KNOXVILLE REGIONAL ITS ARCHITECTURE UPDATE WORKSHOP MINUTES

DATE: November 30 – December 1, 2012

LOCATION: TDOT Region 1 SmartWay TMC Conference Room

SUBJECT: Knoxville Regional ITS Architecture Update – Project Kick-Off Workshop

SESSIONS AND ATTENDACE:

Traffic Management and Traveler Information Session
Date and Time: November 30, 2011, 9:00 AM – 11:30 AM

Nathan Benditz, Knoxville Regional TPO	Brent Johnson, City of Knoxville
Mark Best, TDOT Region 1	Cindy Pionke, Knox County
Brian Boone, City of Maryville	Mike Presley, TDOT Long Range Planning
Steve Byrd, City of Oak Ridge	Melissa Roberson, Knoxville Area Transit
Arun Chatterjee, Univ. of Tennessee	John Sexton, Knox County
Mike Conger, Knoxville Regional TPO	Andrew Sonner, City of Alcoa
Diane Davidson, Oak Ridge Natl. Laboratory	Kevin Stoltenberg, City of Maryville
Corbin Davis, FHWA	Jon Van Eek, City of Oak Ridge
Bryon Fortner, City of Sevierville	John Benditz, Kimley-Horn and Associates
Don Gedge, FHWA	Tom Fowler, Kimley-Horn and Associates
Frank Horne, TDOT Incident Management	Amy Lewis, Kimley-Horn and Associates
John Hunter, City of Knoxville	Becky Bottoms, Cannon and Cannon
Chris Jenkins, Town of Farragut	

Emergency Management Session
Date and Time: November 30, 2011, 1:00 PM – 3:00 PM

Nathan Benditz, Knoxville Regional TPO	Brent Johnson, City of Knoxville
Mark Best, TDOT Region 1	Alan Lawson, Knoxville-Knox County
Roger Byrd, City of Knoxville FD	Chris McLain, Rural Metro
Arun Chatterjee, Univ. of Tennessee	Stephen Millsaps, City of Knoxville
Mike Conger, Knoxville Regional TPO	Mike Presley, TDOT Long Range Planning
Diane Davidson, Oak Ridge Natl. Laboratory	John Sexton, Knox County
Corbin Davis, FHWA	Bart Stinnett, Blount County
Bryon Fortner, City of Sevierville	John Benditz, Kimley-Horn and Associates
Don Gedge, FHWA	Tom Fowler, Kimley-Horn and Associates
Ronald Green, City of Knoxville PD	Amy Lewis, Kimley-Horn and Associates
Frank Horne, TDOT Incident Management	

Transit Management Session
Date and Time: December 1, 2011, 9:00 AM – 11:00 AM

Nathan Benditz, Knoxville Regional TPO	Stephen Millsaps, City of Knoxville
Mark Best, TDOT Region 1	Mike Presley, TDOT Long Range Planning
Doug Burton, Knoxville Region TPO	Melissa Roberson, Knoxville Area Transit
Arun Chatterjee, Univ. of Tennessee	John Benditz, Kimley-Horn and Associates
Mike Conger, Knoxville Regional TPO	Tom Fowler, Kimley-Horn and Associates
Karen Estes, Knoxville-Knox County CAC	Amy Lewis, Kimley-Horn and Associates
Brent Gagley, ETHRA	Brian Haas, Cannon and Cannon

Welcome and Introductions

The Knoxville 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 Knoxville Region.

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 2011. 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 Knoxville Regional ITS Architecture Update project and updated everyone on the project status. The November-December workshops are the second in a series of workshops that will be held to update the Knoxville 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 Knoxville Region. 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 2003 Knoxville Regional ITS Architecture and which were recommended by the consultant team for inclusion in the 2011 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 Knoxville Region selected 42 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 Strategic Deployment Plan Projects

The next step in the process once the Draft ITS Architecture is completed is to develop the ITS Strategic Deployment Plan. Stakeholders were provided with a project input form that they can complete with project ideas and send back to Tom Fowler or John Benditz at Kimley-Horn. A copy of the form is included with these minutes. Stakeholders were asked to fax or e-mail project ideas by the end of December. The draft project listing will be discussed at the next workshop.

Closing Comments and Next Steps

Tom thanked everyone for participating in the workshops and discussed the next steps of the Knoxville 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 Strategic Deployment Plan Workshop, which will be held in February 2012. The purpose of the workshop will be to discuss potential ITS projects for the Knoxville Region.

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DRAFT MARKET PACKAGE SELECTION

Recommended for 2011 Update	Selected in 2003 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
Emergency Management 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
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

Recommended for 2011 Update	Selected in 2003 Version	Market Package	
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
Commercial Vehicle 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
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
✓		AD3	ITS Virtual Data Warehouse

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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 615-564-2702 or scan and email to thomas.fowler@kimley-horn.com

- Project recommendations can also be e-mailed to Tom at thomas.fowler@kimley-horn.com

Example:

Project	Description	Responsible Agency	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 John Benditz with any questions:

Tom Fowler
thomas.fowler@kimley-horn.com
615-564-2710

John Benditz
john.benditz@kimley-horn.com
865-980-6477

Please complete and return by December 30, 2011

Agency: _____

Name of person completing this form: _____

Contact Information (phone and/or e-mail address): _____

Project	Description	Responsible Agency	Opinion of Probable Cost	Funding Identified (Yes or No)