Metropolitan MDI Workshop Wisdom: Project Organization and Outreach

March 1999

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Contract Sponsor: Federal Highway Administration
Contract No.: DTFH61-95-C00040
Project No.: 099818B6-0A
Department: Q020

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McLean, Virginia

Executive Summary

As part of the Metropolitan Model Deployment Program (MDI), six workshops were convened to provide a forum for the exchange of information among the MDI sites of New York/New Jersey/Connecticut, Phoenix, San Antonio, and Seattle. Although much of the information presented during the workshops was specific to individual project development, in the areas of project organization and outreach the information is valuable to a wide ITS audience. Each project was organized differently; all projects shared a common vision on outreach. This paper presents descriptive information on the projects in these areas, as well as "advice from the MDIs". The advice was compiled from presentations at the workshops and represents a body of ITS project management wisdom that should be considered by anyone involved with the management of an ITS project.

Table of Contents

INTRODUCTION

In autumn of 1996 former Secretary of Transportation Federico Pena announced that New York / New Jersey / Connecticut, San Antonio, Phoenix and Seattle were chosen to participate in the Metropolitan Model Deployment Initiative (MDI) program. The program focused on bringing public and private sector partners together in the integrated deployment of Intelligent Transportation Systems (ITS) by integrating existing infrastructure with new traveler information systems.

Although the sites worked towards the common goals of improving the efficiency of existing transportation systems and enhancing the dissemination of transportation information, each Metropolitan MDI site faced unique institutional and technological challenges. Regularly scheduled workshops for the Metropolitan MDI sites were attended by both public and private sector partners. These workshops proved to be an excellent forum to facilitate the exchange of information on various elements of the individual projects and to share experiences on effective responses to the challenges.

The purpose of this report is to further facilitate the exchange of information and provide agencies embarking on ITS initiatives with advice in two areas: project organization and outreach. The sources of information for this report are the presentations and discussions at the Metropolitan MDI workshops. This advice is provided in sections labeled, "Advice from the MDIs". The organizational advice from each MDI is included individually after a brief description of the MDI's organizational structure. Because the outreach teams at the four sites worked together to ensure consistency across the projects, outreach advice from all four sites is combined.

Program Objective

The objective of the Metropolitan MDI program was to provide model deployments of a core metropolitan-area information, communications, and traffic and transit management infrastructure that would support regional traveler information services. In order to facilitate this initiative federal ITS funding was made available for:

- System design and integration of data collection elements of existing transportation management functions;
- Creation of a regional multimodal transportation information system that would support public sector transportation needs;
- Creation of a data repository of current, multimodal traveler information for dissemination through a variety of delivery mechanisms;
- Public relations and outreach activities to highlight the availability and benefits of integrated transportation management system to local consumers, public transportation agencies, and other public and private organizations.

Background on MDI Sites

Each site selected to participate in the Metropolitan MDI program was unique demographically and in the transportation challenges it faced, as well as in the ITS solutions deployed. The

following short summaries illustrate the uniqueness of each metropolitan area.

New York/New Jersey/Connecticut

The New York/New Jersey/Connecticut *iTravel* project is located in the largest metropolitan area in the United States, with a population of over 18 million people. The surface transportation system is one of the most complex in the world; its transit system is most traveled in the United States. *iTravel* will make traveler information more readily available, ultimately making travel into and through the region easier. Specifically, *iTravel* will link information from various transit agencies with TRANSCOM's Regional Architecture to provide travelers with regional, real-time traveler information, and seamless transit itinerary planning across multiple agencies and jurisdictions. The components of *iTravel* are:

- Regional Architecture
- Personalized Traveler System (PTS)
- Traveler Information Center (TIC)
- Transit Itinerary Planning System (TRIPS)

Phoenix

The Phoenix metropolitan area has grown to over 3 million people in 23 different communities. Residential and industrial expansion has significantly increased demand on the regions transportation system. In addition to building new streets and freeways, ITS was also deployed through the AzTech program to improve the quality of life through reduced travel times and enhanced traveler safety. The metropolitan MDI components of AzTech include:

- Traffic signal control
- Transit management
- Transit information service
- Regional Multi-modal Traveler Information

