Federal Highway Administration

State Planning and Research

GUIDE FOR PEER EXCHANGES
Foreword

This document provides guidance for the State Planning and Research (SP&R) peer reviews. It contains information about the philosophy and principle of the peer exchanges; the use of peer exchanges to strategically improve research programs; and guidance and resources on conducting peer exchanges.

This report will be of interest to State research directors, Federal Highway Administration (FHWA) division offices, and others at FHWA responsible for working on State peer exchange panels.

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1. Introduction

The use of peer exchanges was established to provide State departments’ of transportation (DOT) research, development, and technology (RD&T) programs with the opportunity to examine and evaluate their own programs through a collaborative team of peers, experts, and persons involved in the process, where the exchange of vision, ideas, and best practices could be fostered to benefit both their program and the program of the peer team participants.

What are the regulatory requirements for peer exchanges?

The regulatory references in support of the peer exchange are as follows:

23 CFR 420.203
Peer exchange means a periodic review of a State DOT’s RD&T program or portion thereof, by representatives of other State DOTs, for the purpose of exchange of information or best practices. The State DOT may also invite the participation of FHWA and other Federal, State, regional, or local transportation agencies; the Transportation Research Board (TRB); and academic institutions, foundations, or private firms that support transportation research development or technology transfer activities.

23 CFR 420.205(b)
The State DOTs must provide information necessary for peer exchanges.

23 CFR 420.209(a)(5)
Procedures to determine the effectiveness of the State DOT’s management process in implementing the RD&T program, to determine the utilization of the State DOT’s RD&T outputs, and to facilitate peer exchanges of its RD&T Program on a periodic basis.

23 CFR 420.209(a)(7)
Participation in peer exchanges of its RD&T management process and of other State DOT’s programs on a periodic basis. To assist peer exchange teams in conducting an effective exchange, the State DOT must provide them the information and documentation required to be collected and maintained under this subpart. Travel and other costs associated with the State’s peer exchange may be identified as a line item in the State DOT’s work program and will be eligible for 100 percent Federal funding. The peer exchange team must prepare a written report of the exchange.

What are the contents in this guide?

This guide will cover (1) the philosophy and principle of the peer exchange, (2) the use of peer exchanges to strategically improve research programs, and (3) guidance and resources on conducting peer exchanges.
2. The Philosophy and Principle of the Peer Exchange

The use of peer exchanges was established to provide State DOT RD&T programs with the opportunity to examine and evaluate their own programs through a collaborative team of peers, experts, and persons involved in the process, where the exchange of vision, ideas, and best practices could be fostered to benefit both their program and the program of the peer team participants.

Peer exchanges also may be used to examine more focused areas of a State DOT’s research program.
3. The Use of Peer Exchanges to Strategically Improve Research Programs

The use of peer exchanges was established to provide State DOT RD&T programs with the opportunity to examine and evaluate their own programs through a collaborative team of peers, experts, and persons involved in the process, where the exchange of vision, ideas, and best practices could be fostered to benefit their program and the program of the participants. A peer exchange is a focused collaboration among transportation research colleagues through which a host State may find the means to restructure or merely fine tune research program processes. With periodic peer exchanges, a State DOT can help ensure that its research program remains viable, vibrant, and productive.

What is the best peer exchange focus for your State?

State DOTs have been conducting peer exchanges of their research programs since the mid or late 1990s; many have conducted several peer exchanges. A new research director or a State that has had significant changes in its research program would be best served by conducting a full evaluation of its research management plan in his/her first peer exchange.

When a research director has experience with hosting and conducting a peer exchange, he/she may repeat a full evaluation of the management plan or may extend beyond this and conduct an exchange on a specific focused topic in the management plan. Future peer exchanges might extend further to convene around an agenda that will help the host State explore emerging opportunities for program improvements.

What is the best peer exchange format for your State?

Onsite at Host State

The traditional peer exchange is onsite at the host State’s location and lasts for 2 to 3 days. Participants include representatives from the host State, other State research programs, FHWA headquarters office and/or FHWA division office, universities, and/or others. An onsite location affords access to other host State research staff, program offices, and senior management. It also permits easy access to the host State’s facilities, such as laboratories. These benefits most likely would provide the most intense peer exchange format for a State research program. Gaining access to senior management to present the results of the peer exchange is a key step in ensuring a communication flow between research staff and senior-level decisionmakers in a State DOT.

