

STATE OF TRB
January 2008 Report
(a.k.a. “The Cheat Sheet”)

This document is being provided to the chairs of TRB Groups, Sections, committees and task forces for their information and use in planning committee activities. It is also hoped that this “State of TRB” overview will help to maximize the efficient use of available time during your January meetings. Comments are welcome, and can be addressed to Mark Norman (mnorman@nas.edu) or any TRB staff member. Group and Section Chairs and staff will be provided with any updates to this information at the Group/Section Chairs luncheon on Sunday, January 21st.

1. Items of Special Note to Chairs

A. Requested Action Items

The TRB Technical Activities Council (TAC) and TRB staff request all Chairs to consider the following as part of their preparations for the 2008 Annual Meeting and their activities during 2008:

- Review the items in the newly adopted Technical Activities Action Plan (see below) and include in activities as appropriate
- Review sections of the 2008 Technical Activities Leadership Guide, particularly the updates (see below)
- If you have not done so already, arrange for your committee’s research needs statements to be entered into the TRB Research Needs Statements online database
- Provide feedback to the TRB Globalization Initiative leaders from your committee on how globalization is currently affecting and will increasingly impact your committee's areas of responsibility (see below)

B. Technical Activities Leadership Guide Updated

The 2008 Technical Activities Leadership Guide has been updated and has been provided to all Chairs along with this cheat sheet. Updates from 2007 include:

- Part I: The Transportation Research Board
 - Revised TRB mission statement to reflect updated TRB Strategic Plan adopted in 2007
 - Added descriptions of newest TRB administered cooperative research programs
- Part V. Committees
 - Added responsibility of committees and Chairs to assure that committee’s research needs statements are up to date and entered into TRB Research Needs Statements online database
 - Minor revision to involve Group Chairs earlier in the process for selecting committee Chairs
 - Added responsibility of committees and Chairs to nominate reviewers of articles for *TRNews* if and when requested by TRB staff
 - Final date for recommendations by committee Chair on papers to be published in TRR moved from February 1 to January 25

- Changed eligibility for Young Members. Individuals may serve on a committee as a Young Member up to the age of 35.
- Revised criteria and benefits regarding Emeritus Members. Candidates for Emeritus Member must have been actively involved for at least 12 years on the committee submitting the nomination, and have served in leadership roles.
- Clarified that activities of subcommittees (e.g., sessions, workshops, reports) must be sponsored by parent committee(s)
- Part VIII. Conferences and Workshops
 - Updated rules for exhibits and sponsorships by non-governmental organizations
- Appendix B. Sample Criteria for Evaluating Papers for Awards
 - Replaced the one required standard set of criteria with three “sample” sets of criteria, providing Groups with more flexibility in selecting criteria
- Appendix E. TRB Paper Peer Review Process
 - Updated to be consistent with information now contained in the *Transportation Research Record*
- Appendix K. Cooperative Research Program Calendars
 - Updated calendars for 2008
- Appendix N. Technical Activities Action Plan
 - Added this Action Plan for easy reference by Chairs

C. Technical Activities Council to Address Items at Sunday Meeting

The Technical Activities Council will be meeting on Sunday morning, January 13, 2008 in conjunction with the TRB Annual Meeting. The items expected to be addressed during this meeting are listed below:

- 2009 Annual Meeting Spotlight Theme – Energy & Climate Change
- Implementing Items in Technical Activities Action Plan
 - Group Audits of Scopes of Committees
 - Future of the TRB Annual Meeting
 - Updating and Using the Research Needs Statements Database
 - Establishing Closer Ties with Metropolitan Planning Organizations
 - Increasing the Involvement of the Private Sector in Standing Committees
- Task Force on Railroad Operational Safety: Request to Promote to Standing Committee

Group and Section Chairs and staff will be provided with any additional information generated from the TAC meeting at the Group/Section Chairs luncheon that same day.

D. TRB Globalization Initiative

Global trade continues its rapid pace and is having an increasingly dramatic effect on every sector of the U.S. economy, particularly transportation. Five TRB Groups: Planning and Environment, Freight Systems, Rail, Marine, and Policy and Organization have joined together to direct TRB's and the nation's attention to the impacts of globalization on transportation. The TRB Globalization Initiative leaders are requesting feedback from your committee on how globalization is currently affecting and will increasingly impact your committee's areas of responsibility. As you consider this, please keep in mind that several of the TRB summer meetings this next year will have globalization as their theme. In addition, your members may

wish to attend Session 368, "Globalization and Its Impact on the U.S. Transportation Planning and Policy" on Monday, January 14, 2008 at 3:45-5:30 PM, in the Hilton International West. If you or one of your committee members would like to contribute to the TRB Globalization Initiative please contact Cindy Burbank at burbank@pbworld.com or Joedy Cambridge at jcambridge@nas.edu.

