



# URBAN FREIGHT TRANSPORTATION COMMITTEE

TRANSPORTATION RESEARCH BOARD

## Triennial Strategic Plan 2020-2023

Transportation Research Board

Urban Freight Transportation Committee (AT025)

April 2020



*Delivery in NYC - Photo courtesy of Bill Eisele, TTI*

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## Freight Systems Group

Note: the committees listed below are those in the Freight Group prior to the 2020 TRB Committee restructuring.

Mr. Richard Bornhorst, Chair  
FACTOR, Inc.

- Freight Transportation Economics and Regulation (AT010)
- Freight Transportation Planning and Logistics (AT015)
- International Trade and Transportation (AT020)
- Urban Freight Transportation (AT025)
- Agricultural and Food Transportation (AT030)
- Military Transportation (AT035)
- Transportation of Hazardous Materials (AT040)
- Intermodal Freight Transport (AT045)
- Intermodal Freight Terminal Design and Operations (AT050)
- Truck Size and Weight (AT055)
- Trucking Industry Research (AT060)
- Freight Transportation Data (ABJ90) [Data Group, but works closely with Freight Group]
- Truck and Bus Safety (ANB70)
- Freight Rail Transportation (AR040)

## Triennial Strategic Plan (TSP)

**Committee Name and Number:** Urban Freight Transportation, AT025  
**TSP Three-Year Period:** April 2020 to April 2023  
**Date Prepared:** February 2020 - March 2020

### Committee Future Outlook Statement:

#### Committee Scope

This Committee promotes research on urban freight transportation for the advancement of knowledge and the dissemination of information, the improvement of performance, the cultivation of practitioners, and the improvement of public policy and planning as they interact with private systems of logistics.



*TRB Urban Freight Transportation Committee Washington, D.C.  
January 13, 2020 (Note: not all members pictured.)  
Photo courtesy of Lea Camarda, TRB*

The Committee is concerned with developing and advancing the state-of-the-practice and the state-of-the-art in strategies and methods that improve the planning, implementation, operation and performance of urban freight transportation. It seeks to do so by promoting collaboration among academia, the public sector and private interests. It recognizes the vital contribution of efficient freight transportation to the quality of life of urban residents and to their economic well-being. It contributes to professional and academic discourse objectively, without advocating any particular position on public policy or private sector decision-making.

For the purposes of this Triennial Strategic Plan (TSP), “urban freight transportation” refers to the movement of goods and services by any transportation mode that uses or impacts the multi-modal urban transportation system.

## Considerations that Shape Committee Activities

The Committee's activities are influenced by (and in turn influence) many factors.

### *Planning & Economics*

- Urban regions are national economic drivers and inter-modal freight transportation hubs.
- The state of urban transportation, as expressed by congestion, traffic circulation, parking, mobility, accessibility, air quality, greenhouse gas emissions, sustainable development, capacity needs, and state of infrastructure repair.
- Integrating freight into the urban and regional transportation and land use planning and priority-setting processes.
- Anticipated market conditions, customer expectations and demands for the transportation of freight and services that shape economic development opportunities, and how these compete with or complement urban land use and environmental policies.
- Freight industry conditions, including the economics of freight transportation, labor supply and skills, and commercial viability in a competitive environment.
- Freight industry conditions in the context of extraordinary conditions, or a combination of these conditions (i.e., global pandemics, climate change, transformative technologies).
- Commercial usage of infrastructure, including efficient truck route planning, improving the first/last mile access and city logistics, repurposing of underutilized facilities, and minimizing infiltration through residential communities and other sensitive areas.
- Availability of data and analytical tools to predict, plan and monitor urban freight activity, commodity flows, and the factors that influence freight demand.
- America's role as a trading nation, vis-à-vis structural economic changes in other nations (e.g., China, India, Russia, and Brazil)

### *Policy*

- Complete streets, allowing for the shared use of all road users safely and efficiently (with special attention to facilitating truck loading/unloading and mitigating conflicts between trucks and non-motorized modes).
- Funding for urban freight infrastructure, including traditional public sources, private sources, and alternate delivery (such as public-private partnerships [P3]).
- Pricing of urban freight transportation, including prices impacting energy, tolls, parking and time-of-day facility access.
- Methods of engaging urban freight stakeholders, including freight forums, task forces, and the like.
- Changes in local and state policies that influence local economic activities and local delivery practices. For example, a new local ordinance that incentivizes alternative fuel truck use, local land use restrictions against goods movement facility modernization or expansion, or local workforce development initiatives to capitalize on emerging employment opportunities in the urban delivery sector.
- Impacts of national trade policies on goods movement activities at the local level, and the ability of local and state entities to respond to rapidly increasing or decreasing demand to minimize the impacts to the transportation system and the local economy.

