



Urban Freight Transportation Committee (AT025) Meeting 2022 TRB Annual Meeting

Bill Eisele, Ph.D., P.E., PMP
Committee Chair
Senior Research Engineer & Mobility Division Head
Texas A&M Transportation Institute

*Marriott Marquis, Capitol/Congress (M4)
Washington, D.C.
Monday, January 10, 2022*



Meeting Agenda

- Welcome, member roll call and agenda review
- TRB Staff Report (Scott Babcock)
- TRB Freight Group Update (Rick Bornhorst)
- Urban Freight Transportation Committee Overview and Highlights
- TRB Annual Meeting Sessions
- Old Business
- Recognitions and Member Updates
- Announcements & Discussion



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Urban Freight Transportation Committee (AT025) Scope

The committee is concerned with the study and research of urban freight transportation topics and issues, including urban transportation system demand and economic relationships, right-of-way issues, pick-up and delivery needs, terminal transportation needs, institutional challenges, and new technology, with an emphasis on providing support to practitioners.

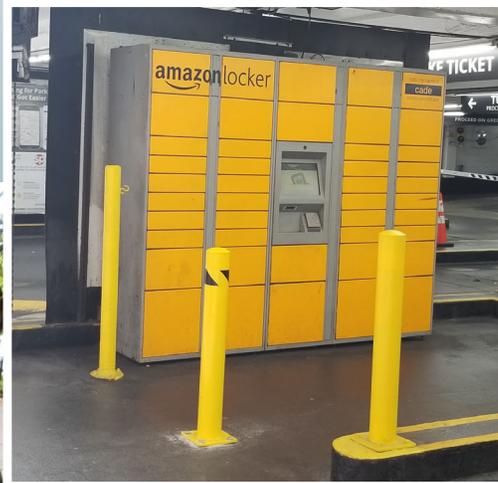


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Urban Freight Movement – *what an exciting time in history!*

- Attention to supply chains and logistics
- Strain on the multi-modal transportation system (world-wide)
- Bottlenecks in the system
- Need for transportation projects, programs and policies to mitigate the impacts

Private-sector Demands/Solutions

- Carriers (and shippers) must make their delivery windows!
- “Next-day delivery” or “same day delivery” means must get product closer to customers before you click “add to cart” and “purchase now”
 - Warehouse and/or distribution centers closer to customers
- More trucks to “make their turns”

Other Challenges (to Truck Deliveries)

- Increased demand & not enough trucks
- Semiconductor shortage (silicon chips)
 - Car and truck production stalled/stopped (driver-assistance systems, smartphones, home appliances, etc.)
- Perennial driver shortage (driver retention issue)
 - Worse now (pandemic)
 - Transportation costs are going up (generally, more dollars chasing fewer goods)
- The battle for the curb....



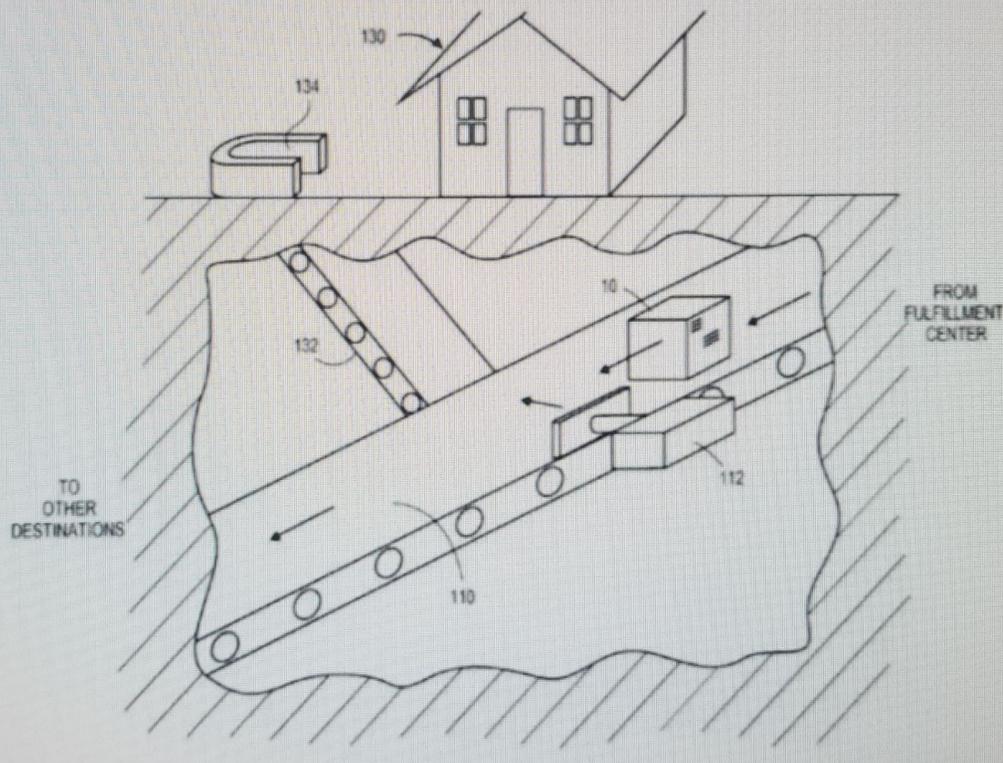
Curb Management – the battle for the curb

