

**POLICIES and PROCEDURES for the
COORDINATION of PAVEMENT ACTIVITIES
in the NORTHEASTERN UNITED STATES**

April, 2004

Prepared by
Charles E. Dougan, Senior Research Associate
University of Connecticut

Report Number CT-TPF-5(62)-2-04-8

The following document sets forth guidelines for the management of a cooperative program of pavement research and technology transfer for the transportation agencies in the northeastern United States.

This pooled-funds project is managed by the Connecticut Department of Transportation in Cooperation with the U.S. Department of Transportation, Federal Highway Administration.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented. The contents do not necessarily reflect the views or the policies of the Connecticut Department of Transportation, other sponsoring states or the U.S. Department of Transportation, Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

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POLICIES AND PROCEDURES FOR THE COORDINATION OF PAVEMENT ACTIVITIES IN THE NORTHEASTERN UNITED STATES

I. INTRODUCTION

Under the authority of ISTEA, the member states of the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) undertook the Strategic Highway Research Program (SHRP). One of the five major elements of SHRP addressed issues in the design of hot-mix asphalt (HMA) paving mixes. The research produced the SuperPave mix design process, a system of importance to all federal, state and local transportation agencies. In fact, the concepts and methodology set forth in SuperPave have been embraced in Canada and Europe. The principles which form the basis of SuperPave represented a significant departure in the practice of designing HMA pavement mixes. In this regard, implementation of SuperPave was a problem in many states and thus required extra effort to implement its use into practice.

To aid in training staff and technicians five centers of excellence in paving technology were established by FHWA to address SuperPave implementation issues and other related needs. Subsequently, state DOTs overcame the lack of financing by developing a pooled funds project. These centers were then in a position to aid states by: providing education and training with SuperPave technology and equipment; addressing various implementation problems; developing systems to disseminate data and information on SuperPave activities on a regional basis; and, researching various factors that affect SuperPave systems. These activities have been on-going for several years, with some very positive results; to wit: several technician training and certification courses have been developed for both binder and mix systems; quality assurance (QA) concepts have been and are being brought on line; and, a website has been developed. There are still regional needs that require continued attention, i.e., monitoring current research and innovations in paving technology, updating the website and QA issues and requirements must be finalized and immortalized via specification requirements. As the main thrust of SuperPave was to prolong pavement performance, we believe that years of monitoring SuperPave designed pavements is required to verify predictions of pavement life.

Looking toward the future, it is believed that there is continuing effort needed to refine and solidify the SuperPave process and to monitor the field performance history of in-place SuperPave mixes. Additionally, the SuperPave system and technology will have to be fully integrated into the 2002 Design Guide for New and Rehabilitated Pavements. This guide will be the basis for future pavement designs throughout the United States for HMA as well as portland cement concrete (PCC) pavement structures. The guide has had strong AASHTO and state support throughout its development and efforts are being undertaken currently, to facilitate implementation of its use.

In parallel, yet related efforts, asset management concepts are being developed for use by DOTs and local government. The acquisition and analysis of pavement performance data will be needed to establish performance curves for various pavement and mix designs. There is strong economic justification for this work based on the fact that an estimated sixty percent of all DOT assets are or involve pavements, the majority being HMA.

There is a continued need to address pavement issues and paving technology in a timely, cost-effective manner on a regional basis.

II. AUTHORITY

The current federal-aid highway legislation contains provisions for states to pool resources to address various research and development needs. This authority, Federal Grant and Cooperative Agreement Act (GCA) of 1977, as amended, Section 6300, et. seq., of Title 31, United States Code (U.S.C.) is the administrative and legal tool for the establishment and continuation of pavement coordination and programs. Each state has similar enabling legislation which addresses the designated contracting procedures of the state.

III. MISSION

The mission of the coordination effort is to provide a system which will glean and address pavement technology issues of regional and local interest; provide technical assistance on paving issues to DOTs and other affected transportation agencies; and provide a focus from which states can distribute the results of their pavement experience to other states and transportation agencies.

IV. ORGANIZATION

The basic organizational structure of the project is established in the Memorandum of Understanding signed by the Chief Administrative Officers of the participating states and FHWA (see Appendix). Following is a brief description of the functions and responsibilities of each of the committees. Changes to the Memorandum of Understanding are by majority vote of the Policy Committee.

1. Policy Committee

The project will operate under the governance of the Policy Committee which consists of the Chief Administrative Officials (CAO) from the participating state transportation agencies. The Policy Committee shall have a chairperson who is selected by the Committee, biennially, FHWA shall designate an Ex-Officio member.

