

TRB 2019-2024 Strategic Plan

Adopted June 19, 2019

Introduction

As the Transportation Board (TRB) approaches its 100th anniversary, it is both celebrating its storied history and it is looking forward to its future. Part of looking forward for an organization like TRB is the development and adoption of a strategic plan. The following pages provide the TRB Executive Committee's strategic direction for TRB's programs and activities for the period 2019-2024.

The TRB Executive Committee last adopted a strategic plan in June 2014. This plan has served TRB well and has been the basis for a number of initiatives that have positioned TRB soundly for the future. The plan included placing a greater emphasis on strategic issues; broadening participation in TRB; making improvements to TRB's legacy programs and developing new programs; better tracking the impact of TRB's programs and activities; strengthening TRB's long-term financial stability; improving TRB's communications; and providing TRB's staff with the knowledge, resources, and tools needed to serve TRB's stakeholders. The Executive Committee has provided strategic direction and oversight of implementation of the strategies contained in the plan. TRB also developed more detailed strategic plans for marketing and communications, inclusion and diversity, international activities, technical activities, and each of the major cooperative research programs. The previous strategic plan, supplemented by the more detailed plans, served as a starting point for developing a new TRB strategic plan.

TRB Overview

TRB is one of seven program divisions within the National Academies of Sciences, Engineering, and Medicine. The National Academies are private, nonprofit institutions that provide expert advice on some of the most pressing challenges facing the nation and the world. The National Academies' work helps shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine. The fact that TRB is housed within the National Academies enables TRB to take advantage of the expertise of some of the most renowned scientists, engineers, and medical professionals in the world, as well as the experts on the staff of the other six program divisions of the Academies. It also brings with it the obligation to meet the National Academies' standards for objectivity, independence, scientific rigor, and an evidence-basis in all that TRB does. TRB is committed to advancing the state of the practice through sound research, sharing of information on cutting-edge innovation, and rigorous analysis of current policy issues.

Approximately 8,500 volunteers serve on TRB's standing technical committees and task forces, its research panels, its advisory study committees, and the Marine Board. These volunteers are supported by a staff of 146 professionals who are experts in the wide variety of disciplines involved in transportation. The TRB Executive Committee provides strategic direction and oversight for all of TRB's programs and activities. In addition, there are oversight committees for each of TRB's major program areas.

TRB's major functions are research, convening, and advising. Through TRB's cooperative research program, TRB manages over 300 research projects at any given time in the areas of highways, transit, airports, and behavioral traffic safety. TRB publishes approximately 900 peer reviewed research papers per year in its journal the *Transportation Research Record* and articles in several additional publications. TRB maintains the largest transportation research bibliographic database in the world with over 1.2 million records.

The TRB Annual Meeting is held each January in Washington DC and is the largest convening activity of transportation professionals in the world, with over 13,000 attendees and over 800 sessions and workshops. TRB has 220 standing technical committees and task forces that convene to discuss current and future issues and research in almost all topics related to transportation. TRB sponsors or co-sponsors approximately 50 conferences or workshops per year in addition to its annual meeting. TRB delivers over 100 webinars per year on a wide variety of subjects.

TRB conducts a number of consensus studies on a wide variety of policy issues across all modes of transportation following the rigorous procedures of the National Academy of Sciences, Engineering, and Medicine. These studies often contribute to changes in legislation or regulation, and in areas such as investment, public/private policy, acquisition, safety, security, and more. In addition, TRB has several standing committees that provide advice to USDOT modal research programs.

National Research Council Transformation

The National Research Council (NRC) is the operating arm of the National Academies. In 2017, the President of the National Academy of Sciences, who serves as the Chair of the NRC, asked the National Academy of Public Administration (NAPA) to do a program and process review of the NRC. NAPA made a number of recommendations to improve the NRC's programs and processes. At the same time, the Chair of the NRC asked an external committee to review the NRC's communications, and this committee issued a report that made a number of recommendations for changes to the way the NRC communicates with its various audiences. In response to the recommendations from these two reports, the NRC initiated in 2018 a series of initiatives to make improvements in the areas of products and processes, financial management, information technology, human resource management, and

communications. These initiatives have been going on at the same time as the development of the TRB strategic plan and have informed some of the action items contained in this plan. Because the NRC Transformation initiatives will continue after the adoption of this plan, some of the specific actions in the TRB strategic plan may change based on the results of the NRC Transformation initiatives. The Executive Committee felt it was important to go ahead and adopt a new strategic plan at this time, recognizing that some of the actions may change as a result of the NRC Transformation initiatives.

