Outline

- HST Challenges
- MSAA Initiative
- TMCC System Design Characteristics
- Stakeholders Outreach and Knowledge Transfer
HST Challenges
One Integrated Vision

Consumer with Mobility Needs

U.S. State & Local Government Funds, Policies, and Regulations

Funding Agencies

Transportation Service Providers

Education

Interior

Social Security

Veterans Affairs

Agriculture

Housing

HHS

Labor

Transportation

Agency on Aging

Head Start

Disability Service Provider

Private Taxi

Public Transit Authority

ADA Paratransit

Medical Transit Provider

Faith Based Transit

Transit Pass

One Call
MSAA Initiative

- A major USDOT ITS initiative
- Collaboration with UWR initiative
- UWR/MSAA joint demonstration of scalable and replicable Travel Management Coordination Centers (TMCC) that
  - Simplified point of access
  - Comprehensive set of services
  - Utilizing ITS
MSAA Road Map

FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10

Program Management, Oversight & Stakeholders Participation

Foundational Research

TMCC Models System Planning & Design (8 sites)

Technical Assistance

TMCC Model Deployments

Independent TMCC Model Evaluations (2)

Knowledge Transfer & Outreach

October, 2005

Fall, 2008
Findings from Research and Field Observations

• Institutional challenges hold keys to successful community transportation coordination

• Examples of institutional issues include
  – Regulatory (e.g., HIPAA)
  – Insurance (e.g., sharing vehicles)
  – Cost sharing
  – General fear of change (agencies, workers, and travelers)

• One fundamental question – *what’s in it for me?*

• ITS as enabling tools

• Most applicable ITS technologies are proven, many with wide-deployment in fixed-route operations
UWR/MSAA Joint Demonstration

- Two-phased Approach
  - Phase 1: TMCC system design
  - Phase 2: TMCC system deployment
- Two independent evaluations
  - Institutional process evaluation
  - Systems impacts evaluation

UWR – the WHAT
MSAA – the HOW
UWR/MSAA Demonstration Status

- Phase 1 RFP release: April 2006
- Phase 1 sites selection announcement: Jan. 2007
- Phase 1 project kick-off: March 2007
- Phase 1 TMCC system design: June 2008
- Phase 2 proposals from phase 1 sites: July 2008
- Phase 2 sites selection announcement: ??
8 Phase 1 Sites
Common TMCC System Needs

• One call or no wrong door
• Multi-media and flexible access (phone, text messaging, IVR, kiosk, internet, 24X7, etc.)
• Travelers manage own accounts (e.g., individual accounts for customized personal preferences)
• Service flexibility
• Customer information sharing (e.g., eligibility and certification)
• Easy fare payment or ID card
• Quick performance monitoring, billing and reporting
• Safety and security (benefit all parties involved)
Common TMCC Modules

- **Communications/Network Modules**
  - Telephone – customer service
  - Internet
  - IVR
  - Kiosk
  - Walk-in

- **TMCC Access/Interface Modules**

- **Service Operations Modules**
  - Reservation and scheduling
  - Vehicle routing, dispatching and monitoring (CAD/AVL)
  - Vehicle communications (MDC and other mobile devices)

- **Service Management Modules**
  - Billing
  - Data management and reporting
  - Electronic ID/fare management
  - Eligibility and certification
  - Customer account and feedback management

“Modulization” facilitates scalability and allows incremental deployment
“Communications” – a Key Foundation

- Communications/Network Modules
- TMCC Access/Interface Modules
  - Telephone – customer service
  - Internet
  - IVR
  - Kiosk
  - Walk-in
- Service Operations Modules
  - Reservation and scheduling
  - Vehicle routing, dispatching and monitoring (CAD/AVL)
  - Vehicle communications (MDC and other mobile devices)
- Service Management Modules
  - Billing – Data management and reporting
  - Electronic ID/fare management
  - Eligibility and certification – Customer account and feedback management
Travelers View on TMCC

USER

Walk in

TMCC

Transparent to travelers

TMCC-lite

IVR
Some Traveler-oriented Functions

- TMCC empowers travelers to do ....
  - Trip planning
  - Trip confirmation
  - Trip modification
  - Trip cancellation
  - Trip reminder

Itinerary Options

Option 1
aaaaaa

Option 2
bbbbbbbb

Option 3
ccccccc
Other Traveler-oriented Functions

• En-route support
  – Vehicle schedule update
  – Vehicle approaching notification
  – Vehicle location monitoring
  – Simplified electronic fare payment
  – Last-minute requests

• Put travelers in charge
  – Eligibility application
  – Personal preference setting
  – Account management
Service Providers’ View on TMCC

[Diagram showing interconnection between TMCC and operators with joint fleet]
Some Providers-oriented TMCC Concepts

- Efficiency gains through technology (CAD, AVL, MDC) (routing/scheduling/dispatching)
- Participating agencies deploying common commercial-off-the-shelf (COTS) technologies
- Different levels of agency autonomy
- Extended service hours (24X7)
- Ability to accommodate last-minute requests
- Mobile data communications a common need
Funding Agencies’ View on TMCC

Individual agencies

Billing/Reporting Module(s)

TMCC

Passenger info
Date/time, location, etc.
Some Funding Agency-oriented TMCC Functions

- Eligibility and certification
- Accountability – rapid feedback on performance and return
- Automated financial transactions
- Automated reporting – consistency and timeliness
- Planning and analysis using ITS archived data
TMCC System Design – a Consolidated View

One Stop / No Wrong Doors  Virtual / Physical  Decentralized Operations

Traveler  Walk in  IVR  TMCC  Transparent to travelers  Human Service Funding Agencies

Joint fleet
Operator

Operator
Additional Observations from System Design

• TMCC interfaces with external systems, such as emergency management authorities
• An alternative concept for efficiency – bidding
• Interfaces between multiple technology COTS products remain to be seen
• Coordination with Medicaid NEMT brokerages is still challenging
• Regulatory barriers exist (e.g., HIPAA) for information sharing
• Cost sharing continues to be a complex issue
Demonstration Phase 2 Next Steps

• Proposals review and recommendation – October 2008
• Sites selection announcement – ??
• Phase 2 kick-off – spring 2009
• Demonstration completion – summer 2010
MSAA Outreach and Knowledge Transfer

• Based on stakeholder input
  – Identify and prioritize knowledge and technical needs
  – Determine effective ways to deliver and address stakeholder needs

• APTA facilitates a seven-member special stakeholder working group
Outreach Plan Development Status

• Working group had accomplished:
  − Identified key stakeholders outreach and knowledge needs
  − Prioritized common stakeholder outreach needs
  − Recommended specific outreach activities and products

• Next steps
  − Release outreach action plan
  − Coordinate with other outreach resources
  − Develop outreach activities and products
**TOP ITS-related Outreach Needs**

- Benefits and costs information of applicable ITS
- Business case to coordinate using ITS
- Real-world cases of using ITS for coordination
- “How-to” plan and implement integrated and interoperable ITS transit systems
How to Participate and Stay Informed

• Subscribe to UWR newsletters/news releases
• Utilize industry resources such as APTA, CTAA & ESPA
• Visit UWR/MSAA websites
• Communicate directly with UWR/MSAA staff
Thank You

Questions and Discussions

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