

CHATTANOOGA REGIONAL ITS ARCHITECTURE AND DEPLOYMENT PLAN UPDATE WORKSHOP MINUTES

MEETING DATE: October 18, 2016

MEETING TIME: 10:00 AM – 12:00 Noon

MEETING LOCATION: Chattanooga Development Resource Center, Chattanooga, TN

ATTENDEES:

- Mike Ailey, City of East Ridge Traffic
- Rozanne Brown, Chattanooga-Hamilton County Regional Planning Agency (RPA)
- Joren Dunnavant, Tennessee Department of Transportation (TDOT)
- Eric Flora, TDOT
- Charlie Hall, Tennessee Emergency Management Agency
- Jill Hindman
- Zach Johnson, TDOT
- Charles Jones, Northwest Georgia Regional Commission
- Yuen Lee, Chattanooga-Hamilton County RPA
- Azad Mahdi, TDOT
- Lisa Maragnano, Chattanooga Area Regional Transit Authority (CARTA)
- Amanda Miller, City of East Ridge
- Annie Powell, CARTA
- Randolph Pullen, Chattanooga-Hamilton County RPA
- Ashli Reed, City of Chattanooga Fire Department
- Nick Renna, Federal Highway Administration Tennessee Division Office
- Karen Rennich, Chattanooga-Hamilton County RPA
- Said El Said, TDOT
- Madeline Shelton, Southeast Tennessee Development District
- John Stuermer, Hamilton County 911
- Tommy Trotter, City of Chattanooga Traffic
- John Van Winkle, City of Chattanooga Traffic
- Jason Warren, Catoosa County Transit
- Aleeta Zeller, Chattanooga-Hamilton County RPA
- Tom Fowler, Kimley-Horn and Associates
- Terrance Hill, Kimley-Horn and Associates

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

INTRODUCTIONS

The Chattanooga Regional ITS Architecture and Deployment Plan workshop was held on Tuesday, October 18, 2016. The purpose of the workshop was to solicit input from stakeholders to assist the Chattanooga / Hamilton County / North Georgia Transportation Planning Organization (CHCNGA-TPO) with the update of the Chattanooga Regional ITS Architecture and Deployment Plan. The purpose of a Regional ITS Architecture update is to provide a vision and framework for the implementation and operation of ITS in the region as technologies, infrastructure, population, and land uses evolve. The Regional ITS Architecture is also necessary in order to meet the FHWA and Federal Transit Administration (FTA) ITS Architecture conformity requirements for any ITS projects in the region that use federal transportation funds. Although updating the Regional ITS Architecture does not guarantee funding for the Region, it does allow the Region to be eligible for federal funding of ITS projects.

The workshop began with Yuen Lee of the Chattanooga-Hamilton County RPA and CHCNGA-TPO welcoming everyone and thanking stakeholders for their participation in the update. Yuen also introduced Tom Fowler and Terrance Hill from Kimley-Horn. Kimley-Horn will be assisting the TPO with the update of the plan. Everyone in attendance introduced themselves and identified the agency or organization they were representing.

PROJECT OVERVIEW PRESENTATION

Tom Fowler and Nick Renna (FHWA Tennessee Division) gave a presentation on the Chattanooga Regional ITS Architecture Update project. The presentation included an overview of ITS, including a discussion of ITS benefits and applications, and a discussion of regional ITS architecture plans and current trends. Following the overview, Tom Fowler led a discussion on the regional ITS architecture update process. The discussion included soliciting input from attendees regarding regional ITS needs, existing and planned ITS projects, interagency connections that might be considered in the update, and additional stakeholders to include in the process.

In addition to the Kick-off Workshop, there will be a series of individual stakeholder interviews conducted in the week following the workshop to develop a more detailed picture of what changes have been made since the last update, determine what each agency plans in the future, and identify any ITS needs. Once the interviews have been completed, a draft Regional ITS Architecture and Deployment Plan report will be developed. A second workshop, tentatively scheduled for December 13, 2016, 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 Fowler also encouraged everyone to extend an invitation to anyone else within their own agency that they thought might be interested in participating.

STAKEHOLDER DISCUSSIONS

Representatives from the stakeholder organizations present at the workshop shared knowledge of planned and existing projects and identified ITS needs for the Region. Topics and notes from the discussion are listed below, and they will assist the project team in preparing a draft of the Regional ITS Architecture and Deployment Plan update prior to the next workshop.

