

TRANSPORTATION POOLED FUND PROGRAM PROCEDURES

BACKGROUND

The Federal Highway Administration (FHWA) and the States have had a number of years of success in conducting a pooled fund program for research and planning projects. Recently, although the program continues to be seen as valuable, its processes have not been operating as efficiently as desired.

FHWA is committed to creating a process which is more efficient and meets the needs of all participants. Whatever changes in the process are made, FHWA will continue to play a leadership role in the program. FHWA will continue to initiate, contribute funds, and participate in studies as appropriate to its program, and FHWA technical specialists will serve as liaisons for all pooled fund studies. FHWA also will continue to serve as a central administrator for financial management and will work to improve these processes. In addition, with this program re-engineering, a sponsoring agency has the option to ask FHWA to serve as the lead agency for a study; FHWA, in this case, will recover some of its costs from the funding pool.

Discussions about the pooled fund program at the regional Research Advisory Committee (RAC) meetings during 1999 pointed out the need for increased efficiency and accountability and other areas for improvement within the program. To initiate a re-engineering of the program, the FHWA convened a workshop in November 1999 at the Turner-Fairbank Highway Research Center to discuss ways in which the pooled fund process could be improved. Approximately 20 people participated in the workshop, including representatives of States, FHWA Headquarters and field offices, the Transportation Research Board, the Civil Engineering Research Foundation, and the Federal Transit Administration.

Several discussions were held during the workshop to identify areas for improvement in the pooled fund program, from the solicitation process through the completion of a pooled fund study. The participants also talked about better ways to communicate during all stages of a study.

The workshop led to several steps toward re-engineering pooled fund processes, one of which was the development of an earlier draft of the processes for the retitled "Transportation Pooled Fund Program." Subsequent to the workshop, a small working group refined the ideas from the RAC discussions and the discussions during the workshop to develop a draft flow chart and description of a proposed re-engineered pooled fund program. This initial draft was circulated among the workshop group, revisions made, and a later draft was circulated among the memberships of the Standing Committee on Research and the RAC. Numerous comments were received in this broad review and were discussed in early August 2000 on a panel at the RAC national meeting as well as through questions and answers by many present at a separate session at the meeting.

Additional changes were made to this document after discussions with the RAC leadership. The resulting document was endorsed by the RAC membership and presented to the Standing Committee on Research (SCOR) membership at its November 2000 meeting. SCOR endorsed the guidelines at that meeting. In February 2001, a small group met to discuss some of the remaining questions, particularly related to the features of a "pooled fund web site" to be

incorporated into the Research in Progress web site being developed under NCHRP Project 20-39(2). This version of the pooled fund web site will not include all features described in this document, but these features may be incorporated later after the initial system is launched.

There has been broad consensus that improved communications in the solicitation process, on the progress of a study, and on final reporting and implementations of products is crucial to the success of the program.

Recommended Changes

One relatively minor change is the elimination of the “national” and “regional” labels; the consensus was that the only distinction between the two labels was who initiated the study, the FHWA and a State, respectively.

There are two areas that are most significant among the proposed changes to the program:

- A web site will be developed to permit online solicitation and commitment by project partners, to post work plans, progress reports, final report/deliverables, implementation activities, and other relevant information. The web site is intended to be interactive and to be the central communications tool for tracking the status of pooled fund studies.

Discussions have been held with the panel for NCHRP Project 20-39(2), “Improved Transportation Research-in-Progress [RIP] Data System.” The project contractor will incorporate necessary information into the re-engineered RIP to accommodate pooled fund studies.

The use of a web site for notification of proposed projects and solicitation for project partners does not preclude sponsoring agencies and potential project partners discussing a proposed project and soliciting partners offline, as often happens now.

- A new option will be available to all sponsoring agencies to use either the Transportation Research Board (TRB) or the FHWA to administer a study (e.g., convene the study Technical Advisory Committee/Panel; coordinate study administrative activities; publish and distribute study reports; etc.). If this option is selected by the sponsoring agency, TRB or FHWA, as selected, will serve as the lead agency. In cases where the sponsoring agency requests TRB or FHWA to provide administrative services, TRB or FHWA will recoup their administrative expenses from the funding pool. Formal rates have not been established, but will likely consist of some fixed costs (e.g., travel for TAC/panel members, editing, publishing) and variable costs (e.g., staff time and other administrative costs). Costs will likely differ for the services provided by the two organizations.

As is the case now, sponsoring agencies may still choose to administer projects themselves or agree to have one of the project partners administer the project.