San Antonio

Prior to being selected as a metropolitan MDI site, Texas DOT had significant experience in ITS deployment with the development TransGuide. The initial efforts of TransGuide focused on the development of an Advanced Traffic Management System (ATMS) for freeways in metropolitan San Antonio. TransGuide will play a key role in helping to improve the quality of life in San Antonio through a reduction in congestion and enhanced emergency care response time. The metropolitan MDI components of TransGuide are:

- Real-Time Area Wide Travel Database
- Automated Vehicle Identification
- Railroad Delay Advanced Warning System (Award)
- Traveler Information Kiosks
- In-Vehicle Navigation
- Emergency Medical Services Management System (LifeLink)

Seattle

The population in the Puget Sound region is predicted to increase 50% from 1990 to 2020. This growth will continue to put strain on the region's transportation systems. The metropolitan MDI project, named Smart Trek, was developed to increase the performance, efficiency and reliability of the regions transportation system. Under Smart Trek, 25 public agencies and private companies initiated 29 various projects designed to build upon the regions extensive investments in ITS infrastructure. The metropolitan MDI components of Smart Trek include:

- The Microsoft Sidewalk project that presents the Washington State Department of Transportation (DOT) traffic Flow Map
- Fastline Travel Software from the Internet
- Traffic TV that is broadcast on the University Washington (UW) cable channel
- Transit Watch system
- Busview
- Seiko Message Watch project
- SeaTac Airport monitor
- Cities of Bellevue and Seattle and the WSDOT fiber optic networks
- ITS backbone
- Mobile video links between incident scene and trauma centers
- Additional ferry information including a site view of the Mukilteo ferry
- Ferry tracking and queue detection projects
- Travel Aid integration into the ITS backbone
- Phase Two Road Weather Information System (RWIS)
- CUE Communications Services, new to Seattle area (providing customized traffic reports)
- Seattle Center Parking project
- Dynamic ride matching program
- ETAK Traffic Check TV
- Traffic Angel (providing personalized traffic information via telephone)
- Enhanced 24-hour incident information from the Washington State Police CAD system at the Washington DOT.

In the second and third quarters of 1998, Phoenix, San Antonio, and Seattle "rolled-out" their MDI projects to the public; iTravel is scheduled for roll-out in 1999. The roll-outs do not mark the end of the ITS development in the regions, because each region plans to continue the expansion of their current ITS systems and the deployment of new systems. For example, Phoenix has already issued another request for participation to augment the AzTech system.

PROJECT ORGANIZATION

An important factor in the successful development of regional ITS initiatives is an effective multi-disciplinary regional organizational structure. ITS organizational structures often evolve from existing relationships between public and private partners, or involvement with multi-agency projects. Organizational structures vary, and a structure that works in one region may not be successful, or even possible in another. The organizational structures for the four Metropolitan MDI sites are described in the following sections.

New York/New Jersey/Connecticut
TRANSCOM, a consortium of 14 transportation agencies in the New York/New Jersey/Connecticut metropolitan, served as the lead agency for the public-sector for *iTravel* and as the overall project manager. TRANSCOM was the single point of contact between the public agencies and the private sector team. New York State DOT served as the contracting agency and was also responsible for administrative issues such as administering funds to the MDI team.

The technical organization of *iTravel* was divided along major component lines, including Traveler Information Center (TIC), Personalized Traveler System (PTS), and Transit Itinerary Planning System (TRIPS). TRANSCOM's project manager was fully accountable to the 14 agency Technology and the Operations (Steering) Committee. The Steering Committee's role was to oversee and provide guidance for each of the components. This committee is composed of senior level executives, primarily in operations and engineering. Members of this committee were in turn empowered by the TRANSCOM Executive Committee that comprised the top official each member agency.

<u>Advice from the New York/New Jersey/Connecticut MDI</u>
Create a clearly defined scope of work for a project. This is particularly important with multiple participants, especially when partnering with the private sector. It helped ensure that all participants agreed upon project expectations.

Make sure that all the partners have a common understanding of everyone's role.

Negotiate the big issues first, even though these are difficult. Otherwise, the apparent progress on other issues can be held up by a roadblock.

Effective lines of communications must be established and maintained between each partner early in the project. A lack of communication can lead to misunderstandings in each partners' requirements and project expectations, resulting in delays.

Create a program management structure that allows input from each involved party and is capable of making timely decisions. Delays in the decision making process will undoubtedly result in delays in the project completion.

If modifications of public-private partnerships are required, they should be done as soon as possible.

