



# Memorandum

Subject: **ACTION**: FY 2003 Participation in the Transportation Management Center Pooled Fund Study

Date: **December 12, 2002**

From: Jeffrey F. Paniati /s/ *Jeffrey F. Paniati*  
Acting Associate Administrator for Operations  
Acting Director, ITS Joint Program Office

In Reply  
Refer To: HOTM-1

Dennis C. Judycki /s/ *Michael Trentacoste for*  
Associate Administrator for Research, Development, and Technology (HRT-01)

To: Division Administrators

On behalf of the current members of the Transportation Management Center (TMC) Pooled Fund Study (PFS), the Federal Highway Administration (FHWA) is soliciting the participation of your State in fiscal year (FY) 2003. If your State is already a member of the TMC PFS (see list of members in Attachment 1), we would like to express our appreciation for your past support, assistance with obtaining their continued participation in FY2003, and with obligating the funds that are committed. Current members should discuss their continued participation and appropriate level of support with their technical representative to the TMC PFS.

If your State is not yet a member, please take this opportunity to discuss with them the benefits of participating in the TMC PFS partnership with the State Research Director, State Traffic Engineer, ITS Program Director, and/or TMC leaders in your State. Also, please consider discussing the opportunity to join and benefits of participating in the TMC PFS with other agencies in your State that are responsible for managing travel and controlling traffic on any portion of the surface transportation system. Such agencies may include cities, counties, regional transportation authorities, toll authorities, turnpike authorities, and port authorities. Any public agency is eligible to join and is invited to participate, by submitting a commitment form to initiate the process to join the TMC PFS (Attachment 2).

The TMC PFS is intended to serve as a forum to identify and address issues that are common among transportation management centers. The goal of the TMC PFS is to assemble regional, State, and local transportation management agencies and FHWA to: (1) identify operational and human-centered issues; (2) suggest approaches to addressing those issues; (3) initiate and monitor projects intended to address identified issues; (4) disseminate results; and (5) assist in solution deployment. Projects initiated by the TMC PFS may focus on conducting research, operational tests, technology transfer initiatives, or training.

The TMC PFS is now entering its fourth year. To build upon three successful years, the TMC PFS seeks to expand its membership, and to increase the level of support from current members. A brief description of the products that have been produced to date along with the current projects is also included in Attachment 1. In the past three years, the following nine projects have been initiated or completed to address the needs of the participating members:

- Changeable Messaging Sign Operation and Messaging
- Configuration Management for Transportation Management System
- TMC Operator Requirements, Position Descriptions, and Software (Phases 1 & 2)
- Transportation Management System Maintenance Concept and Plans
- Managing Travel for Planned Special Events
- Coordinated Freeway and Arterial Operational Plans and Procedures
- Transportation Management System Operations Concept & Requirements
- Transportation Management System Business Plans
- Dynamic Features of Messages on Changeable Messaging Signs

**Agencies interested in joining the TMC PFS should complete and submit the TMC PFS enclosed commitment form by February 28, 2003** (Attachment 2). The early submission of this form by this date is encouraged to enable immediate participation in the process to identify and select the new projects to be initiated in 2003. However, agencies can join at any time during the year. Agencies are approved to use 100 percent SP&R funds to participate in the TMC PFS.

New agencies that join the TMC PFS also have the option of having their staff participate on the teams that review and provide direction to the products that are being developed by current projects. These projects provide an excellent career development and training opportunity for public agency staff to gain exposure to and learn about innovative strategies, techniques, and approaches on how to address the key issues and challenges that public agencies are facing.

Information on the TMC PFS is available on the web at <http://tmcpfs.ops.fhwa.dot.gov/>. For additional information on joining the TMC PFS, contact Jon Obenberger at (202) 366-2221, [jon.obenberger@fhwa.dot.gov](mailto:jon.obenberger@fhwa.dot.gov); or Tom Granda at (202) 493-3365, [thomas.granda@fhwa.dot.gov](mailto:thomas.granda@fhwa.dot.gov).