The term of office for the chairpersons of the Policy Committee and Advisory Committee shall be two years commencing on July 1 of the years ending in an even

number. The term of office of the chairpersons of both committees shall be co-terminus and both chairpersons shall be from the same state.

The process for selection of the chairpersons of the Policy and Advisory Committee shall be as follows:

- The Advisory Committee shall recommend to the Policy Committee a Policy Committee member and an Advisory Committee member from the same state that are willing to serve as chairpersons of their respective Committee.
- The Policy Committee will appoint the Chairpersons of the Policy and Advisory Committee.

The Policy Committee shall have a regularly scheduled meeting, annually; generally in conjunction with the annual NASTO meeting. Other meetings will be called, as appropriate, by the Chairperson.

The Primary functions of the Policy Committee shall be to define globally the pavement research, development, and implementation needs to be addressed; approve the annual program developed in conjunction with the Advisory and Technical Committees; and acquire/provide funding to carry out the Program. Functions of the Policy Committee can be revised, added, or deleted, as it deems appropriate.

2. Advisory Committee

The Advisory Committee shall meet as often as appropriate. It shall provide direct and continuous liaison among the Policy Committee, the Technical Committees, and management of the coordination effort. Each member State of the Policy Committee will appoint one person to the Advisory Committee plus Ex-Officio membership by FHWA. In addition, each state DOT designated a project friend (see definition in Appendix), shall be allocated membership on the Committee. Advise and counsel will be sought from a Friend, but this representative is not authorized to vote on Advisory Committee issues or actions. The primary functions of the Advisory Committee will be to: define specific pavement needs; advise the Policy Committee on implementation needs and opportunities; develop and propose to the Policy Committee an annual work program; continuously monitor progress on projects or activities undertaken and the implementation of project results; and to carry out the directions from the Policy Committee.

The Advisory Committee shall recommend to the Policy Committee a state whose personnel shall function as lead agency for the pavement coordination activities. The lead state shall provide needed management functions and activities. The lead state shall be the state from which the coordinator is selected. The coordinator shall be selected from proposals solicited from interested organizations. The lead state's representative shall act as the secretary of the Advisory Committee.

3. Technical Committee

For any project undertaken, a Technical Committee member will be nominated and approved by the Advisory Committee to aid in guiding the technical aspects of the work. The member/s, appointed by the Advisory Committee, shall consist of one person from each participating state technically knowledgeable in the subject being studied. Other individuals may be added to the Technical Committee if deemed appropriate and approved by the Advisory Committee. The duties of the Technical Committee member include: 1) preparation of the scope of work to be undertaken. Recommending financial sources or programs to carry out the needed study or implementation function. Recommending organizations to receive RFP's. If a Technical Committee member believes that the proposed work is not timely, such a recommendation should be made to the Advisory Committee; 2) review and evaluation of proposals in response to RFP's; 3) providing recommendations to the Advisory Committee on the organization to conduct a particular study; 4) technical monitoring of each study as it progresses; 5) delivery of recommendations to the Advisory Committee concerning the acceptability of interim and completed work; and 6) recommending actions appropriate for implementation of the findings.

4. Management

The day-to-day administrative management of the Program shall be vested in a body or person, selected by the Technical Committee to provide management services. He/she shall have the responsibility and authority to: oversee the procedural aspects of the work; conduct the financial interchanges; and provide services which address the administrative requirements of the Policy, Advisory and Technical Committees. This body or person shall be designated Pavement Program Coordinator. Administratively, the Coordinator shall report to the Lead State's designee. The Coordinator shall serve a four-year term, at the end of which a performance review shall be conducted. The Advisory Committee then has two courses of action: (1) reappoint the Coordinator; or, (2) solicit proposals for the position of Coordinator.

The Lead State and Coordinator shall provide all services necessary for the administration and coordination of pavement activities in the Northeast. These services shall include, but not be limited to, the following:

a. Meetings

The Coordinator shall schedule and make all necessary arrangements for all meetings of the Policy, Advisory and Technical Committees. These arrangements shall include securing a meeting place at a convenient location and notifying all persons who are to attend. He/she shall also attend all meetings of the Policy and Advisory Committees, record minutes of these meetings, and distribute copies of these minutes to all attendees and other parties as directed. When requested by any committee, he/she shall also arrange any meeting between the committee, a state department of transportation, or any other party. The Coordinator shall also arrange and publicize general workshops or seminars to aid in the dissemination of information from either

completed or ongoing projects. The latter function is envisioned to occur annually, but may be scheduled at other time intervals as needs dictate.

b. Intercommittee Communication

The Coordinator shall facilitate all formal communication between the various project committees (i.e., the Policy, Advisory, and Technical Committees) working through the chairpersons of the respective committees.

c. Third Party Communication

The Lead State and Coordinator shall also be required to communicate with the state universities, research institutions, TRB, NCHRP, industry, and with other entities associated and/or involved with the coordination of pavement activities as directed.

d. Program Finances/Accounting

The Lead State shall set up a system for the financial accounting in accordance with the acceptable financial/accounting procedures.

