1920 - Advisory Board on Highway Research Established
TRB Today

BRINGING THE TRANSPORTATION COMMUNITY TOGETHER!

- Delivering Policy Analysis & Advice
- Managing Research Programs
- Providing Tools for Researchers & Practitioners
Bringing the Transportation Community Together

- Annual Meeting – 12,000 Attendees
- Conferences and Workshops – 50+ / 5,000+ Participants
- Committees and Panel Meetings – 6,500+ Participants
- Webinars – 25,000+ Participants
- State, University, and Transit Representatives – 250+ Organizations
- Staff Field Visits
TRB Annual Meeting Events

- 12,200 attendees
- 750 workshops & sessions
- 5,000+ presentations
- 500 TRB committee meetings
- 150+ other meetings
- NETWORKING OPPORTUNITIES!
Standing Committees

Your Entry into the TRB Community:

www.MyTRB.org
Standing Committees

WHAT DO THEY DO?

- Constitute communities of interest
- Identify research needs
- Sponsor sessions, conferences, and meetings
- Review and publish papers and reports
- Share information
Standing Committees
WHY GET INVOLVED?

- Professional and personal growth
- Stay current on issues and research
- Expand your networks and contacts
- Share what you learn with others in your organization

Become Part of a Community!
Policy Analysis & Advice
Research Management
Cooperative Research Programs

- Highways
- Transit
- Airports
- Freight
- Hazardous Materials
- Rail
Characteristics of Cooperative Research Programs

- Practitioners select projects
- Emphasis on solving problems; short-term results
- Panels oversee each project
- Consultants, universities conduct research
- 200+ reports each year
Strategic Highway Research Program (SHRP2)

- **Safety**: Making a Significant Improvement in Highway Safety
- **Renewal**: Accelerating the Renewal of America's Highways
- **Reliability**: Providing a Highway System with Reliable Travel Times
- **Capacity**: Providing Highway Capacity in Support of the Nation's Economic, Environmental, and Social Goals
www.TRB.org
TRB NEWS

2015 TRB 94th Annual Meeting and Transportation Research Record Call for Papers

TRB standing committees have issued calls for papers for the TRB 94th Annual Meeting, January 11-15, 2015, in Washington, D.C., and the Transportation Research Record: Journal of the Transportation Research Board (TRR). While papers addressing any relevant aspect of transportation research will be considered, some committees are soliciting...

TRB Webinar: Transportation Asset Management Implementation Tips and Tricks

TRB will conduct a webinar on May 15, 2014, from 12:30pm to 2:00pm ET that will discuss various aspects of Transportation Asset Management (TAM) implementation at five state departments of transportation. Participants must register in advance of the webinar, and there is a fee for non-TRB Sponsor or non-TRB Sustaining Affiliate employees. A...

TRB Webinar: Highlights from the “Tools and Technology Track” of the 10th National Transportation Asset Management Conference

TRB will conduct a webinar on May 19, 2014, from 2:00pm to 3:30pm ET that will cover presentations on data issues, risk analysis tools, and information technology (IT) implementation that will be given at the 10th National Conference on Transportation Asset Management (TAM) in April 2014. Participants must register in advance of the webinar,...

TRB Webinar: Peer to Peer: Detailed Looks at MAP-21 Asset Management Plan Pilot States
Follow TRB on:

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- Google Plus
- Facebook
TRB Young Members Council Goals

• Involvement:
  – Providing opportunities for young professionals to get actively involved with TRB

• Resources:
  – Providing targeted resources geared for young professionals in the form of technical sessions, events, and guides

• Connections:
  – Providing networking opportunities and connecting young professional peers from around the world

• Representation:
  – Serving as young professionals’ liaison to and from TRB leadership and the research community to address issues of importance to young members
www.MyTRB.org

Broaden Your Horizons!
The Challenge of Delivering Large, Complex Transportation Projects

How TRB’s SHRP 2 Program Addressed This Problem
What is SHRP2?

Save lives. Save money. Save time.

- $218 million, federally funded research program to address critical transportation challenges:
  - Making highways safer
  - Fixing deteriorating infrastructure
  - Reducing congestion
- Collaborative effort of AASHTO, FHWA, and TRB
- Aims to advance innovative ways to plan, renew, operate, and improve safety on the Nation's highways
SHRP 2 Focus Areas

- **Capacity**: Systematizing collaborative decision making to achieve better, faster project decisions
- **Safety**: Fielding the largest-ever naturalistic driving study to reduce crashes and save lives through understanding driver behavior
- **Renewal**: Making rapid, innovative construction possible for “ordinary” projects
- **Reliability**: Providing management and technical tools to reduce congestion through operations
1. Projects were often delayed due to key decision makers
   • becoming involved late in the process,
   • not agreeing with decisions made earlier in the process,
   • forcing decisions to be revisited.

2. Failure to agree on the decision making process and criteria (performance measures) to be used resulted in delays and challenges to decisions

3. Alternatives added late in the process due to failure to identify full range of alternatives earlier caused delays

4. The complex planning and project development process is time consuming and affords many opportunities for missteps
5. Conflicts resulting from poor integration of transportation plans with
   • land use plans,
   • environmental plans,
   • economic development plans, and
   • community plans

6. Key segments of the public became involved late in the process, forcing previous decisions to be revisited
7. Conflicting goals between transportation and environmental resource agencies resulted in intractable disagreements and failure to get approvals.