Attachments (2)

cc:

RAC Members

Directors of Field Services

Resource Center Managers

## Transportation Management Center (TMC) Pooled Fund Study: FY 03 Overview

### Purpose and Goal of TMC Pooled Fund Study:

The TMC Pooled Fund Study is intended to provide a forum for participants to identify and address operational and human centered issues that are common among agencies that manage and operate TMCs. The study focuses on issues facing traffic signal control system, freeway management system, and multi-modal TMCs, and brings together regional, State, and local traffic management agencies, in concert with the FHWA, to:

1. Identify operational and human-centered issues common among TMC operators and managers.
2. Suggest approaches to address identified issues.
3. Initiate and monitor projects to implement the approaches.
4. Disseminate results.
5. Assist in solution deployment.

### Membership:

Membership in the TMC PFS consists of twenty-five public agencies and the FHWA. Agencies may join at anytime during the year by committing funds at a level deemed appropriate by the members. The study has been approved for 100 percent SP&R funding. Any non-commercial agency or organization that is responsible for the management and operation of any portion of the surface transportation system is welcome to join the study. Such agencies and organizations may include cities, counties, toll authorities, turnpike authorities, port authorities, and corridor coalitions. Current members are the FHWA and the following agencies:

Member	Technical Contact	Member Since
Arizona Department of Transportation	Manny Agah	2000
California Department of Transportation	Robert Copp	2000
Connecticut Department of Transportation	William W. Stoeckert	2000
DC Department of Public Works	Kamal Hamud	2000
Delaware Department of Transportation	Gene S. Donaldson	2000
Florida Department of Transportation	Lap T. Hoang	2000
Georgia Department of Transportation	Mark Demidovich	2001
I-95 Corridor Coalition	Marygrace Parker	2001
Illinois Department of Transportation	Jeffrey Galas	2000
Indiana Department of Transportation	Mark Newland	2000
Kansas Department of Transportation	Michael D. Floberg	2000
Michigan Department of Transportation	Kunwar Rajendra	2001
Minnesota Department of Transportation	Nick Thompson	2001
Mississippi Department of Transportation	Bob Mabry	2002
Missouri Department of Transportation	Rick Bennett	2000
Nebraska Department of Roads	Paul Cammack	2001
Nevada Department of Transportation	John Domina	2000
New Jersey Department of Transportation	Kurt Aufschneider	2001
New York Department of Transportation	Michael E. Hartman	2000

<b>Member</b>	<b>Technical Contact</b>	<b>Member Since</b>
Pennsylvania Department of Transportation	Daniel Leonard	2001
Rhode Island Department of Transportation	Cynthia Levesque	2000
Texas Department of Transportation	Richard Reeves	2002
Virginia Transportation Research Council	Catherine C. McGhee	2000
Washington Department of Transportation	Vinh Dang	2002
Wisconsin Department of Transportation	John Corbin	2002

**Process to identify, select, and initiate new projects:**

The members meet annually to review progress on current projects, and to identify and select new projects. Projects are selected based on needs that are identified through an iterative process that involves the TMC Pooled Fund Study member input, state-of-practice reviews, and issues identified by professional organizations. Based on the prioritized list of needs, project proposals are developed for further consideration and reviewed by members in advance of the annual meeting. At the annual meeting these project proposals are reviewed, revised, prioritized, and selected through an iterative process. Consensus building techniques are used to ensure that the needs identified by all members are accommodated to the extent possible.

The projects that are selected and advanced are based on priority ranking established by the members and resources that are available to the study for that year. Project groups that consist of representatives from the member agencies guide the development of the scope of the project, provide technical assistance, and direction after the annual meeting. This involvement includes any further revision of the project scope, clarification of project objectives, development of the statement of work, contractor selection, technical review and direction throughout project development and execution.

**Current projects:**

The following projects have been previously selected over the past three years:

- Changeable Message Sign Operation and Messaging
- Configuration Management for Transportation Management Systems
- TMC Operator Requirements, Position Descriptions, and Software (Phases 1 & 2)
- Transportation Management System Maintenance Concept and Plans
- Managing Travel for Planned Special Events
- Coordinated Freeway and Arterial Operational Plans and Procedures
- Transportation Management System Operations Concept & Requirements
- Transportation Management System Business Plans
- Dynamic Features of Messages on Changeable Message Signs

Brief descriptions of the completed and current projects are provided in the following paragraphs. Additional information on these projects can be found on the TMC Pooled Fund Study website at <http://tmc pfs.ops.fhwa.dot.gov/>.

