

Technical Activities Division Strategic Alignment

Transportation is changing ... and so is TRB

Briefing for Technical Activities Chairs

January 12, 2020

National Academy of Sciences and TRB



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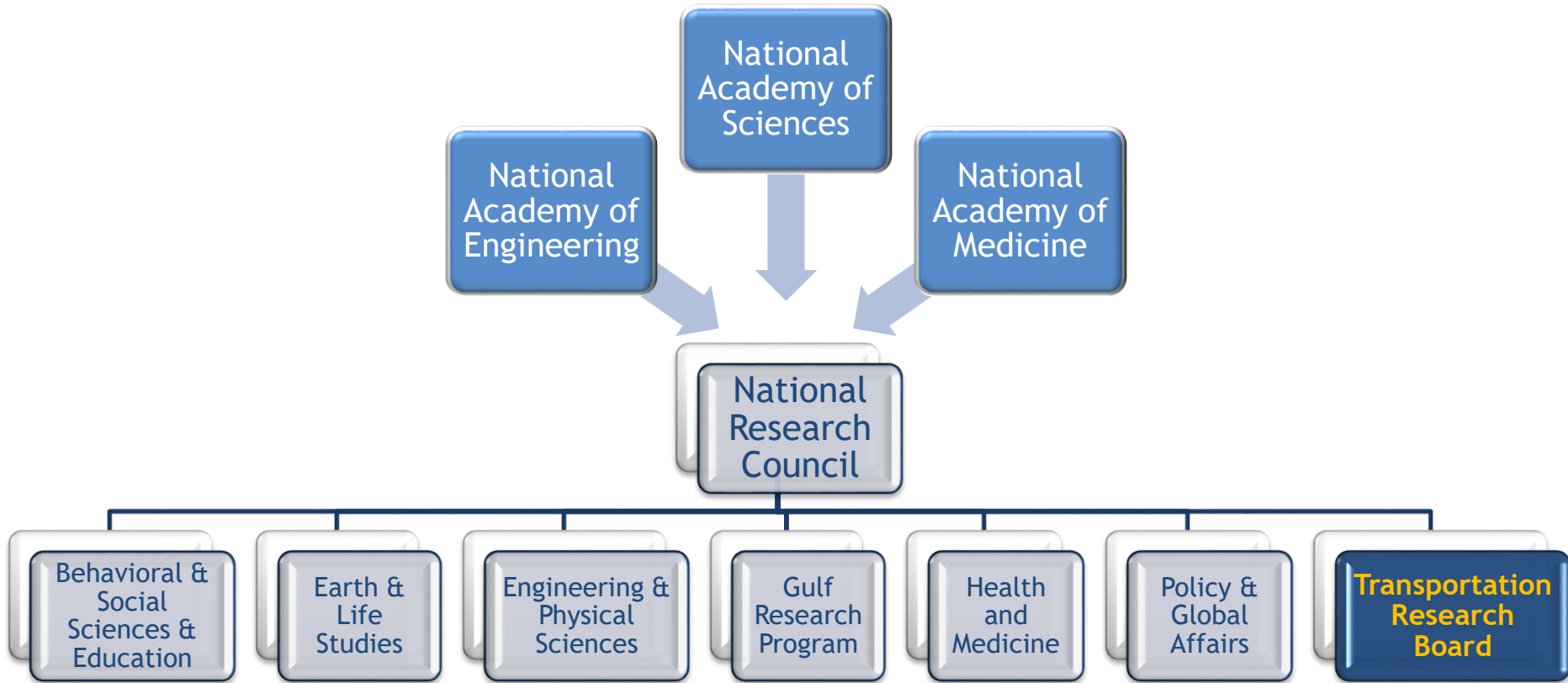
National Academy of Sciences

Advising the Nation
Advancing the Discussion
Connecting New Frontiers



Founded in 1863—private, non-profit—chartered by Pres. Lincoln

NASEM Structure



Technical Activities Standing Committees

Our origin story—our identity

- TRB stands for evidence-based development of knowledge and practice and for transportation innovation in service to the country
- For a century TRB has been serving the country through our volunteers' expertise and our institutional mission, standards and reputation
- TRB began as the National Highway Research Advisory Board in 1920
- Founded to help the country prepare for that era's “transformational technology”—the automobile
- TRB's volunteer committees identified gaps in knowledge and practice that would require research and field testing and guided that research to help fill those gaps
- By the 1970s TRB's mission had become multi-modal, growing over the years to include everything from bus rapid transit to shared mobility and freight data management and much more

On the Cusp of TRB's Second Century

- Once again, transportation is undergoing a period of rapid and transformational—even disruptive—change
- The opportunities and challenges facing transportation are precisely what we are made for, and TRB is prepared to offer:
 - An institutional history and reputation for national service and for independent, balanced approaches to research and innovation that can inform transportation practice and policy
 - A “big tent” in which everyone can come together as equals—government, industry, and university; young people starting their professional journey and the profession’s leading light’s; CEOs and technical experts
 - An environment in which any and all ideas can be proposed, debated, and tested on the basis of their merit
 - A body of dedicated volunteers with experience in every mode of transportation and expertise from a wide array of disciplines, bringing perspectives from across the country and around the world
- To remain healthy and vital, an organization must be able to change as needed to continue to meet its essential mission in new contexts