Process for Development of the TRB Strategic Plan

The TRB Executive Committee's Subcommittee on Planning and Policy Review (SPPR) has principal responsibility for development of TRB's strategic plan. At its June 2018 meeting the Executive Committee gave strategic direction to the SPPR to develop a new plan that would use the existing strategic plan as a starting point, but would update the plan based on progress made since adoption of the existing plan, and on changes in circumstances since adoption of the current plan. The new plan was to be informed by the issues that would be contained in the Executive Committee's report *Critical issues in Transportation 2019*, as well as the strategies included in specific strategic plans that had been developed for marketing and communications, inclusion and diversity, international activities, technical activities, and each of the major cooperative research programs. It was also to be informed by the recommendations of the Executive Committee's task forces for transformational technologies, resilience, public health, and new revenues; the NRC Transformation initiatives; the Technical Activities Council Strategic Alignment process; the *Transportation Research Record* external peer review, restructuring, and ongoing strategic assessment; the Cooperative Research Program business process review; and the TRB Centennial Plan. Finally, TRB staff was requested to perform a SWOT (strengths, weaknesses, opportunities, and threats) analysis to help inform the strategic planning effort. The staff's SWOT analysis was completed in fall 2018 and is available on the TRB website.

At its October 2018 meeting the SPPR developed draft vision and mission statements, as well as proposed goals and strategies. These were circulated to all of TRB's oversight committees and TRB staff for comments. Outgoing SPPR Chair Daniel Sperling and incoming SPPR Chair Katie Turnbull gave an update on the strategic plan process and the draft elements of the plan developed to date to the Executive Committee at its January 2019 meeting. Based on comments received, the SPPR made a number of modifications to the draft, including changing the draft strategies to objectives. Working together with staff, the SPPR identified a draft set of action items under each objective at its April 2019 meeting. After receiving additional input on its draft plan from Executive Committee members, the SPPR presented the draft plan to the Executive Committee for adoption at its June 2019 meeting.

Next Steps

Strategic plans are only effective if the goals, objectives, and action items are implemented. The SPPR will work together with oversight committees from each of TRB's program areas and TRB staff to identify how the TRB strategic plan will be implemented. This will be done recognizing that the strategic plan is quite an aggressive plan, containing a very large number of action items, and is being adopted in a resource-constrained and fiscally uncertain environment. USDOT has recently reduced its contribution to TRB's core technical program by \$900,000 per year. The amount of funding for research that will be contained in the statute that reauthorizes the surface transportation program is uncertain at this time. Therefore, it is likely that not all action items listed in the plan will be able to be implemented.

TRB staff will work with the SPPR to identify the highest priorities and a schedule for implementation of the action items, together with appropriate performance measures that will be used to monitor progress. Both the SPPR and Executive Committee will be given regular progress reports on implementation and which items may need to be deferred due to resource constraints.

As recommendations are developed through the NRC Transformation process, there will likely be additions or changes that will need to be made based on what comes out of the NRC-wide initiatives. There will inevitably be additional circumstances that will arise that will require changes in priorities or actions contained in the strategic plan. TRB staff will work together with the SPPR and the Executive Committee to identify appropriate changes. The plan will be a living document that will be adjusted as circumstances warrant over the five-year life of the plan, or modified based on emerging factors during implementation.

The TRB Strategic Plan 2019-2024

TRB's new five-year strategic plan is contained in the following pages. It contains vision and mission statements for TRB, a set of high-level goals, objectives that support the goals, and a series of action items under each objective. It is intended to provide high-level strategic direction from the Executive Committee to all of TRB's programs and committees and to TRB staff.

Vision

TRB is where the nation's leaders and the global transportation community turn for information exchange, research, innovations, and advice on current, emerging, and critical transportation issues to foster a high-performing multimodal transportation system that enhances society.

Mission

Provide leadership in transportation improvements and innovation through trusted, timely, impartial, and evidence-based information exchange, research, and advice regarding all modes of transportation.

Goals

1. Information Exchange. Provide an impartial forum for the sharing of information across all disciplines and modes on current and emerging transportation issues and related research and innovation, including transportation's relationship with social, economic, environmental, and other issues important to society.
2. Research. Create and expand access to knowledge by conducting, sharing, and promoting research on current and future issues in transportation, particularly focused on innovative, implementable practices and technologies.
3. Advice. Provide timely and trusted advice to inform the choices facing decision makers across all modes of transportation.
4. Collaboration. Promote collaboration on transportation research, education, and technology transfer at international, national, regional, state, and local levels; across public and private sectors; and among transportation providers, users, and other stakeholders.
5. Workforce Development. Develop transportation professionals by providing lifelong learning opportunities and by fostering and promoting an environment that continually enhances the diversity, inclusivity, skills, and capacity of the transportation professional community.
6. Communications. Enhance the transportation community's knowledge of TRB activities and their impacts, the nation's leaders' and public's awareness of the contributions of research to transportation's value, and their understanding of the importance of transportation to society.