- “Curbside management exists at the nexus of transportation, land use, and economic development” *Institute of Transportation Engineers, Curbside Management Practitioners Guide*
- Curb has tremendously-high value in urban environments....and lots of competition

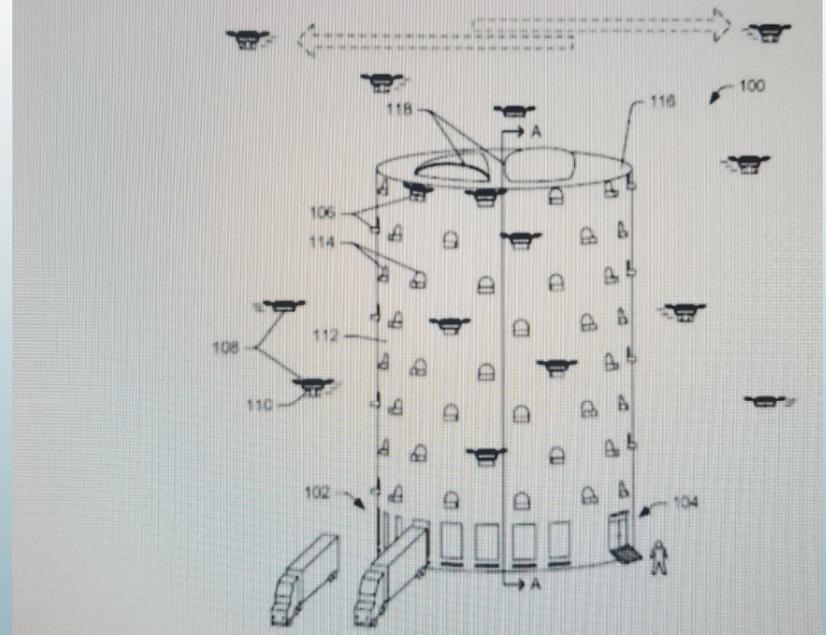


Amazon Patents – a glimpse into the future?