Definitions

FHWA Technical Liaison—An FHWA Technical Liaison in the subject area of the study is assigned to each pooled fund study at the initiation of the project. Liaisons give initial feedback on the project from the context of the national research and technology program, and they participate in the activities of the Technical Advisory Committee.

Investigator/Contractor—The investigator/contractor conducts the study in accordance with the statement of work and as contractually directed by the lead agency.

Lead Agency—The lead agency is the organization that performs or contracts for the research and performs the administrative functions of the study.

Project Partners—Project partners contribute funds or in-kind resources to participate in the study. Project partners may include States, FHWA, other Federal agencies, regional and local transportation agencies, academic institutions, foundations, private firms, and others.

Sponsoring Agency—The sponsoring agency is the organization (i.e., State or FHWA) that formally proposes the project and solicits for participation and funding contributions from project partners.

Technical Advisory Committee/Panel—The technical advisory committee (TAC)/panel includes membership that may include representatives from each of the project partners or may include only part of that group with other experts that can guide the project from the development of the statement of work through the time the research products are implemented.

INTRODUCTION

When significant or widespread interest is shown in solving transportation-related problems, research, planning, and technology innovation activities may be jointly funded by several federal, state, regional, and local transportation agencies, academic institutions, foundations, or private industry as a pooled fund study.

To qualify as a pooled fund study, more than one state transportation agency, federal agency, other agency such as a municipality or metropolitan planning organization, college/university or a private company must find the subject important enough to commit funds or other resources to conduct the research, planning, and technology innovation activity. If a subject has been studied previously, the new study should provide new information that will complement or advance previous investigations of the subject matter.

Federal and state transportation agencies may initiate pooled fund studies. Local and regional transportation agencies, private industry, foundations, and colleges/universities may partner with any or all of the sponsoring agencies to conduct pooled fund projects. The Transportation Pooled Fund Program is the successor of the former National Pooled Fund and Regional Pooled Fund Programs. The two labels, “National” and “Regional” will no longer be used, although the same organizations may propose and initiate studies just as they have under those two programs.

William Zaccagnino is the FHWA contact for questions regarding research pooled fund studies. He can be reached at 202-493-3183 or william.zaccagnino@fhwa.dot.gov by email. Tony Solury is the FHWA contact for questions about pooled fund studies related to planning; he can be reached at 202-366-5003 or tony.solury@fhwa.dot.gov.

PROJECT INITIATION PROCESS

A calendar quarter process is used to manage the initiation of the pooled fund projects. FHWA and State transportation agencies may propose potential projects and serve as the sponsoring agency. Problem statements are used by the sponsoring agency to post potential projects. The status of each project can be checked throughout the quarterly commitment period.

Project Proposed

The first step in initiating a pool-funded project is the completion of a problem statement by the sponsoring agency. The problem statement will include a project title, project description, budget, project goal, estimated project duration, deliverables, and sponsor contact for further information. The agency posting the project should also indicate whether they plan to administer the project or whether they wish to have the project administered by a project partner, TRB, or FHWA. (The sponsoring agency should consult with TRB or FHWA to ensure that the organization is able to accept the responsibility, considering its other responsibilities.)

Posted on Website by Sponsor—An actively maintained central website will be used by the sponsoring agency to post proposed research, planning, and technology innovation projects. Projects may be posted at any time during a calendar quarter (i.e. January-March, April-June, July-September, October-December). The posting of the proposed project will activate the AASHTO Research Advisory Committee (RAC) Listserv with an alert that a new project is available for review. The web site also will include a means for notification of FHWA Headquarters and field offices and for others who enter their contact information on a form on the web site. As is the case now, the sponsoring agency may also choose to contact other potential partners directly.

If the solicitation does not garner an adequate amount of funding to be initiated, the sponsoring agency, at the end of each quarter, may re-post a proposed project; this will be a simple action, which will preserve the previously posted problem statement and all commitments by interested partners. This action will keep the project proposal on the solicitation portion of the web site until the sponsoring agency decides to not re-post the proposal or it indicates the project will be initiated, in which case the project will move to another section of the web site for studies in progress. Actions such as re-posting, project initiation, etc. will create a notification to interested project partners—those who have made commitments to the project proposal on the web site—so they may monitor on a regular basis the extent of their commitments to project proposals during the solicitation phase.