8. The price for failure to work together has been endless:
   - redo loops
   - lawsuits
   - delays
   - cost escalation
Conclusions of Research

1. The transportation planning and project development process as practiced and as defined in federal statutes and regulations is an elaborate and complex process that involves a series of decision points.

2. Many of the key decisions that enable a project to be approved should be made before the NEPA process begins.

3. Collaborative decision-making is a key to success, supported by an effective strategy for enhancing the environment, improving economic vitality, and achieving community goals.

4. Decisions need to be agreed to by key decision makers at each point in the process and not revisited.
Success Factors Identified from Research

1. Collaborate with agency partners and the public
2. Use performance measures and evaluation criteria
3. Structure decision making/use a formal process
4. Integrate transportation decision making with land use and environmental issues
5. Link phases of the transportation decision-making process
6. Manage risks
To create a systematic approach to support practitioners we need to:

- Document the decision points in a process that follows the steps used in successful capacity expansion projects
- Embed methods to integrate transportation, environmental, community, and economic planning into decision points
- Organize information on lessons learned from case studies of successful projects around the decision points in the process
- Make information easily accessible to professionals in the field
The Problem Statement and Research Objectives

• **The Problem:** How to balance competing interests so that decisions on adding transportation capacity can be made in a timely manner and can be sustained.

• **The Research Objectives:** (1) Develop a system-based, transparent, well-defined framework with supporting information systems for consistently reaching collaborative decisions on transportation capacity enhancements and (2) develop a SHRP 2 research strategy for addressing gaps in supporting information systems.
• Created as a framework for collaboration in transportation long range and project planning
• Organizes research on collaborative practices and supports in four phases of decision making
  • Long Range Planning
  • Programming (TIP and STIP)
  • Corridor Planning
  • Environmental Review/Permitting
## The Decision Guide

### Long Range Transportation Planning

<table>
<thead>
<tr>
<th>LRP-1</th>
<th>LRP-2</th>
<th>LRP-3</th>
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### Programming

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<th>PRO-9</th>
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</thead>
<tbody>
<tr>
<td>Approve Revenue Sources</td>
<td>Approve Methodology for Identifying Project Costs and Criteria for Allocating Revenue</td>
<td>Approve Project List drawn from Adopted Plan Scenario</td>
<td>Approve Project Prioritization</td>
<td>Reach Consensus on Draft TIP</td>
<td>Adopt TIP by MPO</td>
<td>Approve TIP by Governor and Incorporate into Draft STIP</td>
<td>Reach Consensus on Draft STIP</td>
<td>Approve STIP with Respect to Conformity and Fiscal Constraint</td>
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### Corridor Planning

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<tbody>
<tr>
<td>Approve Scope of Corridor Planning Process</td>
<td>Approve Problem Statements and Opportunities</td>
<td>Approve Goals for the Corridor</td>
<td>Reach Consensus on Scope of Environmental Review &amp; Analysis</td>
<td>Approve Evaluation Criteria, Methods and Measures</td>
<td>Approve Range of Solutions Sets</td>
<td>Adopt Preferred Solution Set</td>
<td>Approve Evaluation Criteria, Methods &amp; Measures for Prioritization of Projects</td>
<td>Adopt Priorities for Implementation</td>
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### Environmental Review / NEPA Merged with Permitting

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<tbody>
<tr>
<td>Reach Consensus on Scope of Environmental Review</td>
<td>Approve Notice of Intent</td>
<td>Approve Purpose and Need / Reach Consensus on Project Purpose</td>
<td>Reach Consensus on Avoidance and Minimization for the LEDPA</td>
<td>Approve Evaluation Criteria, Methods and Measures</td>
<td>Approve Range of Alternatives</td>
<td>Approve Alternatives to be Carried Forward</td>
<td>Approve Draft EIS with Conceptual Mitigation</td>
<td>Approve Resource Agency Public Notice</td>
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<tr>
<td>Approve Preferred Alternative / LEDPA</td>
<td>Approve Final Jurisdictional Determination</td>
<td>Reach Consensus on Avoidance and Minimization for the LEDPA</td>
<td>Approve Final EIS</td>
<td>Approve the ROD</td>
<td>Render Permit Decision and Approve Avoidance and Minimization</td>
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Dissemination Challenge

Challenge to make this wealth of information accessible to users:

• There are many paths for projects to follow
• Significant benefit from linking the underlying case studies, library of resources, and external sources to specific key decisions
• Opportunity to link other Capacity Program research related to transportation decision making by mapping it to the Decision Guide

Solution was to create beta test version of an interactive, web-based tool

• *Transportation for Communities – Advancing Projects Through Partnerships* (TCAPP)
TCAPP: Tool for Planning and Project Delivery

Freight
Expedited Project Delivery
Economic impacts
Ecological Approach to Mitigation
Community Visioning
Public-Private Partnerships
Greenhouse Gases
Performance Measures

“Decisions that stick”
Better informed collaborative decisions
The beta version, named TCAPP, is being made more user-friendly and has been rebranded and named PlanWorks