# MEMPHIS REGIONAL ITS ARCHITECTURE UPDATE WORKSHOP MINUTES

WORKSHOP DATE: January 12-13, 2010

**SUBJECT:** Memphis Area Regional ITS Architecture Update – Architecture Development

Workshop

#### **SESSIONS AND ATTENDANCE:**

#### **Traffic Management and Traveler Information Session**

Date and Time: January 12, 2010, 9:00 AM – 11:30 AM Location: Memphis Urban Area Metropolitan Planning Organization

Becky Bailey, City of Bartlett
Derek Baskin, City of Millington
Don Gedge, FHWA
John Gilligan, Mississippi DOT
Sajid Hossain, Memphis Urban Area MPO
Ed Johnson, TDOT Region 4
Carlos McCloud, Memphis Urban Area MPO
Frank McPhail, Town of Collierville
Richard Merrill, City of Memphis

Tim Moreland, Memphis Urban Area MPO

Steve Mosher, Gresham, Smith and Partners Michael Rebick, TDOT Region 4
Acey Roberts, Mississippi DOT
Brett Roler, Memphis Urban Area MPO
Pragati Srivastava, Memphis Urban Area MPO
John Thomas, TDOT Region 4
Joe Warren, TDOT Region 4
James Collins, Kimley-Horn and Associates
Tom Fowler, Kimley-Horn and Associates
Amy Lewis, Kimley-Horn and Associates

#### **Emergency Management Session**

Date and Time: January 12, 2010, 1:00 PM – 3:30 PM Location: Memphis Urban Area Metropolitan Planning Organization

Becky Bailey, City of Bartlett
Don Gedge, FHWA
John Gilligan, Mississippi DOT
Johanna Harrell, Shelby County Office of
Preparedness
Sajid Hossain, Memphis Urban Area MPO
Mark King, Town of Collierville
Richard Merrill, City of Memphis
Steve Mosher, Gresham, Smith and Partners

Michael Rebick, TDOT Region 4
Acey Roberts, Mississippi DOT
John Thomas, TDOT Region 4
Joe Warren, TDOT Region 4
Cheryl Yarbro, Shelby County Office of Preparedness
James Collins, Kimley-Horn and Associates
Tom Fowler, Kimley-Horn and Associates
Amy Lewis, Kimley-Horn and Associates

#### **Transit Management Session**

Date and Time: January 13, 2010, 9:00 AM – 11:00 AM Location: Memphis Area Transit Authority Central Station

Don Gedge, FHWA
John Gilligan, Mississippi DOT
Sajid Hossain, Memphis Urban Area MPO
John Lancaster, Memphis Area Transit Authority
Martha Lott, Memphis Urban Area MPO
Carlos McCloud, Memphis Urban Area MPO
Richard Merrill, City of Memphis
Tim Moreland, Memphis Urban Area MPO
Paul Morris, Memphis Urban Area MPO
Steve Mosher, Gresham, Smith and Partners

Michael Rebick, TDOT Region 4
Dorothy Rhodes, Arkansas State Highway and
Transportation Department
Acey Roberts, Mississippi DOT
Mike Stokes, Mississippi DOT
John Thomas, TDOT Region 4
Zhiyong Guo, Kimley-Horn and Associates
Tom Fowler, Kimley-Horn and Associates
Amy Lewis, Kimley-Horn and Associates

#### Welcome and Introductions

The Memphis Area Regional Intelligent Transportation System (ITS) Architecture Update workshops were divided into three sessions: Traffic Management and Traveler Information, Emergency Management, and Transit Management. The sessions were held over a two day period with stakeholders representing federal, state, and local agencies in the Memphis Area including representatives for agencies in Mississippi and Arkansas.

At each of the three sessions Tom Fowler welcomed everyone and thanked them for their continued involvement in the architecture update process and briefly recapped the Kick-off Workshop that was held in October 2009. The stakeholders introduced themselves and told which agency or organization they were representing.

#### **Project Status Update and ITS Architecture Training**

Tom provided an overview of the Memphis Area Regional ITS Architecture Update project and updated everyone on the project status. The January workshops are the second in a series of four workshops that will be held to update the Memphis Area Regional ITS Architecture. Tom also provided an overview of the National ITS Architecture. The current version (6.1) contains 91 market packages. Market packages represent the services that ITS can provide, such as network surveillance, traffic information dissemination, or emergency routing. A regional ITS architecture identifies the market packages applicable to a region and customizes them to address regional ITS needs. The customized market package diagrams identify the connections between agencies and what types of information should be shared.