Although it is at the agency's discretion whether to re-post projects, the solicitation posting time is not expected to exceed 1 year, which will allow for adequate time for partners to respond whose program procedures may allow for an annual response only. The sponsoring agency is expected to monitor the solicitation posting to ensure it is moved to the initiation phase in a timely manner the project may be archived, at the sponsoring agency's request, if enough

funding commitments are not made within a reasonable time. The archive section of the web site will contain lists of projects and project descriptions, which did not receive sufficient funding to be initiated. It is intended as a reference for potential sponsoring agencies of similar research to help them decide whether to pursue the effort. When a proposed project is archived, all commitments to the project are released.

There will also be a link from the website to the NCHRP web site for the purpose of advising people of other research underway, and/or ideas for possible research projects which could be adapted by a sponsoring state.

Commitment by Interested Parties—Federal and state transportation agencies may initiate pooled fund research projects as the sponsoring agency of these projects. However, regional and local transportation agencies, private industry, foundations, and colleges/universities may also make in-kind or financial commitments to proposed projects. The initial commitment to assist in funding a research, planning, or technology innovation project is done by indicating interest via the project posting on the website. Interested parties will indicate their funding commitments for the life of the project; many times, this consists of contributions for each year of the project. The commitment of funds will be entered through a password-protected screen. One person per State will be authorized, by issuance of the password, to make commitments to proposed projects; typically this will be the RAC member in that State.

The sponsoring agency staff will determine if the project moves into the Project Viability step. A sponsoring agency may want to consult with the other interested parties about the viability of the proposed project, including adjustment of the scope or termination of the solicitation based on the level of response. If the project will not be initiated the sponsoring agency will inform all interested parties of this decision via the RAC listserv or email for non-AASHTO members.

Project Viability

The sponsor of the proposed research project makes the determination, perhaps after consulting with other interested parties, if the project, as proposed, is viable based on the level of commitment that has been indicated by the project partners.

Sufficient Commitment to Initiate Project—If the commitment from project partners is sufficient, the sponsoring agency staff may request FHWA to formally establish the project. If the level of commitment is not sufficient for the proposed project to be established, the sponsoring agency may choose to renew the project posting on the website. The sponsoring agency alternatively, perhaps after consulting with other interested parties, may decide to change the scope of the project relative to the level of commitment. The sponsoring agency is responsible for informing the project partners of any proposed changes in project scope.

Formal Project Commitment

Submission of a commitment to the sponsoring agency is an acknowledgment by a project partner that it will formally obligate funding to the pooled fund project. FHWA is the broker of funds obligated to pool-funded projects under the Transportation Pooled Fund Program. The FHWA's responsibilities include authority to approve the use of 100 percent SP&R funds, assigning project numbers and an FHWA technical liaison, obtaining completed obligation

forms, and notifying the project partners on all financial issues. FHWA division offices work with their States to ensure the eligibility of projects, aid in the obligation of funds, and, in some cases, serve as the FHWA technical liaison for a project.

Approval of 100 Percent Federal Funds for a Project—The normal match for SP&R funds is 80 percent federal and 20 percent non-federal funding, but the FHWA has the authority to approve the use of 100 percent federal SP&R funding for pooled fund projects at the request of a lead State if it is in the interest of the Federal-aid highway program. As part of the formal request for project commitment by a State sponsoring agency, the agency may request approval for the funding exception. The FHWA Director for Research, Development, and Technology Service Business Unit (SBU) has the authority to approve 100 percent SP&R funding for research pooled fund projects and the Program Manager for Planning and Environment Core Business Unit (CBU) has the authority to approve 100 percent SP&R funding for planning pooled fund projects.

FHWA Technical Liaison—An FHWA Technical Liaison in the technical area of the study is assigned to each pooled fund study at the initiation of the project. Liaisons give initial feedback on the project from the context of the national research and technology program and participate in the activities of the Technical Advisory Committee.

Submission of Obligation Forms—Each federal, state, regional, or local agency will use the obligation forms that are generally used to obligate funds for research, planning, or technology innovation projects that use federal funding sources. The actual form that is used may differ depending on the agency. In the FHWA, an electronic process is used that incorporates the management processes that are particular to the FHWA Division and/or Headquarters procedures. This process is the official obligation of funds on behalf of the project partners and the means by which these funds are made available for use for the pooled fund study. For private industry, foundations and college/universities the obligation of funds will need to be handled on a case-by-case basis. These organizations may choose to provide their funds directly to the sponsoring agency in accordance with relevant regulatory requirements. If a check is being sent to the FHWA for this purpose, accompanying paperwork should note the formal study number (e.g., SPR-3(123)) and be mailed to Federal Highway Administration, P.O. Box 100147, Atlanta, Georgia 30384-0147. It is expected that each project partner will deploy an easily managed process to make funds accessible for the pooled fund project.

