

Transportation Research Board Transportation and Sustainability Committee (ADD40) 2013-2015 Triennial Strategic Plan (TSP)

I. Future Outlook

Mission Statement and Goals

The mission of the Committee is to advance the understanding of sustainability as it relates to the transportation sector, and to facilitate the development and implementation of research addressing transportation sustainability. The Committee will serve the Transportation Research Board (TRB) to achieve its mission by addressing the following goals:

- Goal 1 - Advance the understanding of sustainability as it relates to the transportation sector
- Goal 2 - Develop a research agenda and promote the funding of research projects that further the goals of sustainability
- Goal 3 - Effectively communicate and coordinate the committee's role and activities with internal and external stakeholders
- Goal 4 - Act as the 'go to' Committee or clearinghouse for TRB on the issue of sustainability

Committee Scope

This Committee describes sustainability as meeting the needs of current and future generations in terms of economic vitality, social equity, and a healthy environment (i.e., the triple bottom line).

The Committee addresses the broad topic of sustainability, and does not focus on individual sustainability-related issues that are covered by other TRB Committees, such as air quality, energy, land development, alternative fuels, and climate change. The Committee views sustainability as an overarching, holistic concept. The Committee addresses the integration of the larger societal goals of the economy, environment, and equity by considering transportation's key role in this endeavor.

Driving Forces and Key Issues

This section identifies emerging and cross-cutting issues over the next seven years that will likely affect the sustainability of the transportation sector.

Topic	Short-term Drivers/Issues: (1-3 years)	Mid to Long-term Drivers/Issues: (4-7 years)
Economy	<ul style="list-style-type: none"> - Prospect of green/sustainable growth/investments as part of economic recovery 	<ul style="list-style-type: none"> - Need to maintain, enhance and reorient existing transportation system based on sustainability (e.g. for climate adaptation) - A lack of sufficient funds to maintain and enhance the existing transportation system - The global and national economic outlook
Climate change	<ul style="list-style-type: none"> - Mainstream climate change strategies and evaluations within the broader planning frameworks 	<ul style="list-style-type: none"> - Need for significant reduction in transportation GHG emissions - Large scale societal adaptation needs - Addressing the impacts of climate change on transportation infrastructure (risk and resilience)
Politics/legislation	<ul style="list-style-type: none"> - Debt spending cuts and/or raised taxes 	<ul style="list-style-type: none"> - Political/legal framework for transportation sustainability strategies, assessment, and implementation - Next Bill after The Federal Surface Transportation Reauthorization (MAP 21)
Global sustainability regime	<ul style="list-style-type: none"> - Role of transportation in coming UN Sustainable Development goals of 2015 	<ul style="list-style-type: none"> - Global frameworks for integrating sustainability in all transportation development - High-level international pressure from the Rio + 20 conference to promote sustainable development
Demographics and human behavior	<ul style="list-style-type: none"> - Growth in travel for tourism, travel, aging population, driving patterns of young persons 	<ul style="list-style-type: none"> - Changes in demographics and community values - Changes in human behavior/travel demands
Social media and new technologies	<ul style="list-style-type: none"> - Emergence of new social media approaches and communication technologies 	<ul style="list-style-type: none"> - Connected vehicles and intelligent roads - The application of new social media approaches and communication technologies.
Decision support	<ul style="list-style-type: none"> - The need for decision-support frameworks/tools/data that are able to capture environmental, social, and economic impacts of transportation projects 	<ul style="list-style-type: none"> - Building a strong evidence base for sustainability strategies, measures, investments and associated decision support tools
Performance measures	<ul style="list-style-type: none"> - The identification and implementation of new performance measures of sustainability and new data sources 	<ul style="list-style-type: none"> - Need for integrated comprehensive performance measurement frameworks and 'Sustainable Transportation Indices' - Identification of transport system performance indicators and evaluation practices that reflect sustainability objectives and their data requirements
Coordination	<ul style="list-style-type: none"> - The increased need of addressing cross-cutting issues with other TRB Committees 	<ul style="list-style-type: none"> - Other non-traditional groups getting more involved with TRB and the topic of sustainability

//. Committee Plan

This section outlines the specific goals and strategies that the Committee will address over the next three years.

Goal 1 - Advance the understanding of sustainability as it relates to the transportation sector

Strategy 1: To reflect the mission of advancing the understanding of sustainability as it relates to the transportation sector, the Committee will develop a clear definition of sustainability and sustainable transportation. This will include the early development of working definitions of sustainability-related terms (e.g., sustainability, livability, social equity, and sustainable development). As part of this strategy, the Committee will elaborate on how each of the drivers identified above can impact the sustainability of the transportation system.

Goal 2 - Develop a research agenda and promote the funding of research projects that further the goals of sustainability

Strategy 2: The Committee will develop a research agenda of key research needs statements of which the highest priority ones will be included in TRB's Research Needs Statements (RNS) database. As appropriate, the Committee will pursue funding sources for the key research needs (through avenues such as the Cooperative Research Programs).

Examples of possible areas of inquiry include:

- the transfer and enhancement of broad sustainability concepts and practices from elsewhere, such as integrated transportation strategies from Europe;
- the development and dissemination of tools and methods for defining and measuring sustainability in a variety of settings and circumstances, including policy and process;
- the identification of specific barriers to sustainability in transportation and strategies for overcoming these barriers;
- responses to changes in economics, technology, and demographics as they affect consumer demands on the transportation system;
- the social consequences of alternative approaches to sustainability;
- understanding sociological issues behind travel choices;
- how to change behavior with respect to sustainability practices (i.e., aspiration vs. behavior);
- how to provide more choice/resilience in creating intermodal/interconnected transportation systems;
- the exploration and identification of improved performance measures (e.g., social capital) as they relate to sustainability in transportation;

- full life-cycle benefit-cost analysis to aid in policy development and decision-making;
- translate the outcomes of high-level international events such as RIO+20.

