

### TMC Pooled-Fund Study

# Handbook for Developing a TMC Operations Manual

TMC pooled-fund web site http://tmcpfs.ops.fhwa.dot.gov/

2005

## What are the objectives of the *Handbook?*

- Clarify the need and benefits for an operations manual.
- Provide a resource for those developing, maintaining and using an operations manual.

### Six step summary of process to develop a TMC operations manual

- 1. Select a TMC operations manual leader.
- 2. Educate the leader.
- 3. Form the TMC manual team that will write the operations manual.
- 4. Educate the team.
- 5. Identify manual components.
- Write the TMC operations manual throughout the life cycle of the system.

### Handbook for Developing a Transportation Management Center Operations Manual

Operations affect outcomes. With more effective operations, there is more effective system performance. An operations manual is a key tool in leveraging effective operations.

You wouldn't buy a high performance car or a stereo system without a manual. So why operate a sophisticated transportation management system (TMS) without an upto-date operations manual? But since every transportation management system is unique and infrastructure changes are a routine occurrence, the challenge of developing an up-to-date manual can be imposing.

Fortunately a number of TMS agencies banded together and wrote a handbook for developing a transportation management center (TMC) operations manual. Based on this extensive practitioner knowledge base the document has become a resource suggesting best practices.

The audience for this *Handbook* includes the following types of agencies and personnel.

- Traffic management and transit management centers concerned with traffic signal control systems, freeway management systems, or multi-modal systems.
- Operators and dispatchers who work in a TMC.
- Managers and technical staff who interface with a TMC and need to know its scope, resources, and procedures.



### **How Does the Handbook Work?**

The Handbook leverages existing products that have been developed for TMCs. These resources include a *TMC Business Planning and Plans Handbook* and a guide for *Developing and Using Concept of Operations in Transportation Management Systems*. The *Handbook* stresses key strategies such as using a team approach, educating the TMC manual team, developing a TMC manual throughout the system life cycle, and documenting the transportation management center's concept of operations prior to writing the TMC manual.

The *Handbook* then guides a user in the development of a TMC operations manual using a sample outline linked to key resources. The *Handbook* leverages existing products that have been developed for TMCs including those sponsored by the TMC Pooled-Fund Study Team.



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The purpose of a TMC operations manual is to formalize and document the policies, plans, procedures, and other support activities that are performed to achieve a TMC's mission, goals, and objectives.

By using an extensive practitioner knowledge base as input into development of the *Handbook*, the document becomes a resource suggesting best practices.



### **Key Aspects of the Handbook**

A successful operations manual must satisfy a number of needs. In some cases the requirement is for <u>quick response</u> to pressing activities. Therefore, it is important to include sections that contain emergency contact numbers and control room emergency procedures.

In other cases the need is to <u>communicate</u> <u>policies and concepts of operations</u> to the operations staff. These topics provide the framework for effective management of the system and identify the roles of interagency cooperation.

Other sections of the manual should describe the physical characteristics of the system and field infrastructure so that TMC operators and field staff are able to work cooperatively to repair system outages.

Another portion should <u>identify daily operational practices</u> so that staffing can be planned, citizen service requests can be handled, and building security can be maintained.





Other sections should <u>describe procedures</u> for operating the <u>systems</u> and equipment to effectively respond to incidents and congestion. Details should be provided for displaying messages on dynamic message signs, exchanging data with information service providers, posting information to the Internet and much more.

Many partners in the Pooled-Fund network contributed their experience to direct the development of this *Handbook*. Their best practices can be guideposts for future TMC manuals.

#### **Additional Resources**

The ITE Recommended Outline for a TMC Operations Manual prepared in 2001 is available on the ITE web site at <a href="http://ite.org/">http://ite.org/</a> and the TMC Pooled-Fund Study website for this project at

http://tmcpfs.ops.fhwa.dot.gov/cfprojects/new\_detail.cfm?id=58&new=0.

The Pooled Fund Study web site also contains TMC manuals that have been contributed by a number of public agencies including: Arizona, Tennessee, Texas and Washington State.

#### **For More Information**

Visit the TMC Pooled-Fund Study website at <a href="http://tmcpfs.ops.fhwa.dot.gov/">http://tmcpfs.ops.fhwa.dot.gov/</a>

Publication No.: FHWA-HOP-06-013 Developing a Transportation Management Center Operations Manual: Fact Sheet