An underground warehouse



A hive of drones

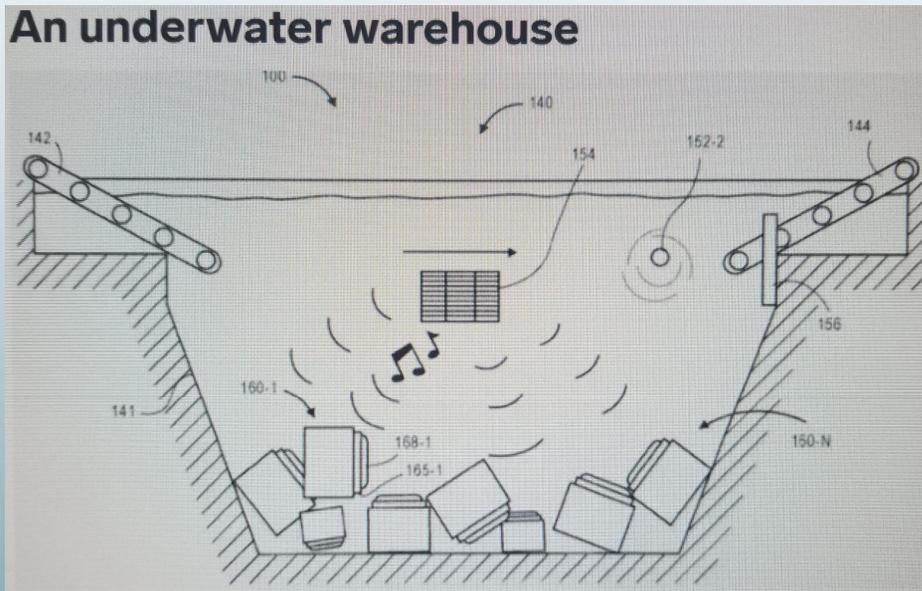


“Multi-level fulfillment center for unmanned aerial vehicles”

