

# JOHNSON CITY REGIONAL ITS ARCHITECTURE UPDATE KICK-OFF MEETING MINUTES

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**MEETING DATE:** October 21, 2014

**MEETING TIME:** 9:00 AM – 11:00 AM

**MEETING LOCATION:** Johnson City Transit Training Center

**ATTENDEES:**

- Glenn Berry, Johnson City Metropolitan Transportation Planning Organization (MTPO)
- Mark Best, Tennessee Department of Transportation (TDOT)
- Chris Craig, First Tennessee Development District
- Jerome Kitchens, City of Elizabethton
- Jeff Rawles, Johnson City Transit
- Anthony Todd, City of Johnson City
- Nick Weander, TDOT
- Tom Fowler, Kimley-Horn
- Terrance Hill, Kimley-Horn

**SUBJECT:** Johnson City Regional ITS Architecture Update – Project Kick-Off Workshop

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## INTRODUCTIONS

Glenn Berry of the Johnson City Metropolitan Transportation Planning Organization (MTPO) welcomed everyone and thanked the stakeholders for their participation in the update of the Johnson City Regional Intelligent Transportation System (ITS) Architecture. He also introduced the consultant team managing the update of the Regional ITS Architecture.

## PROJECT OVERVIEW PRESENTATION

Tom Fowler of Kimley-Horn gave a presentation on the Johnson City Regional ITS Architecture Update project. The presentation included an overview of ITS, explanation of a regional ITS architecture, and a description of the steps that will be followed to update the Johnson City Regional ITS Architecture.

The purpose of a regional ITS architecture is to provide a vision and framework for the deployment, integration, and operation of ITS. The regional ITS architecture is also necessary in order to meet the Federal Highway Administration's (FHWA) and Federal Transit Administration's (FTA) ITS architecture conformity guidelines, which require that any ITS projects funded with federal transportation funds conform to a regional ITS architecture. Although updating the regional ITS architecture does not guarantee funding for a region, it does allow the region to be eligible for federal funding of ITS projects.

In addition to the Kick-off Workshop, there will be a series of stakeholder interviews conducted in October and November. The purpose of the interviews will be to identify any changes that have occurred since the Johnson City Regional ITS Architecture was completed in 2006, identify ITS needs, document any current and planned ITS projects, and develop a list of project needs. Once the interviews have been completed, a Draft Regional ITS Architecture and Deployment Plan Update report will be developed. A second workshop, to be held in December or January, will allow stakeholders the opportunity to comment on the document before it is finalized.

A list of stakeholder agencies that were invited to participate in the process was also presented. Tom asked those in attendance to identify any missing stakeholders from the list. Tom encouraged everyone to extend an invitation to anyone else within their own agency that they thought might be interested in participating. The following is a list of additional agencies or organizations that the stakeholders in attendance agreed should be included in the update process:

- East Tennessee State University (ETSU)
- Washington County/Johnson City Emergency Medical Services (EMS)

## **EXISTING AND PLANNED ITS PROJECTS**

Tom Fowler led a discussion to identify any new projects that have been deployed or planned in the Region since the completion of the Regional ITS Architecture in 2006. The inventory will assist the project team in preparing a Draft Regional ITS Architecture and Deployment Plan Update for the next workshop. The following is a summary of ITS deployments and projects identified by the stakeholders in attendance at the workshop:

### **Johnson City**

- Forty-one (41) CCTV cameras have been installed at many existing signalized intersections in addition to certain locations along I-26 and other major corridors;
- A traffic operations center (TOC) with a video wall has been established to monitor traffic and roadway conditions with the possibility of alerting fire stations and schools of nearby incidents;
- The City has explored the possibility of installing road weather information system (RWIS) stations to monitor for roadway flooding and pavement temperature during icing conditions; however, funding was not included in the current budget;
- The installation of fiber optic cable to connect all ITS devices to the Johnson City TOC is continuing;
- Traffic signals without a fiber connection can be linked through a wireless connection (especially in the Gray community). There are currently 70 traffic signals, but 30 of them are not connected at this time;
- Railroad blank-out signs that restrict turning movements during railroad preemption are in use at multiple signalized intersections that are adjacent to railroad tracks;
- The City would like to include live video feeds from the CCTV cameras on their website and on a local cable television channel.

### **TDOT**

- In 2007, highway advisory radio (HAR), dynamic message signs (DMS), and CCTV cameras were installed on I-81 near the I-26 interchange;
- TDOT would like to distribute live video from CCTV cameras to the public through the SmartWay website. Initially, live video feeds would only be provided internally to TDOT personnel before it is made available to the public;
- TDOT utilizes portable CCTV cameras, HAR units, and DMS for various events such as the NASCAR races in Bristol, large-scale incidents such as interstate closures, and construction and maintenance.

### **Elizabethton**

- The City is currently working on a project along SR91 (West Elk Avenue) to improve traffic flow. SR 91 has access management issues, high volumes, and geometric restrictions that contribute to congestion;

- Microwave sensors and cameras for vehicle detection have been installed at various intersections within the City;
- Two new traffic signals will be installed along Gap Creek Road and the City would like those signals coordinated;
- All traffic signals along SR 91 are interconnected;
- The City would like master signal controllers to be connected to a central location for control.

### **Johnson City Transit**

- The transit vehicle fleet includes automatic vehicle location (AVL) systems and video cameras for security on all fixed-route and demand response vehicles;
- There are also security cameras at the central bus transit center and maintenance yards;
- Additionally, a program allows riders to text JCT on their mobile phones to receive next bus arrival information;
- A Google route application allows riders to plan their trips using specific parameters such as shortest distance or least amount of transfers;
- A fare collection or smart card system could be implemented in the future and may also be compatible with NET Trans;
- Real-time bus location information is now available on the website;
- Transit would like to implement DMS at certain bus stops for the ETSU BUCSHOT routes;
- There is a need to implement scheduling software for paratransit vehicles in the future.

### **ITS NEEDS**

Tom Fowler also led a discussion on the Region's ITS needs. The following general regional needs were identified:

- Better dissemination of accurate road weather information along I-26 toward North Carolina and Sam's Gap especially during winter months;
- The hardware exists for the Johnson City Traffic Division to disseminate necessary traffic information to fire, police, and EMS; however, the software capability would need to be installed. There is also a need to receive similar information from TDOT;
- Johnson City would like to implement adaptive signal control as soon as 2015 on State of Franklin Road near I-26. If the results are successful, adaptive signal control could be expanded to other locations;
- During large-scale events such as the 4<sup>th</sup> of July fireworks, better coordination is necessary among all agencies;
- Plans for emergency response and evacuation regarding hazardous materials should be well coordinated throughout the region. The City of Erwin has a depleted uranium plant, trucks along I-81 may carry hazardous materials, and there is a liquid natural gas facility near I-81 and I-26 that could all affect the Johnson City Region;
- Reverse 911 capabilities that allow officials to reach a large number of people should be explored;
- Coordination between TDOT and local agencies should continue through the duration of construction projects;
- Training and/or hiring qualified personnel and staff to manage and maintain various ITS components have been difficult;

- Consideration should be given to ITS applications for cities adjacent to the Johnson City MTPO planning area, such as Greeneville.

### **CONCLUDING COMMENTS AND NEXT STEPS**

Tom Fowler thanked everyone for their participation. Stakeholders were encouraged to contact any of the project team members if they had any questions or if they would like to add additional items to the ITS inventory or needs. Contact information is included below:

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