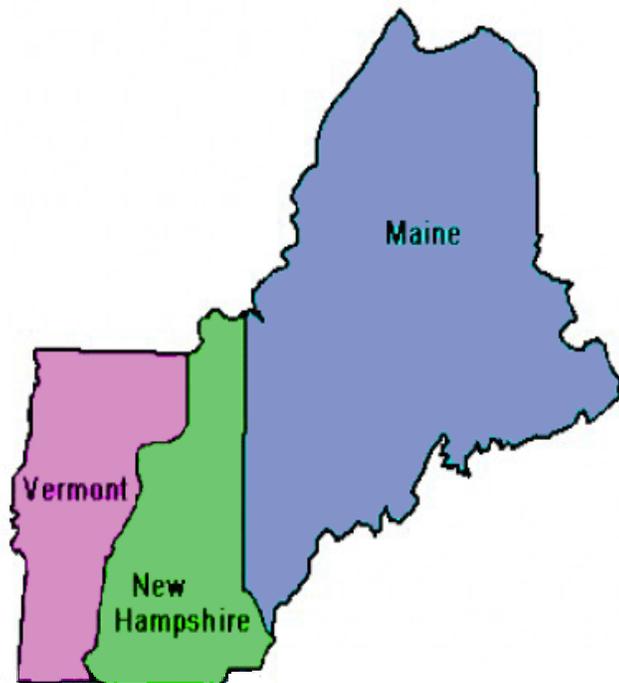

TRI-STATE RESEARCH PEER EXCHANGE 2010



Hosted By:

**Vermont Agency of Transportation (VTrans)
New Hampshire Department of Transportation
Maine Department of Transportation**

**Berlin, VT
October 26-28, 2010**

Final Report

TABLE OF CONTENTS

INTRODUCTION 3

BACKGROUND 4

OBJECTIVES 5

KEY OBSERVATIONS AND THEMES 5

IDENTIFIED STRENGTHS of the HOST ORGANIZATIONS’ RESEARCH PROGRAMS..... 5

OPPORTUNITIES for the HOST ORGANIZATIONS’ RESEARCH PROGRAMS..... 6

TAKEAWAYS & PLANNED ACTIONS—Peer Exchange Team 8

APPENDIX A – Peer Exchange Agenda..... A-1

APPENDIX B – Advance Questions Distributed to Team Members.....B-1

Figure 1 – Peer Exchange Participants4



Tri-State Research Peer Exchange October 26-28, 2010

INTRODUCTION

The research offices of the Vermont, Maine, and New Hampshire departments of transportation hosted a peer exchange on October 26-28, 2010 in Berlin, Vermont. Representatives from three other state DOTs, the Transportation Research Board (TRB), and the Federal Highway Administration (FHWA) joined representatives from Vermont AOT (VTrans), New Hampshire DOT, and Maine DOT to share experiences and successful practices in research program management. The meetings consisted of presentations and active discussions as the group worked to share key information related to specific focus areas in transportation research. Participants in the peer exchange were as follows:

Invited members:

- Dick McReynolds, Engineer of Research - Kansas DOT (retired)
- Leni Oman, Director for Research and Library Services - Washington State DOT
- Mike Sanders, Research Engineer - South Carolina DOT
- Chris Hedges, Senior Program Officer - TRB Cooperative Research Programs
- Dave Hall, FHWA-NH

Host research managers:

- Jennifer Fitch, Research Administrator – VTrans
- Glenn Roberts, Chief of Research - New Hampshire DOT
- Dale Peabody, Transportation Research Engineer – Maine DOT

Other participants:

- Wendy Kipp, Research Technician – VTrans
- Jason Tremblay, Research Engineer – VTrans

Terri O'Shea of O'Shea Consulting facilitated the peer exchange. A copy of the exchange agenda is included in Appendix A.



Figure 1 - Peer Exchange Participants

BACKGROUND

As part of a federal requirement, each state transportation agency is required to conduct a peer exchange of its research program on a periodic basis. Peer exchanges are designed to foster excellence in state transportation research programs through the sharing of best practices and successful program management strategies among participating research manager peers. The overall objectives of the peer exchange process are to:

- Learn how the host states manage and conduct research and how their programs might be improved
- Share information among members of the exchange team and the host states’ research organizations
- Identify useful ideas that members of the peer exchange team can practically apply in their own agencies

This report highlights the key observations and proposed action items that resulted from the peer exchange discussion.