#### **Selection and Customization of ITS Market Packages**

Following the presentation, in each of the sessions Tom Fowler and Amy Lewis led stakeholders through a discussion to select and customize market packages for the Memphis Area. Stakeholders were provided with a list of all of the market packages from the National ITS Architecture. The list indicated which market packages were included in the 2002 Memphis Area Regional ITS Architecture and which were recommended by the consultant team for inclusion in the 2010 update. Each market package was discussed with the stakeholders and a consensus was reached with the group on which to include. Of the 91 market packages available in the National ITS Architecture, the stakeholders in the Memphis Area selected 44 to consider for implementation. A table of the market packages selected is included with these minutes.

Once the market packages were selected, Amy Lewis led a discussion on how each should be customized for the Region. Existing and future data flows as well as appropriate agencies were added to each market packages based on the discussion with the stakeholders. The customized market packages will be made available to stakeholders in PDF format for review and comment before the team proceeds with the development of the Draft Regional ITS Architecture and Turbo Architecture database.

#### **ITS Deployment Plan Projects**

The next step in the process once the Draft ITS Architecture is completed is to develop the Memphis Area Regional ITS Deployment Plan. Stakeholders were provided with a project input form that they can complete with project ideas and fax back to Tom Fowler or James Collins at Kimley-Horn. A copy of the form is included with these minutes. Stakeholders were asked to fax or e-mail project ideas by February 5, 2010 so that they can be included in the draft project listing. The draft project listing will be discussed at the next workshop.

#### **Closing Comments and Next Steps**

Tom and Amy thanked everyone for participating in the workshops and discussed the next steps of the Memphis Area Regional ITS Architecture Update project. The information collected at the workshops will be used to revise the ITS market packages and a Draft Regional ITS Architecture document will be developed and sent to stakeholders prior to the next project workshop.

The next workshop scheduled will be the ITS Deployment Plan Workshop, which will be held on Thursday, March 11, 2010 from 9:00 AM – 12:00 Noon. The purpose of the workshop will be to discuss potential ITS projects for the Memphis Area. The Memphis Urban Area MPO will send out a meeting notice with additional details.

## Memphis Regional ITS Architecture Update

### **DRAFT MARKET PACKAGE SELECTION**

Recommended for 2010 Update	Selected in 2002 Version	Market Package		
Traffic Management Service Area				
✓	✓	ATMS01	Network Surveillance	
✓		ATMS02	Traffic Probe Surveillance	
✓	✓	ATMS03	Surface Street Control	
✓	✓	ATMS04	Freeway Control	
		ATMS05	HOV Lane Management	
✓	✓	ATMS06	Traffic Information Dissemination	
✓	✓	ATMS07	Regional Traffic Management	
✓	✓	ATMS08	Traffic Incident Management System	
		ATMS09	Traffic Forecast and Demand Management	
✓		ATMS10	Electronic Toll Collection	
✓	✓	ATMS11	Emissions Monitoring and Management	
		ATMS12	Roadside Lighting System Control	
✓	✓	ATMS13	Standard Railroad Grade Crossing	
	✓	ATMS14	Advanced Railroad Grade Crossing	
		ATMS15	Railroad Operations Coordination	
	✓	ATMS16	Parking Facility Management	
✓		ATMS17	Regional Parking Management	
		ATMS18	Reversible Lane Management	
✓		ATMS19	Speed Monitoring	
		ATMS20	Drawbridge Management	
		ATMS21	Roadway Closure Management	
	ı	Emergency Ma	anagement Service Area	
✓	✓	EM01	Emergency Call-Taking and Dispatch	
✓	✓	EM02	Emergency Routing	
		EM03	Mayday and Alarms Support	
✓		EM04	Roadway Service Patrols	
✓		EM05	Transportation Infrastructure Protection	
✓		EM06	Wide-Area Alert	
		EM07	Early Warning System	
✓		EM08	Disaster Response and Recovery	
✓		EM09	Evacuation and Reentry Management	
✓	✓ EM10 Disaster Traveler Information			







