

Transportation Management Center Pooled Fund Study 2002 Annual Meeting – May 14th & 15th

Hilton Arlington and Towers, 950 N. Stafford Street, Arlington VA
Gallery One Meeting Room

Meeting Minutes

Attendees

Manny Agah, Arizona Department of Transportation
Robert Copp, CALTRANS
Vinh Dang, Washington Department of Transportation
Jeffrey Galas, Illinois Department of Transportation
Michael Hartman, New York Department of Transportation
Lap Hoang, Florida Department of Transportation
Paul Cammack, Nebraska Department of Roads
John Corbin, Wisconsin Department of Transportation
Gene Donaldson, Delaware Department of Transportation
Kamal Hamud, District of Columbia Department of Transportation
Daniel Leonard, Pennsylvania Department of Transportation
Mark Newland, Indiana Department of Transportation
Richard Reeves, Texas Department of Transportation
Thomas Granda, Federal Highway Administration
Felipe Luyando-Andino, Federal Highway Administration
Jon Obenberger, Federal Highway Administration

Tuesday, May 14

- 08:45 AM Introductions, Welcome, & Opening Remarks (Tom Granda, FHWA)
FHWA Welcome:
- Jeff Lindley, Director, FHWA, Office of Travel Management
 - Introduction of new members

Tom Granda began the day by welcoming everyone to the TMC Pooled Fund Study Annual Meeting. He recognized new participants and noted the strong growth of the program. Then,

Jeff Lindley, Director of FHWA's Office of Travel Management, also welcomed participants and noted strong interest in the issues being addressed through the TMC Pooled Fund Study as evidenced by the size of its membership – highest of the pooled fund studies.

- 08:55 AM Review Agenda (Co-chair: Robert Copp, CALTRANS)

Robert Copp reviewed agenda items for first day of annual meeting.

- 09:00 AM Pooled Fund Study Funding Status (Tom Granda, FHWA) – Attachment 1
- Commitments and obligations 2001-2002
 - Planned expenditures 2002
 - Proposed commitments & level of expenditures 2003

Tom Granda discussed funding related issues and Jon Obenberger added that there was possible interest from the states of Tennessee and Utah as well as the cities of Anaheim and Sacramento in

California in joining the PFS. Tom Granda was asked if there is a deadline for contributions. Tom replied that there is no deadline initially. There was also a question regarding the amount of contributions, specifically, if smaller entities such as cities and counties could contribute less than states as their overall budgets are smaller. Jon Obenberger replied that this can be evaluated on a case-by-case basis and that there is no minimum contribution per se.

09:15 AM Presentation - Preliminary Results of CMS Project (C. Dudek, TTI) – Attachment 2

Connie Dudek of Texas Transportation Institute gave a presentation on the preliminary results of the CMS Project he is heading. Discussion about the CMS Project included topics such as regional differences in CMS messages, the information to give to the user (cross streets, exit numbers, or mile markers). It was decided that comments should be sent directly to Connie (c-dudek@tamu.edu) with copies also sent to SAIC, PFS support contractor. A final version of the report is expected by the end of calendar year 2002. It was the overall opinion of the attendees that support should be given for additional research in the CMS field.

10:15 AM Break

10:50 AM Presentation – Preliminary Results of Operators Requirements Matrix Project (D. Baxter, PB Farradyne) – Attachment 4

Dan Baxter of PB Farradyne gave a presentation on the preliminary results of the Operators Requirements Matrix Project. Discussion on the project included requests for more detail on the KSA matrix, the relationship with the ITS Architecture, educational requirements, and the difficulty of state DOTs in finding qualified personnel to staff their TMCs. Member's expressed strong interest in the final results of this project and felt that the issues involved had great relevance to many of the challenges they encountered regarding staffing of TMCs.

12:00 PM Presentation – Preliminary Results of Configuration Management Project (B. Smith, UVA) – Attachment 3

Brian Smith was unable to attend the meeting, so Jon Obenberger gave the presentation on the preliminary results of the Configuration Management Project. Discussion included the importance of making the Configuration Management concepts more understandable to traffic engineers and the services involved with various CM activities or tasks.

12:30 PM Lunch

01:20 PM Presentation – Preliminary Results of TM Systems Maintenance Project (C. Vick, PB Farradyne) – Attachment 5

Cary Vick of PB Farradyne gave a presentation on the preliminary results of the Traffic Management Systems Maintenance Project. Discussion included the issues of maintaining versus replacing equipment and the level of need for preventive maintenance as well as the importance of incorporating maintenance into initial system design considerations.