OBJECTIVES

The peer exchange was structured around three main focus areas:

- Focus Area 1 – Successful Practices for Soliciting/Identifying High-Value Research Problem Statements (Subtopic: How are needs of executive staff integrated into this process?)
- Focus Area 2 – Successful Practices for Ensuring Quality Research Reports/Deliverables
- Focus Area 3 –Successful Practices for Implementing Research Results (Includes processes for tracking implementation)

The host states' planning committee sent questions to the participants before the meeting to help them prepare their presentations and discussion points. The questions are included in Appendix B.

KEY OBSERVATIONS AND THEMES

Common themes that emerged for program success in all focus areas:

- A culture of innovation facilitates and encourages the adoption of research results
- There is value in participating in regional and national programs
- Robust programs engage their clients and stakeholders through all stages of the research cycle.
- Communicating the value of research program and project successes is critical
- Implementation needs to be considered from the beginning of the process
- Ensuring quality and timeliness of deliverables builds credibility and confidence in research programs

IDENTIFIED STRENGTHS of the HOST ORGANIZATIONS' RESEARCH PROGRAMS

The peer exchange team identified a number of strengths common to the three host agencies' research programs:

- The size of each agency fosters accessibility and dialogue between the research office and other units of the organization
- There is a focus on practical research and on providing solutions that can be easily deployed within the agency
- The diversity of the research portfolio demonstrates that staff are engaged and willing to meet stakeholder needs
- Flexibility and versatility enable the research offices to respond to agency requests in an effective manner

- Personnel possess the knowledge of, and have access to, regional and national tools and resources needed to administer a successful program
- All three states enjoy a cooperative and productive relationship with their respective FHWA Division offices
- The research offices recognize that the quality of research reports and other deliverables have a tangible influence on a study's acceptance and potential for implementation
- Existing Tri-State initiatives and collaborations have laid a foundation for continued and enhanced cooperative efforts between the states
- The states recognize the importance of implementation and the need to continually track and demonstrate the success of technology deployment throughout their departments
- Participation in national programs and research panels enable agency staff to influence the focus and conduct of research to benefit their own agencies

OPPORTUNITIES for the HOST ORGANIZATIONS' RESEARCH PROGRAMS

The peer exchange team identified a number of opportunities for the host agencies to enhance the effectiveness of their research programs:

Focus Area 1 –Successful Practices for Soliciting/Identifying High-Value Research Problem Statements

- Take advantage of existing and ongoing Tri-State initiatives and collaborations to build awareness of high-value research needs in operations, maintenance and other disciplines
- Better involve and engage top management in the research process to clarify the needs of the agency and to ensure that research problem statements are aligned with the agency's strategic goals
- Build “buy-in” among research stakeholders by effectively communicating a fair and open solicitation process and providing timely feedback regarding programmatic and project-level decisions
- Keep research program procedures current to meet federal requirements and to better communicate the various stages of the research cycle
- It is important for research staff to be aware of the key issues and challenges facing the Department on a persistent basis
- Demonstrate to all agency staff the capabilities of research and the potential for addressing day-to-day operational needs through available internal and external resources
- Routinely distribute research findings and other pertinent information to department staff with responsibilities in associated topical areas

- Participation in national programs and panels such as NCHRP are an effective way for smaller states to voice their needs and shape the direction of research.
- Engaging external organizations such as universities, AGC, etc. in the solicitation and identification of research needs can provide a complement to internal views; however, it is critical that such organizations communicate with appropriate agency stakeholders early in the process
- Legislative liaisons are a potential source of high priority research needs for departments of transportation.
- Literatures searches, library research, and syntheses can provide meaningful “quick hits” for leadership and strengthen the tie between the research program and key decision-makers

Focus Area 2 – Successful Practices for Ensuring Quality Research Reports/Deliverables

- Contracts should clearly outline reporting requirements, including formatting and sub deliverables such as executive summaries and other technology transfer products
- To promote “findability”, PDF research documents should be saved in OCR format and utilize proper indexing and key wording, preferably as outlined in the Transportation Research Thesaurus (TRT)
- Tie research contract payments to specific tasks, deliverables or other measurable progress points to promote timely fulfillment of all project objectives
- TRB’s one-page guide for authors of Cooperative Research Program (CRP) reports provides a concise and consistent model for state DOT research organizations
- Encourage the AASHTO RAC to engage the Council of University Transportation Centers (CUTC) in discussions regarding the quality of research reports.