Objectives and Action Items

1. Address emerging and critical transportation issues in a strategic, forward looking, proactive, and timely manner.
 - a. Pursue appropriate activities in each program area to address the issues contained in *Critical Issues in Transportation 2019*.
 - i. Develop and highlight TRB Annual Meeting sessions related to the critical issues.
 - ii. Pursue sponsorship of conferences/workshops for critical issues.
 - iii. Conduct research projects in critical issues topic areas and disseminate the findings to key stakeholders.
 - iv. Pursue sponsorship of consensus and advisory studies for critical issues.
 - v. Develop webinars that address critical issue topic areas.
 - vi. Develop Executive Committee policy sessions that address critical issue topic areas.
 - b. Align the standing technical committee structure to ensure the most important issues of today and the future are being addressed.
 - c. Identify opportunities for jointly addressing critical issues with other National Research Council program divisions.
 - d. Address critical issues in collaboration with other transportation organizations.
 - e. Refresh the list of critical issues on at least a biennial basis to ensure that TRB is addressing new and evolving issues.
 - f. Identify and pursue opportunities to address key issues of interest to Congress, the Administration, states, and local governments in as timely a manner as possible.
2. Involve a broad and diverse cross section of stakeholders and constituencies in TRB programs and activities.
 - a. Identify best practices and develop primers for chairs of committee, panels, and the Marine Board, and for TRB staff highlighting strategies and resources used to recruit, welcome and actively involve a more diverse committee and panel membership.
 - b. Find new ways for Annual Meeting and specialty conference attendees to engage in a way that creates avenues for everyone to make connections and feel included and welcomed.

- c. Develop guidance materials for committee chairs, annual meeting session organizers, and chairs of conference committees regarding recruitment and inclusion of underrepresented groups in their programs and activities.
 - d. Engage with relevant organizations to increase their awareness of and participation in TRB, and to solicit their assistance in identifying potential committee and panel members.
 - e. Engage with other domestic and international transportation-related organizations to identify opportunities for joint activities that are of mutual benefit to both TRB and the partner organization.
 - f. Partner with underrepresented minority-serving organizations (e.g., COMTO, WTS) on professional development activities and in addressing issues of interest to underrepresented groups.
 - g. Expand TRB's Minority Student Fellows Program and continue to diversify program sponsors.
 - h. Identify target sectors that are currently underrepresented and are important for TRB to have involved in its programs and activities (e.g., new technology companies, auto manufacturers, aviation) and work to engage them in TRB activities.
 - i. Identify and pursue programs, products, activities, and issues of interest to young and emerging transportation professionals.
 - j. Market TRB's information resources, including the Transportation Research Information Services (TRIS) program and other digital resources, to young transportation professionals.
 - k. Actively market TRB to international transportation professionals.
3. Pursue continuous improvements and efficiencies in TRB programs, products, and activities to increase effectiveness, usefulness, and timeliness.
- a. Regularly coordinate with TRB sponsor organizations to ensure that TRB is addressing their priority needs through its programs, products, and activities.
 - b. Complete the Technical Activities Council's strategic realignment of TRB's committees to ensure that the committee structure is aligned with the most important issues for TRB to be addressing.
 - c. Identify and implement ways to streamline and reduce the time required from project selection to completion of contract research administered by TRB.
 - d. Identify and implement new ways to provide and promote the value of TRB advisory studies.

- e. Implement process and product changes that are generated from the National Research Council (NRC) Transformation initiatives.
 - f. Review and make appropriate modifications to TRB business support functions (IT, communications, development, finance, publications) to measure value, increase efficiency, and ensure that TRB is using state-of-the-practice technical and management methods.
 - g. Review and make appropriate modifications to TRB's TRIS program to ensure state-of-the-practice efficiencies are being used.
 - h. Re-engineer the *Transportation Research Record* to enhance the quality of the papers, publish more rapidly, and increase the journal's impact.
 - i. Review and revise conference management processes to improve efficiencies, effectiveness, and financial viability.
 - j. In coordination with NRC Transformation efforts, develop and implement improved project management tools.
 - k. Continue to identify and implement means to improve the quality, timeliness, reach, and impact of TRB publications and communications.
4. Introduce new programs, products, and activities to meet the priorities of TRB sponsors and stakeholders, taking into consideration resource availability.
- a. In conjunction with NRC transformation efforts, identify and implement opportunities for new and improved products and services.
 - b. Identify timely methods to address topical issues of interest to sponsors, including new sponsors.
 - c. Continue to develop digital products that meet sponsor and stakeholder needs.
 - d. Solicit input from sponsors on their needs and ways that TRB might be able to address them, including new ways that are consistent with the National Academies' mission.
 - e. Pursue sponsors and conduct a workshop on innovative research methods. Explore opportunities to use promising methods.
 - f. Pursue new methods for addressing current research needs, particularly in light of how rapidly technology is being developed and deployed, new research methods are being developed, the increased uncertainty about the future, and the increased number of disciplines involved in transportation research.