This is why we are embarking on a strategic alignment

Technical Activities Strategic Alignment

Focus on mission, quality, and impact

Components:

- Review and updating of committee structure
- Improvement of committee processes, activities
- Re-engineering conference processes
- Re-engineering *Transportation Research Record*
- Evaluation of internal staff structure and processes

Today we will focus on committee structure

Objectives of Strategic Alignment

- Ensure that we are able to address critical and emerging transportation issues
 - Leveraging the multimodal, multidisciplinary, and multi-sectoral expertise on our committees
 - Adjusting our processes to be more responsive to the faster pace of change in transportation today
- Attract broad & deep volunteer expertise, including from new disciplines and sectors
- Continue to increase the quality of our products and services by updating systems and using best practices
- Magnify the impact of our work through better communication and dissemination
- Attract financial support from a wider array of sources by demonstrating the value and impact of TAD activities

Committee Restructuring



**Mature
Tree**



Pruning



**Healthier
Tree**

Objectives of Committee Restructuring

- Refresh Technical Activities committees to better identify and deliver transportation innovations to serve the country
- Attract and nurture the next generation of volunteers
- Foster greater collaboration across committees, building on our unique structure of multiple modes, disciplines, and sectors
- Create mechanisms to maintain a sustainable and agile organization well into the future

Key Principle and Corollaries

- TAD Committees exist to identify **critical and emerging issues** affecting transportation and to investigate and communicate **evidence-based approaches** to these issues.
 - They should be focused on transportation research and innovation from generation and dissemination of new knowledge to implementation of solutions. Collectively, our committees should cover the spectrum of research and innovation stages.
 - They are not (merely) “communities of practice.” They should not be mostly members of a single group.
 - They are not (necessarily) mirrors of other transportation organizations, or other external groups, laws, regulations

TRB is uniquely able—and should be expected—to break through existing “silos” if necessary to promote research and innovation.

Process to Date

- 2016: Preliminary work by TAC working groups on ideas for improvements
- 2017: Committee contributions to critical issues
- 2018: Group Executive Boards identify priorities
- 2019:
 - January: TAC decision to go forward with restructuring, initial discussions with Group Boards
 - March: Group, Section, Committee Chair input
 - May: Group and Section chair workshop
 - June TAC meeting: “Woods Hole Structure” produced; Executive Committee support obtained for overall process
 - August-November: chair consultations, sponsor outreach
 - December: final structure decided, documented, announced

New Structure—Groups and Sections

- **Safety and Operations Group**
 - Pedestrians, Bicycles, Human Factors
 - Operations
 - Safety
- **Data, Planning, and Analysis Group**
 - Data and Data Science
 - Transportation Planning and Analysis
- **Policy and Organization Group**
 - Executive Management Issues
 - Legal Resources
- **Highway Infrastructure Group**
 - Bridges and Structures
 - Construction
 - Roadway Design
- Geology and Geotechnical Engineering
- Materials
- Pavements
- Highway Maintenance
- Infrastructure Management and System Preservation
- **Sustainability and Resilience Group**
 - Transportation and Society
 - Transportation Systems Resilience
 - Transportation and Sustainability
- **Public Transportation Group**
- **Rail Group**
- **Freight Systems Group**
- **Aviation Group**
- **Marine Group**

New Structure—Some Highlights

- Design and Construction merged with Preservation and Maintenance to take a life-cycle approach to highway infrastructure, while reducing number of sections and committees to promote more integrated approaches.
- Safety and Operations merged, in part to strengthen an integrated approach to these topics, especially with respect to automated and other technologies.
- Executive Management Section established to address enterprise-wide executive issues—should coordinate with technical committees on application.
- Legal Resources added to POG because of the strong role of legal analysis in executive decision making.

Highlights, continued

- Some committees that were tightly associated with existing laws and regulations have been broadened, merged, or otherwise modified to look beyond the regulations for innovation, while recognizing the current constraints.
- New type of Group: Sustainability and Resilience
 - Not focused on a mode or set of disciplines but on 2 interrelated, large-scale, difficult issues requiring multi-modal and multi-disciplinary approaches
 - New Transportation and Society section in this group to represent the community facet of these issues, as well as the other issues they normally address
 - Expect this group/these sections to model coordination and cooperation across the whole structure as required by the issues they address

Coordinating Councils

- Experimental structure to promote coordinated and integrated approach to issues faced by a major demographic, geographic, or jurisdictional group
 - Tasked to coordinate, not establish separate structures, activities
 - Chair appointed by TRB; remaining members from appropriate committees, sections, or groups (no limit) plus liaisons
 - No more than 5 councils at one time
 - 5-year, renewal term for the council
 - Groups may establish parallel councils
- Councils in new structure:
 - Young Members
 - International
 - City Transportation Issues
 - Rural Transportation Issues