2. TRB Annual Meeting

E. 2008 Annual Meeting Program Reflects Partnerships Theme

More than 65 sessions are included in the “Partnerships for Progress in Transportation” spotlight theme for the Annual Meeting.

Progress towards addressing TRB’s critical issues in transportation will not be possible without joint efforts and collaboration. Resolving issues such as congestion, infrastructure renewal, safety, funding, energy, environment, intellectual capital, security and infrastructure protection, and others will require partnerships among a myriad of players. The 2008 TRB Annual Meeting spotlight theme “Partnerships for Progress in Transportation” will explore past and recent experiences, and the need and potential for partnerships inside and outside of the transportation community and around the world.

The overall program consists of more than 550 sessions, 87 workshops, and 350 committee related meetings. The following table shows how this year’s program compares to previous years.

	2004	2005	2006	2007	2008
# Lectern Sessions	498	470	469	455	453
# Poster Sessions	46	65	88	134	114
# Workshops	62	62	73	79	86

The more than 3,500 presentations are equally divided between paper presentations and invited speaker presentations. The paper presentations are evenly split between lectern and poster sessions.

Papers

Year	2006	2007	2008
Total Number Received	2862	3070	2847
Total Presented	1688 (59%)	1849 (60.2%)	1759 (61.8%)
Papers in Lectern Session	888 (52.6%)	935 (50.5%)	867 (49.3%)
Papers in Poster Session	728 (43.1%)	752 (40.7%)	861 (48.9%)
Papers in Meetings	21 (1.2%)	34 (1.8%)	31 (1.8%)
Papers Otherwise Presented	2 (0.1%)	5 (.2%)	0 (0%)

To avoid the paper submission processing delay problems that occurred at the August 1 deadline in previous years, TRB obtained additional server capacity, changed the process for converting the papers to pdf format from online to offline, and introduced dual submission dates that depended on whether or not the paper was already converted to a pdf format by the author. As a result, no significant paper processing delays were incurred, and all papers were successfully submitted by the final August 1 deadline. More than 90% of papers submitted were already converted by the author to pdf format.

F. 2008 Annual Meeting Introduces Some Big Changes

The 2008 meeting for the first time includes paid-for exhibits along with sponsorships for the overall meeting and selected social events. As of mid December, all of the available exhibit space had been rented by more than 140 organizations. General meeting sponsorships have been purchased in all three categories (two platinum, three gold, and 15 silver), and at least one major social event is being sponsored. The net revenue from exhibits and sponsorships has exceeded our budget targets.

For reasons related to the exhibits, and to help increase the chances that hotel rooms are available to TRB supporters and meeting participants, hotel reservations have been linked to TRB Annual Meeting registrations. Sleeping room requests are being processed through a central housing bureau. As expected, this change in long standing practice generated more registration questions than usual.

G. TAC to Kick-Off Annual Meeting Futures Effort

As part of its recently adopted Action Plan (see below), the Technical Activities Council and staff will be evaluating the above initiatives as part of a strategic look at the future of the TRB Annual Meetings. This effort, to be kicked off as part of the TAC January meeting, will include the following:

- Plan for future Annual Meeting facilities and venues to accommodate the growing size and complexity of the meeting.
- Determine how to accommodate increasing size of Annual Meeting program, including number of papers, presentations, sessions, and meetings
- Address the issue of schedule conflicts involving related topics at the Annual Meeting
- Evaluate the role and impact of exhibits and sponsorships at TRB Annual Meeting

3. Technical Activities Division Adopts Action Plan Based on TRB Strategic Plan

The Technical Activities Council (TAC) has developed and adopted the TRB Technical Activities Division Action Plan. The plan draws from the action items in the updated TRB Strategic Plan, supplemented to reflect input received from the standing committees during the development of the TRB Strategic Plan.

