

TRIENNIAL STRATEGIC PLAN (TSP)

Evaluation Period: February 1, 2014 to January 31, 2017

PART 1: Committee Name and Scope

Committee Code *	AT020
Committee Name *	International Trade and Transportation Committee
- Date(s) reviewed	
- Change, if proposed***	No changes proposed
- No. of official members approving change/total number of members **	NA
Committee Scope *	This committee will be concerned with research, management, and regional, national or international policy issues associated with international trade and transportation (inter-country movements and their domestic connections); trends and market forces in trade and international transportation; technological, economic, financial, institutional, or managerial innovations; and barriers to international trade in transportation goods and sciences.
- Date(s) reviewed	
- Change, if proposed ***	No changes proposed
- No. of official members approving change/total number of members **	NA

* Show current, as it currently appears in the [TRB Online Directory](#)

** Includes Chair, Standing Committee Members, Emeritus Members, and Young Members

*** Show proposed, or Not Applicable

PART 2: Committee History**2.1**

Year	2014	2015	2016	2017
Number of Members in Attendance at Annual Meeting		25	14	11
Number of Visitors in Attendance at Annual Meeting			19	19
Number of Papers Reviewed		11	15	21
Total Number in Attendance at Mid-Year Meeting	8	11	N/A	

2.2

Sessions and workshops sponsored/cosponsored at the Mid-Year meeting, including name of co-sponsoring committee(s) if applicable (by year):

NOTE: Sessions and workshops sponsored/cosponsored at the Annual Meeting are listed in attachment A. **List** below all sessions and workshops sponsored/cosponsored at Mid-Year meeting, including name of co-sponsoring committee(s) if applicable (by year).

Annual Meeting Activities	
<u>2017</u>	
Session Number & Name	Number of Podium Sessions: 2 Number of Poster Sessions: 1 Workshops: 0
Session 813 (Lectern)	Current Research in International Trade
Session 408 (Lectern)	Relationship of Trade, the Economy, and Transportation Within the United States
Session 755 (Poster)	Research in International Trade and Transportation
<u>2016</u>	
Session Number & Name	Number of Podium Sessions: 3 Number of Poster Sessions: 1 Workshops: 0
Session 236 (Lectern)	Current Research on International Trade and Transportation
Session 291 (Lectern)	Solutions and Obstacles to Revitalizing Great Lakes Goods Transportation
Session 368 (Lectern)	The Opening of the Expanded Panama Canal
Session 456 (Poster)	Research in International Trade and Transportation
<u>2015</u>	
Session Number & Name	Number of Podium Sessions: 3 Number of Poster Sessions: 1 Workshops: 0
Session 291 (Lectern)	Logistical Innovations at Land and Sea Ports of Entry
Session 706 (Paper)	Current Issues in International Ocean Shipping
Session 822 (Lectern)	China's World Trade Perspective
Session 456 (Poster)	Contemporary Issues in International Trade and Transportation
<u>2014</u>	
Session Number & Name	Number of Podium Sessions: 5 Number of Poster Sessions: 1 Workshops: 1
Workshop 127 Workshop 182	One Hundred Years of the Panama Canal: Legacy and Future
Workshop 181	Harmonization of CO ² Calculation for Freight Transport: Progress Report
Session 232 (Paper)	Recent Research on International Trade and Transportation
Session 281 (Lectern)	Evolving North American Ports of Entry: Innovation on the 20 th Anniversary of the Free Trade Agreement
Session 593 (Lectern)	Part 3: Road Map to Significant Reduction of Freight Related Energy Consumption and Emissions
Session 626 (Poster)	Current Issues in International Trade and Transportation
Session 799 (Lectern)	Climate Change Mitigation and Global Transportation: How Far Can Technologies Take Us?

2.3

Provide title(s) and presenter(s) for informal presentations made at Annual Meeting and Mid-Year Committee meetings:

Annual Meeting

Oscar Bazán, Panama Canal Expansion

Mid-Year Meeting 2016

Christopher Clement, An Overview of USDOT's Engagement with Asia

2.4

Provide titles of new research need statements (RNS) posted in TRB's RNS database (by year):

NOTE: Attachment B shows all statements currently posted in TRB's RNS database.

The volunteer effort required from committee members to prepare research needs statement is not inconsequential and so the committee's leadership has been awaiting a stronger commitment from TRB's administration to give them greater consideration when selecting projects for the National Cooperative Research Programs. Nonetheless, the current goal of the committee is to develop one or more new research need statements over the next three years that will result in funding for at least one research study that addresses international trade and transportation issues.

