

# United We Ride (UWR)/Mobility Services for All Americans (MSAA)

Enhanced Human Service Transportation Models  
Joint Demonstration  
Phase I – System Planning and Design

## Process Evaluation: Baseline Analysis



U.S. Department of Transportation  
Research and Innovative Technology Administration

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## ACRONYM LIST

ADA – Americans with Disabilities Act	MDC – Mobile Data Computers
ARC – Atlanta Regional Commission	M-ITS – MART ITS
AVL – Automatic Vehicle Location	MORE-TMCC – Model Orlando Regionally Efficient Traveler Management Coordination Center
CCT – Cobb County Transit	MPO – Metropolitan Planning Organization
CCTAC – Call Center Technical Advisory Committee	MSA – Metropolitan Statistical Area
CCWIB – Camden County Workforce Investment Board	MSAA – Mobility Services for All American
CMS – Congestion Management System	NGO – Non-governmental Organization
CREST – Central Regional Employment Service Team	NJCAM – New Jersey Council on Access and Mobility
C-TRAN – Clayton County Transit	
DOT – Department of Transportation	PARTA – Portage Area Regional Transit Authority
DMR – Department of Mental Retardation	PATCO – Port Authority Transit Cooperation
	PATS – Paducah Area Transit System
FTA – Federal Transit Administration	PDA – Personal Digital Assistant
GCT – Geauga County Transit	RMC – Regional Mobility Council
GIS – Geographic Information System	RTA – Regional Transit Authority
	RTMA – Regional Transportation Management Association
HHS – Health and Human Service	
HST – Human Service Transportation	SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users
HSTD – Human Service Transportation Delivery	
ITMS – Integrated Transit Management System	TA – Technical Assistance
ITS – Intelligent Transportation System	TARC – Transit Authority of River City
IVR – Interactive Voice Response	TD – Transportation Disadvantaged
	TMCC – Travel Management Coordination Center
KIPDA – Kentuckiana Regional Planning and Development Agency	
KYTC – Kentucky Transportation Cabinet	
LSCOG – Lower Savannah Council of Governments	U.S. DHHS – U.S. Department of Health and Human Services
LYNX – Central Florida Regional Transit Authority	US HUD – U.S. Department of Housing and Urban Development
	UWR – United We Ride
MART – Montachusett Area Regional Transit	
	VTC – Voorhees Transportation



# 1.0 INTRODUCTION

This document presents the findings from the baseline phase of the evaluation of the process being used by eight sites to develop a design for a Travel Management Coordination Center (TMCC) for improved coordination of human service transportation within a region. The process evaluation focuses on how the sites go about the design activity, the challenges they face and how they solve them throughout the fifteen-month design period. The objective is to draw lessons from the experience of these eight sites so that other communities seeking to implement a TMCC can benefit from their experience.

The communities covered in this evaluation include:

- Aiken, South Carolina
- Atlanta, Georgia
- Camden County, New Jersey
- Fitchburg, Massachusetts
- Kent, Ohio
- Louisville, Kentucky
- Orlando, Florida
- Paducah, Kentucky.

The eight sites were selected for the Enhanced Human Service Transportation Models Joint Demonstration that is as part of the United We Ride (UWR)/Mobility Services for All Americans (MSAA) initiative. The thirty-seven proposals that were submitted were reviewed by a federal Inter-Agency Evaluation Panel and eight chosen that best represented the program objectives. The grants awarded to the eight sites were for Phase 1—System Development and Design. Based on the TMCC designs submitted at the end of the 15-month grant period, it is the intent of the U.S. Department of Transportation (U.S. DOT) to select two or more sites to receive a Phase 2 award to implement the TMCC.

To assess the TMCC design process and to provide lessons learned for other coordination projects in the future, the U.S. DOT Intelligent Transportation Systems (ITS) Joint Program Office is evaluating and documenting the activities used by the eight demonstration sites as they proceed towards a final design. While the evaluation approach is described in more detail in a later section, the findings are based primarily on interviews with representatives of each site supplemented by other relevant documents.

Intended for use by the U.S. DOT management team and the demonstration sites, this report documents the baseline conditions, the situation at the beginning of the process. The findings focus on how the sites are working toward a common vision for the TMCC, understanding the process for engaging the stakeholders, how the sites assess their technological needs, and the teaming and organizational framework at each of the sites. The baseline analysis thus is a document capturing the some of the sites' early project planning. The baseline findings also provide a means for comparison with what the sites will achieve later on, midway through the design period, and at the end.

The remainder of the report is organized as follows:

- 2.0 Summary of Findings
- 3.0 Process Evaluation
- 4.0 The Demonstration Sites
- 5.0 Analysis of the TMCC Design Process
- 6.0 Conclusion and Next Steps.

## 2.0 SUMMARY OF FINDINGS

The following are some of the key findings from the baseline analysis at the eight demonstration sites.

### 2.1 VISION AND CHALLENGES

- All the sites had a vision of their TMCC, but they range from very general to highly specific at this stage. As the sites move toward the development of their concept of operations, they will need to translate the vision into concrete operational activities.
- All sites envision becoming more customer-oriented in their TMCC. Besides making it easier for the customer to obtain service, six out of the eight sites also want to expand the number of customers that they are able to serve.
- Operational improvements are a second key element in the TMCC vision. Better coordination and/or centralization of functions are expected to eliminate duplication where it exists and lead to greater efficiencies for the agencies and transportation providers involved in the TMCC.
- Although operational efficiencies are likely to result in cost savings, cost reduction per se does not appear to be a major driving force in the creation of the TMCC, as it was mentioned by only one site.
- Concerns about stakeholders were uppermost in the minds of most of the project teams. The concerns ranged from the complexity of dealing with a large number of stakeholders and how to gain and maintain their involvement to anticipated turf issues and cultural differences among agencies that might make coordination difficult.
- Implementation challenges were a second major source of concern to the demonstration sites, such as getting different technologies to work together and difficulties in providing service to rural areas.

### 2.2 TEAMS' FOUNDATION FOR THE DESIGN PROCESS

- No single model for size and composition of the project team is exhibited by the demonstration sites, although each consists of at least one public agency and one private sector firm. They range in size from two to eight team members.
- Most frequently (at five sites) the lead agency is a transit provider or broker, who is in a position to leverage its knowledge of transportation options and operations in the design process. The lead agencies at the three other sites are regional entities (one regional planning agency, one MPO, and one Workforce Investment Board) who can build on not only their experiences with human service transportation but also their knowledge of the local area and institutional arrangements.
- Five sites are partnered with vendors who supply transit software, and while mindful of the potential for a conflict of interest, the sites value the expertise the vendors bring to the design process. Five sites are using consultants to provide expertise in key areas, such as facilitation with stakeholders, and additional manpower.

- Most lead agencies have prior experience with federal grants and with technology implementations, experience that should prove valuable to the TMCC design process.
- Among the skills needed for the project, concern about the institutional side of a coordinated system is greater than the technical and operational issues. Given that dealing with stakeholders was identified as a significant challenge, it is not surprising that the project team would view having the skills to handle the challenge as important.
- Senior-level support can be an important asset for a project, and such support appears to be well established at five of the sites, with the other three in the early stages of obtaining that support.

## 2.3 STAKEHOLDER INVOLVEMENT

- Most sites are successfully using existing communities, forums, and groups to identify and engage stakeholders for the TMCC project. The use of these communities has enabled sites to hit the ground running with their stakeholders.
- Five of the eight sites have set-up technical or steering committees as mechanisms for stakeholder participation. One of the sites noted that creating an advisory committee, comprised of decision-makers to look at purely institutional and policy-issues has been beneficial to TMCC planning.
- Another approach to reach out to stakeholders, noted by two sites, was organizing a regional summit or council to build awareness and bring the entire body of stakeholders together.
- Two sites reported that conducting focus groups for end-users early in the project might result in new ideas for TMCC development.

## 2.4 COORDINATION

Overall finding: Institutionally, a high-degree of cooperation exists; however, the demonstration sites need to go to the next step in this project and develop models for functional, geographic, and operational coordination.

- Institutional coordination
  - Interviews revealed an interest at all the sites in looking beyond the usual groups. Identifying and coordinating with non-traditional transportation services, programs, and agencies was desired. All sites reported that information gathering on the types of services available in the region has been a critical focus so far.
  - One of the major obstacles has been the uncertainty in the role of private Medicaid brokerages in the TMCC concept of operations.
- Functional coordination
  - Interviews revealed that it was easier to coordinate functionality when there are fewer stakeholders or most of the transportation functions are driven by one agency. At the sites with fragmented transportation structures and multiple transit providers, achieving functional coordination was mentioned as more challenging; however,

several regional efforts were reported such as regional payment systems, common communications backbones etc.

- Geographic coordination
  - There was a strong interest in the potential for shared vehicles, multi-loading and cross-jurisdiction operations; however, current operations are agency-specific and not regional in nature.
- Operational coordination
  - Regional efforts are weak, especially in larger multi-stakeholder areas. This project along with the UWR planning and SAFETEA-LU requirements have helped bring this issue to the forefront.

## **2.5 TECHNOLOGY FOR COORDINATION**

- Integration with legacy systems was mentioned as a challenge especially in sites where there has not been a push towards a common technological platform. While a common technological platform might be desired, understanding the interfaces between systems is challenging.
- The ten technical issues identified by the Kent project team are a very useful summary of technology challenges that sites can be expected to face. (page 30)
- Two sites mentioned 511 as a resource and are in communication with the state agencies to investigate the possibility of using 511 as a the call number for the TMCC
- No uniform or systematic approach was mentioned by the sites for regional architecture. This may be an action item for the technical assistance team as most sites are unsure what they should be looking for in the architecture and how to use it in their design process.

## **2.6 FEDERAL SUPPORT MECHANISMS**

- The presentations at the Kickoff Workshop in March 2007 provided a good opportunity to learn about other sites, but attendees had only limited opportunities for interpersonal networking and information sharing with representatives of other sites.
- Federal liaisons are viewed by most sites as a valuable form of assistance, although some sites have used them more than others. Guidance on policy and programmatic issues was the most frequently cited type of help received.
- All of the sites have been in contact with their technical assistance team, and some sites have already engaged the TAs in reviewing documents or answering specific technical questions. The TA site visits and scheduled monthly conference calls will provide an opportunity for on-going support should a site desire it.

## 3.0 PROCESS EVALUATION

### 3.1 STUDY OBJECTIVE

The objective of this study is to assess the process or approach used by the eight demonstration sites to achieve a design of a TMCC for their region. The intention is to document the experience of the demonstration sites so that the lessons they learn can be shared with other communities who are interested in developing a TMCC.

While it is likely that the study will find that no one-size-fits-all, it will identify common activities as well as unique approaches that may help, or hinder, design development. The evaluation will look across all the demonstration sites to identify significant similarities or differences as well as causative factors. For example, site characteristics such as population size and level of existing coordination may affect the design process. Furthermore, each site will envision a design process they plan to use at the outset, but they may find that they may need to respond to situational changes or unanticipated problems and make some modifications to their plans. The evaluation will seek to capture such changes and the reasons they were made. In the end, potential archetypes of the process may emerge that can serve as models for other communities looking to develop TMCCs in the future.

The timeframe for the evaluation will encompass the period from project kickoff to delivery of a final detailed design to the U.S. DOT, expected to last about 15 months. The evaluation will document and analyze the process of each site over this time.

