

MINUTES OF COMMITTEE MEETING
TRB Committee on Conduct of Research – A5001 & TRB Committee on Technology Transfer – A5012

September 10-12, 2003

J. Erik Jonsson Woods Hole Center of the National Academy of Sciences

Woods Hole, MA

Laurie McGinnis, Chair, Conduct of Research

Cheri Marti, Chair, Technology Transfer

September 10, 2003

12:35 Call to Order & Introductions

Cheri Marti

Technology Transfer Chair Cheri Marti called the joint meeting of the TRB Committees on Conduct of Research and Technology Transfer to order. Members and friends in attendance introduced themselves. In attendance were:

Laurie McGinnis, Center for Transportation Studies,
Ian Freidland, Federal Highway Administration – Washington, DC
Jason Bittner, Midwest Regional University Transportation Center, UW-Madison
Claire Felbinger, Transportation Research Board
Bonnie Osif, Penn State University
Jack Jernigan, Federal Highway Administration, Turner Fairbank
Bill Carr, Transportation Consortium
Richard Long, Florida Department of Transportation
Susanna Reck, Federal Highway Administration, Lakewood, CO
Michael Bonini – Pennsylvania Department of Transportation
Debra Elston, Federal Highway Administration, Washington, DC
Patsy Anderson, University of Kentucky
Patricia Lees, Western Nevada Community College
Kathy DesRoches, University of New Hampshire
Richard Hanneman, Salt Institute
Lisa Pogue, American Public Works Association
Mark Norman, Transportation Research Board
Jane Watson, National Transportation Library
Barbara Harder, BT Harder, Inc.
Bill Evans, Federal Highway Administration, Lakewood, CO
Timothy Barkley, Federal Highway Administration, Atlanta, GA
Lynn Murray, Volpe Center, USDOT

Arriving Later:

Nelda Bravo, National Transportation Library
Jennelle Derrickson, FHWA
Monique Evans, Ohio DOT
Leslie Wright, FHWA

It was noted that this marked the first official meeting for new Conduct of Research chair McGinnis. She noted that the committees generally meet together for the purpose of exchange and learning and have common goals related to implementation of research results.

Marti reviewed the Agenda. The meeting was structured such that joint meetings would be held during the afternoon of the first day, with small group breakouts following. Each committee would meet separately for two half days as well.

TRB update

Mark Norman

Mark Norman presented an overview of the pending reorganization of the Transportation Research Board. This vision of the future was detailed in a handout distributed at the meeting and attached here. Norman stressed that reorganization of the committees is only a small part of the whole effort and that other changes

are also occurring. As an overview, Norman reported that in March 2002, a group met to review the structure and this started the reorganization of the committees to foster better communications. In the old format, five main groups based on disciplines were the overarching structure. Norman stated that if you were unfamiliar with TRB it was very difficult to understand the committees and the organizations, let alone participate. The new structure includes 11 groups, the first six of which are disciplinary groups. The hope is for cross-fertilization of ideas and efforts among the groups. Under this reorganization, a new section called research and education is created. This is where Conduct of Research and Technology Transfer are now. The chairs of the 5 committees are the leadership for the section.

Norman indicated that NEW NUMBERS would be assigned for everything but that the staff and others should rely on name, not numbers for the committees. Staff representatives, hotels, typical session dates will not be changed.

Norman reiterated a series of objectives and goals with this. Among these are:

1. Revise the existing organizational structure by supplementing existing Groups with Groups that can more directly represent non-highway modes, planning and environment, policy and organization, and systems uses.
2. Enhance communications tools and linkages among the Groups, Sections, and committees.
3. Employ a variety of mechanisms to address cross-cutting and critical issues.
4. Expand outreach to targeted groups to attract more diverse and young participant in activities.

In the past, administrative items ended up taking significant time under the old system. Norman indicated that now more time should be available for discussion on issues, etc during larger section meetings. A joint task force (headed by Bob Johns of the Center for Transportation Studies at University of Minnesota) will be established to assist in the implementation of this structure.

Norman reported that topics for policy studies (security, long term funding, breaking down barriers between modes, etc) have emerged through several committees. The Technical Activities Council has used the entire list of topics to identify future conferences and workshops. These discussions have also shaped the Spotlight themes for the annual meeting.

Norman indicated that a Workshop will be put together in the Spring to define TRB's role in the issue of security. Among the issues to be addressed will be which committees will have a direct interest in this effort?

Norman also reported other outreach activities within TRB. He indicated that the number of young members appointed to committees increased from 78 to 127 during the past year. Surveys at the Annual meeting have resulted in identification of 185 new volunteers. TRB has also reached agreements with the Council of University Transportation Centers (CUTC) and Council of Minority Transportation Officials (COMTO) to use their memberships to attract new members. The next issue of the Women's Transportation Seminar (WTS) newsletter will expand this same issue. Norman indicated that at the Annual Meeting attendance was 20% female, that 30% of first time attendees were female, 5.5% were of minority groups and that 12% of first time attendees were of minority groups. This is roughly the same as years past. Approximately 300-350 new attendees participate every year. Chairs of every committee are being encouraged to attend the welcoming sessions this year.