2.5

Provide title(s) of RNS submitted for funding consideration:

NOTE: If funded, include research project title/number and name of funding organization(s).

2.6

Provide titles of synthesis topics submitted (by year):

NOTE: **List** any synthesis topic(s) funded in a research program.

2.7

Membership Make-up: Please see Attachment C provided by TRB for summary details.

NOTE: **Comment** on demographics, balance or lack of balance of membership.

Provide an action plan to address any deficiencies. See attachment C for summary details.

As of January 2017, AT020 consisted of 29 members, represented by Dr. Michael Bomba who served as the Committee Chair. The Vice-Chair of AT020 was Mr. Juan Villa. The incoming committee chair for the new term starting in 2017 will be Mr. Juan Villa and the new Vice-Chair will be Ms. Maria Boilé. The committee's membership by type (as of January 2017) includes 18 regular members, one state department of transportation member, six international members, and three young members. AT020's roster also has one Emeritus Member, former AT020 Chair Dr. Mary Brooks. The gender breakdown of the committee membership is 19 male members (66 percent) and 10 female members (34 percent). Member affiliation was spread between the public sector (12 members), the private sector (5 members), and academic faculty, researchers, and students (10 members). One member was an affiliate of advocacy organization and another was unaffiliated with any group. Statistics on AT020's Friends are not currently available.

MEMBERSHIP TYPES	
Regular Member	18
State Department of Transportation Member	1
International Member	6
Young Member	3
GENDER	
Male	18
Female	10
DIVERSITY	
White	15
Black	0
Hispanic	4
Asian or Pacific Islander	1
American Indian	0
Two or More Races	1
Unknown	7
MEMBER AFFILIATION	
Public-Sector	10
Private-Sector	5
Academia	7
Advocacy	5
Unaffiliated	1

TRB's committee rules allow for a total of 25 regular members, 2 state department of transportation members, 5 international members, and 4 young members (younger than 35 years old) for a total committee membership of 36 persons. Under the current roster, AT020 could add six Regular Members, one state department of transportation Member, and one Young Member. The committee membership's next rotation will occur in April 2017. There are no current restrictions on the number of Emeritus members who can serve on a committee, but TRB highly recommends reserving this honor for past members that have made significant and lasting contributions to the committee and to the Transportation Research Board.

2.8

Provide any of the following:

- Any special publications, such as TR circular, and conference proceedings
- Sponsored or co-sponsored specialty conferences, symposia, workshops, webinars or other joint efforts with other TRB committees, other TRB entities, or other organizations (i.e. AASHTO, FHWA, State DOTs, ASTM, ASCE, and/or other modes of transportation)

PART 3: Committee Future Outlook Statement and Committee Three-Year Plan

Committee Future Outlook Statement

Each TRB standing committee is required to produce a triennial strategic plan (TSP) every three years. The purpose of the TSP is to provide a seven-year outlook on critical issues relevant to the committee's focus. As a committee, AT020 anticipates that there will be significant changes to global trade and transportation practices and trends over the next decade. As a result, its members seek to better understand the following urgent and long-term issues:

RISKS TO GLOBAL TRADE

Despite the many benefits that trade has produced for the U.S. economy, President Trump withdrew from the Trans Pacific Partnership (TPP) agreement, and he signed Executive Order 13796 requiring a comprehensive performance reviews of all bilateral, plurilateral, and multilateral trade agreements and investment agreements to which the U.S. is a party. The North American Free Trade Agreement (NAFTA) will be renegotiated during 2017 and early 2018. The members of AT020 believe these trade policy changes are important, particularly to define with sound research the potential impacts and future consequences for freight transportation infrastructure investments and operations. AT020 will discuss and research impacts of changes to the global trade agreement environment, so that local, state, and national freight transportation planners can better understand how changes will affect the nation's freight transportation system into the future.