The evaluation will be conducted in the following three stages:

- *Baseline Analysis.* The objective of the baseline analysis is to document the process that each site expects to use to develop their TMCC design. This stage occurs as soon as possible following the start of the project.
- *Mid-Way Analysis.* Approximately 6 months into the design process, an assessment of each site will be made to gauge their progress and examine the success and challenges of dealing with process issues so far. This stage will occur around the time that the sites produce their concept of operations, a deliverable to U.S. DOT.
- *Finish-Line Analysis.* Approximately 12-14 months from the kickoff meeting, an analysis of each site's experience across the entire project will be conducted. A final report on the TMCC design process will be prepared synthesizing the findings from all three stages and identifying lessons learned.

### 3.2 METHODOLOGY OF THE BASELINE ANALYSIS

Telephone interviews were the primary method for collecting the baseline process information. To gain different perspectives on the design at each site, individuals representing the following roles were sought:

- Project manager
- Transportation representative
- Human services representative
- ITS/technology leader

- User representative, either a user or someone who works directly with users of transportation services.

The site’s project manager was contacted and asked to identify persons for these roles, and often the project manager could additionally serve as the transportation or human service representative. Due to evaluation resource limitations either the site’s user representative or the ITS/technology leader, but not both, was interviewed. Table 1 summarizes the representatives by role at each site. The names of individuals interviewed are listed in Appendix A.

**Table 1: Interviewee Roles by Site**

Role Interviewed	Demonstration Sites							
	Aiken	Atlanta	Camden Co.	Fitchburg	Kent	Louisville	Orlando	Paducah
Project Manager	X	X	X	X	X	X	X	X
Transportation Representative	X	X	X	X	X	X	X	X
Human Services Representative	X	X		X		X	X	X
ITS/Technology Leader		X	X	X	X			X
User/User Group Representative	X					X	X	

The study team contacted each representative to schedule a telephone interview. A list of questions to be asked was prepared and sent to the interviewees prior to the telephone call. Telephone interviews averaged 30 to 45 minutes in length. Notes from each interview were prepared and sent to the interviewee for comment. Many but not all the interviewees provided additions or corrections to the notes.

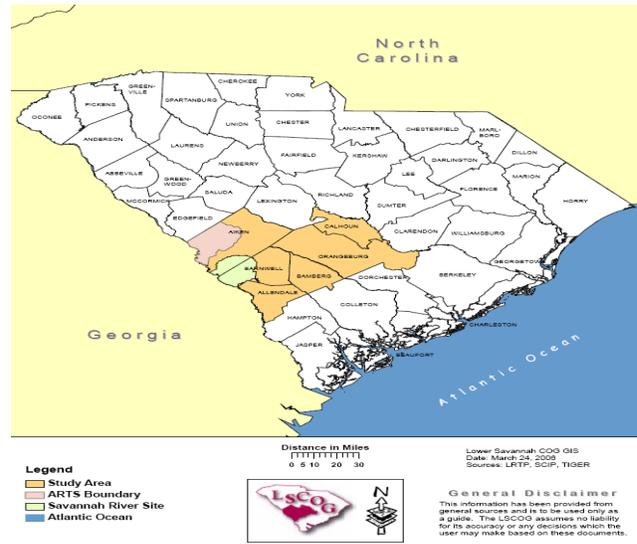
An interview guide was prepared for each role. The guide consisted of open-ended questions that were meant to elicit discussion with the site representative. The questions covered topics such as partners, stakeholders, coordination activities, project management, required skills, staff size, technology, user needs, and expected challenges. While the questions were geared to a particular role, similar questions were sometimes used for different roles to provide an opportunity to assess different perspectives on the design process. Appendix B contains all the interview guides that were used.

## 4.0 THE DEMONSTRATION SITES

The demonstration sites represent several operational environments (urban, suburban, small urban, rural), have different types of lead agency organizations (Metropolitan Planning Organizations [MPOs], transit agencies), which play different roles in human service transportation (planning, coordination, service providers, brokerage). Together, these demonstration sites provide an excellent range of test-beds to develop and pilot new approaches to developing a scaleable and replicable model of coordination. Some of the high-level site characteristics of the demonstration sites are summarized below.

**Aiken** – The TMCC project is led by Lower Savannah Council of Governments (LSCOG), a regional planning organization, in the six-county region in central and western South Carolina. Predominantly rural in nature, the geographic scope for this task covers a service area of 3,891 square miles and an approximate population of 300,266 (2000 census). There are 45 municipalities in the region.

Project partners include – LSCOG, Lieutenant Governor’s Office of Aging, South Carolina Department of Transportation, RouteMatch™, American Medical Resources, Bill Doyle of ISG, and McLary Management.



Transportation services in the region include mostly paratransit and shared ride operations in four of the six counties. Most of the transportation is provided by human service agencies except one small urban area in the region where an out-of-region transit authority provides urban fixed route services.

**Atlanta** – The TMCC design development is being led by the Atlanta Regional Commission (ARC), the regional planning and inter-governmental coordination agency in the 10-county Atlanta region. ARC estimates that the 2005 population of the region is 3.81 million with approximately 1.2 million people living in poverty, disabled or over 65, and potentially transportation disadvantaged.

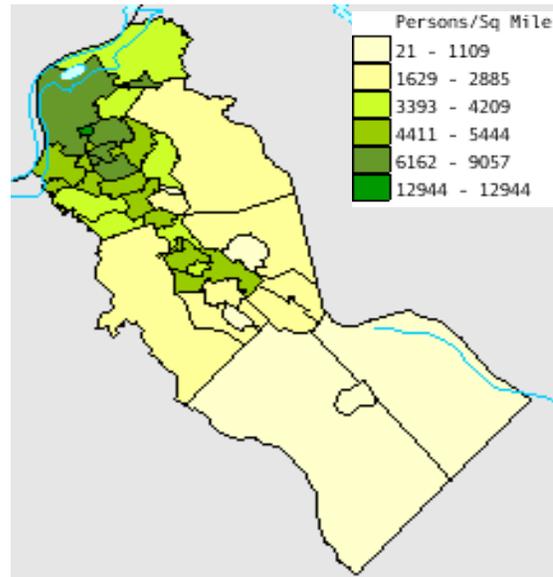
The project team comprises of staff from ARC and a consultant team led by Cambridge Systematics.



Transportation services in the region include fixed route transit systems with paratransit (Metropolitan Atlanta Rapid Transit Authority, Canton Transit System, Cobb Community Transit, Clayton County Transit (C-TRAN), Gwinnett County Transit), regional circulators and campus shuttles (Buckhead Shuttle, Emory/Clifton Corridor

Shuttle, Georgia Tech, Georgia State), commuter buses, regional vanpools, on-call services for seniors, private and non-profit on-demand car, van, and bus services.

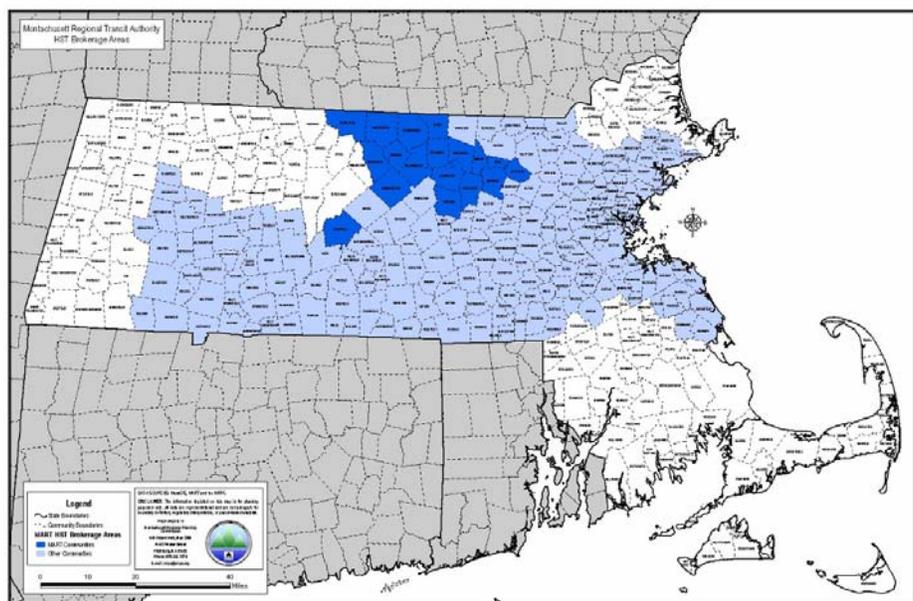
**Camden** – The Freeholders of Camden County (the main elected governing body of the County) have designated the Camden County Workforce Investment Board (CCWIB) to lead this project. This project will be based in Camden County, NJ. Camden County is the eighth-most populated county in New Jersey with 508,932 residents in 222.3 square miles. The primarily suburban county has a population density of 2289.4 persons per square mile.



The CCWIB along with the Alan M. Voorhees Transportation Center (VTC) at Rutgers University comprise the project design team for this project. VTC has led several state transportation planning efforts and is an active participant in the New Jersey Council on Access and Mobility (NJCAM). VTC will provide technical expertise, research, and analytical support. The project also includes a consultant hired specifically for facilitation skills.

Transportation resources in the region include New Jersey Transit, the largest public transit system in the nation and one of the few state-wide systems. They operate the state-wide bus and rail system and the paratransit AccessLink. NJ Transit has 23 bus routes and 2 rail lines throughout the County linking most population centers. AccessLink serves 80,000 annually in the County. Also included in the TMCC will be independent for- and non-profit operators, such as Title XIX (medical) transportation providers providing 11,500 annual rides, taxis, for-profit transportation providers and local NGO and hospital vans. Other resources include PATCO rail service, human service transportation provided by South Jersey Transportation Authority, municipalities, faith-based communities, and senior centers.

**Fitchburg** – The TMCC design project is led by Montachusett Area Regional Transit (MART), a transportation provider and brokerage. MART services cover the Massachusetts cities of Fitchburg, Leominster, Garner and several neighboring cities—as represented in dark blue



in the following map. MART also is the transportation broker for three agencies represented by the Massachusetts Human Service Transportation (HST) office. The service provided through MART covers a vast portion of the State, as represented in light blue in the map. In total, MART serves 18 communities and a total of over 92,000 households.

The project design team consists of staff from MART and HBSS, a transportation software systems provider and integrator.

MART operates services six days/week, and Sunday service for its brokerage operations including subscription and demand responsive services, fixed route, ADA paratransit service, and dial-a-ride services.

**Kent** – The TMCC design for the 2-county region in northern Ohio (Portage and Geauga counties) team is led by the Portage Area Regional Transit Authority (PARTA) and Geauga County Transit (GCT). Portage County, with an area of 507 square miles and a population of 152,061 (2000 census) would best be described as small urban and rural in character. Geauga County is smaller both in population and population density and is a rural county in terms of transportation.



The project team, in addition to the transit providers, includes Trapeze and Dave Kotting, an independent consultant. The team also includes consultant for facilitating the stakeholder interactions in the region.

Transportation resources in Portage County are primarily through PARTA and include services such as Dial-a-Ride, fixed route services, fixed routes with deviation, and contracted human service transportation.

Transportation resources in Geauga County are through Geauga County Transit, which provides door-to-door services and provides human service transportation to over 20 human services agencies.