Focus Area 3 – Successful Practices for Implementing Research Results

- For all research projects, engage the appropriate level and breadth of agency personnel from the start to ensure buy-in and successful implementation upon completion of the work
- Communicate research project recommendations and involve executive staff in implementation activities to the maximum, practical extent possible
- Require problem statement submitters to outline anticipated implementation activities on the research project suggestion form
- Seek and communicate feedback from research stakeholders regarding research project successes, i.e. measure how their needs have been met
- Communication tools such as posters, newsletters, list serv announcements, and internet/intranet blurbs are effective ways to facilitate implementation of successful research

- Put the “punch line” at the beginning to effectively communicate research success
- A systematic process for assessing, tracking, and communicating the effectiveness of research implementation activities can highlight and market high-value program successes and enable stakeholders to connect the research program to positive improvements in their work
- Include implementation tools and activities in contracts; require contractors to provide information in a form the agency can use
- Providing seed money for implementation is an effective way to transform research findings into agency practice

TAKEAWAYS & PLANNED ACTIONS—Peer Exchange Team

Leni Oman

Washington State DOT

The Tri-State Peer Exchange provided an opportunity to examine the practices of all participating organizations in the three focus areas. This examination validated many of the practices we use at WSDOT and suggested activities to augment these practices, which are noted below.

The host agencies demonstrate the strength of collaboration in their research programs and other technical areas of their departments. Through this collaboration, they have been able to accomplish tasks that each state could not do alone. It may be possible to capitalize on this even more by using the multi-state technical forums to identify priority research needs and deploy research results.

The research programs in the host states seem organized to support traditional design, construction, and maintenance needs. All organizations at the peer exchange are increasingly expected to address non-traditional topics such as sustainability and to provide quick turnaround research to support policy development. The program placement and organizational connections should be examined to ensure they provide access to policy leaders who need support. As well, I encourage the agencies to develop invest in information resources to cost effectively address quick turnaround needs.

Possible Actions:

- Revisit performance-based contracting (MaineDOT) and/or tying payments to progress reports (SCDOT).
- Develop one page summary of report guidance (TRB).
- Submit to *Research Pays Off* (TRB).
- Consider producing posters of implemented research (NHDOT/VTrans).
- Request feedback from national research panel participants about intended use of the research project product.

- Review implementation forms from Kansas for potential application (KDOT).

General (RAC) follow up

- Discuss report quality expectations with the Council of University of Transportation Centers (CUTC).
- Seek suggestions for literature review support from Library Connectivity TPF for state DOTs with no library.

Suggestions/Opportunities

- All: review placement of the research program within the organization – is this the best fit to support the breadth of research needs of the department.
- VT: As the department transforms, clarify expectations for how research supports the transformation process and the goals of the department.
- All: Workload/sizing: all programs are managing diverse programs. This versatility is good and helps meet the diverse needs of stakeholders. However, program growth/change may be difficult to accommodate with current staffing levels.
- NH & VT: Consider adding library capability. Employees spend up to 35% of their time looking for information. Professional librarians with very limited resources can greatly reduce the effort required to find information and improve efficiency.

Christopher Hedges

TRB, National Cooperative Highway Research Program

Observations

The Tri-State Peer Exchange addressed three focus areas which are of considerable interest to the NCHRP: (1) soliciting and identifying high-value research problem statements, (2) ensuring quality research reports, and (3) implementing research results. The discussion was extremely valuable and provided me with a number of ideas and actions to pursue in my own program. It is always gratifying to share experiences and learn from others, and each peer exchange in which I've had the privilege of participating has provided new opportunities for process improvements.

It was very interesting to hear both the similarities and differences in how each of the host states and guests approached these three focus areas, and two issues in particular stood out. Firstly, while most state DOT research programs address a wide range of topic areas, some are still concentrated in the more traditional areas such as construction and maintenance. In these cases, other departments within the agency may not consider the research branch to be a resource that serves their needs. Research managers should today have the expertise to serve all functional areas of the Department, as well as senior management. Research managers can provide the greatest value to their DOT when they have the mandate and responsibility to reach out to all stakeholders; to make them aware of the research and information services they can provide them, and of the value and benefits of those services.