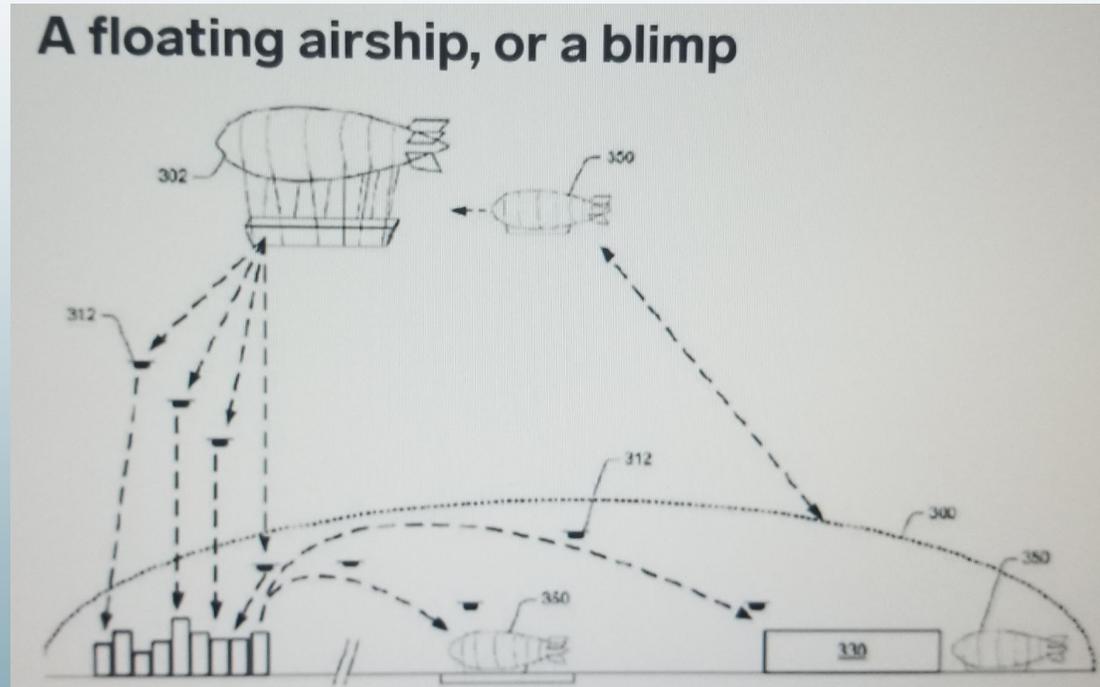
Source: www.businessinsider.com

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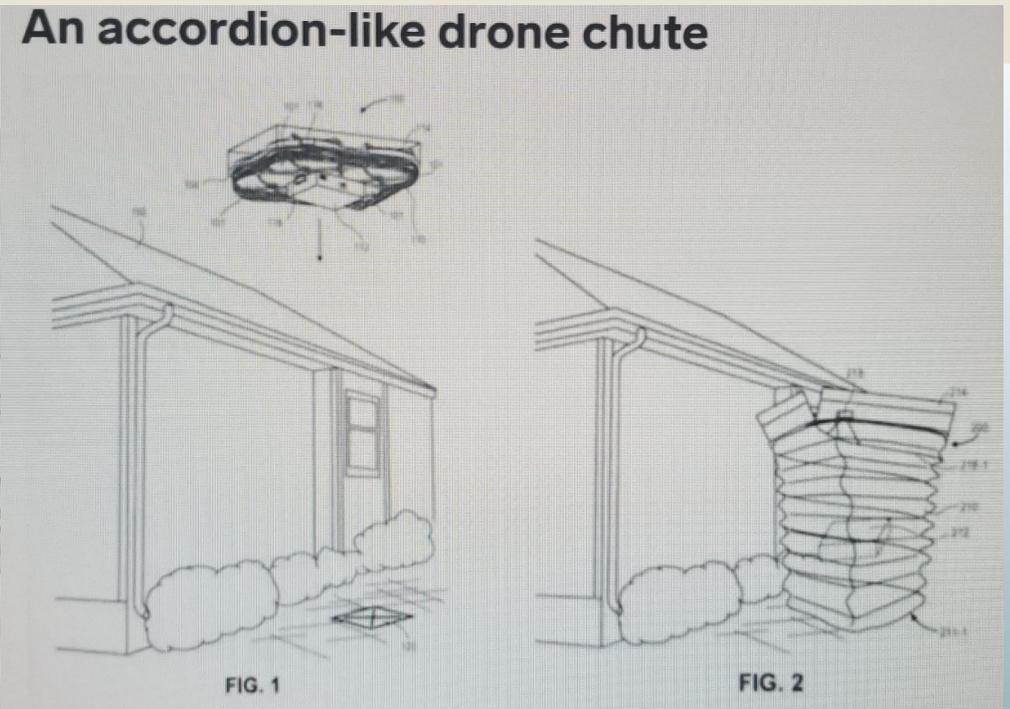
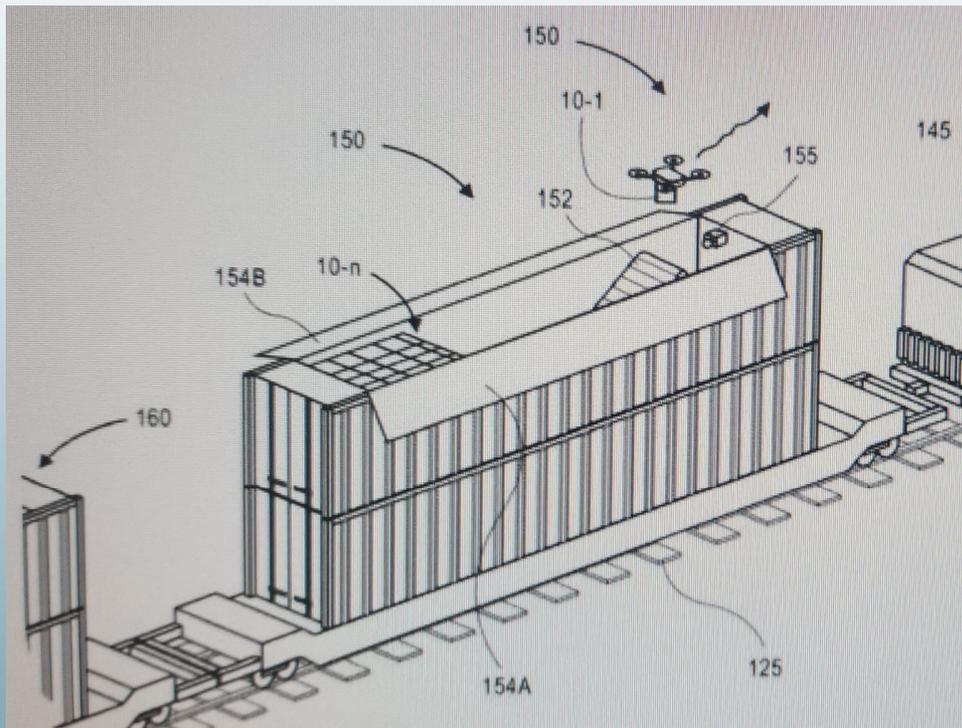


A floating airship, or a blimp



Source: www.businessinsider.com

Amazon Patents – a glimpse into the future?