In terms of team building, large, high profile projects like the MDIs attract senior-level people, often with project management experience; but the project can have only one or two managers in charge, and the others have to be brought in to support those leaders.

Phoenix

AzTech expanded several pre-existing partnerships and built on an existing ITS project base. Arizona DOT and Maricopa County served as lead agencies for the AzTech MDI project. The Technical Oversight Committee and the Executive Committee determined which agency, and who within the agency, would be responsible for various aspects of the project. These committees comprised senior level officials representing a cross section of public partners. In addition to the Executive and Technical Oversight Committees there were the AzTech Project Team, Public Relations Working Group, Transit Working Group, Traffic Operations Working Group, AzTech Evaluation Working Group and the statewide Technical Advisory Committee.

As a result of an increasing number of ITS projects, new positions were created. These included an AzTech Chief Administrator, an Arizona DOT statewide ITS Coordinator, and a countywide ITS Coordinator. Maricopa Association of Governments (MAG) funded a one-third staff position to serve as an ITS liaison, responsible for monitoring the MDI project, as well as other ITS initiatives to ensure that integrated planning occurs. Organizational changes included splitting the Maricopa County DOT Traffic Engineering Division into a Traffic Engineering Branch (housing an ITS unit) and an Operations Branch.

<u>Advice from the Phoenix MDI</u>

Stay in contact with each of your partners. Don't assume that a partner is making progress just because you have not heard from them.

Monitor other (traditional) transportation projects that are in both the planning and development stages to ensure that the ITS projects are consistent with them. Consideration should be given to dedicating a staff person to this monitoring task to ensure that an integrated planning process occurs.

Developing and implementing ITS will not be business as usual. Changes will be needed. Agencies will have to learn how to work with other agencies and within the agencies' bureaucratic systems.

Look for opportunities to integrate with other new or planned systems being developed by other agencies, for example fire departments, sheriff or police offices, or transit agencies.

Recognize the long lead-time for contracts. Contracting is difficult. It takes negotiations to put contracts in place, and remember that the private partners are primarily guided by business decisions.

Good contracts won't make bad partners into good ones. What is needed is a clear, but flexible scope with options, having the business plan included in the contract, and mutual trust.

Finally, make sure you always have a contingency plan available.

San Antonio
The TransGuide partners, TxDOT, VIA Metropolitan Transit, and the City of San Antonio, had overall responsibility of the MDI project. The MDI Executive Oversight Committee, consisting of high-level managers from the partners' agencies and the TransGuide Director of Operations, reported to the partners. Technical staff from these organizations comprised the TransGuide Technical Oversight Committee.

The MDI project contracted with Southwest Research Institute (SwRI) as the System Integrator and Prime MDI Contractor, responsible for most components in the MDI. SwRI had participated in the development of, and was very familiar with the TransGuide system. Subcontractors for the MDI components reported to the System Integrator. The System Integrator met weekly with the Technical Oversight Committee to discuss the status and schedule of each of the components.

Advice from the San Antonio MDI
Involve current traffic management staff throughout the ITS development process to ensure operational compatibility.

ITS projects can encounter resistance because organizations fear change, fear the unknown.

It is much easier to secure partners and create a project team once it is known what funding will be available for the project.

Become aware of any legislative obstacles that must be overcome. For example, prohibitions on giving or accepting donations from the private sector can restrict "donations", such as logo T-shirts or caps, intended to promote the project.

Project characteristics that led to the successful development of ITS include:
- *Strong partnerships*
- *Single integrator that was familiar with existing system*
- *Strong team structure, with partners meeting weekly*
- *Strong vendor support*
- *Well defined vision from the beginning of the project*

Seattle
Overall management of SmartTrek was administered through the Washington State DOT Program Manager, who was responsible for overall project management. An Expert Oversight Committee, representing major transportation stakeholders, provided the guidance to the program management team. A Policy Support Group (including a Puget Sound Regional Council representative) provided guidance on policy and political issues associated with development of SmartTrek and ITS, in general.

Functional components of Smart Trek were organized into "project bundles". Bundles included Transportation Management System, Regional Multimodal Traveler Information Services,

Transit Management and Electronic Clearance, Emergency Services and Incident Management and Public Involvement, Outreach and Marketing. Each bundle had a manager and members that supported work activities. Bundle managers met every two months to exchange information.

Advice from the Seattle MDI

Active participation by team members in each phase of the development and implementation of the project is very beneficial. Regularly scheduled phone conferences and meetings were considered necessary to ensure that all participants had the most up to date information.