Multistate Peer Exchange

A multistate format may be feasible in some situations, particularly if several States have a need to examine a single focus. It is unlikely that a peer exchange trying to focus on several States’ full research programs could be successful because it would dilute the discussion too much to provide enough useful information to the several States in the exchange. In no case should the number of States undergoing a peer exchange of their programs exceed three in this format. Selection of a multistate format should be made with care to ensure that the intended benefits of a peer exchange be attained by all participants.
Participants
Participants at a multistate peer exchange should include panelists beyond the representative peer exchange States. There should be an equal or greater number of representatives other than those of the peer exchange States. Representatives from FHWA; universities; public and/or private laboratories, and institutes may augment the panel. A multistate format does not give the same access to facilities and senior management staff as the onsite format for a single State. That notwithstanding, facilities for all peer exchange States should enter the discussions as much as possible and each peer exchange State should brief their senior management upon their return home.

Location
To minimize logistics for the States involved, a mutually convenient, central location should be selected. Because a multistate peer exchange would involve States with common issues, it is likely they also would be from the same region of the country. While this may not always be the case or include all of the non-peer exchange States on the panel, keeping the logistics as simple as possible would help to keep costs down.

Time
The length of a multistate peer exchange should typically be longer than a single State peer exchange to ensure that all of the States receive adequate attention; the agenda for the peer exchange should be structured appropriately.

Virtual Peer Exchange
A virtual peer exchange may be feasible in rare instances, but should not be used as an easy way to fulfill the regulatory requirement. While technology continues to improve to have electronic exchanges, such as in a webinar or video conference, the technologies have not progressed to a point that gives the same advantages as a face-to-face exchange, particularly when an agenda would extend to the desirable length of a single or multistate peer exchange. Participants should include the same array of representatives as for other formats; that is, host State, other State research programs, FHWA, universities, or others. In no instance should back-to-back virtual peer exchanges be held by a State to fulfill the regulatory requirement.
4. Guidance and Resources on Conducting Peer Exchanges

It is the State's responsibility to initiate its peer exchange. The peer exchange activity, composition of the peer exchange team, the breadth of the issues covered, the duration of the peer exchange, and other issues are at the State’s discretion. That notwithstanding, the State’s selection should be done in consultation with its FHWA division office to ensure there is agreement on what will best fulfill the SP&R regulatory requirements for periodic peer exchanges.

What is the core guidance?

1. Peer exchanges should convene periodically with an agenda that demonstrates efforts to address (a) the State DOT RD&T program’s management plan, in whole or in part, and/or (b) value-added enhancements to the State DOT RD&T program.

2. The peer exchange should be a planned activity with information necessary provided by the host State3,4.

3. Under the Federal regulation, a State must hold a peer exchange periodically, which means at least every 5 years, if not more frequently, and entails at least a 2- to 3-day agenda.

4. The peer exchange team should include a panel of approximately four to five people and should include participants from other State research programs, FHWA staff, universities, or other relevant participants; at least one or two of the panel members should have participated in previous peer exchange panels. The host State also may want to consider inviting research directors who are new in the role to give them not only some experience on a peer exchange, but a chance to make mentoring connections with other transportation research leaders.

5. The peer exchange team must prepare a written report of the exchange4.

6. The host State should hold a close-out meeting together with their FHWA division office representative and their State DOT senior management on the peer exchange.

7. Before the next peer exchange the State director of research should prepare a follow up report or memorandum summarizing changes that were or were not made to the program based on the previous peer exchange, and submit it to his/her FHWA division office and his/her State DOT senior management.
What is the recommended peer exchange cycle for a State DOT director of research?

Determination of which peer exchange cycle is engaged should be at the discretion of the State DOT director of research, in consultation with the FHWA division office, based on the principle and philosophy of the peer exchange and the use of peer exchanges to strategically improve research programs. A longer period might warrant a full evaluation of the management plan to ensure it still provides the appropriate framework for the State’s research program. Alternatively, if a State is confident in its management plan or if it is on a shorter cycle, it may choose to conduct a peer exchange that has a specific focus on topics in the management plan or overall research program. Future peer exchanges might also undergo a similar evaluation of the best focus and format to ensure the exchange will result in the most advantageous benefits to the research program.

