Viasys VDC Inc. 316

Economics

Regional Economic Models, Inc. 934
 TREDIS Software 216

Education and Training

American Association of State Highway and Transportation Officials 819
 ARA Inc.—Strategic Communications & Training 937
 ATSSA 510
 Design-Build Institute of America 419
 Industrial Visualizations 1408
 National Center for Pavement Preservation 917
 TransTech Academy, Cardozo High School 902
 USDOT/OST-R 1019, 1219
 Worcester Polytechnic Institute 1334

Energy

AC&A 318
 South Coast Air Quality Management District 618

Environment

South Coast Air Quality Management District 618
 US Department of the Interior, National Park Service 1235

Geotechnology

Applied Research, Inc.—Vertek Division 1034
 Geocomp Corp. 405
 IDS North America 915
 IPC Global 107
 Jet Filter System, LLC 1515
 Olson Engineering, Inc. 310
 Teledyne Optech 1216
 Uretex USA Inc 912

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Advanced Infrastructure Design, Inc. 207
 Advitam 616
 All Traffic Solutions 203
 Ames Engineering Inc 633
 Applied Research Associates, Inc. 935
 Aqua Patch Road Materials, LLC 839
 Contractors Materials Company 1336
 CTS Cement Mfg Co 313
 Decagon Devices, Inc. 1519, 1525
 Dewberry 519
 Dynatest Consulting Inc. 424
 Easi-Set Worldwide 430
 FORTA Corporation 1135
 Fugro 225
 Gregory Highway Products 511
 GSSI 512
 Highway Care USA 732
 Hill & Smith Inc. 205
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 James Cox and Sons 418
 Mandli Communications, Inc. 111
 Neel Company, T-WALL 432
 NEXCO-Central 803
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 Pavement Technology Inc. 227
 PaveTesting 503
 Reinforced Earth Company 211
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 SES AMERICA 1115
 Skycomp, Inc. 725
 StreetScan 502
 TenCate Geosynthetics 632
 Terrasolid Ltd. 610
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 US Department of the Interior, National Park Service 1235

Hydraulics and Hydrology

BDI: Bridge Diagnostics, Inc 1112
 Jet Filter System, LLC 1515
 International Activities Servicios Mexicanos de Ingenieria Civil 1535

Maintenance and Preservation

AgileAssets Inc. 817
 ARRB Group 1134
 Blastrac 838
 Chase Construction Products 319
 Dayton Superior 836
 DBi Services 910
 Deighton Associates Limited 1419
 Dynatic Solutions Inc. 904
 Evonik Corporation 710
 FP2 Inc. 919
 Gregory Highway Products 511
 International Cybernetics Corp. 210
 Midwest Industrial Supply 103
 MISTRAS Group 416
 National Center for Pavement Preservation 917
 NEXCO-Central 803
 Pathway Services Inc. 131
 Proceq USA, Inc. 230
 Transpo Industries, Inc. 517
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Marine Transportation

Metal Fatigue Solutions 506
 US Coast Guard-Office of Bridge Programs 835

Materials

American Concrete Pipe Association 816
 American Galvanizers Association 1017
 Contractors Materials Company 1336
 Earth Wall Products, LLC 805
 Easi-Set Worldwide 430
 FORTA Corporation 1135
 Gilson Company, Inc. 824
 Kessler Soils Engineering Products, Inc. 724
 Olson Engineering, Inc. 310
 Pavement Technology Inc. 227
 Proceq USA, Inc. 230
 Transpo Industries, Inc. 517
 Zydex Inc. 1211

Motor Carriers

Federal Motor Carrier Safety Administration 611

Operations and Traffic Management

All Traffic Solutions 203
 ARTBA 1237
 CoVal Systems, Inc. 212
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 Decagon Devices, Inc. 1519, 1525
 Digiwest 232
 Intelligent Automation, Inc. 1529
 International Road Dynamics 1217
 Iteris, Inc. 627
 ITS America 826
 AMAR Technologies, Inc. 1516
 Lindsay Transportation Solutions 916
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Advanced Infrastructure Design, Inc. 207
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 AgileAssets Inc. 817
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 Applied Research Associates, Inc. 935
 Applied Research, Inc. - Vertek Division 1034
 Aqua Patch Road Materials, LLC 839
 Dayton Superior 836
 Deighton Associates Limited 1419
 Dynatest Consulting Inc. 424
 Engineering and Research Int'l, Inc. 137
 FP2 Inc. 919
 Fugro 225
 Greenwood Engineering A/S 1035
 GSSI 512
 HUESKER 1410
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 IPC Global 107
 Kessler Soils Engineering Products, Inc. 724
 Midwest Industrial Supply 103
 Pathway Services Inc. 131
 Pavement Technology Inc. 227, 612
 Pavemetrics Systems 427
 PaveTesting 503
 RAP Technologies LLC 516
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 Tensar International Corp 811
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Pedestrians and Bicyclists

Citilabs 213
 Diamond Traffic Products 1417
 Eco-Counter 311
 ITEM Ltd 331
 Iteris, Inc. 627
 JAMAR Technologies, Inc. 1516
 Miovision Technologies Inc. 630
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 Rolta Americas 1416

Planning and Forecasting

Citilabs 213
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 INRO 217
 Miovision Technologies Inc. 630
 NTC@Maryland 202
 OmniBond Systems LLC 731
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American Public Transportation Association 938
 American Society of Civil Engineers (ASCE) 717
 International Access Corporation 837
 Regional Economic Models, Inc. 934
 South Coast Air Quality Management District 618