The Lead State shall maintain and provide financial and cost accounting services acceptable to all project members and FHWA. He/she shall assure that all requests for payment shall be properly invoiced and promptly paid. Billings for work completed shall be submitted to the Coordinator for verification of completion. In turn the bills will be sent to the Lead State designee for payment.

e. Program Monitoring

The Coordinator shall be responsible for keeping track of and monitoring the studies of the Program. Input from the Technical Committees and the Advisory Committee will be provided as necessary. In cases where the progress and finances of a project become an issue the Coordinator shall advise the Advisory and Policy Committees in a timely manner.

f. Program Reports

The Coordinator shall compile quarterly reports to document work progress and final project reports. Annually a summary of progress, on all project administrative and financial activities, shall be developed and presented to the Advisory and Policy Committees. He/she shall maintain a current mailing list for reports, which will be provided to the researchers as needed.

g. Problem Statements and Requests for Proposals (RFP's)

For any problem statement selected by the Policy Committee and whose scope of work has been developed by a Technical Committee, the Coordinator shall assist in

preparing an RFP to be sent to appropriate institutions. When proposals are received, the Coordinator shall organize them for review, analysis, and contractor selection. It is the intent of this project to employ existing programs and projects to address pavement needs in the northeast. To this end, established technology transfer centers, the New England Transportation Consortium (NECT), the National Cooperative Highway Research Program (NCHRP), and other established R & D programs will be employed.

h. Prosecution of Work

For those proposals which have been selected and approved, the Lead Agency shall prepare any required legal instrument required to carry out the proposed work. This document shall be acceptable to the project's membership and the contracting research institution. The document shall contain needed clauses and phrases to protect each part and assure that the work is conducted in a prompt, professional manner.

i. Oversight of Contracts

The Coordinator shall act as the agent of the program in all contract dealings sponsored by the program. The Coordinator shall provide all services, facilities and staff needed to carry out the administrative and clerical functions necessary for this program. This includes but is not limited to: monitoring the progress of contracted work to ensure that both intermediate and final due dates for project progress are met; project billings are properly and promptly provided; project final reports are completed and submitted; and, disseminating the results of completed projects as appropriate.

j. General Requirements of the Coordinator

The Coordinator shall be required to be available during normal business hours to assist with issues as they arise. The Coordinator shall maintain current rosters for all Committees and provide changes to the affected committees as needed.

V. ORDER OF BUSINESS FOR ADVISORY COMMITTEE MEETING

The Advisory Committee generally meets quarterly to review the Program and act on new activities. The following order of business is followed, but can be altered at the discretion of the Committee if the need arises:

- a) Reading and acceptance of the minutes of the previous meeting;
- b) Presentation of quarterly financial report;
- c) Quarterly progress reports on current research projects;
- d) Presentation of proposed research projects; and
- e) Miscellaneous items of concern to the Committee.

Specific items under b, c, and d above are outlined in the following sections.

VI. FINANCIAL REPORT

Contractors shall bill the program for authorized work performed. Each expenditure shall be coded to an approved project. The Coordinator shall present a summary of expenditures by quarter to the Advisory Committee.

Program projects shall be designated by calendar year in which they will be started and the order of the approved project. Example: Project 95-1 was approved in calendar year 1995 and was the first project approved in that year; Project 95-3 was the third project approved in calendar year 1995.

VII. REPORTS

1. Quarterly Progress Reports

Each approved project is reported, in writing, to the Advisory Committee at the quarterly meeting. The written progress reports become a part of the minutes of the Committee meeting. The Coordinator will be the contact point for work performed.

Additional comments on Progress Reports, from affected state personnel, may be solicited by the Coordinator. These are, in turn, forwarded to the performing agency at the earliest possible date for their consideration and use.

Quarterly Progress Reports present the current status of a project, problems encountered, delays which might put the work behind schedule, etc.

2. Final Reports

At the completion of any project, a final report shall be prepared.