**Louisville** – The Transit Authority of River City (TARC) is the primary lead agency for the TMCC project. The secondary lead agencies are Louisville Metro’s Cabinet for Human Services and Kentuckiana Regional Planning and Development Agency (KIPDA), which will be assisting TARC. The geographic scope of the TMCC project will be the Louisville metropolitan region, which consists of the nine-county region served by KIPDA, the metropolitan planning organization. This region in north central Kentucky is slightly larger than the Louisville metropolitan statistical area (MSA) and includes two adjacent counties in southern Indiana, and seven north central Kentucky counties. According to the 2000 U.S. Census, Jefferson



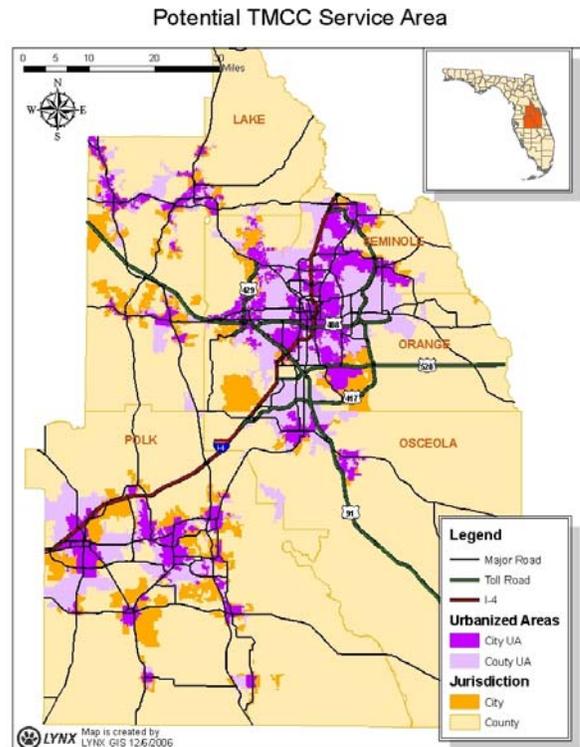
County is the largest of these counties with an estimated population of 693,604. The largest city in the region, Louisville, has a population of 26,307. Jefferson County covers a total of 385 square miles. Overall, the Louisville metropolitan region has a total population of approximately 1,036,601 and encompasses an area of about 2,404 square miles.

In addition to the three agencies, the project team will also include the Regional Mobility Council, consisting of a previous established group of human service and transportation providers in the Louisville area who will be serving as an advisory arm. RouteMatch™, a vendor who has provided software to TARC in the past, will round out the project team.

Transportation resources in the region include Transit Authority of River City (TARC), which operates fixed, and paratransit services in the region, and private for- and non-profit providers, such as the American Red Cross and Yellow Cab.

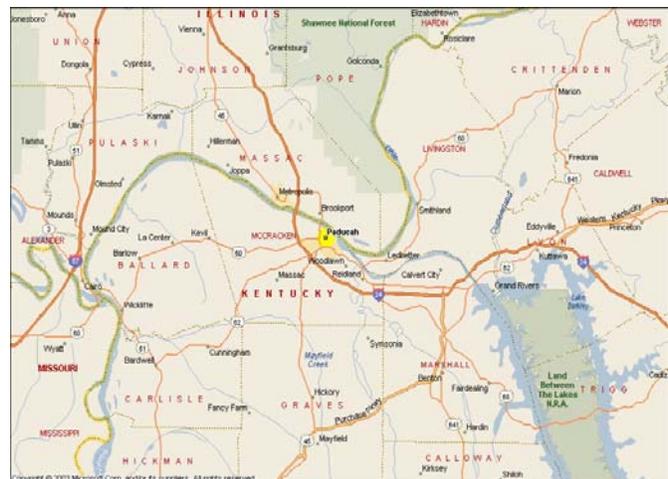
**Orlando** – The Model Orlando Regionally Efficient Traveler Management Coordination Center (MORE-TMCC) development is being led by the Central Florida Regional Transportation Authority known as LYNX.

The MORE-TMCC will serve a five county area, with Orlando serving as the major central urban area. The five counties are Polk, Osceola, Orange, Seminole, and Lake. In total, the current human service providers in these counties cover approximately 2,661 square miles with about 168 vehicles. The goal is to expand this coverage area to 5,364 square miles.



The providers and services under the MORE-TMCC will include fixed and paratransit operations of LYNX, the Citrus Connection (Lakeland County), Lakeland Area Mass Transit District, Polk County Transit Services, and MV Transit.

**Paducah** – The Paducah Area Transit System (PATS) is leading the TMCC efforts for the City of Paducah and McCracken County. The city of Paducah has a population of 26,307 and the entire McCracken County has a population of 65,514. In addition to the core region, upon the award of the Medicaid Transportation Brokerage by the KYTC in 1999, PATS expanded their coverage area to an eight county service area for Medicaid-eligible customers.



The project team comprises of PATS staff, RouteMatch™ and the Call Center Technical Advisory Committee (CCTAC)—a committee to set up and guide the operations of the existing call center managed by PATS.

PATS operates fixed route and paratransit services, airport shuttles, dial-a-ride services, veteran connector services, the Paducah trolley service, and a vanpool service. PATS also provides human service transportation for over 16 organizations, including the KY Medicaid Transportation Program, for an eight county region.

## 5.0 ANALYSIS OF THE TMCC DESIGN PROCESS

This section presents the findings from the baseline interviews with the eight demonstration sites. Where appropriate, the findings were supplemented with information from other sources that reflect baseline conditions, such as the MSAA proposals originally submitted by the sites, the sites' detailed project plans, and material produced by other members of the MSAA project team, especially the technical assistance team and the impact evaluation team.

The findings are organized as follows:

- Envisioning the TMCC and Anticipating Challenges (5.1)
- Establishing a Foundation for the Design Process (5.2)
- Stakeholder Involvement (5.3)
- Transportation and Human Service Coordination (5.4)
- Technology for Coordination (5.5)
- Federal Support Mechanisms (5.6).

### 5.1 ENVISIONING THE TMCC AND ANTICIPATING CHALLENGES

At the beginning of the TMCC design process, it is useful to understand what the demonstration sites want their TMCC designs to achieve to determine later on to what extent the vision was incorporated in the ultimate design. As a starting point Table 2 presents descriptions of the vision, goals, or objectives of the TMCC for each site based on the sites' original grant proposals and descriptions in the evaluation impact strategy document for each site.<sup>1</sup> All the sites expressed an overarching idea or ideas for what they want to achieve with the TMCC. Some are high-level vision statements (Aiken and Kent, for example) whereas others reveal more details on how they intend to carry it out (e.g., Fitchburg and Louisville). At this early stage, it may not be surprising to see this range from very general to highly specific, and as the sites move toward the development of their concept of operations, they will translate their visions into concrete terms for implementation.

During the baseline interviews, representatives of the demonstration sites discussed their vision in various ways, such as near- and long-term goals, specific approaches, and benefits that they hope to realize. They also expressed concern for barriers or challenges that would have to be addressed to achieve their vision.

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<sup>1</sup> SAIC, the system impact evaluation contractor to U.S. DOT prepared an evaluation strategy for each site after meeting with the project team.

**Table 2: Demonstration Sites' TMCC Vision, Goals, or Objectives**

<p><b>AIKEN:</b> The vision is a system that helps consumers access transportation more easily, while better managing current resources and expanding transportation options.</p> <p>A centrally linked and coordinated system that uses proven technology, modified to fit a rural environment and ridership characteristics, to optimize and increase service for consumers, provide solutions for service agencies, and improve use of scarce transportation resources.</p>
<p><b>ATLANTA:</b> The Human Services TMCC will provide functional and operational benefits for consumers, service providers, and human service agencies. Functional benefits will include information sharing via a customer service center that will inform consumers what services currently exist, route planning assistance, client screening, client matching, and education programs. Operational benefits will include improved reservation making, coordinated transportation service delivery, and “real time” travel information.</p> <p>For transit providers and human services agencies, the TMCC will provide coordinated communication among all regional providers, shared financial and operational resources, regional database management, accounting functions and a unified transportation tracking system.</p> <p>TMCC will be built on the existing Atlanta regional transportation system, ITS infrastructure, and the call center operated by the Atlanta Area Agency on Aging.</p>
<p><b>CAMDEN COUNTY:</b> This project will use Medicaid Title XIX medical transportation as a case study and will have three primary elements/objectives: identify the most effective brokerage model, increase access to public transportation, and coordinate more thoroughly with non-governmental organizations.</p> <p>Through the proposed planning process, the Camden County stakeholders will establish a TMCC design that is deployment-ready for the Title XIX medical transportation and is replicable and scalable to support integrating services to seniors and disabled, low-income individuals and the general public for all travel needs.</p>
<p><b>FITCHBURG:</b> At a high level, the M-ITS stakeholders want to increase transportation utilization, increase coordination among providers and funding agencies, and develop a coordination hub for north-central Massachusetts and possibly the rest of the state.</p> <p>The vision is to provide a delivery model that allows a traveler to obtain low-cost transportation across multiple modes of transportation offered by multiple providers. MART aims to leverage existing technological components to an integrated traveler service called M-ITS. (Source: site proposal)</p> <p>The first Phase of the M-ITS project is to offer these travel planning services to customers via a single point of access, albeit through the customer’s choice of mode: telephone, kiosk, personal digital assistant (PDA) or the Internet. In addition to the M-ITS offering riders a single point of access to plan their trips, the system also will offer a simple interface to multiple providers to input the route information that will facilitate this trip planning. This interface will be a web-based route-schedule and capacity-rate management system.</p>
<p><b>KENT:</b> The vision for the TMCC is to be a centralized state-of-the-art call center that serves as a convenient access point for all consumers who require transportation, trip planning, traveler information, and reservations.</p>
<p><b>LOUISVILLE:</b> The Travel Management Coordination Center (TMCC) project is intended to provide all transit customers in the Louisville metropolitan region with a single, one-call source for comprehensive trip planning, making trip reservations, and obtaining program eligibility. The TMCC will also act as the broker for transportation providers and consolidate participating human service organizations’ client travel needs. It will establish a comprehensive set of transportation services to meet the needs of all area residents, with an initial focus on older adults and people with disabilities.</p> <p>TMCC vision is to provide a decentralized call-taking and information center. This center combines all the managerial and logistical functions of the transportation partners that participate as partners. Two phases are envisioned. A first phase would receive calls from the users and matches the user with a provider. The second phase would combine and pool functions including scheduling and dispatch.</p>

**ORLANDO:** The MORE-TMCC deployment plan's overarching goal is integration, specifically in three key areas: institutional integration, operational integration, technology integration. The goal of the MORE-TMCC is to address each of these integration's challenges individually, in the order presented above. While the design and deployment of the MORE-TMCC does involve the additional investment in a few pieces of ITS equipment, the focus is not necessarily on how the various providers can use the new technologies. Rather, the goal of the design is to capitalize on how these technologies and the existing or already planned technology enhancements can enhance the communications and scheduling systems already in use.

Mission statement is for the TMCC to advance coordination between multiple transportation and HHS organizations within the region, to enhance transportation service, provide an opportunity to serve mobility demand in areas currently not served or underserved, utilize existing ITS, develop community resources, and engage stakeholders in interagency coordination and cooperation. TMCC concept includes processes for optimizing trip certification, trip booking, trip dispatch, passenger pick-up, and drop-offs.

**PADUCAH:** PATS goal for this enhancement project is to develop a replicable and scaleable system to expand the Regional Coordinated Human Service and Public Transportation Call Center services for eight counties in western Kentucky. The expanded system would be an operational model for the applicable use of technologies, appropriate interfaces between agencies, and stakeholder responsibilities.