What options are available for peer exchange activities?

FHWA division SP&R coordinators should be available to partner with and support the State DOT in determining the peer exchange activities and agenda. Peer exchange activities should fill at least a 2- to 3-day agenda within a 5-year span. The number of peer exchanges held should be at the discretion of the State and based on the value added of holding a peer exchange to benefit the State DOT RD&T program.

To ensure that a peer exchange may be fully productive, there may not be more than three host States in a multistate peer exchange. For a peer exchange that includes multiple States, four to five people from outside the host States should be included on the panel.

What resources for planning and peer exchange logistic support are available?

- University Transportation Centers or universities are excellent resources to support functions related to peer exchanges and are encouraged as a support partner for the State.
- State Local Technical Assistance Program Centers are excellent resources to support functions related to peer exchanges and are encouraged as a support partner for the State.
- Meeting contractors are other resources to support functions related to peer exchanges.
- FHWA division personnel should be available to assist in peer exchange strategic and planning functions.
- A Transportation Pooled Fund project may be established and administered by States to support peer exchanges.
What other peer exchange resources are available?

Research Advisory Committee (RAC) Web site\(^5\)
(Peer exchange reports)
http://research.transportation.org/Pages/PeerExchangeProgram.aspx
Summary: Collection of peer exchange reports by States

Documenting Peer Exchange Administrative Experiences\(^6\)
(National Cooperative Highway Research Program (NCHRP), Project No. 20-38A)
http://research.transportation.org/Documents/PeerExchangeExperience.pdf
Summary: Examines the progress of the completed exchanges.

Peer Exchange: A Value-Added Program Management Tool\(^7\)
(NCHRP Project 20-7, Task 125)
http://www.tfhrc.gov/services/prxchg.pdf
Summary: This document summarized the States' experiences with peer exchanges and how they benefited from the program. The overall conclusion is that a peer exchange can be a valuable management tool.

Technology Today\(^8\)
“Peer Exchange Produces Results”
Summary: The article touts the success and value of the peer exchange program.
5. Frequently Asked Questions

The following questions and answers about the peer exchange program are asked frequently.

What is the peer exchange program?

The general intent of the Federal regulation for the peer exchange program is to enhance the quality and performance of the State's RD&T management through peer involvement. The peer exchange process grew out of the original concept of peer review as conducted by organizations such as the American Society of Civil Engineers, the American Council of Engineering Companies, and the Association of Soil and Foundation Engineers. In those peer exchanges; organizations seek independent assessment of their firms and a comparison with industry norms. Furthermore, the review teams deal primarily with the chief executive officer (CEO) of the organization to review standard and predetermined aspects of the organization's operations, (e.g., financial management, project management, human resource management), conduct confidential interviews with employees, and present findings at a closeout meeting with the CEO at the conclusion of the exchange. The final step is a staff briefing of the exchange report. Many of the elements from this peer exchange methodology were retained in the development of a customized peer exchange process.

What is the objective of the peer exchange program?

The objective of the peer exchange program is to give State DOTs means to improve the quality and effectiveness of their research management processes. A peer exchange provides an opportunity for a State to examine its research program, particularly relative to its management plan. It is a practical and effective tool to foster excellence in RD&T program management. Peer exchanges provide an opportunity for panelists to share best practices and management innovations with each other.

The basic approach for setting up a peer exchange is to invite an outside panel of managers to meet with the host agency to discuss and review its RD&T management process. Information on the host agency's policies and procedures, including its management plan and work program, are shared with panel members in advance of the peer exchange. During the peer exchange, panel members may meet with managers, staff, stakeholders, and customers to gain further insight into the host State's program. The information gathered from the exchange is presented to agency management.

How often are peer exchanges conducted?

Under 23 CFR 420.209 (a)(7), a State is required to conduct peer exchanges on a periodic basis. FHWA has administratively determined this to be at least once every 5 years.
Who should be on the peer exchange panel?