Copies of the draft final report should be submitted to the Chairman and members of the Project Technical Committee for review. The Chairman of the Project Technical Committee will coordinate the Committee's review of the report and provide the principal investigator (PI) with the review comments.

In resolving the Technical Committee's review comments, the PI should communicate directly with the Chairman of the Technical Committee. When the PI has resolved the Technical Committee's comments to the satisfaction of the Chairman, the Chairman will provide the PI with a memo, with a copy to the Coordinator, instructing the PI to provide sixty (60) paper copies and a disc containing the final report in ADOBE™ Portable Document Format to the Coordinator.

3. Administrative Report

Annually, at the close of each program year, the Coordinator shall prepare an Administrative Report which summarizes annual expenditures and the status of each on-going project for the previous year. This report shall contain a summary of all completed reports and activities for the reported year.

VIII. CHANGES IN POLICY AND PROCEDURES

Any change in Policy and Procedure, when determined to be in the best interest of the States, shall be by majority vote of all Advisory Committee Members.

IV. APPENDICES

1. Definitions

Whenever the following terms are used in this document they shall be interpreted to intend and mean the following:

Coordination of Pavement Activities: A Joint undertaking through which the transportation agencies of the participating states pool their resources to focus on needed research, development and implementation of improved methods for dealing with common problems associated with the region's pavement systems.

Participating state: A state department of transportation (DOT) or agency which contributes funding to the pooled-funds project entitled, "Coordination of Pavement Activities in the Northeast".

Project Friend: A state department of transportation or agency in the northeast which has not provided funding for the pooled-funds project entitled, "Coordination of Pavement Activities in the Northeast", for various reasons. However, the agency or DOT, because of its northeastern location, has expressed interest in the results of this effort.

Policy Committee: The governing authority for the project. It consists of the chief administrative officers of the participating state transportation agencies and, Ex-Officio membership by FHWA. Its functions are to define the research needs, approve the annual program, and acquire and provide funding.

Advisory Committee: Provides direct and continuous liaison among the Policy Committee, the Technical Committees and the Coordinator. One member is appointed by each member state of the Policy Committee. Its functions are to solicit pavement research needs, develop and propose the annual work program, review research project progress and implementation and advise and carry out the directions of the Policy Committee.

Technical Committee: Guides the technical aspect of the work of particular research project for which it has been formed. It consists of one member from each of the participating states and one from the FHWA, each of whom is technically knowledgeable of the research project's subject. The committee is responsible for formulating and monitoring the project, and making recommendation for the implementation of project findings.

Coordinator: A body or a person who provides the administrative management for the project. He/she oversees the procedural aspects of contracts, and carries out the administrative requirements of the Policy and Advisory Committee.

Federal Highway Administration (FHWA): The Federal Highway Administration of the United States Department of Transportation and its duly authorized agents or representatives, each acting within the scope of his/her designated duties.

Pooled Funds: The financial resource, comprised of the combined contributions of participating states and FHWA.

Lead State: The state through which pooled funds from the sponsoring agencies/FHWA are funded. It executes contracts for research and conducts the financial transactions for the project.

Project: A study, contracted and funded by participating states, carried out by a principal investigator affiliated with a university or research institution.

Program: All aspects of coordinating pavement activities in the northeastern United States, including the orientation, progress, and implementation of all its sponsored projects and implementation activities, and the dissemination of pavement data and information.

Request for Proposal (RFP): A detailed statement of need and the work envisioned to address this need. Included are funding and time constraints for the work to be performed.

2. Memorandum of Understanding for the Coordination of Pavement Activities in the Northeastern United States

Date

PURPOSE

The transportation agencies in the northeastern region of the United States are joining together to pool their professional, academic, and financial resources to address issues and problems with pavements in the region. The cooperation will focus on development and implementation and dissemination of data and information to substantially improve methods for dealing with common pavement problems. Such problems will be associated with the administration, planning, design, construction, rehabilitation, reconstruction, operation, and maintenance of pavement systems in the region.

This Memorandum of Understanding is established among the participating states to describe the organizational, financial, and administrative activities which constitute this activity.

Participating Members (a) as of October 1, 2003

- Connecticut Department of Transportation
- Delaware Department of Transportation
- District of Columbia Department of Transportation
- New Hampshire Department of Transportation
- New Jersey Department of Transportation
- New York Department of Transportation
- Rhode Island Department of Transportation
- Federal Highway Administration – Ex-Officio

Project Friends (b) as of October 1, 2003

- Maine Department of Transportation
- Maryland Department of Transportation
- Massachusetts Highway Department
- Pennsylvania Department of Transportation
- Vermont Agency of Transportation

(a) A participating member has contributed funding to pooled funds project TPF-5(62), “Coordination of Pavement Activities with Northeast”

(b) A project friend has not as yet contributed funding to project TPF-5(62), but has expressed interest in the project and the results of the effort.