The PATS enhancement project involves the design and development of a Regional Coordinated Human Service and Public Transportation Call Center to provide service to general public customers, human service agencies, and Commonwealth of Kentucky Medicaid recipients in the Region 1 service area. The project involves integrating additional telephony, internet, and fixed route & paratransit based ITS enhancements with the Call Center to:

- Provide a higher level of service to customers in the Region 1 service area,
- Determine Medicaid eligibility for customer trip requests,
- Integration of fixed route and paratransit services, and
- Automated telephone and internet-based trip reservations.

The Call Center would also enable persons within the region (and potentially statewide) with the capability to contact a single 1-800 telephone number to be referred to their nearest Medicaid broker and coordinate public/human service transportation system.

Table 3 summarizes the expectations articulated by interviewees at each site. It should be noted that the interviewees responded to open-ended questions in the interview. (See Appendix for interview questions.) The absence of a response in a particular category does not necessarily reflect a total absence of that characteristic at a particular site but instead reflects what was uppermost in the minds of those being interviewed.

All sites are customer oriented, envisioning a system that provides an easy means (e.g., one-stop) for a customer to get information about the transportation services available to them. Six of the eight sites also saw the TMCC as enabling them to serve more customers. Two sites, Fitchburg and Kent, specifically want service expanded to provide better transportation to jobs for those who need it.

The operational benefits of the TMCC were the second major area of emphasis. Most expect to realize efficiencies through, for example, elimination of duplication in paperwork or services. Themes of centralization and coordination were apparent in the responses of sites in terms of enhanced service delivery unified billing. Only one site, Atlanta, identified cost reduction as something they expected to achieve.

Four of the demonstration sites emphasized the role of the providers, expecting the TMCC to enable more providers, especially small operators, to be involved in human services transportation than currently. They also want to see more interaction among different modes in delivery of transportation services.

Four of the sites chose to emphasize the approach they were taking in the design of the TMCC. Three sites, Aiken, Atlanta and Paducah, saw the TMCC as a means for taking a regional or inter-county approach to coordinating transportation. Atlanta, Fitchburg, and Kent want to take some sort of phased approach rather than trying to build the ultimate system to start.

Among the challenges and barriers that the demonstration sites expect to encounter (Table 4) in designing the TMCC, various concerns about stakeholders and issues involving implementation are uppermost in their mind. With regard to stakeholders, the concerns are the sheer number in two of the large urban areas, Atlanta and Camden County; simply getting and maintaining stakeholder interest in the project in Fitchburg and Louisville; and expectations of turf issues among stakeholders and their fear of losing control in a centralized system in Louisville. Louisville also saw as potential barriers the differences in agency cultures and their perceptions of service quality and whether they will be able to get transportation providers to change how they currently do business to be part of the TMCC.

Among the implementation challenges, three sites cited the integration of technologies, such as getting existing and new technologies to work together. For example, Fitchburg reported concerns with integrating with third-party AVL providers. Aiken, a largely rural area, and Louisville, an urban area surrounded by growing suburban and rural areas, expressed concern about the limited or lack of services to people who need them and concern about the TMCC's ability to serve them.

Four locations raised the customer as a challenge for the TMCC design. In different ways they recognized the challenge of keeping focus on who the TMCC is ultimately designed to serve. For example, an Aiken interviewee noted that medical patients have unique needs that must be taken into consideration in providing transportation service in a coordinated system.

**Table 3: Demonstration Sites' Vision of TMCC\***

Expected Characteristics	Demonstration Sites							
	Aiken	Atlanta	Camden Co.	Fitchburg	Kent	Louisville	Orlando	Paducah
<b>Customer</b>								
Serve more customers/more types of clients/access or mobility for all/service on demand	X	X		X	X	X	X	X
One stop for users/ easier for user/ information on all choices/better service	X	X	X	X	X	X	X	X
Expand service to transportation for jobs	X	X		X	X			
Increasing outreach		X					X	
Passenger as part of the solution		X					X	
<b>Providers</b>								
More providers/include small operators	X	X					X	
More multi-modal interaction		X			X	X		
Share vehicles of different groups	X	X				X		
<b>Operations</b>								
Enhance delivery/coordinate & streamline/transparent to user	X	X						
Efficiency/eliminate duplication of paper work or service	X	X	X	X	X	X	X	
Benefit of centralized dispatch & scheduling	X	X					X	
Centralized information hub, possibly operation hub	X	X					X	
Unified billing		X					X	
Technology for more effectiveness or better service	X	X				X	X	
Reduce cost		X						
Riders from different funding sources travel together	X	X						X
<b>Approach</b>								
Regional rather than county/intercounty coordination	X	X						X
Start small then expand to more areas or providers		X			X			
Phased approach to ease transition for users and providers	X	X						
Build on current robust system				X				
Centralize forms first then later replace with on-line					X			

\* Responses to open-ended questions volunteered by interviewee. Absence of a response does not mean a specific expected characteristic is not applicable to a site.

**Table 4: Challenges and Barriers Anticipated by Demonstration Sites\***

Challenges and Barriers	Demonstration Sites							
	Aiken	Atlanta	Camden Co.	Fitchburg	Kent	Louisville	Orlando	Paducah
<b>Stakeholders</b>								
Complexity in dealing with large number		X	X					
Getting and maintaining interest		X		X		X		
Turf issues and perceived loss of control	X	X					X	
Cultural or attitudinal differences about service						X		
Transportation providers willingness be involved and to change		X				X		
<b>Implementation</b>								
Rural service difficulties	X					X		
Difficulties in coordinating vehicle usage		X	X					
Getting technologies to work together	X	X		X	X	X		
Operational challenge of serving agencies, providers, users simultaneously		X		X				
<b>Customer</b>								
Keeping it convenient for customer		X					X	
Unique needs of patients/human services transportation users	X	X						
Understanding the customer's perspective and needs		X					X	
<b>Other</b>								
Need for flexibility	X	X						
Funding needed for region not county	X	X						
Funding cutbacks threaten service						X		
Federal and state rules not necessarily synchronized	X	X				X		
Seek more state government involvement								X

\* Responses to open-ended questions volunteered by interviewee. Absence of a response does not mean a specific expected characteristic is not applicable to a site.

Among the other challenges or barriers identified, funding was cited by two locations. In Louisville, potential transit funding cutbacks may lead to actual reductions of service. For Aiken, the funding issue was one of how the funds are allocated geographically. Regional funding, rather than by county, would provide more flexibility in delivering service. Paducah felt that more involvement from state agencies involved in human service transportation would be desirable, as it would lend greater legitimacy to their effort in development of a TMCC.

## 5.2 ESTABLISHING A FOUNDATION FOR THE DESIGN PROCESS

Key components for a successful project are the structure and functioning of the team. For definitional purposes, the project team consists of the partners directly responsible for the design, whereas stakeholders are consulted for their input to the design. To assess the team's foundation for undertaking the design process, the project managers of the demonstration sites were asked to provide the following information which is summarized in Table 5:

- Size and composition of the project team
- History of collaboration
- Prior experience leading similar projects
- Key skills needed
- Schedule issues
- Senior-level support.

The project teams range in size from two partners in the case of Atlanta and Fitchburg to eight in Aiken. In both Fitchburg and Atlanta, the team consists of the public sector lead agency plus a private sector contractor. Five teams have at least one other public agency as a partner, and all teams have one or more members from the private sector. In all but one site, Camden County, some or all of the team members have successfully collaborated on other projects in the past.

Five of the sites are led by a transit provider or broker. They include Fitchburg, Kent, Louisville, Orlando, and Paducah. As the primary transit provider in the region, the lead agencies are able to leverage their knowledge of transportation options and operations to this effort. Three sites have a regional agency that does not operate a transit system in the lead role. They include the Lower Savannah Council of Governments in Aiken, the Atlanta Regional Commission, and the Camden County Workforce Investment Board, all of whom are seeking to leverage their knowledge of the local area and institutional arrangements in their leadership role.

The private sector team members' role varies among the sites. Five of the sites are partnered with vendors who supply transit systems (e.g., RouteMatch™ in Aiken, Louisville, and Paducah; HB Software Solutions in Fitchburg; and Trapeze Group in Kent), and while mindful of a potential conflict of interest the sites value the expertise the vendors bring and the potential to speed the design process along. Consultants provide expertise and additional manpower at five of the sites. For example, Kent and Camden County have enlisted consultant help specifically for stakeholder facilitation tasks. Atlanta has hired a team of consultants to assist with technical and outreach activities.

Universities are team members at three sites: Aiken, Camden County, and Orlando. The Voorhees Center at Rutgers University in providing transportation and technology expertise to Camden County; the Center for Urban Transportation Research at the University of South Florida is evaluating the project in Orlando; and the Clyburn Transportation Center of South Carolina State University will be evaluating the project in Aiken.

Having experience with similar projects could be an advantage in managing the TMCC design effort, and all but one lead agency had prior experience with projects funded by federal grants. With a few exceptions, the lead agency had prior experience with technology implementations.

However, some sites felt the TMCC design project was different. The project manager in Kent said that his agency “had done technology deployments projects, but not anything like this.” Similarly, the Louisville project manager felt that the TMCC was different from previous projects, “because of the requirement that the design be replicable and scalable. Thus, they need to work on two tracks at the same time”

A variety of skills needed for the TMCC design project was identified by the project managers, with “people” and facilitation skills cited by six of the eight agencies. Technology knowledge was mentioned by five agencies. When the identified skills are examined as a whole, it would appear that concern about the institutional side of a coordinated system is greater than the technical and operational issues. Added together, skills such as institutional knowledge, credibility, facilitation, and outreach constitute 63% of all the interviewees’ responses. Given that dealing with stakeholders was identified as a significant challenge earlier in this section, it is not surprising that the project team would view as important the skills needed to meet that challenge.

When asked about the size of the staff involved in the TMCC design effort, the number was not always easy to calculate. As shown in Table 5, the staff size ranged from two (Kent) to twelve (Paducah), but these were a mixture of both public agency and contractor personnel as well as staff working full and part-time on the project.

Since the interviews took place approximately three months from the start of the project, all the sites had developed a schedule and submitted them to FTA as part of their project plan deliverable. While still early in the project, three sites indicated that they were somewhat behind schedule or had a concern about the schedule. For example, the Fitchburg project manager indicated that the fifteen months of the project seemed like a long time, but as they get into the details, it does not seem as long anymore. These schedule concerns have been addressed by adjusting activities in their proposed project plans and the sites are comfortable in meeting the deadlines for this task.

Senior level support can be a significant boost for a project, helping to ensure that sufficient resources are available or to help with difficult issues that arise, particularly of a policy or inter-agency nature. Five of the sites indicated that they had good-to-very-strong support within the lead agency or beyond, including support from elected officials in some cases, such as Paducah. On the other hand, Atlanta was just beginning to gain senior-level support through the summit they had recently held and Kent had recently asked for help from senior people within the lead agency and state representatives.