5. Systematically identify and track the usefulness and impacts of TRB's programs, products, and activities, and adjust them to provide the greatest value for the investments made.
 - a. Develop systematic tools for gathering data on and measuring the impacts of each of TRB's programs, products, and activities, transitioning from primarily anecdotal evidence.
 - i. Using data collected by Sage Publications, measure the usage and impact of the *Transportation Research Record*.
 - ii. Using data collected by the National Academies Press, measure the usage and impact of TRB research reports.
 - iii. Using data collected by the National Academies Press, measure the usage and impact of TRB advisory reports.
 - iv. Collect and report on data collected from TRB sponsors on the impact of TRB reports five years after issuance of the reports.
 - b. Incorporate recommendations and methods from the NRC Transformation initiative on measuring the impact of NRC programs into TRB's impact measurement methods.
 - c. Issue annual reports on the usage and impact of each of TRB's program areas.
 - d. Working with oversight committees for each program area, adjust the program to focus on areas of greatest value and impact for TRB sponsors and stakeholders.
 - e. Develop value propositions for TRB sponsors and affiliates for each of TRB's programs.
6. Use means that are effective in reaching diverse audiences to communicate timely information about TRB's programs, products, and activities, and about transportation issues and policy research.
 - a. Collaborate with other transportation organizations to develop informational materials on the value of transportation to society.
 - i. Conduct research on the most effective means to communicate transportation's value to society.
 - b. Enhance TRB's digital communications capabilities in conjunction with NRC's Transformation efforts in this area.
 - c. Develop communications strategies for studies, reports, and convening activities early in the planning process for each activity.
 - d. Develop a strategic communications plan for TRB's program-wide activities.

- e. Track the effectiveness of TRB communications activities through use of the most appropriate and current analytics capabilities.
 - f. Communicate the value proposition that TRB offers for sponsors and affiliates, including TRB's objective, independent, non-partisan, evidence-based approach to its programs, products, and activities.
 - g. Review TRB marketing materials to ensure they are appropriate for diverse and key audiences and adjust as appropriate.
 - h. Develop communications materials for Congressional staff about TRB's capabilities and value proposition.
 - i. Equip TRB staff and volunteers to be communications ambassadors for TRB's programs, products, and activities.
 - j. Adapt TRB's communications strategies to rapidly changing communications methods.
 - k. Develop a marketing strategy for the TRB Annual Meeting.
 - l. Develop a marketing strategy to target greater awareness of and participation by transportation professionals and organizations from nations other than the United States.
 - m. Develop communications strategies that are appropriate for different generations within the transportation profession.
 - i. Develop communications strategies that specifically are targeted to young professionals and students.
 - n. Develop and implement an ongoing method to disseminate the results of research on critical issues topics to federal, state, and local stakeholders.
 - o. Develop articles on the critical issues, research projects, and policy studies for publications (print, online, video, blogs, etc.) aimed at policymakers, sponsors, and stakeholders.
 - p. Communicate the benefits of standing committee volunteer opportunities to enhance professional development and encourage pathways for diverse groups to become actively engaged and take on leadership roles.
7. While pursuing additional resources, balance TRB's programs, products, and activities with available financial, volunteer, and staff resources to achieve the goals and objectives in this strategic plan.
- a. Annually adjust the amount of activity in each program area to be in balance with the financial support made available to that TRB program area.

- b. Use information developed on the use and impact of TRB's programs, products, and activities to make adjustments that ensure that the greatest value is provided for the resources that are available.
- c. Evaluate TRB's Global Affiliate program and Individual Affiliate program to provide the appropriate balance of benefits to affiliates while increasing revenues to TRB.
- d. Evaluate the package of private sector support opportunities for the TRB Annual Meeting to identify potential improvements for marketing, meeting the needs of companies supporting the meeting, and revenue potential.
- e. Make TRB's conferences and workshops self-supporting through sponsorships, exhibit sales, and registration revenues, including potential pool-fund arrangements.
- f. Identify and pursue additional sponsors, affiliates, and other support opportunities for TRB programs, products, and activities.
- g. Identify additional organizations that are willing to provide matching funds for Cooperative Research Program (CRP) research projects or self-funded TRB consensus studies.
- h. Continually evaluate TRB's programs and activities to ensure that they are being delivered as efficiently and effectively as possible.
- i. Train staff and volunteers to assist in fundraising activities for specific programs and activities.
- j. Expand TRB's programs and activities to address new and future transportation issues as opportunities arise, provided financial and staff resources can be secured.
- k. Identify potential additional TRB professional development offerings, provided that financial and staff resources can be secured for these offerings.