Subcommittees

- Currently ~350, all “unofficial”
 - Split between “administrative” and “topical”
 - Largely invisible to the transportation community
 - Topical subcommittees doing very important work
- Issue: How to provide more visibility to topical subcommittees while retaining informal nature
- Distinguish:
 - Administrative task forces: assist with committee tasks, committees continue to establish and manage them as needed
 - Subcommittees: topical in nature, still informal but make more visible and selectively provide some additional resources (i.e., AM sessions, web presence)
- Many details still to work out:
 - No immediate effect on existing subcommittees
 - New ones for some topics previously in standing committees

Other Facets of Reorganization

- Development of more consistent chair training
- Various mechanisms to support coordination & integration:
 - Coordinating Councils
 - Increased role for Section chairs in coordination & strategic planning
 - Revised Triennial Strategic Planning process, include subcommittee activities, make plans accessible to all chairs
 - New Group combinations, as described earlier
 - New type of Group to address major, interrelated challenges of sustainability and resilience
 - (Expected) staff restructuring to free up staff from administrative tasks to work more with committees and coordinate at the staff level
- Experimental in some ways: let's see what works best

Are the changes complete?

- One goal of this effort is to create a culture in which change can happen more easily and to put processes in place that will support more agile change
- This structure is not “perfect”—no structure will be
 - We will gather input on how this structure is functioning and may make small adjustments in a year or two
 - We will review all committee scopes, activities, membership to ensure that they are aligned with mission and current context; this may lead to additional changes as well
- We will develop procedures for regularly assessing and adjusting committee structure to keep TAD committees fresh through targeted changes, reducing the need to perform periodic comprehensive restructuring.

Next Steps

- Rotations:
 - 2020 rotations for committees not affected structurally will proceed as normal.
 - Committees undergoing a merge will be temporarily permitted to increase in size to accommodate all members of merged committees for the remainder of their current term.
 - Merged committees must return to normal maximum size by the 2022 rotation. **No** exceptions. Use rotations and interim drops.
 - However, for merged committees the maximum will be set at 36 even if the three categories of “incentivized” memberships are not all filled with members belonging to these categories.
 - Nevertheless, data on diversity of committee membership will still be collected and used to judge committee performance.
 - For “sunsetting” committees: the current terms of the members will be honored for Annual Meeting discounts
 - Chairs: individual plans have been worked out for each case

Next Steps, continued

- Early 2020:
 - Retool all relevant IT systems
 - Reassign staff
- April 2020:
 - New structure is officially in place
- Throughout 2020:
 - All committees review scopes, membership, activities
 - Normal process for approving new committees in the structure
 - Work out details of subcommittees and councils
 - Update leadership guide
- January 2021: TRB's 100th Annual Meeting
 - Sessions organized by new committees
 - All new committees meet
- During 2021:
 - Update and streamline strategic planning processes and forms
 - Develop processes for more regular assessment and adjustment

Expected Benefits

- A more agile structure that can change as needed to address evolving issues and needs.
- More coordination and collaboration across the structure to address multi-disciplinary and multi-modal issues.
- A culture more open to new people and ideas, sparking more creativity in the search for innovative solutions.
- Opportunities for volunteers to explore new ideas and connections.
- More visibility for the important work of the committees, which is critical for meeting our mission.
- Making best use of sponsor resources through prioritizing efforts and through regular assessment of committees and activities.

Resources

- TRB has established a website at:
www.TRB.org/NewCommitteeStructure
- You will find links to:
 - The new structure: Committees, Sections, Groups, Coordinating Councils
 - Descriptions of Coordinating Councils and Subcommittees
 - List of topics expected to be covered in committees, councils, or subcommittees
 - Charts relating current and new structures
 - Frequently Asked Questions (FAQs)
 - This powerpoint



Perspectives from TRB's Executive Director, Neil Pedersen

Executive Committee View of Committee Realignment

- Strong support of the realignment from the TRB Executive Committee
- Importance of having the committee structure be in alignment with critical and emerging issues
- Needed to be done within context of constrained resources
- Need for continuing process of evaluation and adjustments to the committee structure
- Thank you for your support!

Inclusion and Diversity

- Importance of diverse thinking and perspectives
- Challenges:
 - Addressing diversity when merged committees go through next rotation
 - # of committees with low percentages of minorities and women
 - Low percentages of underrepresented minorities
 - Diversity among committee chairs
- Thank you for your attention to diversity and for all the great work that you do as chairs!

Most importantly ...

Thank you for your dedication, service, and leadership.

TRB depends on volunteers and volunteer leaders like you to achieve our mission.

If any group of people is well-suited to carry out strategic change, it is TRB's volunteers, who have consistently demonstrated their commitment to innovation and service for 100 years!

Questions?

Comments?