**Table 5: Project Team Structure and Functioning by Demonstration Sites**

Characteristic	Demonstration Sites							
	Aiken	Atlanta	Camden Co.	Fitchburg	Kent	Louisville	Orlando	Paducah
<b>Team Size and Composition</b>								
Total	8	2	3	2	4	5	6	3
Public Sector	3	1	1	1	2	4	3	2
Private Sector	4	1	1	1	2	1	2	1
University	1		1				1	
<b>Lead Organization</b>								
Regional Organization (i.e., planning or workforce investment board)	X	X	X					
Transit Provider/Broker				X	X	X	X	X
<b>Private Sector Team Member</b>								
Vendor (e.g., transit software product)	X			X	X	X		X
Consultant(s)	X	X	X		X		X	
History of Collaboration (by two or more team members)	X	X		X	X	X	X	X
<b>Lead Organization's Experience</b>								
With Federal Grants	X	X	X	X		X	X	X
With Technology Deployments		X	X	X	X	X	X	X
<b>Skills Needed for Project</b>								
Local Knowledge/Institutional Knowledge	X	X	X	X	X			X
Credibility with Local Officials	X	X			X			
People/Facilitation Skills	X	X	X	X	X	X	X	
Technology Knowledge	X	X	X	X	X	X		
Operational Knowledge/Experience	X	X		X				
Outreach/Sharing Information	X	X				X	X	X
Transportation Knowledge/Experience	X	X	X			X		
<b>Staff Size (estimate of public and private, full &amp; part time)</b>	4+	9	7	10	2	7	4+	12
<b>Schedule Issues/Delays to Date</b>		X			X	X		
<b>Senior-level Support to Project (as perceived by the site)</b>	Very strong	Just starting	Strong	Some	Seeking	Strong	Good	Strong

## 5.3 STAKEHOLDER INVOLVEMENT

Stakeholder involvement is probably one of the most critical aspects of the TMCC design. The demonstration sites recognize that if the TMCC concept is to succeed, it needs to be developed using a collaborative effort and reflect the needs of the entire region, and not just the lead agency. Identifying the local agencies and contacts and involving them throughout the project has been one of the early success stories of the TMCC design process.

### 5.3.1 Identifying Stakeholders

All the sites have identified a large set of stakeholders they would like to involve in the TMCC design. The range of stakeholders is impressive across all the sites and includes transportation providers, human services agencies, and user groups. All the sites have also held a local kick-off meeting with their stakeholders to begin developing the concept for the TMCC.

Several sites have been trying to use existing committees, forums, and groups as a means to engage the stakeholder community for the TMCC project. Using these existing arrangements has helped these sites get off to a running start by quickly identifying and engaging the appropriate personnel for the TMCC project. Some specific examples include

- Aiken's use of the Regional Transportation Management Association (RTMA), which is a group of regional transportation providers, and the Systems Transformation Grant Working Group, a very active stakeholder group with representation from consumers and advocacy groups.
- Camden County used past partnerships that they could build upon, such as the One Stop Center, for the TMCC project. In addition, several stakeholders were already working together with the United We Ride strategic planning committee. Camden County is using the United We Ride planning efforts as a base foundation for TMCC to build upon.
- Fitchburg has been reaching out to the Massachusetts Department of Mental Retardation committee called CREST (Central Regional Employment Service Team) for improving transportation options for employment.
- Louisville has had success in engaging stakeholders through the Regional Mobility Council (RMC). The RMC consists of a variety of human service and transportation providers who will be serving as an advisory arm to the grant. The RMC has been especially helpful, as it brings together human service and transportation providers to process and identify different coordinated and collaborative projects that they can work on. For example, the Transportation Authority, Area Agency on Aging, AARP, and Senior Center Network are partnering to implement a travel-training program for seniors.
- Paducah is using an existing stakeholder group set up in the region—the Call Center Technical Advisory Committee (CCTAC).
- In Orlando, a committee of transit users called the Transit Advisory Committee, hosted by LYNX, is being used to gather input for the TMCC project.

In an alternative approach, Atlanta found it useful to organize a Human Service Transportation (HST) Summit in June 2007 to bring together all the stakeholders in the ARC project region involved in transportation. There was overwhelming interest around the region with over 170

attendees from the region. The summit helped broaden the support for the notion of the TMCC and the coordination of human service transportation and built new relationships in the region.

### 5.3.2 Obtaining stakeholder input and continuing stakeholder involvement

One of the challenges of this project is to ensure that the stakeholders are engaged through the lifecycle of the project and the initial project euphoria is nurtured throughout the project.

Five of the eight sites have set-up technical or steering committees as mechanisms for stakeholder participation. Some sites have also set up advisory committees to guide and shape the region’s policies and address institutional and organizational barriers specifically. As an alternative, Kent and Fitchburg reported that, in lieu of a formal committee structure, they have been conducting detailed interviews with their stakeholders to collect input. Table 6 lists the methods used by the sites for stakeholder involvement.

**Table 6: Methods Used for Stakeholder Involvement**

Sites	Stakeholder Agency Involvement Method
<b>Aiken</b>	Mobility Center Advisory Committee – Using members from RTMA and other stakeholder for this project.  A sub-group was formed to function as a technical sub-committee that works between meetings to consider possibilities for system integration, technology applications, and reports.
<b>Atlanta</b>	The ARC team’s approach to secure long-term participation of key stakeholders is to establish two main stakeholder groups: the Interagency Advisory Committee, to look at broad policy and high-level institutional issues and a Technical Stakeholder Committee to look at technical issues and review design aspects of the TMCC
<b>Camden</b>	Steering committee of key stakeholders in the region has been established. Also working on a larger stakeholder group of 26 agencies for planning. It is comprised of County leadership, transportation providers and planners, human services organizations, and consumer advocates.
<b>Fitchburg</b>	Primary method of stakeholder involvement is through individual stakeholder interviews. No formal committee structure.  Use existing Human Service Transportation Area Advisory Councils and CREST for project review and input.
<b>Kent</b>	Interviews with stakeholders. Steering committee of key stakeholders to review project results and participate in focus group is planned.
<b>Louisville</b>	No formal committee structure. The Regional Mobility Council will be the primary group for stakeholder involvement.
<b>Orlando</b>	Small group meetings. No formal community structure.
<b>Paducah</b>	Existing Call Center Technical Advisory Committee will be used for this project.

### 5.3.3 Involving the End-users

Involving the end-users early in the design process is critical to a customer-centric TMCC design. While the user involvement has been minimal so far, several sites have plans to solicit input from the end-users. In Aiken, Louisville, and Orlando, the advisory committee includes end-users and advocacy groups. Camden, Fitchburg, Atlanta, and Paducah are planning focus groups with select riders during the course of this project. Table 7 lists the end-user involvement methods used by the sites.

**Table 7: End-user Involvement**

Sites	End-user Involvement Method
<b>Aiken</b>	The advisory group has consumers and advocacy groups who will provide input to the design. LSCOG also works with Easter Seals/Project Action. Considering public meetings and outreach with Easter Seals.
<b>Atlanta</b>	ARC is going to set up a focus group before the TMCC is designed to see if there are any issues to work out, and have a focus group afterwards to discuss what aspects worked well.
<b>Camden County</b>	Focus groups with critical population segments and Town Meetings to obtain broader community input
<b>Fitchburg</b>	Plan to get individual riders who might be interested in helping. There is a targeted group of individuals that are being asked for input in the project. These are users who use "subscription services," are very familiar with MART, and use multiple services.
<b>Kent</b>	Surveys of special services agency customers are planned
<b>Louisville</b>	The project will use focus groups to get an initial reaction, and once the scope is mapped out, it will be reviewed with the users. The plan calls for three points of contact with users: beginning, middle, and end.
<b>Orlando</b>	Using the Transit Advisory Committee, a user committee set up by LYNX, which meets monthly.
<b>Paducah</b>	A rider focus group is also going to meet quarterly to keep them informed on the design. The focus group was thought for this project and was so successful that PATS is going to continue doing it, as they are able to generate vital rider input.

## 5.4 TRANSPORTATION AND HUMAN SERVICES COORDINATION

HST coordination can be described in four dimensions with the scalability and replicability aspects in each. Table 8<sup>2</sup> shows the four dimensions of integration.

**Table 8: Dimensions of Human Service Transportation Coordination**

Dimension	Scalability	Replicability
Institutional	System to add (or remove participating agencies/organizations)	Other institutions to adopt same model or process
Functional	Expand (or reduce) system functionalities	Other functional areas to adopt the same model/process
Geographical	Expand (or contract) geographical coverage of service	Other communities to adopt the same model/process
Operational	Add or change the operations of transportation providers	Other transportation providers to adopt the same model/process

Sites varied widely by their history, the extent, and the nature of human service coordination. In many cases, they had different levels in different dimensions and are hoping this project can help them improve their coordination in the dimensions where they currently lack a regional approach. The sites responses to each of the above four dimensions of integration are discussed

<sup>2</sup> *Scalable and Replicable*, Presentation at UWR/MsAA Kick-Off meeting, March 19-20, 2007

below: Aiken, Fitchburg, Orlando, and Paducah have been most active with coordination effort in the past.

#### **5.4.1 Institutional Coordination**

Several sites reported a high-degree of institutional coordination in the region. All the sites reported working relationships with other agencies in the region and work through several forums, committees, and advisory groups. The following are some illustrative examples sites on the types on institutional cooperation.

- Aiken noted that there is a long history of developing coordination in the region. The region was the first group in the state to bring stakeholders together and eliminate turf issues and deal with service in a more cost-effective manner. Setting up of the RTMA (Regional Transportation Management Association) in 2000 was a major step in addressing coordination. Medicaid was the driving force, and provided a base from which to work. RTMA meets quarterly, but works as a consortium to identify their costs and work at uniform cost across providers. That way they weren't bidding against each other for clients when the Medicaid brokerage system came about.
- Fitchburg also reported a high-degree of existing institutional and operational coordination. There are extensive linkages between MART and human service agencies, especially with the Department of Mental Retardation (DMR) region and the Massachusetts Human Service Transportation (HST) office. MART is the Medicaid broker and also serves DMR and other human service agencies. Human service transportation is a large operation in the region, with four DMR regions, nine HST areas, and seven RTAs.
- In Orlando, the legislative and institutional framework in the state of Florida favors coordination. All human service agencies would have to come through the designated transportation coordinator (LYNX in Orlando's case) to get federal or state reimbursement. LYNX, as the coordinator, will determine whether the service can be provided by existing transit or whether a separate contract is needed for the human service agency to provide service. LYNX coordinates transportation-disadvantaged services for over 63 agencies providing and/or brokering services.
- In Paducah, PATS serves as the coordinated human service and Medicaid Broker for transportation services in Western Kentucky. PATS provides coordinated transportation for human service agencies, including the Kentucky Department of Medicaid Services, Kentucky Department of Vocation Rehabilitation, Kentucky Department of The Blind, Kentucky Department of Disability, Medicaid-Foster Parent Program, Medicaid-Private Auto Transportation Program, the Paducah Housing Authority (funded by the USHUD R.O.S.S. elderly & disabled program), United States Department of Veterans Affairs, Paducah-McCracken County senior services (funded by USDHHS Administration on Aging Title 3B Program), Oscar Cross Boys & Girls Clubs (Kentucky Department of Juvenile Justice and United Way), and employment transportation.

On the other side of the spectrum, some of the sites (i.e., Atlanta, Kent) reported a limited level of coordination region-wide. While agency-specific coordination efforts exist, these sites plan to

use this project as a springboard to develop a concept for the entire region, crosscutting agencies and jurisdictions.