### *Operations*

- State of repair, capacity and resiliency of critical freight transportation links.
- Institutional ability to enforce existing regulations and to anticipate / respond to changes in the factors that impact urban freight.
- Technologies that optimize the operations, safety, performance, emissions and energy usage of urban freight transportation (e.g., growing use of e-purchases, alternative fuel trucks, expansion and contraction of distribution centers, use of longer-combination vehicles, Blockchain, Internet of Things, automated vehicles, 3D printing and drone delivery).
- Global supply chain changes (e.g., shifts towards near-shoring due to changing transportation, foreign labor and fuel costs; shipping domestic oil by rail).
- Security needs amid new foreign and domestic challenges.



These factors may also be read as issues or as opportunities (and often as both). Many of these factors impact more than one area of Planning & Economics, Policy and Operations. In the prior list, they are listed where the impact is most significant.

On a related note, the committee also maintains an *Urban Freight Bibliography Resource* available here: <https://urbanfreight.tti.tamu.edu/resources/>.

### **Committee Future Outlook and Goals**

The Committee aims to introduce innovations and promote good practices in policies, plans, procedures and actions that address the aforementioned factors and influences from the perspective of urban freight transportation. To achieve this, the Committee has adopted five key goals, with its corresponding actions, for the future:

1. *Identify problems and opportunities:*  
Identify and define relevant concerns, opportunities, and objectives in urban freight planning, policy, and operations and develop research problem statements to address these areas.
2. *Promote best practices:*  
Promote practice-ready research for planning, policy, and operational issues in urban freight transportation while seeking funds for such efforts.
3. *Engage stakeholders:*  
Seek ways to foster direct and active relationships between public and private stakeholders serving urban communities in order to develop better methods and policies for integrating freight into urban communities.
4. *Educate planners, elected officials, and young professionals:*  
Support professional development for those interested in urban freight transportation.
5. *Diversify collaborations:*  
Develop and diversify committee membership and relationships that ensure committee composition and connections reflect expertise from academic, private and public sectors across the U.S. and internationally, and meet TRB's diversity goals.

The Committee plan below identifies specific milestones to achieve these goals.

### **Specific Milestones over the Next Three Years**

#### **2020-2023**

The Committee will maintain a number of ongoing activities and responsibilities, including:

- Reviewing submitted technical papers.
- Organizing annual meeting sessions and workshops.
- Investigating ways to further promote the annual meeting call for papers.
- Conducting regular Committee teleconferences to keep momentum on activities and making decisions between formal meetings.
- Disseminating, via e-mail and LinkedIn, information on upcoming events that have urban freight content to the mailing list of Committee members and friends.
- Encouraging participation of Committee members and friends in upcoming freight conferences, webinars, etc. that are sponsored by other TRB committees or by other organizations (e.g., International Urban Freight Conference and VREF Urban Freight Conference).

In addition to these ongoing activities, the following special objectives are identified for the upcoming three (3) years:

#### **2020-2021 (Year 1)**

- Complete 2020-2023 Triennial Strategic Plan.
- Make preparations for committee rotation in 2021 (33% of membership rotates) incorporating TRB diversity goals.
- Recognize, disseminate and implement innovative research.
- Maintain a non-formalized subcommittee structure in the key areas of Research, Communications, and Committee Chair Activities (see page 10).
- Conduct workshop at annual meeting to assess state-of-the-art and state-of-the-practice in urban freight transportation, identify industry research needs and develop research problem statements.
- Promote the submission of high-quality papers to TRB in the subject area of urban freight transportation.
- Promote the development of quality problem statements that are directed for funding and promote new research.
- Undertake special outreach efforts with private-sector freight stakeholders (e.g., develop list of case studies of successful urban freight strategies, develop guidelines for effective and secure sharing of urban freight data).
- Undertake special outreach efforts with the international community (e.g., develop list of case studies of successful urban freight strategies, conference co-sponsorship, etc.).