Norman also reported that annual meeting sessions have a solid October 1 cutoff date for submission via the TRB Website. If the chair is not available or in charge of the session – TRB needs the name of person(s) responsible for the sessions to grant necessary access. Norman indicated that the Program has gotten too big to be changed much after Oct 1.

On the issue of communications, Norman indicated that as part of the reorganization - at least each of the groups/sections should have a quarterly communications effort. Targeted information to the interested groups/sections would be key.

Q&A:

Pogue stated that the numbers and reorganization appears to be good. Friedland indicated that with respect to diversity, the subset on the "hard" side include many fewer female and minority participants. Norman noted that design/construction had significantly lower numbers than the planning side as well.

Carr asked about the cap on the number of sessions at the annual meeting and Norman indicated that there is some session "creep." The current allotted number is 2.3 sessions per committee – allowing for some co-sponsoring.

Norman noted that more information will be accessible this year on the interactive program. Registered attendees will get passwords to get room assignments as well as session titles, an improvement over last year's program. He also indicated that the number of papers submitted continues to grow and TRB is limited to how many can be published. The submissions grow by about 10% each year and the issue is about journal and peer review. The policy needs to be strict enough but not too restrictive. Claire Felbinger is the TRB contact person for this.

Elston asked if external customers were involved in the reorganization activities and Norman assured her that there was a lot of external input to the proposal.

2004 NCHRP Synthesis (joint efforts)

Cheri Marti

A handout was distributed on NCHRP Synthesis Project 35-12: Analysis of DOT and other research organization's technology transfer success, challenges, and needs. A copy is attached to these minutes. Marti reported that Lees, Joe Toole of FHWA, Bill Evans, Harder, DesRoches, and others participated in the development of the synthesis proposal. This is the first step along the "toolbox" concept. This would develop a "how to" guide as a resource to guide states through the implementation process. Basically it involves how you package the information. The toolbox will look at the entire process - through research and adoption and how to navigate through choices in developing a research plan.

The Synthesis should provide a state of the practice in DOTs. AASHTO and FHWA are funding this effort. Solicitations are due October 6th and a technical panel will be assembled to select the consultants. The technical panel will launch possibly at the TRB annual meeting. Reck relayed a CalTrans idea that had very low rates of responses on a similar survey effort? Reck indicated that very few responses may have been due to a definition/language issue. Is tech transfer the same thing as research implementation?

Murray asked if the synthesis or toolbox was the product of this Project. Marti indicated that the toolbox is a future item, that this was merely another step in its development.

Marti indicated that the Committee on Tech Transfer would be spending more time on this during their individual committee meeting.

Bittner asked about the Panel formation and the panel will be pulled together by TRB staff and there may be some input from the committees involved.

Summary of Joint A5001 & A5012 May 2003 Workshop

Laurie McGinnis

McGinnis reported that the May workshop preliminary summaries were available. Copies were distributed. A version is attached here. McGinnis reported that she didn't want to rehash what was done in May, but that the intent of the breakout sessions would be to explore the finer points to create an action plan based on the May work.

McGinnis noted that the final product would be to take the preliminary session information and combine with an Action Plan through the small groups sessions scheduled in the afternoon. The final report will probably go out as a E-circular through TRB. Attending participants signed up for individual groups and pre-assigned facilitators were charged with the responsibility of drafting an action plan.

Each facilitator was to select a presenter and the results would be reported in the joint session the following day. At this point the small groups were assigned and discussions occurred. The results of these discussions are summarized in the minutes of the September 11, afternoon session.

Discussion of 2004 mid-year meeting

Mark Norman returned to discuss plans for the 2004 meeting. Because of the reorganization of the TRB committees, he proposed a mid-year meeting that would include the Technology Transfer, Conduct Of Research, Education and Training, Library Information Services in Transportation, and History Committees. It was noted that the Woods Hole location could not accommodate all five committees. The timing of the meeting was discussed given the low number of both state DOT and university representatives at the meeting. A suggestion was made that a July meeting might be more amenable to these two groups. One reason for the low attendance of state DOT reps was thought to be because of their attendance at RAC meetings. No decisions were reached regarding meeting composition or location. Mark stated that plans for the mega-mid year meeting in 2005 were cancelled.

Optimizing the Dissemination and Implementation of Research Results

On May 5, 2003 over 60 transportation professionals from federal, state, city and county agencies, the private sector, and research and educational academia attended a TRB workshop to address the process of research dissemination and implementation. The intent of the workshop was to identify useful strategies for ensuring that optimal use is made of research that is conducted.

There were focus groups that provided summaries in the report on the following subjects:

- New techniques and methods for sharing preliminary research findings
- Efficient dissemination of published materials
- Developing appropriate materials for the implementation of research results
- Case Studies – Guidelines for Do's and Don'ts
- Identifying Barriers to dissemination and implementation

In order to further explore these topics, the T2 and COR committees divided up into five separate groups to address these items and to come up with recommendations which were later voted upon.