The resulting Action Plan contains more than 40 action items. These have been grouped into the following seven major categories:

1. Strengthen our ability to address critical and cross-cutting issues

2. Identify and take steps to increase the involvement of key constituencies and groups
3. Increase our contributions to identifying needed research, monitoring ongoing research, and sharing research results
4. Optimize the effectiveness and value of the TRB Annual Meeting and conferences
5. Enhance the quality, stature, accessibility and usefulness of our publications
6. Take maximum advantage of new technology tools for communications and information
7. Facilitate the ability of chairs to effectively manage, and volunteers to effectively participate in, committees

The full Action Plan was previously provided to Chairs, and is included as Appendix N in the updated Technical Activities Leadership Guide. TAC has assigned planned timeframes and leaders for each action item. It will be important to coordinate these with implementation of the actions contained in the updated TRB Strategic Plan, as directed by the TRB Executive Committee and the SPPR.

If past experience is any guide, the development of this action plan will be much more than a paper exercise. The 2002 Technical Activities Division Quality Improvement Program generated more than 60 action items. In the past five years, virtually every action item that was generated has been addressed, and the vast majority has been implemented in some form. It is expected that this newest Action Plan will have the same success in helping to guide the direction of the Technical Activities Division in the years to come. TAC will begin tackling a number of Action Plan items at its January 2008 meeting.

4. 2007 Budget Targets Met –Foundation Laid for Future Years

Thanks to much hard work and dedication by TRB staff and volunteers, TRB was able to close the budget gap for core programs during fiscal year 2006/7. We are cautiously optimistic that we may be able to selectively restore some of the services and activities that have been reduced while building up the reserve funds in this triennium budget cycle.

With the vast majority of activities of the Technical Activities Division dependent on core funding, significant time and effort have been devoted over the past 18 months to meet the budget challenges. All of the cost saving and revenue enhancement options presented to the TRB leadership were implemented. Our budget goals for fiscal year 2006/7 were met, albeit with a heavy reliance on spending cuts. Chief among these was not filling much needed TRB staff positions. Fees for TRB meetings and other services were increased to be closer to prevailing market rates. At the same time, a number of programs have been initiated that hopefully will increase our revenue in the future. These include the initiation of an online subscription service for the *Transportation Research Record*, introduction of paid-for exhibits and sponsorships for the TRB Annual Meeting beginning in 2008, and launching the TRB webinar series.

5. Transportation Research Record Back in the Web of Science

Thomson Scientific ISI has agreed to again include the *Transportation Research Record* (TRR) in the organization's Web of Science category effective immediately, and to resume computing the citation impact factor for the TRR beginning with the 2007 series. The lack of a TRR

Thomson Scientific ISI 2006 citation impact factor will be a one-year exception and users can expect to see the TRR citation impact factor again beginning with the 2007 series.

In mid-March, TRB staff learned that Thomson Scientific is now concentrating coverage of conference proceedings series publications in “ISI Proceedings” from 2007 forward. Hundreds of publications were transferred without notice to this Proceedings category, including the TRR. The TRR and other publications would not be included in the Web of Science category, nor would they have a citation impact factor associated with them.

Needless to say, this would have been devastating to the TRR and to the mission of TRB to link the academic and practitioner communities in transportation research. Upon learning of this development, TRB staff contacted the editorial director of Thomson Scientific and explained why the TRR should be considered a scientific journal and not categorized as a conference proceedings. The adverse impacts of such a move on TRB, the TRR, and the transportation academic community were explained. It was agreed that if the publication and paper review process descriptions were revised in the TRR volumes, then Thomson Scientific would consider again including the TRR under the Web of Science publications along with the associated citation impact factor.

The changes were primarily intended to remove any inferences that the presentation of a paper at the TRB Annual Meeting is the driving factor in the decision to publish that paper in the TRR. TRB staff made these changes and incorporated them into the first TRR volumes that were printed in June. In early July, TRB staff met with the Thomson Scientific editorial director and his staff in their Philadelphia offices. At that meeting, Thomson Scientific concurred in these changes and agreed to resume including the TRR on the Web of Science.

6. TRB Webinar Series Launched

In September, TRB launched its webinar series. The inaugural webinar “Cable Barrier Systems: State of the Practice” was based on an NCHRP report. Three webinars had been presented as of early December, averaging 90 sites and about 150 individual participants per webinar. These webinars will bring some of the most popular TRB session topics to those who were not able to attend the original sessions. The webinars will also include presentations by those involved in preparing newly released TRB products and reports. Each webinar is about 90 minutes in length. Future topics are now being selected and scheduled. Access is through registration fees, which are waived for TRB sponsor organizations.

7. New TRB Research Needs Statements Database Opens

The new TRB Transportation Research Needs online database was opened for public use in late September. Approximately 17,000 users have accessed the database since TRB announced it to the public three months ago.