#### **2021-2022 (Year 2)**

- Complete committee rotation (33% of membership rotates) incorporating TRB diversity goals.
- Recognize, disseminate and implement innovative research.
- Install Vice Chair in preparation for 2023 chair rotation.
- Conduct workshop at annual meeting to assess state-of-the-art and state-of-the-practice in urban freight transportation, identify industry research needs and develop research problem statements.
- Promote the submission of high-quality papers to TRB in the subject area of urban freight transportation.
- Promote the development of quality problem statements that are directed for funding and promote new research.
- Undertake special outreach efforts with private-sector freight stakeholders (e.g., develop list of case studies of successful urban freight strategies, develop guidelines for effective and secure sharing of urban freight data).
- Undertake special outreach efforts with the international community (e.g., develop list of case studies of successful urban freight strategies, conference co-sponsorship, etc.).

#### **2022-2023 (Year 3)**

- Recognize, disseminate and implement innovative research.
- Conduct workshop at annual meeting to assess state-of-the-art and state-of-the-practice in urban freight transportation, identify industry research needs and develop research problem statements.
- Promote the submission of high-quality papers to TRB in the subject area of urban freight transportation.
- Promote the development of quality problem statements that are directed for funding and promote new research.
- Undertake special outreach efforts with private-sector freight stakeholders (e.g., develop list of case studies of successful urban freight strategies, develop guidelines for effective and secure sharing of urban freight data).
- Undertake special outreach efforts with the international community (e.g., develop list of case studies of successful urban freight strategies, conference co-sponsorship, etc.).
- Begin TSP update for 2023-2026.



## Targets for Years Four to Seven

### 2023-2027

Over the longer term, the committee will seek to build upon its strengths (in particular, the commitment of its members) and to continue to work collaboratively with other TRB standing committees and other partners. The committee will endeavor to fulfill all TRB committee requirements (even as these may change), revisit the Triennial Strategic Plan, and undertake special efforts to close gaps, address weaknesses, and make improvements where necessary.

## Appendix A – Committee Composition (as of April 2020)

### Committee Leadership

Chair	Bill Eisele
Secretary	Erica Wygonik
TRB Staff	Scott Babcock
Communications Coordinator	Fatemeh Ranaeifar
Membership Coordinator	Akiko Yamagami
Recognition Coordinator	Linsey Callaghan
Research Coordinator	Ivan Sanchez-Diaz
Resource Coordinator	Miguel Jaller
Session Coordinator	Peter Plumeau and Gabriela Giron
Emeritus Members	Arun Chatterjee and Joe Bryan

### Committee website

<https://urbanfreight.tti.tamu.edu/>

### Membership racial diversity and gender

The reported composition of the committee as of January 2020 is shown below. This report includes Young Members (currently four members designated, with five members under the age 35) and Emeritus Members (currently two members) with a total membership of 36.

White	24	67%
Asian or Pacific Islander	5	14%
Hispanic	4	11%
Black or African American	3	8%
Unknown	0	0%

Male	25	69%
Female	11	31%

### Geographic distribution of membership

North East US	11	31%
South East US	3	8%
Central US	4	11%
North West US	1	3%
South West US	9	25%
International	8	22%
<b>Total</b>	<b>36</b>	<b>100%</b>

### Professional affiliation distribution of membership

Academia	13	36%
Contractor / Consultant	10	28%
Local or Regional Government	6	17%
Research Institution	1	3%
State Highway / Transportation Department	4	11%
U.S. DOT	2	6%
<b>Total</b>	<b>36</b>	<b>100%</b>

## Appendix B – Connecting Tasks to Leadership Structure

All TRB committees have a Committee Research Coordinator and a Committee Communications Coordinator. The near-term and long-term milestones listed in this TSP generally fall in the areas of Research, Communications, and Committee Chair. Per the 2020-2023 goals, the Committee will maintain a non-formalized subcommittee structure organized as follows to satisfy Committee tasks:

### Research (*Committee Research Coordinator*)

- Perform annual meeting paper reviews (*Paper Review Coordinator*).
- Track committee performance measures related to papers, problem statements, funding, etc. (*Committee Research Coordinator*).
- Update and disseminate the Committee's *Urban Freight Resource Guide* to the TRB community at large (*Resource Coordinator*).
- Develop problem statements and obtain support (*Statement Coordinators and Committee Chair*).

