

BRISTOL REGIONAL ITS ARCHITECTURE UPDATE REVIEW MEETING MINUTES

MEETING DATE: January 24, 2017

MEETING TIME: 9:00 AM – 11:00 AM

MEETING LOCATION: Municipal Annex, Bristol, Tennessee

ATTENDEES:

- Tim Beavers, City of Bristol TN
- Eric Flora, Tennessee Department of Transportation (TDOT)
- Khuzaima Mahdi, TDOT
- David Metzger, Bristol Metropolitan Planning Organization (MPO)
- Rex Montgomery, MPO
- Donny Necessary, Virginia Department of Transportation (VDOT)
- Andy Padgett, TDOT
- Rashad Pinckney, TDOT
- Joe Roach, TDOT
- Nathan Vatter, TDOT
- Terrance Hill, Kimley-Horn
- Tom Fowler, Kimley-Horn

SUBJECT: Bristol Regional ITS Architecture Update – Stakeholder Review Workshop

INTRODUCTIONS

The purpose of the workshop was to review the draft Bristol Regional Intelligent Transportation System (ITS) Architecture and Deployment Plan and to obtain input from stakeholders to assist with the preparation of the final draft of the document. The purpose of a regional ITS architecture update is to provide a vision and framework for the implementation and operation of ITS in a region as technologies, infrastructure, population, and land uses evolve. A regional ITS architecture is also necessary in order to meet the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) ITS Architecture conformity requirements for any ITS projects in a region that use federal transportation funds. Although updating the Regional ITS Architecture does not guarantee funding for a region, it does allow a region to be eligible for federal funding of ITS projects.

Terrance Hill, with Kimley-Horn, welcomed everyone and thanked the stakeholders for their participation in the update of the Bristol Regional ITS Architecture. Everyone in attendance then introduced themselves and identified the agency that they represented.

PROJECT OVERVIEW PRESENTATION

Terrance and Tom Fowler presented on the progress of the update to the Bristol Regional ITS Architecture and Deployment Plan. Terrance briefly introduced key sections of the document and described their purpose. The first draft of the Regional ITS Architecture document was made available on January 19, 2017, and stakeholders were notified that they could access the document from the website below. All stakeholders were encouraged to review the document and submit questions or comments to either Terrance or Tom by February 8, 2017.

<http://www.kimley-horn.com/projects/tennesseeITSArchitecture/bristol.html>

Terrance summarized key changes to the draft document compared to the previous version published in 2008 and led a discussion of those changes with stakeholders. The discussion included gathering comments from stakeholders regarding the draft document and working with the attendees to prioritize the new service packages included in the draft document.

Terrance then led a discussion of existing and planned ITS projects in the region. Stakeholders had the opportunity to ask questions and provide updated information on projects included in the draft document. Details of this discussion are outlined below.

Following the project discussion, Tom discussed with stakeholders the logistics for proper use and maintenance of the Bristol Regional ITS Architecture and Deployment Plan. Tom presented on planning for operations outlined in the draft document, discussed systems engineering analyses (SEA) and how they relate to ITS architecture, reviewed conformance to the architecture that a project would need to demonstrate in order to be eligible for federal funding, and outlined the timeframe for future updates to the Bristol Regional ITS Architecture and Deployment Plan.

STAKEHOLDER DISCUSSION

As noted, Terrance led a discussion to identify any new projects that have been deployed or planned in the Region since the completion of the Bristol Regional ITS Architecture in 2008. The following is a summary of ITS deployments and projects identified by the stakeholders in attendance at the workshop:

TDOT

- The Tennessee Highway Patrol dispatch recently moved into the Region 1 TMC to improve communication during events and incidents. There have been initial challenges, but coordination is improving.
- TDOT discussed thresholds for the deployment of the HELP vehicles along Interstate 81; however, it does not currently meet those thresholds within the Bristol Region.
- TDOT is also utilizing smart work zone equipment on some of its larger projects. Although there are currently no projects in the Bristol Region that utilize smart work zone technology, TDOT may elect to do so on future projects. Additionally, the University of Memphis is conducting research on the effectiveness of smart work zones to reduce crashes and protect the lives of workers. It was mentioned that an approximate 30% reduction in the number of crashes has been realized with the implementation of smart work zone equipment.

- TDOT is developing a program called Active ITS, which is a software platform that can be used to share ITS related data among agencies such as CCTV camera video.

VDOT

- VDOT's Bristol District would like a local traffic operations center (TOC) rather than relying on the TOC that is located in Salem. Additionally, VDOT mentioned the desire for a regional TMC for the Tri Cities Region that would include VDOT, TDOT, Johnson City, Kingsport, Bristol, TN and Bristol, VA personnel.
- Roadway service patrols are provided along I-81 by VDOT's Safety Service Patrol (SSP). VDOT currently provides this service through a contract with a private firm.
- VDOT is also exploring the possibility of deploying tethered drones on their SSP vehicles to use as mobile CCTV cameras.
- All VDOT snow plows will have automatic vehicle location (AVL) systems that will allow the public to see their location as well as locations where the snow plows have already treated.
- VDOT would also like to implement real-time parking information for commercial trucks to help reduce the number of trucks parking along interstate exit and entrance ramps.

City of Bristol, TN

- The City would like to implement closed circuit television (CCTV) cameras along corridors that are primary routes for traffic leading to the Bristol Motor Speedway. The existing cameras that the city uses were erected for security and are not favorable for viewing traffic conditions.
- A long-term goal of the City would be to have a centrally controlled signal system and possibly establish a TOC in coordination with 911 dispatch.

Other Comments

- VDOT mentioned that they would like to also review the revised draft and send it through their appropriate channels for comment and approval similarly to TDOT.
- TDOT mentioned that service packages for ramp queue detection, wrong way detection and warning, ramp metering, and variable speed limits should be added to the architecture.
- For future updates to the architecture, stakeholders agreed that major updates should occur on an as needed basis such as when major ITS deployments have been implemented or when the National ITS architecture is updated. However, it was mentioned that each time the long range transportation plan is updated, the ITS architecture should be reviewed to see if it needs to be updated.

CONCLUDING COMMENTS AND NEXT STEPS

Terrance and Tom thanked everyone for their participation and encouraged stakeholders to review the draft document (particularly projects in the deployment plan and service package diagrams in appendix B related to their agency) and provide comments by **February 8, 2017**. Stakeholders were also encouraged to contact any of the project team members if they had any questions. Contact information is included below:

Bristol MPO:
Rex Montgomery
rmontgomery@bristoltn.org
(423) 989-5519

TDOT:
Joe Roach
joseph.roach@tn.gov
(615) 253-2435

Kimley-Horn:
Terrance Hill
terrance.hill@kimley-horn.com
(615) 564-2869

Tom Fowler
thomas.fowler@kimley-horn.com
(512) 418-4535