Group 1 – New Techniques and Methods for Sharing Preliminary Research.

This group proposed developing a process for engaging end-users in all steps of research progress including work, results, and dissemination. To do so, develop a framework or roadmap with a checklist. Include use of a focus group, plan for dissemination, use of peer exchange, literature review (TAG). There should also be an advocacy group that includes end-users and tech transfer specialists. As part of this overall plan, identify customers for this research and how they might utilize it. The customer then becomes the champion. The question of who should develop this process was posed. One suggestion was FHWA's RD&T organization. What is resident in the other modes? This group suggested that it should take 60-90 days to develop this process.

Group II – Efficient Dissemination of Research Results

This group acknowledged the need for adequate resources and long-term continuity for the National Transportation Library. The NTL needs to be more broadly recognized as a great resource and a key element of transportation research.

In terms of dissemination of published materials, it is acknowledged that dissemination is a science. There needs to be a systematic use of formats/standards for web, electronic, and print mediums. Users need to be trained in the areas of retrieval and migration. These publications need to be viewed as a real asset and accordingly, their dissemination be properly funded.

There is a need to create a mindset of dissemination by researchers, managers and funders. It needs to be embedded in all stages of research including those funding the research through grant proposals (COE, DOT modes), and the researchers, practitioners, and T2 agents. It should also be part of the whole research process utilizing NTL, AAAS etc.

Group III - Developing Appropriate Materials for Implementation of Research

This group recommended conducting a research study to develop mechanisms that would assist the implementation of research. This would include developing contract verbiage, implementation plans, and other reporting mechanisms. It would also include training tools – the how to- of implementation. There could be a related study to develop best practices to implementation and include a true benchmark effort in context of quality.

As part of this effort, there needs to be an alliance among the Committee on Technology Transfer, Committee on Conduct of Research, and Committee on Training and Education. This topic could become the basis of a session at the 2005 TRB Annual Meeting.

Another suggestion was to develop executive briefing materials that could be presented at CEO leadership forums detailing the benefits of successful implementation of research. This could become a standard briefing for the transportation community.

It was also recommended that a memo be sent to state DOT research directors to encourage greater involvement on their part with the Accreditation Board for Engineering and Technology (ABET) at the Industrial Board level.

Group IV – Case Studies – Guidelines for Do's and Don't

This group recommended the development of a primer to conduct a workshop on implementation and the development of guidelines on case studies. They posed the question of how to define what makes a good case study. There was a reference to a Harvard University report on how to do a case study. What is the purpose of doing a case study? There was also a discussion about the OMB mandate to develop metrics for research. A discussion ensued about the lack of metrics in technology transfer. Further questions explored included the timing of the case study, who should be involved, and how these should be funded.

Group V – Identifying Barriers to Dissemination and Implementation

In order for research to be more widely disseminated and implemented, agencies need to be encouraged to tie their research goals to the agency's strategic goals. This will help document and validate the value of research and justify the case for more research. It also gives us the language to communicate the value of research. This group recommended writing a position statement reflecting the above to be shared with SCOR, SCOH, and RAC.

They also suggested the development of a TRB workshop with the E&T committee to better understand the benefits of marketing and the appropriate strategies for communicating to the different audiences, e.g. public, decision makers, managers, field personnel – in a timely manner.

In addition, it was suggested that as part of developing implementation incentives, that they promote a research implementation set aside from SPR funds at the DOT level. This will become part of a proposal lead by A5001 that will be presented to TRB to reach AASHTO, RAC, and NACE.

At the end of the presentations the meeting participants were asked to vote on those recommendations that they considered the most valuable. Following that suggestions were made as to who might implement these recommendations. The results are as follows and are in descending order of votes:

1. Conduct a research study to develop a model for implementation including contract verbiage, implementation plans, reporting mechanisms, and training tools. (NCHRP-AASHTO)
2. Secure adequate resources and long-term continuity for the National Transportation Library. In conjunction with this, identify champions. (NTL users)
3. Conduct a study to develop practices best practices in the dissemination of research. Include benchmarking effort in the context of quality. (FHWA/NCHRP/ACP)
4. Develop a process for engaging end-users in all steps of the research progress/work/results/dissemination.
5. Create mindset of dissemination of research in the researchers, funders, practitioners, and T2 agents. (COE, DOT modes, NTL, AAAS)

6. Develop implementation incentives, through a research set-aside from SPR funds at the DOT level. (explore with RAC to get funds)

Partnerships in Transportation Research and Technology

Barbara Harder then gave an excellent presentation on the elements of a good partnership. This presentation was focused on partnerships from the perspective of the state departments of transportation. She noted that the majority of public sector transportation partnerships have emerged during the last 15-20 years. She detailed those elements that have the highest ratings for facilitating research partnerships and the benefits from partnerships that are most valued. The top two benefits of research partnerships are enhanced technical expertise and cost savings. The most important elements in sustaining a research partnership are continued building of personal relationships, generating positive results or showing progress and successes, and sustained resources including maintaining technical expertise and funding. She then summed up the key elements of a partnership by featuring the 8 "I" factors to create "we".