Secondly, in my experience, the most successful and sustainable research programs at the state level are those that address both bottom-up and top-down research needs of its stakeholders; in other words, research that helps practitioners resolve day-to-day technical issues as well as research informing the policy decisions of senior executives. This requires a structured, transparent process to solicit research needs, review and prioritize them, and select the projects that have the potential to provide the greatest benefit to the agency. The ideal process will involve a wide range of practitioners and management staff who can balance the needs of all stakeholders through clear, identified selection criteria. A feedback loop to the submitters is also very important. In order to keep stakeholders engaged in the program, they need to understand the reasons when their ideas are not selected; i.e. was their problem statement deficient in some way or did the need not reflect a top priority of the agency? A successful research program is one which due diligence is given to developing these clear processes to ensure that all ideas evaluated by stakeholders with the appropriate expertise and selected by management staff with responsibilities across the DOT hierarchy.

Action items

The items below will be investigated as ways to improve our own program.

1. Explore opportunities for TRB to provide state DOTs with assistance in soliciting high quality research problem statements within their own agencies.
2. Make sure that all NCHRP problem statement submitters are fully aware of the review process, selection criteria, and the results of final project selections.
3. Survey RAC members to determine whether the “Publications Format Request Page” on the RAC/SCOR website is still a useful and up-to-date product.
4. Make sure our online reports are posted as searchable pdf documents.
5. Continue the evaluation of NCHRP fixed-price contracts with payments tied to milestone deliverables.
6. Explore new opportunities to evaluate and communicate the value of the NCHRP program and projects.
7. Find new ways to track the results of NCHRP projects. Consider using the “NCHRP Products for AASHTO Committees” table to survey committee chairs on implementation of specific reports. Find ways to sustain momentum and enthusiasm for tracking project results by building it into the standard NCHRP workflow.
8. Explore opportunities to work with communications experts to help develop appropriate products to disseminate the results (and benefits) of completed projects to targeted audience groups (e.g. practitioners, senior DOT executives, legislators, and the general public). To the extent possible, build these deliverables into project contracts.

9. Develop a more formal process to utilize our contractors' implementation plans.
10. Explore opportunities to work with TRB Standing Committees to facilitate implementation of NCHRP project results.
11. Investigate means to communicate project completion dates to RAC members whose agencies have a member on the project panel.
12. Take greater steps to ensure that NCHRP project write-ups on the web are kept up to date.

Richard McReynolds (ret.)

Kansas DOT

Observations:

The VT, NH and ME transportation agencies all have research groups that work hard to fulfill their state's RD&T needs. Each state also participates in regional and national programs which are vital to successful research programs. Involvement of agency staff at the regional and national levels is important for the successful development and implementation of new technologies that improve the quality and cost effectiveness of agency operations.

Each state has a single research committee with mid-level management membership. Kansas experience since 1991 is with a three-level research committee structure (which was modeled on the committee structure used in Texas) that involves both top level and mid-level managers. This committee structure has dramatically increased trust and awareness of research at KDOT.

Each state is working to identify and document the benefits of their research projects. Documentation of successful research projects is a valuable way to help define the benefit of the overall research program.

Planned Actions:

- Explore various links and information described below on a time available basis.
- Provide information about the following best practices to Rodney Montney, current KDOT Engineer of Research.
- WASDOT forms for evaluation of research proposals that may be useful to assist area panel leaders in their annual panel meetings.
- Create more posters for display of research project findings at the Eisenhower State Office Building and Materials and Research Center. Posters and PowerPoint presentations could be required as a deliverable on some or all research projects.
- Consider a WASDOT "Transportation Research" type presentation which presents blurbs about various research projects organized by Strategic Plan subject area.
- Share the link to the TRB "Impacts on Practice".

Observations:

The three states hosting the Tri-State Peer Exchange, Maine, New Hampshire, and Vermont, have much in common that allowed the multi-state format to be successful. Previous collaborations on research activities and other functions made their involvement in this process a natural fit.

Though some differences were noted in procedures used by each state in their program, committee structures, etc, it is evident that all three states have viable research programs that support their organizations' missions and goals. All recognized that participation from all levels in their organization is critical to the research process. Also, all recognized the benefits of participating in national programs though some were more involved than others.