Peer exchange panels should include representatives of other States' research programs, universities, and customers and stakeholders of the research program. States are also encouraged to include a representative from the FHWA division office and/or FHWA's headquarters. Panel members may be chosen for their technical expertise, experience in managing a research program, or knowledge of customer needs. The host State may also want to consider inviting research directors, who are new in the role, to give them not only some experience on a peer exchange, but a chance to make mentoring connections with other transportation research leaders.

Does the peer exchange have to be an overview of the State's whole research program?

No. While an overview peer exchange is very valuable for a State to conduct, some of the periodic peer exchanges may be focused on areas of the State's research program. For example, some States have focused on performance measurement or technology transfer. If a State chooses to conduct a peer exchange on a focused area, it should still address the general intent of the peer exchange program to enhance quality and performance of the State's RD&T management through peer involvement.

Can peer exchanges be funded with SP&R funds?

Yes. Travel and other costs associated with the State DOT's peer exchange may be identified as a line item in the State DOT's planning and research work program and is eligible for 100 percent SP&R funding.

Is a face-to-face peer exchange in one State the only format that may be used?

No. These guidelines permit several formats, but in all cases, the host State(s) must ensure that the format will meet the intent of the Federal regulation for the peer exchange program to enhance the quality and performance of the State's RD&T management through peer involvement.

The permitted formats include

- **Onsite at Host State**
  The traditional peer exchange is onsite at the host State’s location and lasts for 2 to 3 days.

- **Multistate Peer Exchange**
  A multistate format may be feasible in some situations, particularly if several States have a need to examine a single focus.

- **Virtual Peer Exchange**
  A virtual peer exchange may be feasible in rare instances, but should not be used as an easy way to fulfill the regulatory requirement. A virtual peer exchange would use technologies such as a Webinar or video conference.
Does participation in a meeting such as the American Association of State Highway and Transportation Officials (AASHTO) RAC national meeting fulfill the peer exchange requirement?

No. Participation in a meeting such as national meetings of the AASHTO RAC is certainly a worthwhile endeavor and typically involves considerable interaction with peers, but such meetings lack crucial elements of a formal peer exchange.

A peer exchange is designed to focus on a State's research program, using a knowledgeable panel to gather information on the host State's program and make constructive recommendations. A crucial part of a peer exchange is the panel's opportunity to present findings and recommendations to the host State's senior management and key decision makers. One of the benefits of peer exchanges has been the opportunity to make senior managers more aware of how research supports their overall program and helps them address customer needs. Even in a multistate peer exchange, host State participants are to go back to their home States and brief senior leadership and other staff on the results of the peer exchange and the processes to be improved as a result of the exchange.

Is the peer exchange panel required to report its findings?

Yes. According to 23 CFR 420.209 (a)(7), the peer exchange panel must prepare a written report of the exchange. If at all possible, the report should be written before the closeout meeting with the senior management of the host State(s). At a minimum, the report should be prepared before the panel members leave.

The report should include a brief introduction that identifies all of the participants on the panel and describes the purpose and intent of the activity. The body of the report should briefly discuss those aspects of the research program that the panel explored.

The conclusion section of the report should reflect the highlights of the open discussions and should be written as a panel, using a panel consensus approach. Moreover, it should include an endorsement by all of the members of the panel. A copy of the report should be forwarded by the host State to the FHWA division administrator upon completion of the peer exchange.

Before the next peer exchange the State director of research should prepare a follow up report or memorandum summarizing changes that were or were not made to the program based on the previous peer exchange, and submit it to his/her FHWA division office and his/her State DOT senior management.
What does the closeout meeting with the host State senior management involve?

The closeout meeting can be of great benefit if conducted with senior management of the host State. It should highlight positive aspects of the host State research program and outline those aspects that the visitors intend to incorporate into their own programs. Of course, any suggestions agreed to by the panel should also be presented to the host State senior management, with the understanding that senior management support is necessary to make significant changes. For multistate peer exchanges, host States returning home should conduct this briefing as soon as possible after returning.

Does FHWA hold the States responsible for the specific action items included in the report?

No. Peer exchanges are opportunities for States to identify successes as well as areas for improvement in their research programs. The host States and their peer exchange panels identify action items as ways the host States may improve their programs. It is a host State’s responsibility to follow up on action items with the goal of gaining the greatest benefit from the peer exchange. A host State may choose to give feedback on its progress on action items to the panel and FHWA, but it is not required.