Cooperation with non-traditional transportation providers and services was frequently reported as an interest by the sites. Several sites reported a desire to coordinate with private providers (Louisville, Atlanta etc). Atlanta has set up an online survey on the ARC website, collecting transit provider (including public, private and other non-traditional transportation) information regarding areas, costs and schedules. Camden County is attempting to better coordinate with faith-based transportation services through the faith-based coalition, which is comprised of over 45 local churches and synagogues. Orlando reported several innovative transportation services which they would like to incorporate into a TMCC model. Illustrative programs cited by the interviewee in Orlando included:

- **Volunteers in Motion.** A service coordinator at the Brevard Space Coast Area transit coordinates volunteers driving county vehicles to provide transportation. The program is very successful and has been in operation for over 10 years. This program expands the capacity of the Transportation Disadvantaged service and mass transit in the region. The program coordinator works with the lead contractors/providers in the county for eligibility and intake.
- **Senior Tran – Downtown Orlando.** A shuttle service for seniors living in high-rises in downtown Orlando for day-to-day trips (medical, groceries etc).
- **ITN – Orlando.** Independent Transportation Network was noted as very successful program involving part-time and volunteers driving personal automobiles (no signs) to help senior with transit needs. Seniors (65 and over) and other individuals who have visual impairments can join with annual membership and draw down on their trip account balances. There are no restrictions on the types of trips. Consumers cover 50% of the fees. Growing rapidly. Provided over 2000 trips since last year.

Funding and Medicaid transportation were among the two challenges in bettering institutional coordination. Three locations expressed concerns and uncertainty with the private Medicaid brokerage in the region, specifically the role that the private brokerage will play in the TMCC. All three sites indicated that they are in communication with the brokerage provider and will evolve to a better understanding of the level of involvement. One site reported a desire for additional coordination with state human service agencies and noted that there is a role for the federal liaisons in encouraging state-level participation in the local efforts at coordination. Another issue raised in the interview was potential union issues especially in a service area with some unionized and un-unionized providers and the difference in their labor costs.

#### **5.4.2 Functional Coordination**

Fewer sites reported functional coordination efforts. At a fundamental level, agencies still follow their own functions and processes.

Enabling a high level of functional coordination is also easier in places like Fitchburg, Kent, and Paducah where there is a primary transit provider in the region. In these places, a majority of the functions are carried out or determined by the lead agency. Common types of functional coordination reported include automated client eligibility verification (Paducah, Fitchburg), and

common billing (Fitchburg, Paducah, Orlando), use of a common electronic vendor portal for Medicaid subcontractors for trip scheduling, billing, etc (Fitchburg), or database links for vendors to download trips etc (Paducah). Several of these agencies also reported use or planned deployment of AVL/MDC systems.

In larger regions with multiple transit providers and a more splintered transportation and human service framework, functional coordination is harder to achieve. Regional efforts reported by the sites include establishing a common radio system and AVL system (Aiken), common drug testing systems (Aiken), regional fare payment systems (Atlanta, Orlando), and a common scheduling software or seat licenses (Aiken).

### **5.4.3 Geographical Coordination**

Most sites reported only a low-level of geographic coordination in terms of cross-jurisdiction operations but all of them expressed a high-desire to ascertain more possibilities as part of this project. Primarily, these coordination activities are specific to the participating agencies and not part of a regional effort.

In Atlanta, CCT and MARTA are extending trips into each other's service area. This takes place primarily between the affected transit agencies and not regionally. In Orlando, LYNX reported cross-boundary operations with Volusia counties to Daytona. Similar services are also offered in Lake County and Polk County. TARC has inter-jurisdictional physical coordination, for example with Oldham County. Camden reported that the transfer system is one example of partnership across jurisdictions. The South Jersey Transportation Authority provides shuttle services for veterans in three counties by coordinating by the day of week for more efficient use of vehicles. One of the goals of the RTMA is to foster geographic coordination. Aiken hopes to draw in transit providers who operate in a greater number of counties allowing for more flexibility in service to their riders while optimizing the vehicle loading. For example, a trip to Charleston can multi-load with riders from multiple counties rather than have, say, six vehicles with one person each.

### **5.4.4 Operational Coordination**

The interviews revealed that operational coordination, especially in the larger sites is mostly agency-specific and there has not been a regional approach yet. Individual agencies and groups of agencies have developed innovative arrangements and practices but no regional applications yet have been developed. Several sites reported that the United We Ride planning, the SAFETEA-LU coordination requirements and the TMCC project are helping the region focus on identifying and advancing the case for operational coordination.

In Louisville, for example, there are existing operational linkages between transit agencies because of the physical connection with the TARC fixed-route services. In addition, TARC has a non-profit vehicle maintenance program that helps with on-going maintenance for a reduced fee. TARC also has contracts with Yellow Cabs and American Red Cross to dispatch rides from the TARC dispatch center.

In Fitchburg, HHS has a large transportation operation in the region with several inter-jurisdictional and operational linkages, encompassing over 300 routes and three Regional Transit

Authorities (RTAs). Fitchburg reported that they are working with two adjoining RTAs (Worcester and Lowell) to assign trips for Medicaid transportation in overlapping areas. There are about 20 subcontractors, which have mostly vans, but a few cabs as well.

In Paducah, PATS has a few existing operational linkages with the adjoining counties of Fulton and Murray-Calloway, but only on Medicaid trips. PATS has working relationships with all HHS agencies and provides service to most of them in McCracken County.

## 5.5 TECHNOLOGY FOR COORDINATION

Table 9 shows the baseline technologies that the demonstration sites have so far identified as existing in the region.

**Table 9: Baseline Technologies Reported by the Sites**

Baseline Technologies	Demonstration Sites							
	Aiken	Atlanta	Camden Co.	Fitchburg	Kent	Louisville	Orlando	Paducah
Automated Routing and Scheduling System (GIS based)	X	X	X	X	X	X	X	X
Wireless Communications/Radio Systems	X	X	X	X	X	X	X	X
In-vehicle Mobile Data Computers	X	X	X	X	X	X	X	X
Electronic Fare Collection System (Smart Card Technology)	Planned	X					X	
Customer Service Center/Support		X		X		X	X	
Electronic Bus Routes/Schedules		X						
Real-time Vehicle Tracking (AVL)	X	X		X	X	X	X	X
Real-time Traveler Information		X					Planned	X (participating in KY 511)
Automated Reservation Management		X		X				
Vehicle Arrival Notifications System		X						
Web-based and Telephone-based Travel Planners	X	X		Planned			X	
Accounting/Billing Software	X	X		X	X			
Help-line/Call Centers	X	X		X				X
Interactive Voice Response (IVR) System for Reducing Call Volume	X			X				
Web-reservations				Planned				
Automated Client Eligibility Verification				X				X

Computerized Complaint Management System				X				
Portable Computer-based Driver Training Simulator								X

A wide variety of ITS technologies is shown to exist in some manner among the sites. The next step for all the sites will be to refine their understanding of the technologies in their region, especially who uses them and how. Currently, all the sites are gathering information regarding technology.

Atlanta is working on developing a detailed inventory of ITS in the region focusing on identifying and differentiating between agency-specific and regional (like electronic fare collection) technologies. Atlanta is working on a needs assessment, which will include the inventory and allow ARC to see what gaps, potential weaknesses and needs exist.

In Camden County, the federal technical assistance team has been contacted to help with the properties of interfacing with existing software. Camden County is still working on understanding the best way to phase in the technology—whether they should interface existing technology or have one technology as the successor—and is planning to evaluate this from a cost/benefit and results perspective.

Four of the demonstration sites (Paducah, Kent, Fitchburg, and Aiken) have a common technology platform available across most of their systems. As part of the technology assessments, these sites are looking at ways to improve and expand their current deployments to include a more regional and coordinated concept of operations.

- Aiken is planning additional technology applications such as a specialized coordination module, a smart farecard system, electronic cost allocation, and ridership tracking modules.
- In Fitchburg, where a sophisticated system exists for brokerage operations, additional modules such as a trip-planning tool are being planned as part of this grant.
- Kent is assessing technology improvements and alternatives and is leaning towards a system that is browser-based, since that is easy to scale up and replicate. They are also working on database sharing with different database structures, but are waiting on the information gathering interviews being carried out by the project team to completely determine the needs of the region before making a final decision. They are also planning public meetings to gather user and agency needs before reaching for a technological solution.
- From participation in public education and information meetings, Paducah has identified some needs to consider in the TMCC design. Based on the feedback from the meetings, Paducah noticed common responses, such as wanting to: use the web to make reservations; use cell phones to make trips; speak to a live person; use an IVR system; have automated notification for arrival; and use of smart cards. While most ideas can be implemented, some appropriate phasing will be needed.

When a common platform was not present, integration was mentioned as a challenge especially with legacy systems. Atlanta and Camden identified integration of the existing legacy systems as a challenge, as most agencies have their own systems in the region.

Atlanta noted that it did not want to limit the options of the TMCC until it is clear what the needs are and what the best technology to use could be. The TMCC design also needs to leverage the comfort that agencies already have with the legacy systems they are using and be able to integrate that with new systems. Another challenge is maintaining, updating, and interfacing the systems. Atlanta noted that they need to look at technology on a regional level, as most agencies are either boundary- or client-based, but they need to look at a broader scope. Transit is one component, but they need to integrate and include the human services legacy systems, as well. In addition, the costs of upgrading, maintaining, and designing systems will need to be addressed.

Camden has contacted the federal technical assistance team for help with the properties of interfacing with existing software. The team is still working on understanding the best way to phase in the technology—whether they should join together or have one technology as the successor. Camden is hoping that technology improvements gives greater efficiencies built into the project, as they already have a rich public transportation system.

In some of the sites that are smaller operations or have a widely deployed common platform, integration of legacy systems was not mentioned as much of a concern. Paducah stated that while other transportation providers in the area can benefit by stating their needs/wants to try to get them translated into the TMCC design, other counties do not have as much technology as PATS, and that will need to be taken into consideration. Paducah has made their system software available to adjoining counties, who can download Medicaid trips from the server.

Fitchburg, also reported that while there are a few legacy systems, such as the fare box, most technologies are already integrated into Integrated Transit Management System (ITMS) software used by MART. Some software modules are not integrated with each other, primarily because there has been no need to date. However, some integration possibilities exist, such as combining AVL with trip planning for just-in-time booking or the use of IVR with trip planning.

Fitchburg anticipated integrating with a third-party AVL system as one of the biggest problems for them. The companies that build AVL are not the same as the ones who build the other ITS components, such as scheduling.

The project team at Kent is conducting interviews to assess the needs of the project, which have not yet been completed. The following text box shows the barriers that Kent project team has identified for typical technical concerns of coordination efforts. While not specific to PARTA and the region, these represent the superset of issues that Kent is expecting to encounter based on their experience with similar systems. The list will serve as a reminder that will help ensure that they address potential issues during the course of the design development.

## TECHNICAL ISSUES IDENTIFIED BY THE KENT PROJECT TEAM

### ITS Hardware

Are MDCs in each vehicle, even providers? What happens if they are not? Are the same MDCs being used? Same protocols? Are GPS accuracies the same between fleets?

### Communications

Are fleets sharing same MDC communications backbone? How does system know which database/site to send messages? How do you deal with different protocols? How do you deal with different system timings? What happens when there are dead spots/down time? What happens when there is an emergency?

### GIS Engine – Very likely different map sources/GIS engines.

How do you deal with different GIS reference points? How often will the maps be updated? Can each agency make map data changes? What happens when Geocodes don't match between datasets?

### Data Exchange

How do you send and merge data? Rider eligibility systems and issues? What if different sites are using different Database Engines? Multi-Model data exchange? Providers may get trips/data from different agencies? Integrating with 211 and 511 systems.

### Data Control

Who owns data? What if there are conflicts between agencies? Many more possibly and issues? Client ID numbers, eligibility dates, etc.?

### Security – Who do you want to see the data?

Should competitors see each others information? What about sensitive client data?

### Internet Connectivity – Speed of internet connectivity depends upon data exchange needs.

What will bandwidth issues be for each agency? What will bandwidth cost? – operations expense/budget? What of future bandwidth needs?