Planned Actions:

- Consider including an additional step in the problem statement screening process prior to balloting by the Research and Development Executive Committee.
- Add a line on the problem statement form asking if the subject is of national, regional, or SCDOT only interest.
- Investigate tying deliverables to progress payments.
- Consider requiring a third-party review of final reports prior to review by the Steering and Implementation Committee.
- Follow-up on implemented findings well after the completion of a research project to determine final use and possible benefits/savings to the Department.
- Consider using a project sponsor (upper level manager) in addition to the Steering and Implementation Committee Chairman in the research project monitoring process to aid in implementation efforts.
- Investigate ways to involve the Department's Public Relations Unit in disseminating research project findings, press releases, etc.
- Consider requiring more formal implementation plans in research proposals.
- Develop a more formal form and process to document implementation.

I had opportunity to participate in the first two days of the 2010 ME-NH-VT Tri-State Peer Exchange and am reporting lessons I learned from the exchange that I think may be of some benefit to NHDOT's research program. I am restricting my comments to NH's program since I am familiar enough with it to evaluate the discussions in light of NH's practices. The lessons I thought were significant are as follows:

1. Focus Area 1, Solicitation/High Value Research

- a. Meet with DOT leadership prior to the solicitation for proposals to determine if they have any focus or direction they would like to see emphasized.
- b. Raise the value of the Research Section to the Department leadership by making them aware of the section's ability to do executive research such as informing the Department's position on legislation.
- c. Involve the AGC and other industry organizations in the solicitation process to more fully vet topics, to have access to their resources, and to obtain industry buy-in on changes.
- d. Make the Administrator of the Bureau most affected by the research the TAG chairman.

2. Focus Area 2, Quality Research Reports/Deliverables

- a. Tie payments for contract research to deliverables - set milestones for progress payments.
- b. Include the requirement for a third party editorial review of reports in contracts for research projects.
- c. Ask for concise reports – prevent reports from becoming graduate theses.
- d. Consider guidelines for report format, length, and graphics.

3. Focus Area 3, Implementation

- a. Consider convening the RAC to approve research recommendations and assign responsibilities for implementation.
- b. Produce an annual Research Project Implementation Progress Report.
- c. Present research results at meetings such as the ACEC spring conference, the Tri-State Operations Meetings, and the Local Government Center meetings.
- d. Include a table or chart in a newsletter showing percent of time or budget devoted to topics from each Bureau.
- e. Make sure Department knows of the Research Section's ability to do surveys.
- f. Produce one-page research stories with punch line at the beginning of the article.

Planned Actions

- Update the procedures manual for our research program. Outline process from solicitation through implementation. Incorporate recommendations from management and the Federal Highway Administration.
- Review RAC membership structure to ensure the needs of the Agency are being met.
- Investigate increasing participation in national and regional research efforts. This includes targeted distribution of pertinent information and opportunities, and increased committee involvement.
- Emphasize Agency's mission, vision, and goals during the solicitation and approval process. Seek management input through RAC membership. Stay attuned to key issues and challenges facing the Agency.
- Review current contract requirements. Consider revising payment structure to base reimbursement on completion of predetermined milestones. Include reporting and formatting requirements. Reference the one page guidance for report writing from TRB.
- Consider establishing project advisory panels of stakeholders to promote involvement and success of research initiatives and subsequent implementation.
- Implementation should be considered throughout the entire process. Revise solicitation form to include actions that will facilitate or inhibit implementation. Consider a brief (1-2 page) implementation plan within the final deliverable or as a separate document.
- Consider other project deliverables when appropriate including posters, folios, and other marketing materials.
- Clarify leadership expectations and investigate methods to monitor, track, and report implementation.

The Tri-State format utilized during this peer exchange was especially fitting given the similar size, structure, and challenges facing not only the three parent organizations but also each state's research program. Thanks to the entire peer exchange team for their insight and dedication during nearly three days of fruitful discussion. As always, the exchange provided an abundant source of ideas and potential focus areas for enhancing the NHDOT research program.

Planned Actions:

- Develop capabilities for improved and more detailed literature searches and in-house synthesis products (WSDOT, WIDOT examples) to enhance our ability to respond to quick-hit needs from upper management and others.
- Review delivery-based/task-based contracting procedures utilized by Maine DOT (and Mass DOT) to better link payments to specific deliverables, tasks, or milestones.