Before the next peer exchange the State director of research should prepare a follow up report or memorandum summarizing changes that were or were not made to the program based on the previous peer exchange, and submit it to his/her FHWA division office and his/her State DOT senior management.

Must panel members be selected from a list of “approved” panel members?

No. During the initial stages of the program, there was a requirement that some panel members be selected from the FHWA “approved” list of those who had received formal training on the peer exchange process. Since then, many people have gained experience by participating in peer exchanges, so FHWA no longer requires formally trained members on the panel.

Peer exchange panels should include representatives of other States’ research programs, universities, and customers and stakeholders of the research program. States are also encouraged to include a representative from the FHWA division office and/or FHWA’s headquarters. Panel members may be chosen for their technical expertise, experience in managing a research program, or knowledge of customer needs.

Among participants should be a few people who have experience with peer exchanges, but the host State may also want to consider inviting Research Directors who are new in the role to give them not only some experience on a peer exchange, but a chance to make mentoring connections with other transportation research leaders.
Who can help me identify panel members?

There are a number of ways to identify potential panel members. Nominations may be solicited from State DOT staff, FHWA division/headquarters staff, partners, and stakeholders. The host State may solicit names of potential panel members from scientific or professional societies, such as the American Society of Civil Engineers (ASCE), the Institute of Transportation Engineers (ITE), TRB, or AASHTO committees. AASHTO’s RAC maintains a list of its members on its Web site, http://research.transportation.org, and the RAC national or regional listservs can be used to solicit volunteers from other States.

What if I cannot attend a peer exchange because my State agency has travel restrictions?

The FHWA division office can write a letter in support of the peer exchange stating the State’s responsibility to attend peer exchanges and citing 23 CFR 420.209(a)(7) of “Participation in peer exchanges of its RD&T management process and of other State DOT’s programs on a periodic basis.”

Have all States conducted peer exchanges?

Yes, and many States have hosted several peer exchanges. The regulation, 23 CFR 420(a)(7), calls for States to participate “in peer exchanges of its RD&T management process and of other State DOTs’ programs on a periodic basis.” Initially, FHWA's Office of RD&T defined “periodic basis” to mean at least once every 3 years. With the initiation of these guidelines, periodic now is defined as at least once every 5 years.

Additional questions?

For more information or if you have additional questions, contact John Moulden at 202-493-3470 or john.moulden@dot.gov.
6. Appendix: FHWA Division Peer Exchange Checklist

Use this checklist as a tool in developing and managing your peer exchange.

- State initiates peer exchange.
- Peer exchange convenes with an agenda, which demonstrates efforts to address (a) the State DOT RD&T program’s management plans and/or work program, whole or in part, and/or (b) value-added enhancements to the State DOT RD&T program.
- Peer exchange planned activity with information necessary provided by the host State.
- Peer Exchange activities entailed a 2- to 3-day agenda within a 5-year span.
- Peer exchange team includes at least a panel of four to five people and includes participants from other State research programs, FHWA, universities, or other relevant organizations; at least one or two of the panel members should have participated in previous peer exchange panels.
- Peer exchange team prepared a written report of the exchange.
- Host State holds closeout meeting together with their FHWA division representative and their State DOT senior management on the peer exchange.
- Before the next peer exchange the State director of research prepares a follow up report or memorandum summarizing changes that were or were not made to the program based on the previous peer exchange and submits it to their FHWA division office and their State DOT senior management.
7. References


2. U.S. Code of Federal Regulations, Title 23, Part 420.205(b), revised April 2, 2010. Web site: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=909cc2c2e5f318534294c428a0ed1699;rgn=div5;view=text;node=23%3A1.0.1.5.1.0.2.1.3;idno=23;cc=ecfr#23:1.0.1.5.1.0.2.1.3 (Accessed: April 6, 2009)


9. American Association of State Highway and Transportation Officials (AASHTO), Standing Committee on Research (SCOR), and its Research Advisory Committee (RAC) research Web site. Web site: http://research.transportation.org (Accessed on April 6, 2010)