NORTH AMERICAN TRADE AND TRANSPORTATION

During 2016, Canada and Mexico were the United States' second and third largest trading partners, respectively. North American trade is dependent upon adequate transportation infrastructure and efficient inspections at the ports-of-entry to physically move traded goods. Yet, in practice, crossing a binational border in North America can be an expensive and time-consuming process. Border delays can create problems within industry supply chains and cause companies to become less competitive in the international market. Following and studying these issues has been a long-standing focus of AT020 and it will continue to be over the planning horizon. Other emerging issues that have renewed the committee's focus on border freight planning, include: increasing wages in emerging economies; the prospect of an altered NAFTA; advances in Mexico's manufacturing industries; increasingly partnering in the production of manufactured goods that rely upon multinational supply chains for the movement of intermediate inputs among NAFTA partners and the distribution of finished products to markets; the boom in oil, natural gas, clean coal and shale energy production in the U.S., the expanded Canadian energy production; and the opening of Mexico's energy industry to foreign investment. In May 2017, the Office of the U.S. Trade Representative communicated to Congress the intention to begin negotiations with Canada and Mexico regarding modernization of NAFTA.

IMPACTS FROM CLIMATE CHANGE

Due to the overall lack of attention by political leaders and the general population, climate change driven by the anthropogenic release of greenhouse gasses is occurring at an almost unabated pace. Recently, a significant milestone of 400 parts per million (ppm) of carbon dioxide (CO²) in the atmosphere was measured. This level of CO² is unprecedented in 3 million year and is closely tied to human activity. Many consequences of climate change have the potential to affect freight transportation infrastructure and operations. Future sea level change, for example, could inundate port infrastructure and connecting landside transportation links. Droughts, caused by climate change, could impact agricultural production and the viability of industry in certain regions. In addition to the potential consequences of climate change on international trade, AT020 is also interested in promoting activities that identify potential solutions for stabilizing or reducing CO² emissions related to international freight transportation and mitigating their impacts on industry and the general population.

OPENING OF THE PANAMA CANAL EXPANSION AND TRENDS IN THE MARITIME SHIPPING INDUSTRY

The expanded Panama Canal began its operations in mid-2016. Since the original project announcement, this widely watched event has been a source of intense speculation, from the maritime shipping industry to local economic development officials in the United States. Whether the expected demand at Atlantic and Gulf ports materializes or predicted load centers emerge in the Caribbean, it will be an important issue to

follow for the next few years. Other important topics in maritime trade that should be monitored and studied include: growing ship sizes and their impact on congestion and delays at ports whose infrastructure is geared toward ships with lower capacity; overcapacity in the containership industry and its impact on freight rates and services; consolidation of the container-shipping industry that may result in increased freight rates and reduced services; the movement of LNG and other energy-related cargoes; and compliance with the new International Maritime Organization requirements (i.e., the amended Safety of Life at Sea (SOLAS) convention) for providing verified container weight to carriers.

OTHER KEY ISSUES

In addition to the topics discussed above, other questions or areas of interest to AT020 members include:

- The growth in trade compared to economic growth, both globally and in the United States? Desired perspective would include: The World Bank, The International Monetary Fund, major ocean carriers, investment firms, academics, researchers at think tanks, etc.
- What are the fundamental drivers (macroeconomic, demographic, industry, etc.) of container trade growth, globally and in the United States?
- The impacts of sustainability initiatives, particularly consumers actively measuring their carbon footprints to mitigate climate change and choosing to buy 'local' or 'Made-in-USA' products, as a result.
- The impacts of 3D printing and the possibility for further automation in manufacturing and import substitution
- The practice and accuracy of trade forecasts, which are used to direct billions of dollars of investments by ports, railroads, private investors, and federal, state and local governments. What approaches to planning and forecasting should be used or adopted?
- Can investments in U.S. transportation infrastructure lead to improved competitiveness for U.S. exports?
- The growing shift from global (offshoring) manufacturing to regional (nearshoring and reshoring) by the implementation of sophisticated technologies.
- Truly open datasets and analytics platform being developed or already available to better understand or assess some of the issues mentioned above.
- Connected vehicle/autonomous commercial vehicle deployment and infrastructure needs for international trade
- Big Data and implications for international trade and freight transportation planning and infrastructure investments for public agencies

Committee Three-Year Plan

Over the next three years, AT020 has an aggressive plan to: promote research on international trade and transportation issues; develop research need statements that will lead to funded research projects; maintain strong participation in the committee's activities by members and friends; and recruit new members and friends who are highly motivated to accomplish the committee's goals. The committee's work plan for the next three years is outlined in the sections below.

ACTIVITIES

Over the three-year period covered by this plan, the committee will seek to achieve the following two goals, using the strategies outlined below.

Goal 1: *Foster and contribute to research and public policy discussions on the global trade environment and its impact on international and domestic freight transportation trends.*

Strategy 1: Identify critical, cross-cutting issues that affect international trade and transportation.