Notification of Formal Commitment—On request from the sponsoring agency, FHWA will provide information about the status of the funds committed and obligated. Particular attention will be made to the actual obligation of funds as related to the initial commitments that were made by the project partners. In the event that the obligation of funds differs from the former commitment to the proposed project, the sponsoring agency may choose to follow up with partners who have not fulfilled their commitments or to re-evaluate the project's viability. If the obligation levels are sufficient, the sponsoring agency staff, along with FHWA, may move the project to the Project Initiation step.

Project Initiation

The sponsoring agency staff may elect to serve in the “lead agency” role and complete the project initiation functions unilaterally. The sponsoring agency and project partners alternatively may choose to have the Transportation Research Board (TRB) or the FHWA manage the project. The sponsoring agency should consult with TRB or FHWA to ensure that the organization is able to accept the responsibility, considering its other responsibilities. All initiated projects should be recorded in Research in Progress as well as having information maintained on the pooled fund web site, by the webmaster.

Establish Technical Advisory Committee—Each project partner may appoint a technical expert to serve on the (TAC). The TAC will serve for the duration of the project. The roles of the committee include drafting and approving the project work statement, selecting the best qualified researchers to conduct the project, review of project progress reports and annual reports, acceptance of project deliverables and final reports, and completing implementation activities.

TAC members should expect to participate in all project-related meetings and briefings. Advanced communication technologies will be used to the greatest extent possible to reduce unnecessary travel to participate in these meetings and briefings. If vacancies occur in the TAC the project partner from which the vacancy occurred will appoint a new technical expert within 30 days of the vacancy occurring.

Travel and communication expenses for project partners associated with participation on the Technical Advisory Committee will be paid out of the project’s funds unless stated otherwise for the individual project.

When the TRB project management option is used, there will not be a TAC; TRB will select a panel of experts that may not include representatives from each of the project partners; TRB will solicit nominees for panel membership from Federal agencies, States, universities, relevant associations, and numerous other organization, and, from among the nominees, select the panel members on the basis of their expertise. These panels will typically have 8 to 10 members.

Work Statement Development—The lead agency will use a process to develop a work statement consistent with the direction of the TAC. The work statement will be incorporated into a plan of work that should include the following elements: list of partners, statement of problem, work statement, researcher requirements, project performance timeline, estimated budget, project communications requirements, deliverables, and implementation plan.

Investigator/Contractor Selection—The lead agency will use the plan of work to initiate the investigator selection process. The contracting laws and regulations of the lead agency will drive and govern the actual selection process. The TAC member input will be considered to the greatest extent possible in the selection of the successful investigator. Any TAC member concerns or grievances should be addressed within the communication structure that is adopted by the committee. If the lead agency and the TAC member cannot mitigate the concerns and grievances, the option to withdraw from the project may be exercised.

Upon the successful selection of the best qualified investigator, the project is initiated through an

agreement, work order, or contract that is consistent with the Conduct of Research procedures of the lead agency. If TRB is administering the project, TRB rules regarding contracts would apply. Similarly, FHWA acquisition regulations will apply for projects managed by FHWA. The lead agency will include the members of the TAC in the project kick-off meeting. At this point the project monitoring and reporting process starts.

Project Monitoring and Reporting

Active monitoring of all elements of the project is critical to the overall success and impact of the pool-funded effort. The lead agency is the process owner of the project monitoring activities. The TAC members need to be actively involved in reviewing and providing comments on progress reports and preliminary findings that are developed by the investigator.

Quarterly Progress Reports—The investigator on a calendar quarter basis will provide project status and progress reports. If necessary, the lead agency or the TAC may request that these reports be issued more frequently. These periodic reports are integral to successful communication with project partners about the progress within the project and to communication with the transportation community at large about research in progress. The progress reports will include project and funding status information and any preliminary findings. The investigator should also include a review of tasks completed in the previous quarter and a plan of tasks to be completed in the upcoming quarter. The report may include, at the request of the lead agency and the TAC members, an interactive information item for review of any concerns, issues or problems arising as the project develops. All progress report information, including reports on projects managed by the TRB or FHWA, will be posted on the pooled fund program website and may be password protected if the project is of a confidential nature.

Project Payments—Based on an approved invoice from the lead agency or TRB, FHWA will make a payment for the costs indicated in the invoice. The lead agency or TRB request reimbursement of these payments through the standard invoicing process. Reimbursement is made by FHWA from the project fund created by the project partners and is assessed in proportion to the amounts contributed by project partners. Reimbursement may not exceed the funds that have been obligated for the project.