TMC Operator Requirements, Position Descriptions, and Software – Phase 1: This project developed a matrix that relates TMC functions to operator knowledge, skill, and ability requirements. Because not all TMCs are the same, the matrix will trace TMC functional requirements to the tasks that operators may perform based on typical TMC functions. Agencies could use the matrix and other information developed by this project to assist them with planning and designing TMCs; developing knowledge, skills, and abilities (KSA's) required for TMC operators; establishing job classifications; developing position descriptions; and identifying training needs.

*Milestones & Products:*

- Final versions of the Phase 1 draft products are available on the project web page.
- Technical reference provides guidance and best practices on:
  - Developing operator tasks based on TMC functions;
  - Developing TMC operator KSA's;
  - Preparing position descriptions;
  - Identifying comparable job classifications; and
  - Establishing possible training and career development needs.
- Spreadsheet of various matrices developed to assist in developing TMC operator KSA's is available on the project web page.

Detailed project information and products are available at the project web page at:  
[http://tmc pfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=26&new=0](http://tmc pfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=26&new=0).

TMC Operator Requirements, Position Descriptions, and Software – Phase 2: The objective of Phase 2 is to develop a software tool that will assist in the development of KSA's and position descriptions for TMC operators. This software will build off the spreadsheet application that was developed in Phase 1 of this project. This software will allow for the information developed and contained within this spreadsheet to be easily modified to match a particular TMC and agency. The resulting software will allow for the basic operator tasks to be identified, KSA's developed, job classifications established, and key items presented for use in preparing position descriptions. This effort will also involve revising the technical reference to ensure that it matches what is provided in the software and is consistent with the processes that may be involved with developing the individual matrix or ultimate position descriptions for an operator.

*Milestones & Products:*

- Scope of work developed and work initiated on contract, March 2003.
- Draft software and revised technical reference, June 2003.
- Final software and revised technical reference, September 2003

Detailed project information and products are available at the project web page at:  
[http://tmc pfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=26&new=0](http://tmc pfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=26&new=0).

Changeable Message Sign Operation and Messaging: The project developed a document that provides guidance and identifies best practices on the operation and display of messages on changeable message signs (CMS). This document presents the basis around which recommended procedures and best practices for the operation, development, and display

of messages on CMS,. It also provides the available information that identifies the basis or empirical evidence that relates the impact of CMS messaging to driver behavior, traffic flow, and safety. This documentation is intended to support agencies in developing their own policies, procedures, and practices that would govern how CMS are operated, messages developed, and displayed.

*Milestones & Products:*

- Draft technical reference is available on the project web page.
- Final technical reference to be submitted in February of 2003.
- White paper on CMS operational and messaging issues requiring additional research or integration into the MUTCD is available on the project web page.

Detailed project information and products are available at the project web page at:  
[http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=25&new=0](http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=25&new=0).

Transportation Management System Maintenance Concept and Plans: This project is developing a document that will provide guidance on how to plan, develop, and support a maintenance program to meet the needs of a TMC. Issues to be addressed include: (1) typical components of a maintenance program; (2) need for and components of a multi-year business plan; (3) what should be included in a maintenance concept and requirements for a TMC; (4) how to develop and what to consider in developing a TMC maintenance concept and requirements; (5) how to use and integrate the maintenance requirements throughout the life-cycle of a TMC; and (6) policies, procedures, resources, and support services needed to maintain a TMC.

*Milestones & Products:*

- Synthesis of Practice (April 2002) is available on the project web page.
- Draft technical document (July 2002) is available on the project web page.
- Final technical document will be developed by March of 2003.

Detailed project information and products are available at the project web site:  
[http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=27&new=0](http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=27&new=0).

Configuration Management for Transportation Management Systems: This project developed a document that provides guidance and best practices on configuration management (CM) control processes, accounting system, managing a CM program and activities, job and/or position requirements, tools, and how to apply these techniques and concepts throughout the life cycle of a system.