Using project bundles facilitated the cooperation and communication among different participating agencies. Project bundles also provided the opportunity for more agencies and staff to share information on projects other than their own.

Provide participants with explicit firm deadlines. This was a primary contributing factor in ensuring that Smart Trek was completed on schedule.

Developing contracts and agreements with the multiple partners, along with the related inter-agency and inter-jurisdictional communication and cooperation, required significant staff time.

Existing relationships played a significant role in facilitating communication and cooperation among team members. Many public and private team members were participants in existing projects and easily migrated their working relationships into Smart Trek activities.

OUTREACH

Transportation engineers may be unfamiliar with outreach, and some may be initially uncomfortable leading an outreach effort. However, outreach is a critical component of an ITS project and cannot be ignored. Each of the four MDI sites had an outreach program.

Outreach Planning

The purpose of outreach is to build a constituency by achieving stakeholder understanding and support through increased public awareness. Outreach activities, for example, a newsletter, meetings with various interest groups, or trade show presentations, should be aimed at celebrating project success, demonstrating ITS benefits, and strengthening the partnerships needed for success.

The specific outreach activities varied somewhat from project to project. Common to the four MDIs was the development of a plan that organized and described the outreach effort. For example, the AzTech outreach plan addressed definitions; organization and resources; roles and responsibilities; outreach objectives; and the approach. It contained the following definitions:

- *Education:* Activities targeted toward educating the traveling public, universities, colleges, technical colleges, high schools, and educational programs within local governmental agencies.
- *Publicity:* Activities geared toward gaining the attention of a target audience like the educational, engineering, or legislative communities, or the general public.
- *Promotion:* Activities designed to generate interest in the project and show progress and accomplishment, such as trade show exhibits, facility tours, and associations meetings.
- *Public Involvement:* Activities designed to involve stakeholders early in the decision making process, so that trust is built with them. Public input is documented to show how it affects the decision making process.
- *Marketing:* Activities designed to sell, promote, or price ITS-related products and information to the business community and the consumer-public.
- *Stakeholder:* Any affected or interested party, including, but not limited to representatives of Indian Nations, State and local governments and agencies, Congress, other Federal Agencies, review bodies, community groups, environmental and other interest groups, business, labor, academia, professional and technical organizations, educational organizations, DOT employees and contractors, and members of the general public.

Outreach Approach

The specific approach of the outreach effort must be tailored to each specific project. Outreach is particularly important if the ITS project will be providing traffic information to the traveling public. Taking the attitude that if “you build it, they will come”, is naive. ITS is a new technology and the traveling public must be educated concerning its use, benefits, and even its existence in a local area. Since ITS competes with traditional transportation projects for funding, a traveling public that is aware of and uses ITS information is an important ally in the competition for funds. Political, agency and legislative champions are critical for establishing continued funding of ITS projects; the champions must be educated and continually informed of

progress.

The mission of the "TransGuide and Model Deployment Initiative Public Information Plan" was to utilize all applicable mediums to inform the public and key decision makers about TransGuide, ITS systems in general, and their benefits. In San Antonio, public information efforts included:

- Kick-off event
- Project Demonstrations
- Media Brown Bag Luncheons
- News releases on each major project development
- Articles in print (newspapers, magazines, etc.)
- Broadcast interviews
- Full color one-page flyer
- Project fact sheets
- Facility tours
- Partnering with TxDOT to promote highway safety
- Public service announcements
- Quarterly newsletter
- Media exposure by participation in local talk shows
- Trade-show presentations
- Movie theater Public Service Announcements
- Ribbon cutting events.

Outreach Activities Targeted to the Audience

The Phoenix outreach plan divided the target audiences into three categories, then identified specific efforts, or activities, for each category. These are shown below.

Phoenix Target Audience	Efforts
Stakeholders (Federal, State, and local governments, legislators, special interest groups, and employers)	Bulletins, fact sheets, community events, executive slide presentations, tours, web page, and various printed materials.
Media	Press conferences, press releases, media contact.
Traveling public	Public Service Campaign will target retail (e.g., grocery bag ads, "tent cards" in restaurants), sporting venues (scoreboard bits, public address, programs, and billboards), and public facilities (posters in libraries, government buildings, etc.).