Source: www.businessinsider.com

Technological Solutions are ~~Coming~~ Here

- Delivery robots
- Autonomous vehicles – beginning in the freight delivery, long-haul being tested (showing promise)
- “Space-age” deliveries
- What about technology xx?...
- ...if it reliably and safely helps the private-sector hit delivery windows, it will be in the running.

Several Stakeholders Involved

- Several stakeholders involved (and responsible) as we (all) tackle these transport problems
 - Public agencies (federal, state and local)
 - Private companies (businesses, shippers, carriers, technology, etc.)
 - Non-profits
 - Customers (and general public)
 - The AT025 committee!!
 -and anyone else who eats or buys anything (be responsible consumers)





Reflecting on Our Recent Successes

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TRB Blue Ribbon Awards

“Recognize exemplary best practice in standing committee activities and the volunteer efforts associated with those activities.”

- 1. Research: Identifying and Advancing Ideas for Research (2020, AT025)**
- 2. Renewal: Attracting and Preparing the Next Generation of Professionals and Scholars in TRB (2022, AT025)**
- 3. Implementation: Moving Research Ideas Into Transportation Practice**
- 4. Leadership: Contributing to Improving the Management and Operation of TRB Committees (Honorable Mention 2019, AT025)**
- 5. Diversity: Increasing the Diversity of Committee Membership (2022, AT020)**



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Our 2022 Award Application

- *Renewal: Attracting and Preparing the Next Generation of Professionals and Scholars in TRB*
- Input and support from a diverse team for the application:
 - Bill Eisele (Texas A&M Transportation Institute)
 - DJ Mason (Volpe)
 - Alireza Ermagun (Mississippi State University)
 - Gaby Giron (Portland Bureau of Transportation)
 - Seckin Ozkul (University of South Florida)
 - Casey Wells (Texas DOT)
 - Joe Bryan (WSP)
 - Vicky Nelson (TTI Graphics Department)
 - Rick Bornhorst (Factor, Inc., Freight Group Chair support)



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Our Contribution

- *RENEWAL: Implementing a successful model for attracting and preparing the next generation of industry professionals and scholars in TRB by culturing a collaborative and supportive learning environment, providing active involvement in critical committee activities, and providing mentoring and networking opportunities for leadership roles.*



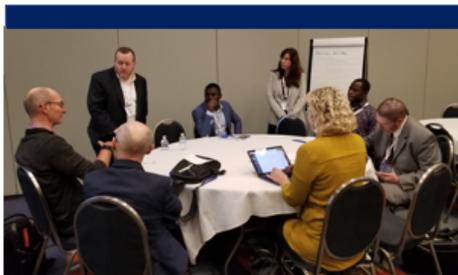
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RENEWAL: AT025 Model

Attracting and preparing the next generation of professionals and scholars in TRB through...

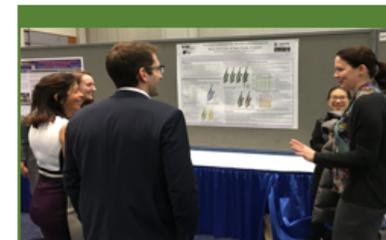
COMMUNITY
collaborative, supportive,
diverse and international
learning group



ACTIVE INVOLVEMENT
in critical committee
activities



**Model for
Successful Renewal**
AT025



MENTORING
and networking
for leadership
roles

Photo credits: Cable Risdon, TRB (top)
Bill Eisele, TTI (bottom two)