TRB standing committees are responsible for maintaining a collection of research problem statements for the most needed research in their topic area. However, until now there has not been a central place where these can be collected, searched, and shared. TRB’s new Research

Needs Statements (RNS) database provides a shopping list for all those in the transportation research community who fund and conduct transportation research, including TRB's cooperative research programs, federal agencies, state DOTs, university faculty and students, consultants, and others.

More than 700 statements in 31 subject areas have been included in the database as of December 2007. Each statement has been vetted through one or more of 135 TRB standing committees. The collection of research needs statements will be augmented and kept up to date by the TRB standing committees as part of their regular portfolio of activities. In addition, it is expected that the Technical Activities Council, Groups, Sections, and standing committees will use the database as a tool in conducting strategic reviews of transportation research needs in subject their subject areas, including the setting of research priorities and the identification of gaps.

8. Energy Committees Review Generates Approach to Address Cross-Cutting Issues

Methods to address issues that cut across many of the TRB standing committees have long been a challenge facing the Division. During 2007, an effort was initiated to develop a strategic approach to addressing transportation energy and climate change issues. Following up on a recommendation of a study group chaired by Mike Meyer, a Special Task Force (STF) on Energy and Climate Change is being appointed. The STF reports directly to the Technical Activities Council and the TRB Executive Committee. Task force members include representatives from a cross-section of standing committees with a direct interest in energy and climate change, supplemented by other experts. A three-year term is envisioned.

The STF will hold its first meeting in January. During its first year, the STF will develop a strategic plan or road map to help guide the TRB Technical Activities Division in planning activities and involving constituencies relative to energy and climate change. Over its three-year term, the STF will help to coordinate energy and climate change activities across TRB Groups and standing committees, identify joint initiatives, and help to prioritize issues and activities. TAC will evaluate this for application as a more formal approach than we have at present to address critical and cross-cutting issues on a regular basis.

9. TRB Responds to Emeritus Members' Concerns

In July, TRB informed standing committee Emeritus Members that, due to our core budget shortfall, TRB would no longer be able to offer our growing number of Emeritus Members complimentary Annual Meeting registration on an indefinite basis. It was also explained that Emeritus Members would be eligible for the registration fee paid by other standing committee Members beginning with our 2008 Annual Meeting.

We heard from a number of Emeritus Members in response to this letter. Although some expressed understanding and support, others pointed out that paying the Committee Member registration fee (\$300 before November 30, \$475 after) could jeopardize their ability to attend and participate in the Annual Meeting and committee activities. Upon further consideration, a follow-up letter was sent explaining that it was decided to only ask the Emeritus Members the pay the same rates as students (\$105 before November 30, \$120 after) for the upcoming Annual

Meeting. It was also pointed out that TRB will revisit this in future years in relation to TRB's financial situation.

This latest letter generated a very positive response. The consensus comment was that TRB listened to the concerns of our Emeritus Members, and responded accordingly.

10. TRB Programs Update

A. Cooperative Research Programs

The National Cooperative Highway Research Program (NCHRP) published 45 reports during 2007. In addition, work was completed on the development of the Mechanistic-Empirical Pavement Design Guide and Software, representing the largest, sustained continuous effort in the history of the NCHRP. The results of this project will have major impacts for state departments of transportation across the country. The guide and software have been adopted by AASHTO and will be available and maintained through the AASHTOware product line. NCHRP is funded as a voluntary 5.5 percent take down of SP&R funds. Under SAETEA-LU, NCHRP funding was approximately \$36.5 million for fiscal years 2007 and 2008.

The Transit Cooperative Research Program (TCRP) published 27 research reports during 2007. SAFETEA—LU increased authorized funding for the TCRP from \$9.3 million in 2007 to \$9.6 million in 2008, with a further step increase to \$10 million in 2009 expected.

The Airport Cooperative Research Program (ACRP), initiated in late 2005, completed its second year of operation. The ACRP Oversight Committee (AOC), the governing board for the program, met in July to select the FY 2008 research program. Over 90 projects are now in progress covering a wide range of topic areas. An FY 2007 appropriation of \$10 million was provided for the program and an FY 2008 appropriation of \$10 million is pending as of this writing, subject to the aviation reauthorization legislation and related appropriations. During 2007, the ACRP published its first products; 7 ACRP publications were released.

The National Cooperative Freight Research Program (NCFRP) and Hazardous Materials Cooperative Research Program (HMCRP), both initiated in late 2006, completed their first full year of operation. The governing board for each program met in late 2006 to select their first round of research projects. Those projects are now underway. The governing boards met again in late 2007 to select their fiscal year 2008 and 2009 projects. Those projects will be initiated during 2008. Annual funding for the NCFRP and HMCRP is \$2.75 million and \$0.9 million, respectively.