*Milestones & Products:*

- Draft technical reference is available on the project web page.
- Final technical reference will be submitted in February of 2003.
- Brochure identifying benefits and value of CM will be submitted in March of 2003.
- White paper on CM topics requiring additional research will be submitted in April 2003.

Detailed project information and products are available at the project web site:  
[http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=24&new=0](http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=24&new=0).

Coordinated Freeway and Arterial Operational Plans and Procedures: The overall objective of this project is to develop a document that provides technical guidance and recommended practices on how to: (1) prepare plans, coordinate activities, develop procedures, and protocol to use in managing travel, controlling traffic, and providing services related to coordinating travel on freeways and arterial roadways; and (2) identify the institutional issues, agreements, technologies, support services, traffic control plans, analysis techniques and tools, support programs (e.g., potential further study, training, technical guidance), and other factors that may be appropriate to consider in the various phases associated with planning, managing travel, and providing services.

*Milestones & Products:*

- Synthesis of Practice (October 2002) is available on the project web site.
- Draft technical reference will be submitted by March 2003.
- Final technical reference will be submitted by July 2003.

Detailed project information and products are available at the project web site:

[http://tmcdfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=48&new=0](http://tmcdfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=48&new=0).

Managing Travel for Planned Special Events: The objective of this project is to develop a document that provides guidance and best practices related to the proactive management of travel for planned special events. The intended audience of this technical reference is the team of individuals (e.g., transportation agencies, service providers, private sector companies, and other interests) that would be involved in or responsible for the advanced planning, stakeholder coordination, and management of day-of-event activities for a range of different types of planned special events. The technical issues that will be addressed will include the planning and stakeholder coordination in advance of specific special events; managing travel the day-of-the-event and activities of the traffic management team; post-event activities; planning to improve the management of travel with all planned special events in a region; and procedures, practices, techniques, and issues to consider for a range of typical types of planned special events.

*Milestones & Products:*

- Synthesis of Practice (September 2002) is available on the project web site.
- Draft Technical Document will be complete in March 2003.
- Final Technical Document will be complete in July 2003.

Detailed project information and products are available at the project web site:

[http://tmcdfs.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=32&new=0](http://tmcdfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=32&new=0).

Transportation Management System Operations Concept & Requirements: The overall objective of this planned project is to develop a document that provides technical guidance and recommended practices on: (1) what is an operations concept; (2) how to develop and what should be included in a concept of operations for a TMC; (3) what are functional requirements; (4) how to develop and what to consider in developing TMC functional requirements; and (5) how to use and integrate the concept of operations and requirements throughout the life-cycle of a TMC.

*Milestones & Products:*

- Scope of work developed and work initiated on contract, February 2003.
- Draft report submitted November of 2003.

Dynamic Features of Messages on Changeable Message Signs: The objective of this proposed project is to test and provide guidance on the impacts of dynamically displaying messages on changeable message signs (CMSs). This project will involve multi-task human factors laboratory studies to assess the impacts of dynamically displaying or flashing messages on CMSs, develop guidance to practitioners based on the results of this test, and identify proposed changes to existing sections or need for new sections in the MUTCD. This project will build upon the current research conducted under the TMC Pooled Fund Study project *Changeable Message Sign Operation and Messaging*.

*Milestones & Products:*

- Scope of work developed and work initiated on contract, March 2003.
- Work plan identifying dynamic features of displaying and flashing messages to be tested, June 2003.
- Tests completed and preliminary results presented, October 2003.
- White paper identifying recommended practices and potential changes to make to the MUTCD, February 2004.

Transportation Management System Business Plans: The purpose of this proposed project is to develop a document that provides guidance and best practices on how to develop and what to include in a TMC business plan. The intended audience of this document is the team of individuals that would be involved in the development or ultimate use of a TMC business plan. The technical issues that will be addressed will include: (1) what to consider and different types of business plans that may be applicable based on the needs of each agency; (2) role, relationship, and how to integrate a TMC business plan into other strategic documents; (3) typical components of a business plan; (4) process and considerations in developing; (5) application of concepts to a TMC, and (6) sample case studies of successful types of case studies.

*Milestones & Products:*

- Scope of work developed and work initiated on contract, February 2003.
- Draft report submitted November of 2003.