### Communications (Outreach) (*Committee Communications Coordinator*)

- Maintain a Committee website (*Committee Chair and Web Coordinator*).
- Maintain social media presence (LinkedIn, consider Facebook, Twitter) (*Media Coordinator*).

### Committee Chair

- Providing overall committee leadership and direction to the committee.
- Facilitate committee activities by working closely with all coordinators.
  - Ensure appropriate membership to tackle committee goals and activities (*Membership Coordinator*).
  - Periodically update Committee membership to maintain balanced representation by geography, gender, race, ethnicity and organizational affiliation (*Membership Coordinator*).
  - Recognize members and AT025 friends (*Recognition Coordinator*).
  - Oversee annual meeting and mid-year meeting planning by working closely with *Session Coordinator*.
- Facilitate committee process to develop problem statements.
  - Coordinate with partners (e.g., FHWA, Volpe, others) to develop TRB annual meeting Sunday morning workshop (traditionally with focus on research needs identification).
  - Coordinate with *Problem Statement Coordinators* to ensure timely statement identification, ranking of ideas, solicitation of leaders and team members and to seek state DOT and AASHTO endorsement of NCHRP problem statements
- Engaging stakeholders interested in urban freight transportation.
  - Developing/maintaining relationships with private-sector and public-sector practitioners.
  - Undertaking special outreach efforts with the international community (conference co-sponsorship, etc.).
  - Engaging other freight group committee chairs and freight group chair on coordination activities.
  - Engaging the membership to be involved in committee activities and moving committee objectives forward.
  - Identifying potential TRB Webinars related to urban freight in cooperation with the *Session Coordinator*.
- Providing TRB staff with required committee information when requested.
- Approving/circulating meeting notes developed by the *Committee Secretary*.
- Circulating announcements and opportunities to committee members and friends (*Communications Coordinator*).

## Appendix C – Recent History (2018-2020)

- Developed and maintained successful research partnerships with AASHTO, FHWA (and associated Volpe staff), VREF Urban Freight Conference, and I-NUF METRANS Freight Conference.
- Received 2020 TRBTAC Blue Ribbon Award (Research category) (2020) (see photo at right).
- Received 2020 TRB TAC Honorable Mention Blue Ribbon Award (Leadership category) (2019).
- Increased paper submittals to annual meeting from 22 (2016) to 50 (2020) – a 127% increase.
- Developed (or assisted on) several problem statements that were eventually funded (at approximately \$2 million total, not including FY21 submittals):
  - Long-range Planning for Urban Freight Transportation (FY21) (Submitted)
  - Freight Trip Consolidation: Documenting the State of the Practice in the U.S. in the Digital Age (FY21) (Submitted)
  - Human-scaled Urban Delivery: A Synthesis of Research and Practice (FY21) (Submitted)
  - Integrating Freight Movement into 21<sup>st</sup> Century Communities' Land Use Design and Transportation Systems (\$500,000) (FY20)
  - Understanding and Using New Data Sources to Address Urban and Metropolitan Freight Challenges (NCFRP 49, \$600,000) (FY17)
  - Metropolitan Freight Transportation: Implementing Effective Strategies (NCHRP 08-106, \$375,000) (FY17) (FY17)
  - Design and Access Management Guidelines for Truck Routes (\$500,000) (FY17)
- Completed committee rotation (2018).
- Annual Meeting
  - Conducted three committee meetings at the annual meeting with special guests:
    - Mr. Tom Madrecki, UPS
    - Ms. Marygrace Parker, I-95 Corridor Coalition
    - Ms. Tamiko Burnell, FHWA
    - Ms. Caroline Kieltyka, AASHTO
    - Mr. JP Ducasse, USPS
  - Helped organize and co-sponsor podium sessions, poster sessions, and workshops
- Midyear Meeting
  - Conducted three committee meetings
  - Helped organize and co-sponsor sessions
- Conducted quarterly committee meetings via conference call.
- Completed reviews of all assigned papers and made recommendations.
- Prepared *Urban Freight Resource Guide*, a compendium of practical and research documents that cover a wide range of topics. The focus is on US resources, but also includes several international references. First edition released in February 2014; most recent edition in January 2020.
- Upgraded and transferred website from Google to TTI server.
- Grew friends list to nearly 400.
- Recognized outstanding member contributions and Best Papers awards.
- Invited non-traditional TRB participants to Annual Meetings.
- Updated Call for Papers.