Public Transportation

American Public Transportation Association 938
 Rolta Americas 1416

Publications

American Association of State Highway and Transportation Officials 819
 ARA Inc.-Strategic Communications & Training 937
 ATSSA 510
 Taylor & Francis Group 324
 Transportation Research Board 1003

Railroads

BDI: Bridge Diagnostics, Inc 1112
 Earth Wall Products, LLC 805
 Federal Railroad Administration 818
 Greenwood Engineering A/S 1035
 Lindsay Transportation Solutions 916
 Metal Fatigue Solutions 506
 Neel Company, T-WALL 432
 Pavemetrics Systems 427
 Roadscanners Oy 411
 Tensar Int'l Corp 811
 Terrasolid Ltd. 610
 3D-Radar 624

Research (about research)

American Transportation Research Institute 425
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 MISTRAS Group 416
 National Academy of Sciences, Engineering and Medicine 906
 National Advanced Driving Simulator 317
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 USDOT/OST-R 1019, 1219

Roadway Pavement Preservation

Applied Research Associates, Inc. 935
 Aqua Patch Road Materials, LLC 839
 Blastrac 838
 Chase Construction Products 319
 CTS Cement Mfg Co 313
 DBi Services 910
 FORTA Corporation 1135
 Greenwood Engineering A/S 1035
 HUESKER 1410
 National Center for Pavement Preservation 917
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 Sinak, Inc. 524
 StreetScan 502
 TenCate Geosynthetics 632
 Tensar Int'l Corp 811

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				ZOYON	1210

Mark Your Calendar!
TRB 96th Annual Meeting
January 8–12, 2017
Walter E. Washington Convention Center
Washington, D.C.



Sunday, January 10

8 a.m. _____
9 a.m. _____
10 a.m. _____
11 a.m. _____
Noon _____
1 p.m. _____
2 p.m. _____

3 p.m. _____
4 p.m. _____
5 p.m. _____
6 p.m. _____
7 p.m. _____
8 p.m. _____
9 p.m. _____

Monday, January 11

8 a.m. _____
9 a.m. _____
10 a.m. _____
11 a.m. _____
Noon _____
1 p.m. _____
2 p.m. _____

3 p.m. _____
4 p.m. _____
5 p.m. _____
6 p.m. _____
7 p.m. _____
8 p.m. _____
9 p.m. _____

Tuesday, January 12

8 a.m. _____
9 a.m. _____
10 a.m. _____
11 a.m. _____
Noon _____
1 p.m. _____
2 p.m. _____

3 p.m. _____
4 p.m. _____
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7 p.m. _____
8 p.m. _____
9 p.m. _____

Wednesday, January 13

8 a.m. _____
9 a.m. _____
10 a.m. _____
11 a.m. _____
Noon _____
1 p.m. _____
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3 p.m. _____
4 p.m. _____
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9 p.m. _____

Thursday, January 14

8 a.m. _____
9 a.m. _____
10 a.m. _____
11 a.m. _____
Noon _____

1 p.m. _____
2 p.m. _____
3 p.m. _____
4 p.m. _____
5 p.m. _____

TONGJI UNIVERSITY

FACULTY RECRUITMENT FOR COLLEGE OF TRANSPORTATION ENGINEERING



同济大学交通运输工程学院
COLLEGE OF TRANSPORTATION ENGINEERING
TONGJI UNIVERSITY



Tongji University is a comprehensive university in China, which includes 33 colleges, such as engineering, science, medicine, management, literature, arts, philosophy, law, economics, pedagogy, and it owns 6 well-known affiliated hospitals in Shanghai. Tongji University has established a transportation program with a history of over 100 years. Now, the College of Transportation Engineering has become a comprehensive program integrated with all related disciplines in the field of land transport in China.

The college consists of more than 160 faculties/staff, 850 students and 700 graduates. Recently, the College of Transportation Engineering has set up "Transportation Research Institute of Tongji", which include various organizations like "Joint International Research Laboratory of Transportation Safety", "Transport Data Science Research Center", "Sino-German Transportation Research Center", "Intelligent Transportation System Research Center" and etc.



Five Departments

- Road and Airport Engineering
- Traffic Engineering
- Urban Rail Transit and Railway Engineering
- Transportation Management Engineering
- Transportation Information and Control Engineering

Recruitment Positions

Regular Department Faculty

- Full Professor
- Associate Professor

Research Staff at Transportation Research Institute of Tongji

- Research Professor
- Associate Research Professor
- Assistant Research Professor
- Postdoctor

University Special Talent Program

- Thousand Talents Program
- Thousand Talents Program for Distinguished Young Scholars
- Shanghai Thousand Talents Program
- Yangtse River Scholar Program
- Shanghai Eastern Scholar Program
- Tongji Special Appointment Professor

Tongji Events during TRB Annual Meeting

- Exhibition: January 11th-14th Booth 231, Convention Center
- Information Session: January 11th 17:30 -19:30, Convention Center 208
- Recruitment Talk: January 12th 13:30-17:00, Marriott Marquis (event room notification at lobby)

Application Procedure

Please send your curriculum vitae to Prof. Jian Lu (jianjohnlu@tongji.edu.cn) and Mrs. Xiaohua Wan(wanxiaohua0309@163.com)

For eligibility criteria and procedure information, please refer to:
<http://hr.tongji.edu.cn/>
<http://www.tjtt.tongji.edu.cn/>

Thank you!

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