Opportunities/Activities Highlighted in Our Application

- Leadership opportunities with mentoring
 - Sunday-morning workshop
 - Co-problem statement coordinators
 - Experience on teams to develop problem statements
 - Membership coordinator, recognition coordinator
 - Paper review assistance (sub-committee)
- One of largest participating committees when Freight/Marine YMC initially implemented mentoring program
- Offering opportunities to volunteers and publicly recognizing young professionals



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Opportunities/Activities Highlighted in Our Application

- Growing community of 500+ friends, many new to the field
- Providing a place to share experiences from the freight industry
- Sampling of quotes



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Other Successes

Partnerships and Collaborators

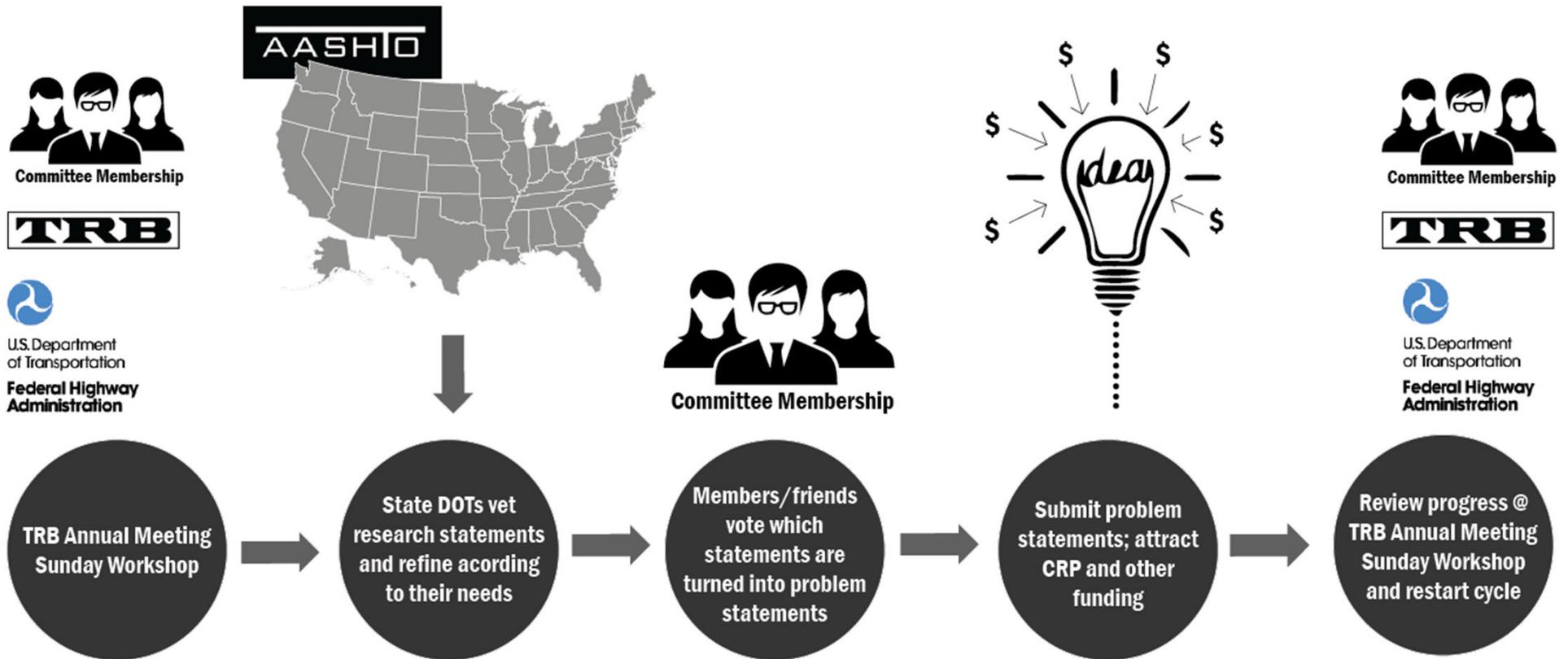
- FHWA / Volpe / AASHTO
- Engaging international partners/forums
- Invited speakers (examples)
 - Industry (UPS, USPS)
 - Agencies (Transportation for America, NACTO)
 - Other committees (Bicycle, Flexible Pavements, etc.)
- International UF Conference / Volvo Research Education Foundation



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Our Research Needs Development Process



Over \$2.5MM in NCHRP funding (and growing)!