- TDOT may be developing an ITS backbone to allow cities and counties to connect to the state system. The backbone would allow cities and counties to share information and coordinate activities with the state and with one another.
- Enforcement is a key component to a successful ITS system. Stakeholders discussed the use of variable speed limit signs and how they could be enforced in a practical way.
- Stakeholders expressed that the Georgia Department of Transportation (GDOT) needs to be included in the update process.
- The City of Chattanooga has an Advanced Traffic Management System (ATMS) grant to collect data and share it with the public. The City hopes to involve Hamilton County in the effort, which is just now getting underway. The project is intended to provide the public with travel data for multiple travel modes: automobile, transit, and bicycle. The City has had discussions regarding using social media or apps to see the data.
- The City of Chattanooga will implement a downtown surveillance system so public can see intersections in real-time. Cameras will also be used by the transportation management center (TMC) and emergency management personnel. Cameras and vehicle detection will be available at 42 intersections. These ITS updates will allow for better coordination of traffic, especially during peak conditions. The City would like to coordinate with the existing TDOT system.
- The City of Chattanooga does not think that dynamic message signs (DMS) are efficient for local streets.
- CARTA makes its transit information available to the public and would love to integrate with the City of Chattanooga ATMS.
- There is a vision for unifying the regional transit systems (CARTA and SETHRA) in the future so they can share information with one another. Transit agencies that could be involved include CARTA, SETHRA, Walker Transit, Dade County Transit, and Catoosa County Trans-Aid.

- There has been discussion as part of the ATMS effort about setting up an incident management station at the 911 center to allow for direct coordination of efforts during emergencies.
- Emergency vehicle signal preemption could also be included in the City of Chattanooga ATMS project. The City of Chattanooga Fire Department would like to be included if possible. The Fire Department didn't have funds to add detection equipment to their vehicles. ITS infrastructure on Gunbarrel Road was updated recently, but preemption was not included in the update. Emergency vehicle preemption is used in a limited capacity now at signals adjacent to one fire station.
- The City of Chattanooga Fire Department is hoping to install automatic vehicle location (AVL) systems on their trucks soon and could incorporate emergency vehicle preemption capabilities with this update.
- The City of Chattanooga oversees the traffic signals in East Ridge and Red Bank. All of their traffic signals will be updated to run on the same system. Signals in Collegedale may also be included in the future.
- The City of Chattanooga has 31 signals which are configured with transit signal priority (TSP) capabilities but TSP is not currently operational. Intersections include Brainerd Road and Elmwood Drive, Lee Drive and Shallowford Road, and intersections along Gunbarrel Road.
- Interstate 75 Smart Park areas at mile marker 21 and mile marker 45 provide smart parking for freight. Smart Park capabilities include providing to operators the number of available spaces in each area and allowing operators to reserve available spaces. TDOT does not want to force operators to leave these areas after a certain amount of time due to liability concerns. TDOT also does not want to let freight vehicles park on I-75 shoulders.
- The TDOT ITS deployment on I-24 near Monteagle includes DMS, speed warning signs, detection to determine if trucks are in runaway truck ramps, and thermal imaging cameras that can be used during heavy fog or other times when visibility is limited.
- ITS gaps along I-24 and I-75 between Manchester and Athens are being filled in over time.
- TDOT and several stakeholders expressed a desire to make the TDOT Region 2 TMC a 24-hours operation.
- Active ITS is a system that will have traffic management software available for cities to share information with TDOT.
- The Tennessee Highway Patrol (THP) currently has a desk within the TMC.
- Skyline sends video feeds to area cities for free. HD video feeds can be shared with cities with a signed agreement and minimal costs.
- TDOT has a deployment of 3 cameras and 1 DMS along I-24 in Manchester for the Bonnaroo Music Festival.
- CARTA has additional DMS signs, in addition to AVL and Computer-Aided Dispatch (CAD).
- CARTA wants to move toward an integrated multimodal system for bike and carshare options and fare payment options.
- CARTA has smart parking meters and has looked at sensor based parking and dynamic signage to inform the public of where parking may be available. The agency manages some on-street parking and three parking garages.
- Chattanooga has a bikeshare program, and bikeshare data may be integrated into the ITS program to know where bikes are located at stations throughout the network.
- TDOT is in the process of developing a 3-year strategic plan. Each TDOT Region has identified specific ITS projects for the plan.
- Stakeholders discussed the use of unmanned air systems for traffic surveillance. Public agencies can fly drones through legal counsel with FAA approval. Drones could be used to assist with bridge inspection, aerial mapping, and crash investigations.
- The Chattanooga TPO hosted a parking forum, where one of the key discussion points was that there is a public responsibility for addressing travel demands and a private responsibility for

addressing parking demands. People in attendance were interested in technologies related to sharing parking information.

- Stakeholders discussed to what extent security concerns have been addressed for connected vehicles.
- TDOT uses an application called R.E.S.C.U.M.E. for staging and alerts during incidents.
- Federal funding is increasingly looking at performance measures for systems to assess the value of funding different projects. Common performance measures include: delay, congestion, speed, volume, and response and clearance times.
- Stakeholders discussed the concepts related to Big Data and how best to store data collected through and used in ITS projects.
- The City of Chattanooga uses Bluetooth for travel times and speeds on Brainerd Road.
- TDOT is considering increased use of Bluetooth data for identifying travel times.
- City of Chattanooga has collaborated with the University of Tennessee-Chattanooga and Oak Ridge National Laboratory regarding connected vehicle technology. Oak Ridge thinks the City is a good testbed for the technology. James Lee is the contact.

CONCLUDING COMMENTS AND NEXT STEPS

Yuen Lee and 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. Stakeholders should also contact Yuen Lee or Tom Fowler if they would like for the project team to extend an invitation to any other agencies or individuals not currently included in the list of stakeholders.