- Reach out to NHDOT legislative liaison to gauge potential high-priority needs that could be addressed by research.
- Encourage the New Hampshire AGC and other external organizations to work with Department personnel to identify high-value research needs.
- Monitor Department progress with the Balance Score Card (BSC) to better tie research problem statements to strategic needs.
- Review WSDOT matrix linking strategic goals to research needs.
- Update NHDOT RD&T² Primer (research program procedures).
- Consider adopting TRB’s “Author Guidelines for Submitting CRP Reports”.
- Reestablish regular meetings to monitor and facilitate implementation activities. Seek ways to continually communicate successful implementation efforts.
- Procure permanent research poster frames for M&R building and generate posters for recent projects.
- Take a look at WSDOT Gray Notebook, Research Notes and Folios.
- Encourage staff to prepare for “elevator speeches” that highlight program activities, successes and benefits.

Dale Peabody

Maine DOT

MaineDOT, New Hampshire DOT and the Vermont Agency of Transportation work collaboratively on many initiatives so it was an easy decision to conduct a “multi-state host” research peer exchange. Our research programs are very similar in staffing and funding size and we share many common transportation goals and needs. In the few months leading up to the exchange we held numerous conference calls that were not only helpful for planning the event but also served as “mini” peer exchanges as we discussed what we did well and what we considered our weaknesses. Special thanks to Glenn Roberts of NH DOT and Jennifer Fitch and Wendy Kipp of VTrans for their efforts.

This peer exchange was extremely valuable in providing management practices, insights and techniques that can be used at MaineDOT to improve our overall research program. The three focus areas (soliciting research ideas, quality reports/deliverables, and implementation) provided a solid foundation for presentations and discussion. The guest state DOT and TRB research managers presented excellent examples of best practices that define quality research programs. My “take home” items are listed below:

1. Investigate involving the current Tri-State relationships in operations and project development for the purpose of defining common issues that can be addressed with research.

2. Consider holding a research topic solicitation meeting similar to South Carolina DOT. This could lead to numerous research ideas that might be suitable for the state program as well as regional and national research programs.
3. Compile data on research program fund sources, match, type, etc. and prepare graphical representations (pie charts) that can be used to promote the program.
4. Work closely with the Library to improve “knowledge management” in the agency.
5. Closely review information from Kansas DOT on their implementation program and adopt techniques that fit MaineDOT.
6. Engage our legislative liaison on a frequent basis to determine potential research work that can support critical policy and legislative issues facing the agency.
7. Work with agency to aggressively pursue alternative funding for conducting research, i.e. IBRDP, TSCP, HfL, etc.
8. Use TRB’s AASHTO Products from NCHRP research database as a starter to explore how we can best take advantage of the Cooperative Research Programs.
9. Make a commitment to expanding MaineDOT membership on CRP panels and TRB committees.

Appendix A – Peer Exchange Agenda

Tri-State Research Peer Exchange
October 25-28, 2010
Berlin, VT



Agenda

Monday evening, October 25th

6:00 PM Meet in hotel lobby. Introductions and dinner.

Tuesday, October 26th

8:00 – 8:30 AM VTrans Welcome – Bill Ahearn

- Tri-State research managers' opening remarks
 - Overview of schedule, focus areas, goals
- Introduction of visiting team members and other guests

8:30 – 10:00 AM Brief Overview of Participants Research Organizations

8:30 – 8:40 Jennifer Fitch (Vtrans)
8:40 – 8:50 Dale Peabody (Maine DOT)
8:50 – 9:00 Glenn Roberts (NH DOT)
9:00 – 9:10 Mike Sanders (SCDOT)
9:10 – 9:20 Dick McReynolds (KSDOT, retired)
9:20 – 9:30 Leni Oman (WSDOT)
9:30 – 9:40 Chris Hedges (TRB)
9:40 – 9:50 Group discussion

9:50 – 10:05 Break

10:05 – 11:50 **Focus Area 1 – Best Practices for Soliciting/Identifying High Value Research Problem Statements (Subtopic: How are needs of executive staff integrated into this process?)**