The Committee will distribute and promote the Research Agenda, Research Needs Statements and Call for Papers throughout TRB and other appropriate venues, especially with a view of getting high priority research needs funded.

In implementing this strategy, the Committee will carry out supporting actions such as soliciting, reviewing, and publishing research and conducting meetings, conferences and symposia to disseminate the outcomes.

Goal 3 - Effectively communicate and coordinate the committee's role and activities with internal and external stakeholders

Strategy 3: The Committee will assist in coordination, communication, and technology transfer within TRB with regards to sustainability. The Committee will incorporate new ways to coordinate and communicate (in conjunction with existing venues such as the committee website and mailing lists) and also leverage the energy and enthusiasm of members and friends. Close coordination with other TRB Committees with sustainability-related missions will encourage a more holistic approach to sustainability by capitalizing on ongoing work of other Committees, and avoiding duplication of effort. The Committee will also reach out and coordinate with non-traditional groups including international agencies to gain knowledge and to engage them into the Committee's activities.

Goal 4 - Act as the 'go to' Committee or clearinghouse for TRB on the issue of sustainability

Strategy 4: By effectively carrying out the above strategies, the Committee will become the “go to” place for other TRB Committees interested in sustainability. The Committee will therefore assist in the coordination, communications, and technology transfer within TRB with regards to sustainability and serve as a ‘clearinghouse’ function for this topic.

Appendix A consists of a draft action plan including specific responsibilities and timelines for implementing these four strategies in support of the committee's goals.

III. Committee History

The Transportation and Sustainability Committee was established by TRB in 2005. It was predated by the Transportation and Sustainability Task Force and the Subcommittee for Sustainable Transportation Indicators.

According to the Annual Report of Committee Activities prepared by TRB staff, the Transportation and Sustainability Committee had the following membership and accomplishments from 2010 to early 2012:

	2010	2011	2012	2013	Total
Membership					
Total members	27	25	30	26	
Young members	2	2	2	3	
International members	6	5	8	4	
Annual Meetings					
Committee met	✓	✓	✓	✓	
Papers reviewed	17	17	20	20	74
Papers recommended for publication	5	5	3	2	15
Paper/conference sessions	2	2	2	3	9
Poster sessions	1	1	0	1	3
Published meetings	2	2	2	2	8
Co-sponsored sessions/meetings	4	7	5	5	21
Workshops		1		1	2
Mid-year Meetings					
Committee met	✓	✓	✓	*	

**Midyear meeting is planned*

The committee has a full membership roster and a robust friends list numbering over 200. Numerous friends have indicated that they would like to become members of the Committee at the next rotation.

Committee meetings at the Annual Meeting have been very well attended, with many enthusiastic new friends attending each year. The Committee has conducted mid-year meetings each year, with fewer attendees than the annual meeting, but with several people participating by telephone.

The Transportation and Sustainability Committee did not have any specialty conferences, circulars, or reports, or research statements over the 2010 -2012 three year period. As discussed above in Section II, the Committee Plan now includes a new focus on the facilitation, development, and distribution of a research agenda. This will include the development of research statements, prioritization of research statements, inclusion of research statements in the TRB RNS database and pursuing funding sources for these statements. The committee is also in the process of planning its first international conference to be held in the fall of 2014 or the spring of 2015.

The Committee now has six active Subcommittees:

- Sustainable Transportation Indicators Subcommittee ADD40 (1)
- Research
- Communication
- Session Planning
- Paper Review
- International

These subcommittees with the exception of the Indicators and International Subcommittees were established during the 2012 Annual meeting. The Indicator Subcommittee has been in existence for several years and the International Subcommittee was established subsequent to the 2013 Annual Meeting. The subcommittee structure has been successful and has resulted in improved coordination to meet Committee goals and obligations, and increased engagement of Committee members.

The Transportation and Sustainability Committee also participates in two joint subcommittees with other TRB committees:

- Climate Change Joint Subcommittee (along with the Transportation Energy Committee, ADC70 and Alternative Fuels Committee, ADC80)
- Health and Transportation Joint Subcommittee (along with Environmental Justice in Transportation Committee, ADD50, Travel Behavior and Values Committee, ADB10, and Urban Data and Information Systems, ABJ30)

Over the past three years, the Committee has also coordinated a program using Committee volunteers to liaise with other Committees carrying out sustainability-related work.

APPENDIX A

ADD40 TSP Action Plan

STRATEGY	ACTIONS	LEAD	SUPPORT	TIMELINE
#1 Advancing understanding of sustainability; develop definition; link to drivers/issues	See above description	Joe Zietsman	Damon Fordham; Todd Litman; Henrik Gudmundsson	October 2013
#2 Develop and promote research agenda	<ul style="list-style-type: none"> - Identify research needs - Prioritize research needs - Include in RNS database - Pursue funding 	Ralph Hall	Tara Ramani	October 2013
#3 Coordination, communication and technology transfer	<ul style="list-style-type: none"> - Maintain website and databases of resources - Coordinate liaison volunteers - Accelerate the Committee through leveraging resources and social networks 	Nidhi Kalra	Donna Day	-Ongoing -Annual
#4 Serve as 'go to' Committee for sustainability for other Committees	(Should result from actions above)	Joe Zietsman	Damon Fordham; April Marchese	
Other Committee actions	<ul style="list-style-type: none"> - Meeting planning - Paper reviews - Session planning - International Coordination 	Joe Zietsman; John MacArthur; Tien-Tien Chan; April Marchese		-Semi-Annual - Annual