02:00 PM Arterial Operations and Traffic Signal Systems: Overview of National Initiatives (Felipe Luyando-Andino, FHWA)

Felipe Luyando-Andino of FHWA gave a presentation on Arterial Operations and Traffic Signal Systems. Handbooks are being developed including an update of the Communications for Traffic Control Systems Handbook, the creation of a Detector Handbook, and the creation of a Traffic Control Systems Handbook. Courses are also being created including a Freeway Traffic Operations course and a Computerized Traffic Signal Design course. In terms of research, improvements are being made in queue detection to aid in incident management as well as field tests of adaptive signal control systems.

02:15 PM USDOT's National Transportation Security Initiatives (Shelley Row, FHWA)

Shelley Row of FHWA gave a presentation on the USDOT National Transportation Security Initiatives. The events of September 11th have caused the transportation community to re-examine issues regarding security of transportation infrastructure and has focused attention on the need for expanded inter-agency and inter-regional coordination for incident management operations. The interaction between emergency and transportation vehicles was discussed.

02:45 PM Break

03:15 PM Freeway Management & Operations: Overview of National Initiatives (Jon Obenberger, FHWA)

Jon Obenberger provided an overview of ongoing and planned national freeway management and traffic operations related research initiatives. Following his presentation, there was discussion on Variable Speed Limits and the need to conduct outreach to other groups. Gene Donaldson of Delaware DOT discussed a successful meeting with representatives of TMCs in Delaware, Maryland, and Virginia. John Corbin of Wisconsin DOT emphasized that unless the meetings were done at a regional level, it would be difficult to get states to participate due to high travel costs. Paul Cammack of Nebraska DOT suggested that perhaps there might be one track for managers of TMCs and another for the Operations people. Jon Obenberger requested that ideas from each agency as to needed research, testing, technical guidance/references, outreach, and training may be forwarded at any time to consider including in this program and to obtain necessary budget support.

04:00 PM Discuss Status of Projects Initiated in 2002 (Jon Obenberger, FHWA)

- Managing Travel for Planned Special Events
- TMC Concepts of Operations and Requirements
- Coordination Freeway and Arterial Operational Plans and Procedures

Jon Obenberger gave an overview of the status of the projects initiated in 2002 before going into detail about new project ideas.

04:30 PM Overview of New Project Ideas (Jon Obenberger, FHWA)

Jon Obenberger gave an overview of the new project ideas. Jon Obenberger pointed out that one of the projects that the members had been considering, Freeway System Performance Monitoring and

Reporting, was selected by NCHRP as a research project to be initiated this fall. As a result, it was removed from the list of potential projects for the members to consider.

Tom Granda suggested that perhaps studies be combined if possible in order to maximize the number of projects to be completed based on the amount of resources that are available.

The revised two page project proposals were distributed for each of the proposed projects that were reviewed, feedback provided, and identified prior to this meeting as warranting further consideration for selection by the members:

- Resolution of Selected Changeable Message Sign (CMS) Issues that Affect Operational and Safety Considerations
- Ramp Metering Handbook
- TMC Operations Manual: Policies, Procedures, and Plans
- Acceptance Testing for Transportation Management Systems
- Multi-year TMC Business Plan

Several attendees suggested that projects such as the CMS projects, Maintenance Plan, and the Operator Requirements Matrix should also be considered further based on the issues that were discussed and recommendations identified during the earlier presentations for further research. The discussion to be held during the next session would involve identifying additional projects that should be considered and issues to be considered with current projects that are proposed.

05:00 PM Review Day 2 Agenda/Adjourn for Day (Co-chair: Robert Copp, CALTRANS)

Robert briefly described activities planned for the following day.

Wednesday, May 15

08:30 AM Review and Discuss Potential New Projects (Co-chair: Robert Copp, CALTRANS)

- Review project development and selection process
- Review current project proposals and identify potential changes
- Identify any new projects not previously presented to members

Participants were asked if there should be any additions to the list of new projects for consideration for the following year. Based on the this discussion, it was determined that the Changeable Message Signs and Operator Requirements Matrix projects should be considered for further consideration.