### Contingency Plans

Data Backup and Redundancy issues? Disaster Recovery Plans?

### Politics

Different operational requirements? Data control issues? Data Liabilities? Operational Liabilities (i.e., accidents, transfers, driver training)? Revenue/cost sharing? Faring Differences? IOA? Unions? Providers combining with their other business?

### Reporting Needs – Much greater needs and issues.

How do they differ? Billing Needs? Statistic Calculation?

Two locations (Paducah and Orlando) also mentioned that they are interested in how the TMCC project can take advantage of the regional 511 system. In Orlando, there is an existing 511 system with transit information as option 3 and callers are connected to the LYNX call center for fixed route service, to MV transit for paratransit service, or to a car-pool ride matching center. Orlando reported that it is a real possibility that 511 could be the one-call number for the region and will work with the Florida DOT to see how best to use 511 for this task.

### 5.5.1 Use of the National ITS Architecture

The use of the National ITS architecture in the TMCC design process has been strongly encouraged by the U.S. DOT. While the demonstration sites reported they are looking into the regional ITS architectures, it has not yet been a uniform or systematic approach. Two of the sites reported that the regional architecture did not contain enough human service transportation information and they see gaps that need to be addressed in the architecture. The other sites indicated that they are reviewing available information and will consider architecture more during the development of the concept of operations. It should be noted that an ITS architecture gap analysis report is a deliverable that each site will be submitting to FTA.

## **5.6 FEDERAL SUPPORT MECHANISMS**

The MSAA program offers several types of support to the demonstration sites intended to assist the sites in their TMCC design process. These include the federal liaisons, the technical assistants, and an on-line community website. In addition, the kickoff workshop held in March 2007 in Washington, DC, introduced participants to members of each site, providing site representatives an opportunity for dialogue among themselves. The project managers of each site provided their perspective on these forms of support.

### **5.6.1 Inter-site Contacts since Kickoff Workshop**

The Kickoff Workshop received mixed reviews from the site representatives. While most felt that it provided a good opportunity to hear what the other sites were doing, some felt that the packed agenda and venue limited networking opportunities. Nevertheless, five sites (Aiken, Atlanta, Kent, Orlando, and Paducah) reported contacts with other sites since the Workshop. Aiken, in particular, appears to have been active in contacting other sites. One site, Louisville, felt that the competitive nature of the second stage of the project may have inhibited contact among the sites.

The on-line community website was not fully functioning at the time of interviews, and only two sites (Fitchburg and Orlando) reported using it. The Orlando project manager reported that he had been posting on the website, but had not been getting many responses.

### **5.6.2 Federal Liaisons Support**

The federal liaisons are viewed by most sites as a valuable form of assistance, although some sites have used them more extensively than others. For example, Fitchburg has monthly calls with their federal liaison and technical assistants, and Kent said they were in regular contact with their federal liaison. In terms of the types of support received, Aiken reported being very happy with the assistance on Medicaid issues and program guidance, and Atlanta sought assistance on policy issues. Paducah has used the federal liaison to ensure that deliverables are being submitted satisfactorily. At the time of the interview, Louisville and Orlando reported they had no contact with their federal liaison since the Kickoff Workshop, although it does not appear that they have actively sought federal liaison's help.

### **5.6.3 Technical Assistants**

At the time of the interviews, all the sites had had at least one conference call with their technical assistants (TAs). Since then the TAs have prepared technical assistance plans for each site, either in draft or final form, and visits by the TAs to each site are underway. Although the relationship with the TAs was still evolving at the time of the process evaluation interviews, half the sites reported that they had already made regular use of help from the TA team. Those using the TAs reported the following types of assistance to date and/or expectations for the future:

- Aiken – review of the detailed project plan and in the future plan to use TAs for more technical aspects such as wireless communication
- Atlanta – review concept of operations when ready and other types of technical help as needed
- Camden County – review of project timetable and planning a systems engineering workshop
- Fitchburg – plan to use extensively in reviewing documents, concepts, and ideas

- Orlando – assistance on National Transit Database reporting
- Paducah – help in the future on how to interface with the 511 system.

Review of the technical assistance plans for each site and the TA monthly reports to U.S. DOT indicate that monthly conference calls are taking place with each site and other interaction by phone or e-mail will occur as needed to respond to a site's needs. Some of the specific requests for assistance that have been made are:

- Technical/ITS issues: data communications between vehicles and the TMCC; linking two proprietary software systems; and data warehousing and management
- Coordination issues: advice on technical committee composition; information on insurance issues; information on cost savings from coordination of trips; brokerage systems for Medicare trips
- Project Management issues: concept of operations; review of detailed project plan; systems engineering training; quarterly reporting to FTA; budgetary question.

## 6.0 CONCLUSION AND NEXT STEPS

The baseline analysis was a first step in documenting the process used by the demonstration sites in developing a final design for the TMCC. The information collected from the detailed interviews with the project managers, the transportation and human service representatives, the technical leads and the users revealed promising approaches to a complex program as well as the challenges and issues that the sites are attempting to address.

The baseline analysis period has corresponded to the early stakeholder involvement and project planning phases for the sites. All the sites are currently engaged in an information gathering and planning stage and have focused significant efforts in obtaining regional participation and setting up frameworks to involve a diverse group of stakeholders in the design of the TMCC. The sites also recognize the opportunity for this project to make them more customer-centric rather than agency-centric.

As the sites proceed to a concept of operations for the TMCC, they face a challenge in coalescing the high-level vision, the needs, and the particular requirements of the various agencies in the region to a regionally acceptable model.

Coordination has many facets and the sites need to focus on all of the different dimensions of coordination (institutional, functional, geographical, and operational) as well as the role of technology in addressing the challenges in each dimension. Currently, at a regional-level, institutional coordination is further along than the other dimensions. For the other dimensions, many successful examples were cited by the demonstration sites; however, they are mostly agency-specific and do not have a regional perspective. The evaluation suggests that the demonstration sites need to elucidate what the TMCC means for the other dimensions at a regional level.

The role of technology in coordination is being researched by all the sites. Currently, the sites are gathering information on both the status of existing technologies as well as the needs of the stakeholders. The sites are a little unclear on the use of statewide architectures and the national ITS architecture framework and unsure of how it fits with the TMCC design.

While no site expressed a clear winner or a technological solution, some sites are ahead of the others in terms of technological capability and consequently are using the TMCC project to determine what other advancements can be made. However, caution must be exercised by the sites to ensure they do not define the solution before defining the problem of coordination.

The sites will be contacted again to develop a mid-way and a finish-line analysis report. The mid-way analysis will occur around the time that the sites produce their concept of operations, a deliverable to U.S. DOT. The finish-line analysis will occur once the final design document has been submitted to the U.S. DOT.

Ultimately, a final report on the TMCC design process will be prepared synthesizing the findings from all three stages and identifying lessons learned. The lessons learned will be a compilation of best practices and experiences from which other regions around the country can benefit as they develop their coordinated human service transportation models.



## **APPENDIX A**

### **Names of Interviewees**

Sites	Project Manager	Transportation Representative	Human Service Representative	Technical and ITS Lead	Users Representative
Aiken, SC	<p><b>Lynnda Baasham</b> Director, Human Services Lower Savannah Council of Governments 2748 Wagener Road Aiken, SC 29801 803-649-7981 <a href="mailto:lbassham@lscog.org">lbassham@lscog.org</a></p> <p>Dana Luttrull is Grants manager for the MSAA, as well as the United We Ride and CMS Systems Transformation Grants.</p>	<p><b>Scott Murphy</b> Executive Director Aiken Area Council on Aging in Aiken, SC <a href="mailto:skmurphy@gforce.com">skmurphy@gforce.com</a> 803-648-5447</p>	<p><b>Scott Murphy</b>, Executive Director Aiken Area Council on Aging in Aiken, SC <a href="mailto:skmurphy@gforcecable.com">skmurphy@gforcecable.com</a> 803-648-5447</p>		<p><b>Ann Weathers</b>, Department of Health and Environmental Control, Home Health Division, Orangeburg County Transportation Planning Committee (good advocate for vulnerable people who need rides.) 803-536-9117 <a href="mailto:WEATHEAH@dhec.sc.gov">WEATHEAH@dhec.sc.gov</a>.</p>
Atlanta, GA	<p><b>David Schilling</b> Senior Planner Atlanta Regional Commission 40 Courtland Street, NE Atlanta, GA 404-463-3100 <a href="mailto:dschilling@atlantaregional.com">dschilling@atlantaregional.com</a></p>	<p><b>David Schilling</b> – Transit Manager for ARC</p>	<p><b>Beth Stalvey</b> Area Agency on Aging, <a href="mailto:bstalvey@atlantaregional.com">bstalvey@atlantaregional.com</a>, 404-463-3224 and David Schilling</p>	<p>ARC ITS Expert - <b>Caroline Marshall</b>, Principal Planner Atlanta Regional Commission 40 Courtland Street, NE Atlanta, GA 30303 404-463-3285 <a href="mailto:cmarshall@atlantaregional.com">cmarshall@atlantaregional.com</a></p>	
Camden County, NJ	<p><b>Donna Johnston</b> Project Manager Camden County Workforce Investment Board 204 Kings Highway, South Cherry Hill, NJ 08034 856-931-9999 <a href="mailto:Donna@ccwib.com">Donna@ccwib.com</a></p>	<p><b>Rhonda Urkowitz</b> Cross County Connection 856-596-8228 <a href="mailto:Urkowitz@transportationchoices.com">Urkowitz@transportationchoices.com</a></p>		<p><b>Woods, Pippa</b> Transport Policy Instructor Business &amp; Project Dev. Rutgers University 33 Livingston Avenue, Ste 500 New Brunswick, NJ 08901 732-932-6812 x684 <a href="mailto:pwoods@rci.rutgers.edu">pwoods@rci.rutgers.edu</a></p>	
Fitchburg, MA	<p><b>Bruno Fisher</b> Chief Operating Officer Montachusett RTA 1427 Water Street Fitchburg, MA 01420 978-345-7711 <a href="mailto:bfisher@mrt.us">bfisher@mrt.us</a></p>	<p><b>Bruno Fisher</b> Chief Operating Officer Montachusett RTA 1427 Water Street Fitchburg, MA 01420 978-345-7711 <a href="mailto:bfisher@mrt.us">bfisher@mrt.us</a></p>	<p><b>Michelle Harris</b> – MA Dept. of Mental Retardation 413-284-1550 <a href="mailto:Michelle.Harris@dmr.state.ma.us">Michelle.Harris@dmr.state.ma.us</a></p>	<p><b>Himanshu Batnagar</b> President HBSS 1600 Osgood Street, Ste 2-59 North Andover, MA 01845 978-580-9065 <a href="mailto:hb@hbssonline.com">hb@hbssonline.com</a></p>	