*Bill Eisele accepts the 2020 TAC Blue Ribbon on behalf of committee: January 12, 2020  
Photo courtesy of Lea Camarda, TRB*

## Appendix D – Collaborations

### TRB Committees

The Committee seeks to maintain close formal and informal relationships with several other TRB committees. In many cases, Committee members are also members of other standing TRB technical committees and this affords an excellent opportunity to interject urban freight considerations into other areas of transportation research. These include, but are not limited to (note: these are committee names and number before the 2020 reorganization):

- A0010 International Cooperation
- ABC10 Strategic Management
- ABE30 Transportation Issues in Major Cities
- ABG20 Transportation Education and Training
- ABG50 Transportation History
- ABJ20 Statewide Data and Information Systems
- ABJ40 Travel Survey Methods
- ABJ90 Freight Transportation Data
- ABR20 Logistics of Disaster Response and Business Continuity
- ADA20 Metropolitan Policy, Planning and Processes
- ADB30 Transportation Network Modeling
- ADC20 Transportation and Air Quality
- ADD50 Environmental Justice in Transportation
- AFD60 Flexible Pavement Design
- AHB40 Highway Capacity and Quality of Service
- AHB60 Highway/Rail Grade Crossings
- AHB70 Access Management
- ANF20 Bicycle Transportation
- AT010 Freight Transportation Economics and Regulation
- AT015 Freight Transportation Planning and Logistics
- AT020 International Trade and Transportation
- AT030 Agricultural Transportation
- AT045 Intermodal Freight Transport
- AT050 Intermodal Freight Terminal Design and Operations
- AW030 Marine Environment

### Other Organizations

The Committee is formalizing ties with several organizations separate from other standing TRB committees and other traditional partners. These external organizations yield broad influence in transportation planning and offer additional opportunities for integrating freight with other modes of transportation in urban settings. These organizations include:

- American Association of State Highway and Transportation Officials
- American Planning Association
- American Trucking Associations
- Association for Commuter Transportation
- Association of Metropolitan Planning Organizations
- Federal Highway Administration
- Institute of Transportation Engineers
- National Association of City Transportation Officials
- National Association of Regional Councils
- Transportation for America
- Urban Land Institute
- Volvo Research and Educational Foundations

## Appendix E – List of Committee Members (as of April 2020)

Johanna Amaya-Leal, Iowa State University  
Giorgio Ambrosino, MemEx  
Jeff Ang-Olson, ICF  
Robyn Bancroft, OKI Regional Council of Governments  
Michael Browne, University of Gothenburg  
Joe Bryan, WSP, Emeritus Member  
Tamiko Burnell, FHWA  
Linsey Callaghan, Rhode Island DOT, Recognition Coordinator  
Arun Chatterjee, University of Tennessee, Knoxville, Emeritus Member  
Tom Cherrett, University of Southampton  
Eulois Cleckley, City of Denver  
Alison Conway, City College of New York  
Joseph Dack, HDR  
Bill Eisele, Texas A&M Transportation Institute, Chair  
Gabriela Giron, University of Washington, TRB sessions co-chair  
Miguel Jaller, University of California, Davis, Resources Coordinator  
Katie Kirk, Cambridge Systematics  
Yatman Kwan, Caltrans  
Chip Millard, FHWA  
Tom Murtha, Chicago Metropolitan Agency for Planning  
Tom O'Brien, California State University, Long Beach  
Maria Oscott, Lindolmen Science Park AB  
Seckin Ozkul, Univ. of South Florida, Problem Statements Co-coordinator  
Peter Plumeau, EBP US, Inc., TRB sessions co-chair  
Fateme Ranaiefar, Fehr & Peers, Committee Communications Coordinator (CCC)  
Matt Roorda, University of Toronto  
Mike Ruane, Delaware Valley Regional Planning Commission  
Vivek Sakhrani, CPCS  
Ivan Sanchez-Diaz, Chalmers University of Technology, Committee Research Coordinator (CRC)  
Daniel Studdard, Atlanta Regional Commission  
John Tompkins, Minnesota DOT, Problem Statements Co-coordinator  
Ron van Duin, Delft University of Technology  
Casey Wells, Texas DOT  
Erica Wygonik, RSG, Committee Secretary  
Akiko Yamagami, LA County Metro Transport. Authority, Membership Coordinator  
Hugo Yoshizaki, University of Sao Paulo