**Program Administration:**

As part of its contribution to the TMC Pooled Fund Study, the FHWA provides the staff and resources that are necessary to successfully support various projects and activities. As a result, the funds that are provided by the members go entirely to the projects that are selected and products that are produced or services provided. FHWA resources are then used for providing leadership, direction, technical expertise, and project management to the various activities that are pursued or projects initiated. Contract solicitations, when necessary, will be issued through normal FHWA procurement procedures.



**Governance and Charter:**

A charter, ratified by the members, governs the following aspects of the TMC Pooled Fund Study: membership; project selection; project management, coordination, and solicitation; policies and procedures; fiscal management; and overall TMC Pooled Fund Study management. The complete TMC Pooled Fund Study charter is available at <http://tmcpfs.ops.fhwa.dot.gov/>.

**FHWA Contacts:**

For additional information on the TMC Pooled Fund Study contact Jon Obenberger at (202) 366-2221, [jon.obenberger@fhwa.dot.gov](mailto:jon.obenberger@fhwa.dot.gov); Tom Granda at (202) 493-3365, [thomas.granda@fhwa.dot.gov](mailto:thomas.granda@fhwa.dot.gov); or Felipe Luyanda-Andino at (202) 493-3368, [felipe.luyanda-andino@fhwa.dot.gov](mailto:felipe.luyanda-andino@fhwa.dot.gov). To request documents or material that are not available on the TMC Pooled Fund Study website, contact Ming-Shiun Li at (612) 373-6335, [ming\\_shiun\\_li@urscorp.com](mailto:ming_shiun_li@urscorp.com).

**TMC POOLED FUND STUDY: FUNDING COMMITMENT FORM**

**STATE/AGENCY:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**PROJECT TITLE:** "Transportation Management Center (TMC) Pooled Fund Study (PFS)"

**PROJECT NUMBER: SPR-2(207)**

Submitting this form indicates that your agency intends to participate and transfer the funds noted in the commitment column below to the TMC PFS. Agencies, as stated in the FY2003 TMC PFS participation memo from Jeffrey Paniati and Dennis Judycki to Division Administrators, are approved to use 100 percent SP&R funds to participate in the TMC PFS. Subsequent to making the funding commitment, agencies should transfer and/or obligate their funds for 2003. Please indicate if your agency will immediately obligate the funds committed for 2003 or at a future date. Also indicate if your agency plans to use funds other than SP&R and the method that will be used to transfer these funds.

\_\_\_\_\_ **YES** \_\_\_\_\_ **NO**

**PROPOSED LEVEL OF FUNDING SUPPORT:** \$ \_\_\_\_\_

<u>FY Year</u>	<u>Commitment</u>	<u>Comment</u>
2003	\$ _____	_____
2004	\$ _____	_____
2005	\$ _____	_____
2006	\$ _____	_____

If Federal-aid funds will be electronically transferred, the Federal-aid Project Authorization and Project Agreement Form must be submitted to the FHWA Division Office in your state. These funds need to be entered in the FHWA Financial Fiscal Management Information System (FMIS) as 0002207 to obligate and make these funds available to the TMC PFS.

Agencies may use non-Federal-aid or other sources of funds to participate in the TMC PFS. The transfer of these funds must be in the form of a check made payable to the Federal Highway Administration and submitted directly to the FHWA Lockbox. The address of the lockbox is: FHWA, P.O. Box 100147, Atlanta, Georgia 30384-0147. The TMC PFS and project number SPR-2(207) must be included on both the submittal letter and check to ensure that the funds are properly credited to the TMC PFS.

Notes: \_\_\_\_\_  
\_\_\_\_\_  
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**TO JOIN:** Please return this completed form to Jon Obenberger by February 28, 2003 at [Jon.Obenberger@fhwa.dot.gov](mailto:Jon.Obenberger@fhwa.dot.gov) or faxed to (202) 366-8712.

**AGENCY CONTACTS:**

Technical Contact:	_____	Phone:	_____
Title:	_____	FAX:	_____
Address:	_____	e-mail:	_____
	_____		
	_____		

Funding Contact:	_____	Phone:	_____
Title:	_____	FAX:	_____
Address:	_____	e-mail:	_____
	_____		
	_____		