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Clear Triennial Strategic Plan (TSP) Goals and Milestones

- 5 TSP Goals
 1. Identify problems and opportunities
 2. Promote best practices
 3. Engage stakeholders
 4. Educate planners, elected officials and young professionals
 5. Diversify collaborations
- Sample Milestones
 - Conducting regular teleconferences (open to all)
 - Track yearly number of papers
 - Track number of problem statements developed (and total \$)
 - Hold breakout sessions to develop problem statements (workshops)



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Members (January 2022)

Friends welcome to join at: MyTRB.org

- Dr. Johanna Amaya
- Mr. Jeff Ang-Olson
- **Dr. Georgia Ayfantopoulou**
- Mr. Scott Babcock
- Ms. Robyn Bancroft
- Mr. Rick Bornhorst
- Mr. Joseph Bryan
- **Mr. Trevor Brydon**
- Ms. Tamiko Burnell
- Ms. Linsey Callaghan
- Dr. Arun Chatterjee
- Dr. Alison Conway
- Mr. Joseph Dack
- Dr. William (Bill) Eisele
- **Dr. Alireza Ermagun**
- **Dr. Miguel Figliozzi**
- **Dr. Roel Gevaers**
- Ms. Gabriela Giron
- **Mr. Brian Hunter**
- Dr. Miguel Jaller
- Ms. Katie Kirk
- **Mr. Matthew Lesniak**
- **Mr. DJ Mason**
- Mr. Tom Murtha
- Dr. Tom O'Brien
- Dr. Maria Oscott
- Dr. Seckin Ozkul
- **Mr. Asheque Rahman**
- Dr. Fatemeh Ranaiefar
- Dr. Matthew Roorda
- Mr. Michael Ruane
- Dr. Vivek Sakhrani
- Dr. Ivan Sanchez-Diaz
- Mr. Daniel Studdard
- **Ms. Julia Thayne**
- Dr. Ron van Duin
- Mr. Casey Wells
- Dr. Erica Wygonik
- Dr. Hugo Yoshizaki
- **Dr. Wenjuan Zhao**



***Bold** = new members April 15, 2021*

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Committee Structure and Leadership

- Freight Systems Group Chair
 - Rick Bornhorst
- TRB Staff Representative
 - Scott Babcock
- Chair
 - Bill Eisele
- Vice Chair
 - Erica Wygonik
- Secretary
 - Seckin Ozkul
- Committee Research Coordinator
 - Ivan Sanchez-Diaz
- Committee Communications Coordinator
 - Fatemeh Ranaiefar
- Emeritus Members
 - Arun Chatterjee & Joe Bryan
- Session Coordinators
 - Ivan Sanchez-Diaz & Gabriela Giron
- Workshop Coordinators
 - DJ Mason & Tamiko Burnell
- Problem Statement Coordinators
 - Alireza Ermagun & Casey Wells
- Resources Coordinator
 - Miguel Jaller
- Recognition Coordinator
 - Linsey Callaghan
- Membership Coordinator
 - Vacant (until near rotation)



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TRB Freight Systems Group (AT000)

Mr. Rick Bornhorst, Chair

- Freight Transportation Economics and Regulation (AT010)
- Freight Transportation Planning and Logistics (AT015)
- International Trade and Transportation (AT020)
- **Urban Freight Transportation (AT025)**
- Agriculture and Food Transportation (AT030)
- Transportation of Hazardous Materials (AT040)
- Intermodal Freight Transport (AT045)
- Trucking Industry Research (AT060)



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Welcome!

The Transportation Research Board's Urban Freight Transportation Committee (AT025) is concerned with the study and research of urban freight transportation topics and issues, including urban transportation system demand and economic relationships, right-of-way issues, pick-up and delivery needs, terminal transportation needs, institutional challenges, and new technology, with an emphasis on providing support to practitioners.



I hope you are staying safe and healthy wherever you may be!