The members provided review comments on each of the proposed projects. The following is a list of the issues that were identified by the members to be considered for inclusion in these various projects if they are considered further:

Proposed Changeable Message Sign Project

- Add issues identified as priorities for research in the current CMS project to Project SOW
- RFP should list priorities and should offer or propose how many can be addressed within budget as metric for selection
- Incremental “progress” structure for contract continuation, member review and approval prior to moving to subsequent phases
- Emphasis on issues that are directly applicable and answer questions in the MUTCD and other operational issues. The study should not be solely for research

- A broad universe should be used for driver selection in the study
- Route divergence is a quagmire in this study and should not be a major focal point
- The results can be used to support or integrate into the development of future training, standards, policies, and operational procedures.

Proposed Ramp Management and Control Project

- Institutional issues and perception with strategies for operations
- Ramp geometry and other constraints
- Warrant and criteria for supporting ramp metering
- Process guidelines: ramp meters, ramp gates, and ramp closures
- Maintenance and Operation considerations
- Signal control at ramp terminal
- Ramp temporary closures
- Retrofitting ramps with meters
- Ramp metering with 1, 2, or 3 lanes
- Isolation operation versus central control
- Speed Control
- Benefits
- Design standards with new installations
- Enforcement commitments
- Marketing / Outreach / Public Involvement
- Planning
- Operations Guidelines
- Enforcement (cop in a box)
- Operating at saturation
- Coordination of ramp meters with adjacent signals
- Safety with congestion relief (regionally and corridor-wide)
- Tables and charts
- System Capacity
- Integration with signals
- Travel advisory information in front of ramp entrance
- Training
- Effort of document

Proposed TMC Operations Manual

- Difference between TMC Operations Manual and Control Room Operations Manual
- Basic guidelines
- Cost and level of effort
- Training: on-the-job versus other options
- Expand on existing ITE outline recommending issues to be included in an Operations Manual

Proposed Acceptance Testing Project

- System engineering process reference and tie to types of test plans
- Warranties with contract (and when do they start?)
- Contract Mechanisms (how to include testing and acceptance)
- Role and involvement resources for acceptance testing
- Training and staff capabilities
- Conditional versus final and device versus component

- Tie to CM
- Examples on how to proceed with testing
- responsibilities for the DOT, system manager, system integrator, and subcontractor
- Capabilities and expertise required to support needs of system
- Day to day testing and verification
- What to do with problems such as non-completion, penalties, and payments that result from failed acceptance tests
- Work incidental to other contracts
- Recourse with non-acceptance
- Process to direct and resolve
- Relate and use example to road builders
- Produce for non-technical and management audience
- Criteria with level of system and how to establish, how they may change over time
- Plan, Design, and Maintain

Proposed Multiyear TMC Business Plan

- Management is the ultimate audience of state activities /TMC
- Business case for why to deploy, maintain, and operate
- Analysis to support bases for plan, method, tools, data, and level of effort
- Benefits and measures
- Focus of traveler info, traffic (arterial and freeway), incident management, and support
- Baseline information on cost to build, manage, maintain, and inventory
- Who develops the plan, skills, and experience
- Summary documents developed specifically for executives
- Process to develop, time and effort needed
- Straw document
- Statewide versus TMC specific
- Describe and ID other items to be supported
- Agency structure
- How this plan fits with other strategic plans
- Florida DOT: analyzing other agency organizations with ITS and Traffic
- Goal, objectives, measures, baseline of performance measures, and thresholds
- Map “matrix” to agency of higher level goals, objectives, and measures
- Transportation Management System focus
- Transportation Management Business versus Traffic
- How successful the TMC is integrated into the agency program
- Case studies with different types of agencies
- Focus with business function and plans
- Macro with how to fit within the ultimate agency plan (environment, safety, mobility, congestion)
- Components
- Products (technical reference document, case studies)

Proposal for Expanded Operator Requirements Matrix Project

- Levels for KSAs and classifications (High or Advanced, Middle, Entry)
- Evaluation of matrix and modify based on recommendation using 3 to 4 sites for evaluation and test to existing descriptions
- How to develop KSAs for agency, project, and use in report

- How to use software
- Outreach and awareness through distribution letters, fact sheets, articles, or a communications plan
- Software and automation
- PD's (what to include, how to develop, HR issues, samples, how to develop)

Following these discussions, FHWA solicited volunteers to serve as Champions for each project. Projects and associated champions are listed below:

- TMC Operators Matrix (Mike Hartman, NYS DOT)
- Acceptance Testing (Mike Hartman, NYS DOT)
- TMC Operations Manual (Manny Aagah, ADOT)
- CMS Project (Jeff Galas, IDOT)
- Ramp Control Handbook (Jeff Galas, IDOT)
- TMC Business Plan (Robert Copp, CALTRANS)

Prior to voting and prioritizing the projects to pursue, the members decided that the continuation of the operator requirements matrix project should be continued and be the highest priority for funding. As a result, this project was not included in the voting. It was determined that a cost estimate for this project would be identified once the FHWA staff developed the proposal for the completion of the project that addressed the issues the members identified.