B. Policy Studies Address Key Issues

TRB published significant study reports during 2007 on the metropolitan travel forecasting, the road safety professional workforce, and on options for the ITS standards program. Peer committees also issued letter reports on the R&T programs of FHWA, FRA, and FTA, on the Long Term Pavement Performance (LTPP) program, and on the pavement technology research and deployment programs of FHWA. A major study on the impacts of climate change on transportation was wrapping up as the year comes to a close, with plans for a release of the

results Tuesday morning during the Annual Meeting. The findings and recommendations of the report on metropolitan forecasting, released earlier in 2007, will also be featured at a session Wednesday evening of Annual Meeting.

Projects underway include:

- Relationships among development patterns, VMT, and energy consumption;
- Options to reduce GHGs and energy consumption from transportation;
- Funding options for mega-freight projects;
- Role of transit in emergency evacuations;
- Research priority setting and coordination in highway infrastructure operations and safety;
- Options for halting introduction of non-indigenous species into the Great Lakes by vessels transiting the St. Lawrence Seaway;
- Traffic safety lessons from nations that have a better safety record than the United States; and
- Risk of oil spills from vessels transiting the Aleutian Islands.

Congress requested a number of National Academy/TRB studies in SAFETEA-LU. One project that started late in 2007 will provide a review of a study FHWA will conduct on the implementation of changes to the Section 4(f) process regarding transportation project impacts on historic sites, parks, recreation areas, and wildlife refuges.

C. SHRP-2

During 2007, the SHRP 2 Oversight Committee approved research contracts for 18 new research projects and the 2008 research plans for all four focus areas, which will comprise another dozen projects. Progress in each focus area is briefly described in the following sections. More detailed information about projects is available on the SHRP 2 website.

Safety

Although driving behavior is widely believed to be responsible for most collisions, the effects of roadway design and traffic conditions on driver performance and on the risk of collisions and casualties are largely unknown. SHRP 2 safety research will apply advanced technologies to understand how drivers interact with and adapt to a variety of factors—the vehicle, the traffic, the roadway characteristics, traffic control devices, and the environment—and to assess the changes in collision risk associated with each factor.

Nearly continuous collection of a vast array of data will support a study of the entire driving process, including near-collisions, critical incidents, and traffic conflicts. The goal is to measure crash margin factors to develop surrogate risk estimates for specific traffic maneuvers. The safety research plan field study of driving behavior will gather data with a sophisticated instrumentation package installed in the vehicles of 2,000 to 3,000 volunteer drivers. In addition, a roadside video system will record the movement of all vehicles at a specific site.

Work began in 2007 on the first three projects, and contracts for two additional projects are in negotiation. These five projects will collect and analyze the largest-ever data set for driving behavior. Five other projects are scheduled under the safety research plan.

Renewal

SHRP 2 renewal research aims to develop a systematic approach to renew highways and ensure durable facilities with rapid and minimally disruptive techniques. The task involves identifying and developing materials and methods for design, construction, and inspection that reduce life-cycle costs, extend useful life, improve constructability, and decrease onsite construction times.

The research plan addresses strategies such as prefabrication, modular construction, standardized components, and roll-in technologies for bridges and pavements. Seven projects are underway, and five requests for proposals that were issued in July are in contract negotiations. Three additional projects are anticipated under the research plan.

Reliability

SHRP 2 reliability research addresses the root causes of uncertain travel times by focusing on highway system operations. The reliability of travel time is valued by travelers and shippers and is related to the problem of congestion.

Reliability research projects will identify effective operations strategies; improve the means of integrating operations activities into planning, modeling, and decision making; and aid in the implementation of operations strategies. Three projects are underway, and three others are in contract negotiation. Another six projects are anticipated under the research plan.

Capacity

Capacity research within SHRP 2 focuses on strategies and tools to integrate environmental, economic, and community requirements systematically into the planning and design of new highway capacity. At the core of the research program is a framework for collaborative decision making, aimed at context-sensitive solutions to capacity problems. Supporting the framework are projects that focus on system-based performance measures, the regional economic impact of new highway capacity, reflecting the capacity gains from highway management in the planning process, and assessing the effect of congestion and pricing on highway users' behavior.

Results and insights from the early projects will allow the development of tools that target the most critical barriers to success. Research started on three capacity projects this year, and two others have entered contract negotiation. One additional project is scheduled for 2008, with several others identified for future funding.