Recommended for 2010 Update	Selected in 2002 Version	Market Package		
Maintenance and Construction Service Area				
✓		MC01	Maintenance and Construction Vehicle and Equipment Tracking	
		MC02	Maintenance and Construction Vehicle Maintenance	
✓	✓	MC03	Road Weather Data Collection	
✓	✓	MC04	Weather Information Processing and Distribution	
✓		MC05	Roadway Automated Treatment	
✓		MC06	Winter Maintenance	
		MC07	Roadway Maintenance and Construction	
✓		MC08	Work Zone Management	
		MC09	Work Zone Safety Monitoring	
✓		MC10	Maintenance and Construction Activity Coordination	
		MC11	Environmental Probe Surveillance	
✓		MC12	Infrastructure Monitoring	
Public Transportation Service Area				
✓	✓	APTS01	Transit Vehicle Tracking	
✓	✓	APTS02	Transit Fixed-Route Operations	
✓	✓	APTS03	Demand Response Transit Operations	
✓	✓	APTS04	Transit Fare Collection Management	
✓	✓	APTS05	Transit Security	
✓	✓	APTS06	Transit Fleet Management	
✓	✓	APTS07	Multi-modal Coordination	
✓	✓	APTS08	Transit Traveler Information	
✓		APTS09	Transit Signal Priority	
✓	✓	APTS10	Transit Passenger Counting	
	Con	nmercial Vehic	cle Operations Service Area	
		CVO01	Fleet Administration	
		CVO02	Freight Administration	
		CVO03	Electronic Clearance	
		CVO04	CV Administrative Processes	
		CVO05	International Border Electronic Clearance	
		CVO06	Weigh-In-Motion	
		CVO07	Roadside CVO Safety	
		CVO08	On-board CVO and Freight Safety and Security	
		CVO09	CVO Fleet Maintenance	
✓	✓	CVO10	HAZMAT Management	
		CVO11	Roadside HAZMAT Security Detection and Mitigation	
		CVO12	CV Driver Security Authentication	
		CVO13	Freight Assignment Tracking	







Recommended for 2010 Update	Selected in 2002 Version	Market Package		
Traveler Information Service Area				
✓	✓	ATIS01	Broadcast Traveler Information	
✓	✓	ATIS02	Interactive Traveler Information	
		ATIS03	Autonomous Route Guidance	
		ATIS04	Dynamic Route Guidance	
		ATIS05	ISP Based Trip Planning and Route Guidance	
		ATIS06	Transportation Operations Data Sharing	
		ATIS07	Yellow Pages and Reservation	
	✓	ATIS08	Dynamic Ridesharing	
		ATIS09	In Vehicle Signing	
		ATIS10	VII Traveler Information	
Archive Data Management Service Area				
✓	✓	AD1	ITS Data Mart	
✓	✓	AD2	ITS Data Warehouse	
<b>√</b>		AD3	ITS Virtual Data Warehouse	







## MEMPHIS REGIONAL ITS ARCHITECTURE UPDATE

#### **DEPLOYMENT PLAN PROJECT INPUT**

#### Instructions for completing project input table:

- Please fill in the following categories to the best of your knowledge
  - Project project name
  - Description brief description of the project components and goals
  - Responsible Agency identify agency responsible for implementation, operations, and maintenance
  - Opinion of Probable Cost please provide any input you have on project costs
  - Funding Identified indicate whether or not funding has been identified
- If you are not able to complete a category it is fine to leave it blank
- One blank page has been included, please feel free to make additional copies as needed
- An example project has been included below
- When complete please fax to Tom Fowler at 512-418-1791
- Project recommendations can also be e-mailed to Tom at thomas.fowler@kimley-horn.com

#### Example:

Project	Description		Opinion of Probable Cost	Funding Identified (Yes or No)
City of Emergency Vehicle Signal Preemption Expansion	Implement emergency vehicle signal preemption on additional traffic signals in the City of and extend the capability beyond Fire vehicles to include EMS vehicles as well.	City of	\$6,000/intersection \$1,500/vehicle	No

#### Please contact Tom Fowler or James Collins with any questions:

Tom Fowler James Collins

thomas.fowler@kimley-horn.com james.collins@kimley-horn.com

512-418-4504 901-374-9109

Please complete and return by February 5, 2010

Agency:
Name of person completing this form:
Contact Information (phone and/or e-mail address):
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Project	Description	Responsible Agency	Opinion of Probable Cost	Funding Identified (Yes or No)