Planning is well underway for the 101st TRB Annual Meeting! Stay up to date on our planned activities, and learn how you can assist, by reviewing the meeting notes from our latest committee meeting, available on our [Meetings](#) page. Please note that our committee has been awarded the 2022 Blue Ribbon Award in the Renewal Category (Attracting and Preparing the Next Generation of Professionals and Scholars in TRB)! This marks the 3rd Blue Ribbon Award won by the committee since 2007 (2009, Honorable Mention in Leadership Category; 2020, Research Category; 2022, Renewal Category).

Help us to continue celebrating the TRB Centennial! In celebration of the TRB Centennial, the Urban Freight Transportation Committee developed a Centennial Paper entitled *Urban Freight Transportation Committee Centennial Paper: Embracing the Future with Insights from the Past*. As the name implies, the paper provides historical context on urban freight transportation, reflects on current challenges, offers glimpses of the future and provides a history of our committee. If you are looking for an interesting read and primer on the topic of urban freight transportation, I encourage you to read and enjoy it!

Remember, becoming a friend of our committee is as simple as going to www.mytrb.org, creating an account and clicking on our committee to become a friend. You will then receive my direct emails alerting you of our latest TRB Urban Freight Transportation Committee news!

Thanks, and have a great day!

Bill Eisele

Chair, TRB Urban Freight Transportation Committee



(Typical) Key TRB Dates: 2022

- January 2022: TRB Annual Meeting
- ~February: NCHRP synthesis topics due
- Used to be March 15, now year-round: TRB webinar suggestion forms due
- Summer: Mid-year meeting, TBD
- ~May 1: Urban Freight “Call for Papers”
- ~June 15: Preliminary sessions and workshops for Annual Meeting due
- August 1: Deadline for submission of papers by authors
- September 15: Paper reviews by individual reviewers due
- October 1: All paper presentation decisions and Annual Meeting session details due
- ~November 1: NCHRP problem statements due
- January 2023: TRB Annual Meeting



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Recognitions!

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Incoming Committee Chair

- Dr. Erica Wygonik, Ph.D., P.E., Vice President, Northeast Region, Wall Consultant Group
- Current Vice Chair, previous Secretary, Committee Research Coordinator, paper review coordinator and more!
- Term officially begins April 15, 2022



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Certificates of Commendation

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Research Paper Awards

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Award for the Best Research Paper

- **Modeling Optimal Drone Courier Fleet Size and Sustainability Tradeoffs**
 - Yuval Hadas, Bar-Ilan University
 - Miguel Figliozzi, Portland State University



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Award for the Best Applied Research Paper

- **Modeling Impacts of Off-peak Delivery in the Greater Toronto and Hamilton Area**
 - Tufayel Chowdhury, University of Toronto
 - James Vaughan, University of Toronto
 - Marc Saleh, University of Toronto
 - Kianoush Mousavi, University of Toronto
 - Marianne Hatzopoulou, University of Toronto
 - Matthew Roorda, University of Toronto



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Hall of Fame - Selection Criteria

- Current (or recently rotated) member, with at least 6 years on the committee
- Demonstrated exceptional commitment and service to the committee with their overall body of work, as evidenced by:
 - long-term contributions,
 - a previous award form the committee for service,
 - a paper award, or
 - other noteworthy contributions.
- Up to 2 individuals selected per year
- Special exceptions at the discretion of the committee for specific individuals that merit inclusion (i.e., HOF criteria were not in place during time of service/rotation, etc.)



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2022 Hall of Fame Inductee:

Dr. Michael Browne

Professor, Department of Business Administration
University of Gothenburg, Sweden



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2022 Hall of Fame Inductee:

Ms. Akiko Yamagami

Manager, Transportation Planning, Goods Movement
Los Angeles County Metropolitan Transportation Authority



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Announcements & Discussion

Members and Friends

- Other Relevant 2022 Annual Meeting sessions or workshops
- Other TRB committee meetings
- Noteworthy accomplishments, such as reports and studies, or project implementation
- Innovations in urban freight movement
- Upcoming conferences
-then a photograph of the members



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