10:00 AM Break

10:20 AM Prioritize 2003 Projects to Initiate (Co-chair: Robert Copp, CALTRANS)

- Review and discuss results of project prioritization
- Review and revise project proposals based on members comments
- Members prioritize project proposals prior to break

1:25 PM Lunch and Voting

2:00 PM 2003 New Project Selection – Continued (Co-chair: Robert Copp)

- Review results of project prioritization
- Review and revise project proposals based on members comments
- Select new projects for 2003

Results (in descending order) are summarized in the table below:

Project	Order
CMS Project	1 st
Multi-Year TMC Business Plan	2nd
Ramp Management and Control Handbook	3rd
Acceptance Testing	4th
TMC Operations Manual	5th

Since the final three projects were so close in terms of the number of votes (10, 9, and 7, respectively) received, a second vote on the last three projects was conducted. Each member was given two votes to cast. Each project champion made a few comments regarding why their project should be chosen. This voted resulted in a clear preference, with the Ramp Metering Handbook garnering over twice as many votes as the least preferred project idea. Results of the second vote are shown below:

Project	Votes
Ramp Management and Control Handbook	1st
Acceptance Testing	2nd
TMC Operations Manual	3rd

Thus, the final results were to choose the Operator Requirements Matrix Project, CMS Project, Multi-Year TMC Business Plan, and Ramp Handbook as the priorities to consider pursuing further in 2003.

Another project that the attendees wanted to focus on was a communications effort to support the TMC PFS. Training needs, awareness on innovation issues, and outreach material on TMC and various other related issues were also discussed as being needed. . This effort could use technology such as video conferencing to reduce travel expenses. Jon Obenberger mentioned that sample outreach products could take the form of brochure, Question and Answer sheets for public and media, briefing sheets, summary report for officials, and other resources could be prepared to meet the needs of public agencies. . Tom Granda mentioned that perhaps CDs or other tools can be developed for this, but stressed that the products need to be usable to be effective.

Many attendees expressed the need to put resources into developing a communications plan and associated efforts to support the various initiatives that are determined necessary to meet the needs of TMC PFS. The members indicated that this project should also be considered as one of the priorities that should be considered to receive funding. FHWA staff was requested to develop a proposal to support this effort to all the members to consider this project and associated activities further.

03:00 PM Member Feedback (Jon Obenberger/Tom Granda, FHWA)

- Need and type of mechanism to provide feedback
- Issues to obtain feedback on (e.g., PFS management, administration, project management, web site, etc.)
- Website
- Other issues

Tom Granda asked for member feedback from the attendees. Several attendees identified the need to meet more than once a year due to the number of current projects that will be completed and the work that will remain on finalizing the scopes of new projects to be initiated. The time of year with respect to other conferences such as ITE or ITS America was discussed. Several members indicated that it would be tough to go to the same location at the same time as ITS America or ITE even if they were not at the conference itself. A recommendation was made to consider holding a second meeting in the fall of 2002 or possibly 2003.

Comments were also provided related to , the amount and quality of e-mails that everyone receives related to various TMC PFS activities and projects. It was determined that - a monthly status report would be sent out with the term "TMC Monthly Status" in the subject line to provide a brief overview related to all of the past and upcoming TMC PFS activities. It was also noted that improvements were also needed on how current the information is on the TMC PFS web site, how timely information is sent out and packaged in advance of conference calls, and the quality and clarity of electronic communications needs to improve.

03:30 PM Remaining TMC PFS Activities for 2002 (Tom Granda, FHWA)

Discuss date and agenda for next meeting
Discuss schedule and process to solicit participation for 2003
Distribute vouchers to invitational travelers

It was also recommended that future conference calls be scheduled on a regular basis (i.e. 2nd Thursday of each month) for each TMC PFS project to reduce conflicting schedules and obtain more participation. Jon Obenberger asked the attendees to talk with colleagues in other states, cities, or other public agencies (e.g., toll, turnpike, or port authorities) to gain their support to join the TMC PFS. . .

04:00 PM Adjourn

Jon and Tom again thanked PFS members for their participation and encouraged them to stay involved in projects, as their guidance is a key element in ensuring that the projects meet the needs of the members and other practitioners.

Meeting was then adjourned.