- Action items:
 - Review TRB's 2013 update of *Critical Issues in Transportation* and develop a summary of critical and cross-cutting issues related to international trade and transportation.
 - Examine other sources of information that may be useful for identifying critical and cross-cutting international trade and transportation issues and develop a summary of the issues

identified.

- Identify the gaps in existing research on critical and cross-cutting issues related to international trade and transportation.
- Develop recommendations for research on critical and cross-cutting issues related to international trade and transportation.

Strategy 2: Encourage, develop, review, and present research on international trade and transportation.

- Action items:

- Develop a *Call for Papers* for the TRB Annual Meeting, based on critical issues related to international trade and transportation and post the *Call for Papers* on the TRB website in early-May of each year.
- Request that International Trade and Transportation Committee members and friends prepare at least one Research Needs Statement annually to be considered for future funding by the National Cooperative Highway Research Program or other cooperative research program.
- Encourage AT020 Committee members and friends to submit papers to be considered for presentation at the TRB annual meeting and for publication in the *Transportation Research Record*.
- Review TRB-assigned international trade and transportation papers submitted for the TRB Annual Meeting and provide results of the review process to TRB staff by October 1st of each year.
- Recommend presentation of peer-reviewed international trade and transportation research papers at the TRB Annual Meeting.
- Recommend publication of highly rated peer-reviewed international trade and transportation research papers in the *Transportation Research Record*.

Strategy 3: Identify mechanisms to encourage international collaboration in international trade and transportation research.

- Action items:

- Explore opportunities for committee members and friends to support and collaborate on research that addresses global trade and transportation issues.
- Continue to recommend appointments for international members on AT020.

Strategy 4: Work with other TRB committees in the Freight Systems Group and the Marine Transportation Group, as well as other TRB committees, to identify common goals and pursue mutual research objectives.

- Action items:

- Identify TRB committees with related interests and appoint formal or informal committee liaisons.
- Collaborate with members of other committees to develop research problem statements and co-sponsor meeting sessions and workshops.

Goal 2: Educate transportation system stakeholders on the value and application of research on international trade and transportation issues.

Strategy 1: Organize international trade and transportation presentations and sessions for the TRB Annual Meeting and the TRB Summer Meeting where appropriate.

- Action items:

- Plan and manage one or more sessions focused on timely and important issue related to international trade and transportation at the TRB Annual Meeting.
- Collaborate with other TRB committees and TRB staff to identify and co-sponsor other sessions of interest to AT020.
- Collaborate with other TRB committees and TRB staff to identify and sponsor or co-sponsor presentations at the TRB summer meeting.
- Identify strategies to broaden the audience at TRB meetings (e.g., distribute invite postcards at Sunday evening receptions, email electronic postcards to committee friends in advance)

Strategy 2: Develop international trade and transportation topics and sessions for specialty conferences hosted by

TRB committees or other organizations.

- Action items:
 - Identify and acknowledge specialty conferences and seminars that may be of interest to AT020 members. When members attend such conferences, invite them to prepare a brief summary of the conference proceedings to post on the committee website.
 - Explore opportunities for collaboration between AT020 and international trade conference sponsors for conference planning and participation, especially when such activities may serve to expand the dissemination of international trade and transportation research and education.
 - Collaborate with other TRB committees and other organizations, as needed, to develop shared research problem statements and plan joint sessions/conferences.

Strategy 3: Use the Internet and other mediums to improve committee communication and collaboration among Members and friends.

- Action items:
 - Develop and maintain a list of AT020 members (including young, state department of transportation, and international members) and a list of committee friends using My TRB. Update the lists as needed, including after the Annual and Mid-Year meetings.
 - Update the International Trade and Transportation Committee website at least twice annually.
 - Create a group for the committee in a professional social media platform and encourage members and friends to participate.

ENCOURAGING PARTICIPATION BY SPECIAL CATEGORY MEMBERS

AT020 is well represented by international members (6 members) and Young Members (3 members). The committee only has one state department of transportation member and could benefit from adding another. The gender breakdown of the committee, while not at parity, is similar to many other TRB committees. Likewise, the member affiliation is not heavily skewed toward any one category (e.g. consultants, academics, etc.). Over the next three years, committee members and friends will be strongly encouraged to identify and recruit other high-quality individuals who would be interested in participating in AT020 as a member or friend.