15 minutes per organization
New Hampshire
Vermont
Maine
TRB
South Carolina

Appendix A – Peer Exchange Agenda

Kansas
Washington

- 11:50 – 1:00 PM Lunch
- 1:00 – 2:00 **Focus Area 1 (cont'd)**
Group Discussion – Focus Area 1 (including feedback and takeaways;
strengths and opportunities)
- 2:00 – 3:00 **Focus Area 2 – Best Practices for Ensuring Quality Research Reports**
15 minutes per organization
Maine
New Hampshire
Vermont
Washington
- 3:00 – 3:15 Ice Cream Break
- 3:15 – 4:15 **Focus Area 2 (cont'd)**
TRB
South Carolina
Kansas
- 4:15 – 5:00 Group Discussion – Focus Area 2 (including feedback and takeaways;
strengths and opportunities)
- 5:00 Adjourn. Dinner on your own

Wednesday, August 27th

- 8:00 – 10:00 AM **Focus Area 3 – Best Practices for Implementing Research Results
(Includes processes for tracking implementation)**
15 minutes per organization
Vermont
Maine
New Hampshire
Kansas
Washington
TRB
South Carolina
- 10:00 – 10:15 Break
- 10:15 – 11:00 Group Discussion – Focus Area 3 (including feedback and takeaways;
strengths and opportunities)

Appendix A – Peer Exchange Agenda

11:00 – 11:45	Facilitated Brainstorming for Final Report – Host States’ Strengths and Opportunities
11:45 – 1:00 PM	Lunch
1:00 – 2:30	Facilitated Brainstorming for Final Report – Host States’ Strengths and Opportunities (cont’d)
2:30 – 2:45	Break
2:45 – 4:00	Team members work on individual takeaway items. Complete and on flash drive for 8:00 AM Thursday.
4:00	Adjourn
5:30	Group Dinner

Thursday, October 28th

8:00 – 9:45 AM	Complete draft of peer exchange final report
9:45 – 10:00	Break
10:00 – 11:00	Close-out Session
11:00 AM	Adjourn

Appendix B – Advance Questions Distributed to Team Members

Questions

Participant overviews:

- What is your annual research budget amount?
- Identify different fund sources used for research
- How many on your staff? What does staff do? Project managers, conduct research, evaluate products, other?
- What is the organizational structure? Where is the Research office located? How far are you removed from the front office?
- What type of research is conducted by others? (for example, just the more formal projects)
- What type of research is conducted in-house? (SPR, experimental features, ad-hoc, etc.)
- What does your current research portfolio look like (e.g. percent materials, structures, maintenance, other modes, policy, etc.)?
- What are the hot topics at your agency that are being addressed with research?

Focus Area 1 – Best Practices for Soliciting/Identifying High Value Research Problem Statements

- How do you solicit ideas for research? (web, emails, focus groups, individual meetings, workshops, other)
- Who is asked for research ideas? (entire organization, management, research councils, outside agencies, etc.)
- Are there any forms/templates used to solicit ideas? Please share and briefly describe.
- How/when is the executive staff involved?
- How are research problem statements prioritized? Who does it? Scoring/ranking criteria?
- What level of detail is required during initial solicitation phase (i.e. prior to ranking/prioritization process)?
- What roles and approvals need to be identified before a problem statement is considered? For example, does a mid/upper-level Sponsor need to be identified to ensure results will be implemented? Does an agency “Champion” need to be identified to drive the research? (May be separate requirements for problem statements submitted from within, or outside, the agency)

Focus Area 2 – Best Practices for Ensuring Quality Research Reports/Deliverables

- Do you have a standard form/style for research reports? Please share templates.
- Are report guidelines specified in contract language?
- For contract research, are deliverables linked to progress payments? Please provide details.
- Who reviews reports/deliverables to determine acceptance?

Appendix B – Advance Questions Distributed to Team Members

- Do you require a third party review for grammar, typos, etc. prior to submittal for technical staff review?

Focus Area 3 – Best Practices for Implementing Research Results

- How is research result implementation done by your agency?
- Do you have a process for tracking implementation? Project level? Program level?
- Does your agency have a process in place for implementation of research results from national level such as NCHRP, SHRP2, FHWA, other?
- Are presentations from PI's required?
- Are there other requirements for PI's such posters, implementation plan, etc.?
- What are the keys to ensuring implementation of research project results