The Outreach Effort as a Source of Information

In addition to providing information, an outreach program can also be a source of information to identify needs and obtain feedback from the stakeholders. From May to August 1997 the Smart Trek Communications and Outreach Team interviewed a total of 48 individuals representing 33

public and private organizations. Information collected from those interviews included:

- Keep the Smart Trek messages simple; make it easy to understand by a wide audience.
- Encourage legislators to take the lead in championing ITS and Smart Trek. Keep them well informed and make sure their questions are answered.
- Cultivate knowledgeable reporters, and encourage continuing and accurate coverage of transportation by the media.
- Use a variety of means to get the word out.
- Provide guidance and materials that others can use to help promote and explain the program.
- Don't over-sell ITS and Smart Trek. Present them as (key) components of a regional transportation strategy.
- Present the long-term picture about where ITS is headed.
- Wherever possible, personalize the information and the statistics you present. More people will understand and accept Smart Trek when they see how it can benefit them personally.
- Keep the ITS message in front of people continuously.

Advice from the MDIs

Don't underestimate the skills needed to support a successful outreach program. Traditional transportation staffs don't have the skills that public relations professionals have in knowing what will work with the various stakeholders. Making the most effective use of outreach budgets requires experience and media savvy. Here's an example. Marketing efforts in Seattle, although multimedia, concentrated on radio. The public relations firm knew that various demographic groups listen to specific stations. After working with Smart Trek staff to identify the target audience, the appropriate stations were used to air the information. Further, the means of reaching your audience are constantly changing. A short time ago the Internet was not considered a viable promotional tool. In 1998, it was in some areas. For example, 38% of the Seattle Puget Sound area's population has Internet access, as compared to 20% of the population nationwide. What is it in your area?

Don't delay getting started on outreach. Start developing an outreach plan when you start the project. Get professionals onboard early. First, they must learn about the project and understand it; that takes time. Second, getting the firm onboard early helps to ensure a consistent message throughout the project. Every firm has its own ideas about the best way to do things, and will want to tailor the outreach in terms of specific efforts, logos, or even the name of the project. Using a consistent approach from the beginning will avoid confusion that can result from a changing message. Be prepared to work with the public relations team and be involved in the decision making. Although you have to rely on the public relations firm's judgement, make sure you are comfortable with their approach. These firms often create "glitzy" approaches that appeal to some customers, but that traditionally conservative transportation agencies may not be comfortable with.

Don't assume the private sector partners will take the lead in outreach. Relying on private partners to conduct the outreach activities is risky. Large firms can take the lead in outreach, particularly if the firm has a significant advertising budget. However, many private partners will

be small, recently established firms that have little or no experience with outreach. These start-up firms are often strapped for cash and can't support the cash outflow to a public relations firm. Finally, your ITS project may be their first deployment; they may not have had products in the field to promote through an outreach effort before.

Don't ignore the press. Chances are that your ITS project will be news of one kind or another. A non-MDI situation that was described during the MDI workshops related to EZ-Pass electronic toll tags in New York. During the first few weeks of EZ Pass use, start-up glitches did appear, and the press was merciless in describing the problems and associating them with the decision makers responsible for EZ-Pass. Very quickly the problems were solved. Once the system was working fine, it was no longer news, and the successes got buried in the back pages. Be proactive and educate the media before the project is deployed.

Be prepared for the unexpected, both good and bad. Anecdotal stories showed that the project must be ready to support unexpected media opportunities. In one case a foreign news crew came to do a story on the local MDI project. Their arrival became a local news story that provided "free" positive publicity for the project. In another case a writer contacted an MDI project, asking for information for a story he was writing on congestion for an international magazine. Having the information ready and available made it easy for the writer to address the positive aspects of the project. The project must be ready for ad hoc requests and use the opportunity to work with the media and get their story out. On the other hand, events outside of the control of the project can thwart the outreach efforts, and late breaking news stories can knock ITS-related stories off the front page.

Identify any legal restrictions that may apply to outreach. State or local legislative obstacles may impact the outreach effort or even the project itself. The State of Texas has very strict laws governing the use of items purchased, developed, or accepted by the project. Laws that prohibited the project from giving or accepting donations of any kind, even donations such as t-shirts from the private sector that would be used to promote the project, limited the range of acceptable outreach efforts. Further, project-developed in-vehicle navigation units were considered State property. Although it was initially hoped that these units would be installed in private vehicles, that was not allowed by State law; instead they were installed in public vehicles like police cars.