Sites	Project Manager	Transportation Representative	Human Service Representative	Technical and ITS Lead	Users Representative
Kent, OH	<b>Bryan Smith</b> Manager of Business Development Portage Area RTA 2000 Summit Road Kent, OH 44240 330-678-7745 <a href="mailto:bsmith@partaonline.org">bsmith@partaonline.org</a>	<b>Bryan Smith</b> Manager of Business Development Portage Area RTA 2000 Summit Road Kent, OH 44240 330-678-7745 <a href="mailto:bsmith@partaonline.org">bsmith@partaonline.org</a>		<b>Richard Wildey</b> Trapeze Software 480-315-5061 <a href="mailto:richard.wildey@trapezegroup.com">richard.wildey@trapezegroup.com</a>	
Louisville, KY	<b>Carrie Butler</b> TARC Operations Planning Manager Transit Authority of River City 1000 W Broadway Louisville, KY 40203 502-213-3490 <a href="mailto:cbutler@ridetarc.org">cbutler@ridetarc.org</a>	<b>Carrie Butler</b>	<b>Barbara Gordon</b> Executive Director, Area Agency on Aging 502-266-5571, x125 <a href="mailto:barbara.gordon@ky.gov">barbara.gordon@ky.gov</a>		<b>Priscilla Rao</b> TARC Director of Paratransit 502-213-3245 <a href="mailto:prao@ridetarc.org">prao@ridetarc.org</a>
Orlando, FL	<b>Doug Jamison</b> Project Manager – Planning Central Florida RTA/LYNX 455 North Garland Avenue Orlando, FL 32801 407-254-6071 <a href="mailto:djamison@golynx.com">djamison@golynx.com</a>	<b>Doug Jamison</b>	<b>Sarah Lightell</b> Senior Resource Alliance 407-228-1816 <a href="mailto:lightells@elderaffairs.org">lightells@elderaffairs.org</a>		<b>Cheryl Stone</b> 407-748-0429 <a href="mailto:cmsmicro@aol.com">cmsmicro@aol.com</a>
Paducah, KY	<b>Kim Adair</b> Assistant General Manager Paducah Area Transit System 850 Harrison Street Paducah, KY 42001 270-444-3660 <a href="mailto:kadair@paducahtransit.com">kadair@paducahtransit.com</a>	<b>Gary Kitchin,</b> Paducah Area Transit System 850 Harrison Street, Paducah, KY 42001 270-444-3661 <a href="mailto:gkitchin@paducahtransit.com">gkitchin@paducahtransit.com</a>	<b>Kim Adair</b>	<b>Todd Allen - RouteMatch™</b> Software 1180 West Peachtree, Suite 1130 Atlanta, GA 30309 404-253-7846 <a href="mailto:todd.allen@RouteMatch.com">todd.allen@RouteMatch.com</a>	



**APPENDIX B**  
**Interview Guides**

# INTERVIEW GUIDES

## INTERVIEW WITH THE MSAA SITES – PROJECT MANAGER

### Team and Site Information Review

1. Please confirm the site characteristics on the attached page, including the list of partners that we were able to ascertain from the proposal or the workshop presentation. Are all of the partners still going to be part of the TMCC design process and in what capacity? Have there been any changes? [NOTE: A Background Form was prepared for each site and sent to the interviewee.]
2. Are there any key partners/agencies not currently involved that need to be added?

### DISCUSSION ITEMS

#### Project Partners Involvement

3. Have some or all of current partners worked together in past? If so, how would you describe the success of those collaborative efforts? Can you provide specific examples of previous collaborative efforts?
4. Among the partnering agencies, what type and level of support have they committed? Were any formal commitment mechanisms used, such as a memorandum of understanding (MOU)? Has the support been forthcoming so far? If no, please explain.
5. Are consultants or vendors a part of your team? Have any contractual or other issues arisen regarding private sector participation? Is conflict of interest a potential concern with any private-sector participants and, if so, how will that be dealt with?

#### Broader Regional Stakeholder Involvement

6. In addition to the list of partners identified earlier, are there broader stakeholder groups or agencies that you would like to reach out to during this project? Please describe.
7. Have you faced any challenges in getting such stakeholders involved? Please describe.
8. Do you have plans to use processes/forums/groups in this project to maximize stakeholder involvement in the region? If so, what are they and how do you plan to use them? (e.g., organize a steering committee or subcommittees; hold periodic meetings; send a newsletter on progress.) Please describe.
9. Have the goals and objectives for TMCC in the proposal been shared and discussed with all the regional stakeholders?
10. Will regional stakeholders have a role to play in influencing the TMCC design? Please explain.
11. Are you including the end-users (including individual riders and groups representing the mobility challenged) in the design process and, if so, how? (If not, why is that?)

### **Project Management**

12. What is your and your team's experience in program management?
13. Have you established a schedule for the project, and, if so, may we obtain a copy? How would you assess your success in meeting the schedule so far?
14. What do you think are the important capabilities required for this project and how have they been filled at your site? (e.g., technical knowledge, institutional knowledge, facilitation skills, etc.)
15. How do you expect to measure progress on this project?
16. What are some of the challenges/concerns or hot issues in terms of project management at this stage?
17. Have you garnered support from senior-level management at agencies or other influential individuals (e.g., elected politicians) important to your project? If so, what processes have you successfully used?

### **MSAA Program Collaboration**

18. Did the information shared by other sites and discussions you may have had with representatives of other sites at the March 19-20 workshop provide any useful lessons for your project? Please describe.
19. Have you been in touch with the federal liaison assigned to your site? If so, how often, for what purpose, and have they been a benefit to the project so far? In the future, how often and for what purpose do you expect to use the federal liaison?
20. Have you been in touch with the technical assistance team assigned to your site? If so, how often, for what purpose, and have they been a benefit to the project so far? In the future, how often and for what purpose do you expect to use the technical assistance team?

### **Other Comments**

21. Do you have any additional comments or feedback that you would like to provide?

## **INTERVIEW QUESTIONS FOR THE TRANSPORTATION REPRESENTATIVE**

### **TMCC Goals and Objectives**

1. Describe in your own words your vision for how your TMCC will affect transportation service delivery operations? If you have a near-term and a long-term vision, please describe both.
2. The federal government has published a variety of research reports and guidance on coordination of human services transportation. Are you familiar with any of these? Have you found these helpful in developing your vision
3. What are the biggest challenges (operational, institutional, and technological) to coordination of transportation that you expect the TMCC to address?
4. From the standpoint of transportation providers in the region, are there any major transportation-related barriers to achieving a TMCC design?

### **Existing Linkages with Human Services and Transportation Providers**

5. Are there existing operational linkages (shared vehicles, inter-jurisdictional trips, transfers, cost allocation, etc.) between transit agencies in the region?
6. To what extent have the Health and Human Service (HHS) agencies and transportation agencies in the regions worked together in past?
7. Can you provide an example of past partnering efforts? How would you describe the success of those past partnering efforts?
8. Have you included non-traditional transportation providers such as private providers, volunteer operations, faith-based organizations into TMCC design? If so, please describe their existing role? Do you expect their role to change in the future?

### **Stakeholder and Partners Involvement**

9. What will your role be in the design of the TMCC? In general, how many hours a week do you anticipate spending on this project?
10. In addition to your time, is your agency committing other resources to this project?
11. Do you expect other transportation providers in the area to contribute the TMCC design?

## **INTERVIEW QUESTIONS FOR THE HEALTH AND HUMAN SERVICE REPRESENTATIVE**

### **TMCC Goals and Objectives**

1. What is your agency's current role in human service transportation? For example, do you fund, plan, broker, and/or provide/deliver transportation services?
2. Describe your vision for how you expect your TMCC to improve health and human service operations? If you have a near-term and a long-term vision, please describe both.
3. The federal government has published a variety of research reports and guidance on coordination of human services transportation. Are you familiar with any of these? Have you found these helpful in developing your vision?
4. What are the biggest challenges (operational, institutional, and technological) to coordinated transportation that you expect the TMCC to address?
5. From the standpoint of health and human service organizations in your region, are there any major barriers to achieving a TMCC design?

### **Existing Linkages with Other HHS Agencies and Transportation Providers**

6. To what extent have HHS agencies in your region worked together in the past to coordinate transportation?
7. Can you provide any examples of past partnering efforts with transportation providers? How would you describe the success of past partnering efforts?

### **Stakeholder and Partners Involvement**

8. What will your role be in the design of the TMCC? In general, how many hours a week you anticipate spending on this project?
9. In addition to your time, has your agency committed other resources to this project?
10. Do you expect other health and human service stakeholders in the area to contribute the TMCC design?

## **INTERVIEW QUESTIONS FOR THE TECHNICAL AND ITS LEAD**

### **Current Level of Technology Deployment**

1. Do you have any prior working relationship with the project lead agency? If so, please describe.
2. Based on information in the proposal and workshop presentation, we have assembled this list of current and planned ITS technology in the region. Would you please verify or make corrections if necessary? [Note: A list of ITS technologies for each site was sent to the interviewee in advance of the interview.]
3. Besides transportation technologies, are there any significant systems or technologies used within the key health and human services partners?
4. How are you planning to assess and include legacy systems into the TMCC design?
5. What are some of the technological barriers that you expect to overcome during the course of this project?

### **Systems Engineering**

6. Are you familiar with the National ITS Architecture and regional architecture?
7. If so, have you already or do you plan to assess statewide or regional architectures and ITS deployments to see how the TMCC project can benefit?
8. Are you familiar with the ITS systems engineering process? (It was discussed at the March workshop in DC.) If so, how closely are you following the systems engineering process? Please describe.
9. Have you begun any of the following, and if so please discuss:
  - a) Assessing needs.
    - i. How are you going about that?
    - ii. Are these needs of riders, partner, others?
    - iii. If there are more needs than can be accommodated at the present time, how do you expect to decide on which needs to focus? (i.e., how to prioritize needs?)
  - b) Assessing technology alternatives. How are you going about this?

## **INTERVIEW QUESTIONS FOR THE TRANSPORTATION USER**

1. What type of transportation service do you use on a regular basis?
2. Do you have any difficulties or do you need assistance when you arrange for a trip?  
Please explain.
3. Do you feel that your transportation needs are currently met in the region? If not, please describe the challenges that you face
4. Do you ever assist others in using different types of transportation in the community?  
Please explain?
5. Are there any major successes you have seen in your community regarding various types of transportation? Please describe what works well from your standpoint in terms of a transportation trip.
6. Are you familiar with the concept of coordinated transportation?
  - a. If so, how will a coordinated transportation system benefit you and others in the community?
7. What aspects of coordination would you most like to have occur?
8. Are you familiar with [LEAD AGENCY FOR MSAA PROJECT]?
  - a. Have you heard about a project they are leading to develop a Travel Management Coordination Center or TMCC in your region?
  - b. If so, what would you say are the goals of that project?
  - c. Do you expect to be involved in the project in some way?

## **INTERVIEW QUESTIONS FOR THE USER GROUP REPRESENTATIVE**

1. In what role do you participate in human service transportation in your region? (e.g., represent mobility-challenged riders, plan trips for riders as part of your job function, etc.).
2. Are there any major successes you have seen in your community regarding human services transportation? Please describe.
3. Does your community have any major challenges in fulfilling the transportation needs of individuals who have special transportation needs or difficulties in traveling? Please explain.
  - a. Have these challenges affected your role [defined in Q1]? If so, please explain.
4. Are you familiar with the concept of coordinated transportation for the mobility-challenged?
  - a. If so, would a coordinated system benefit you in your role [defined in Q1] or the users you represent?
  - b. What aspects of coordination would you most like to have occur?
5. Have you heard about a project in the region to develop a Travel Management Coordination Center or TMCC in your region?
  - a. If so, what would you say are the goals of that project?
  - b. Do you expect to be involved in the project in some way?
  - c. If so, how will you be involved and how much time do you expect to devote to the TMCC project?
6. Have you previously been involved in efforts to coordinate human service transportation in your region? How do you think the current efforts compare to these earlier activities?



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**U.S. Department of  
Transportation**  
ITS Joint Program Office, HOIT  
Washington, DC 20590  
Toll-Free "Help Line" 866-367-7487  
[www.its.dot.gov](http://www.its.dot.gov)

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