Annual Report—An Annual Report will be made of each project on or about the yearly anniversary date of the project's initiation. This web-based report should include the information contained in the Quarterly Progress Reports, as well as, expanded information on the project findings or conclusions and recommendations if the project has been completed. The same progress reporting procedures used for NCHRP will be used for any projects managed by the TRB. The investigator is obligated to complete the project within the timeline prepared in the plan of work, unless granted an extension by the lead agency. At the conclusion of work, the project completion step is next.

Project Completion

An orderly and planned wrap up of the project is necessary to increase the implementation potential of the project findings, conclusions, or recommendations. The three key elements of successful completion are the delivery of useful and usable products, a final report with an easily understandable executive summary, and final payment to the investigator.

Deliverables Received—The lead agency, working with the TAC members, needs to ensure that the plan of work includes the delivery of useful and usable products. The investigator is expected to deliver these products. Deliverables may include reports, models, recommendations, software, new/improved products, etc. Where applicable, technology innovation sessions should be scheduled for the investigator to demonstrate, explain, or provide instruction on the project deliverables. Opportunities to showcase the project findings, recommendations, and conclusions should be pursued by the TAC members. The TAC will approve the acceptance of the project deliverables.

Final Report and Summary—A final report of work processes, findings, and recommendations will be required for each project. An executive summary will accompany each final report. The summary may be in a format proposed by the lead agency, e.g., short multi-page report, flyer, etc., but should always provide concise and useful information on the study and provide direction on how readers may easily gain access to the full report and to information on other individual deliverables. When appropriate, the final report should include: a discussion of the problem that was researched, review of current practices, in-depth review of the procedures and processes used to conduct the project, conclusions and recommendations, references, bibliography, and acknowledgments with a listing of TAC members for the project. The lead agency and TAC members, consistent with the project plan of work, may request additional elements.

Product Distribution

The lead agency will ensure that all of the project partners receive all project reports and deliverables. It is suggested that all reports be made available on the internet to provide a broad availability of the reports.

Report and Summary Distribution—At the direction of the TAC members, the lead agency may distribute the project report and all or some of the project deliverables beyond the project partners. This direction will be based on the nature of the project and the advisability of broader-based distribution. Issues of fiduciary fairness and responsibility will need to be considered by the TAC members in this decision. Since these projects virtually always use Federal or at least public funds, any limitations on distribution of reports, especially via the internet, should be exceptions. The desirability of broad-based implementation will also be considered in accordance with the implementation plan. If appropriate, project products should be sent to the relevant AASHTO Standing Committee and to the relevant TRB committee or subcommittee. Whenever possible, the full text of all reports should be made available on the web and should be linked to TRIS Online. These reports should be in an accessible format, such as html or Adobe Acrobat. (The cost of putting the full text of the report on line should be borne by the lead agency.)

Research Implementation

The Transportation Pooled Fund Program is primarily an applied research, planning, and technology innovation funding and contracting mechanism. Definable and measurable implementation is crucial to overall program viability. Therefore, the pooled fund program includes an implementation plan that should be published on the web and fulfilled as part of the pooled fund project. Follow-up implementation strategy should identify implementation at the

end of the research, and, at the discretion of the TAC members, track near-term (1 year) and long-term (3 to 5 years) effects of program investments.

Follow-up Questionnaire—At the conclusion of the research under the pooled fund project, the project partners will be polled on implementation potential, effect, and experiences with an evaluation of cost/labor savings or increases. At the discretion of the TAC, selected projects similarly will be polled again at 1-year, 3-year, and 5-year intervals. The poll may also be expanded to RAC membership (via the RAC listserv) to measure the level of implementation of study products in the transportation community at large. The questionnaire will be completed by TAC members or representatives from their agencies, institutions, foundations, or companies. The lead agency will be responsible for doing the surveys and sharing the results by posting them on the web.

Final Invoice Payment—Based on the delivery and acceptance of the products and reports included in the plan of work, the final invoice will be paid to the investigator. FHWA will reimburse the lead agency for the remaining costs of the project up to the obligation limits of the project. The lead agency will complete the Certification of Completion or other documentation consistent with the lead agency's FHWA-approved Conduct of Research Manual. Copies of the Certification of Completion will be sent to all project partners and the lead agency will record on the web site that the project is complete. At the discretion of the lead agency, an After Action Review may be conducted with the investigator to measure the projects processes and outcomes.

Annual Summary

Compilation of Annual Summary—An annual report summarizing the number of problem statements posted, the number of pooled fund projects initiated, and the number of projects completed will be compiled by FHWA and published on the web site. This report will include information obtained during the previous year.

#