ORGANIZATION AND MANAGEMENT

Policies and Procedures
Coordination of Pavement Activities

Policy Committee

The project will operate under the governance of the Policy Committee which consists of the Chief Administrative Officials (CAO) from the participating state transportation agencies. The policy Committee shall have a chairperson who is selected by the committee, biennially. FHWA shall designate an EX-Officio member.

The Policy Committee shall have a regularly scheduled meeting, annually; generally in conjunction with the annual NASTO meeting. Other meetings will be called, as appropriate, by the Chairperson.

The primary functions of the Policy Committee shall be to define globally needed pavement research, development, and implementation activities to be addressed by the program; approve the annual program developed in conjunction with the Advisory and Technical Committee; and acquire/provide funding to carry out the Program. Functions of the Policy Committee can be revised, added, or deleted, as it deems appropriate.

Advisory Committee

The Advisory Committee shall meet as often as appropriate. It shall provide and continuous liaison among the Policy Committee, any Technical Committees, and management of the project. Each member State of the Policy Committee will appoint one person to the Advisory Committee plus one Ex-Officio member from FHWA. The primary functions of the Advisory Committee will be to: solicit specific pavement needs; advise the Policy Committee on implementation needs and opportunities; develop and propose to the Policy Committee an annual work program; continuously monitor progress of research projects and implementation of research results; and carry out the directions from the Policy Committee.

The advisory committee shall recommend to the Policy Committee a state whose personnel shall function as Lead agency for the project. The Lead State shall be selected by consensus of the Advisory Committee. In general, the Lead State shall be the state from which the Coordinator is selected. The Coordinator shall be selected from proposals solicited from interested organizations. The Chairman of the Advisory Committee shall be elected annually vote of the members. The Lead State's representative shall act as the secretary of the Advisory Committee.

Technical Committee

For each project undertaken as part of this program, a Technical Committee member will be designated for the term of the study or activity. It shall be constituted by a representative/s, technically knowledgeable in the topic or subject being addressed. The member shall be approved by the Advisory Committee to guide the technical aspects of the work. Friends of the project will be invited to participate on the committee. Other individuals may be added to the Technical Committee, if deemed appropriate and approved by the Advisory Committee. The duties of the Technical Committee include;

1) preparation of the scope of work to be undertaken. Recommending additional organizations to receive RFP's. If the Technical Committee believes that the proposed work is not timely, such a recommendation should be made to the Advisory Committee; 2) review and evaluation of proposals in response to RFP's; 3) providing recommendations to the Advisory Committee on organizations to conduct a particular study; 4) technical monitoring of each study as it progresses; 5) delivery of recommendations to the Advisory Committee concerning the acceptability of interim and completed work; and 6) recommending actions appropriate for implementation of the findings.

Program Management

The day-to-day management of the Program shall be vested in a body or person, who shall be apart from the regular hierarchy of the Program. That person/body, selected by the Technical Committee shall provide management services for the program and shall have the responsibility and authority to: oversee the procedural aspects of the research; conduct the financial interchanges of the project; and provide services which address the administrative requirements of the Policy, Advisory and Technical Committees. This body or person shall be designated Program Coordinator.

The Lead State and Coordinator shall provide all services necessary for the administration and coordination of the activities of the program.

FUNDING

A regional pooled fund study will be employed to provide a funding mechanism for the Program. The Policy Committee will determine the size of the Program and the amount of each State's contribution. The Lead State and Coordinator will then administer the work as necessary in conformance with FHWA requirements. Payments to the researchers will be made from the pooled fund account.

PROGRAM DEVELOPMENT

Annually, the Policy Committee will approve and publish a Program addressing pavement issues and/or specific needs it desires to have investigated. RFP's may be developed and employed to address the project needs. It is the intent of this project to employ existing programs and projects to address pavement needs in the northeast. To this end, established technology transfer centers, the New England Transportation Consortium (NECT), the National Cooperation Highway Research Program (NCHRP), and other established R & D programs will be employed.

PROJECT SELECTION AND ADMINISTRATION

Contract administration will be managed by the Lead State and the Coordinator. Technical guidance will come from the Technical Committee and overall guidance from the Advisory Committee.

AMENDING THE MEMORANDUM OF UNDERSTANDING

This MOU can be amended at any time, in any way, by the Policy Committee.