

# CLEVELAND REGIONAL ITS ARCHITECTURE UPDATE REVIEW MEETING MINUTES

---

**MEETING DATE:** March 29, 2017

**MEETING TIME:** 10:00 AM – 12:00 PM

**MEETING LOCATION:** Cleveland City Council Meeting Room - Cleveland, Tennessee

**ATTENDEES:**

- Tad Bacon, Cleveland Utilities
- Brian Beck, City of Cleveland
- Garris Bugg, Tennessee Department of Transportation (TDOT)
- Emily Carpenter, TDOT
- Landon Castleberry, TDOT
- Preston Elliott, RPM Transportation
- Sara Elmore, TDOT
- Kayla Ferguson, RPM Transportation
- Eric Flora, TDOT
- Nikita Hemnani, TDOT
- Yuen Lee, Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (CHCNGA TPO)
- Khuzaima Mahdi, TDOT
- Stacy Morrison, TDOT
- Rashad Pinckney, TDOT
- Karen Rennich, CHCNGA TPO
- Joe Roach, TDOT
- Victor Weddle, TDOT
- Alan Wolfe, TDOT
- Terrance Hill, Kimley-Horn
- Tom Fowler, Kimley-Horn
- Dan Malsom, Kimley-Horn

**SUBJECT:** Cleveland Regional ITS Architecture Update – Stakeholder Review Workshop

---

## INTRODUCTIONS

The purpose of the workshop was to review the draft Cleveland 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 regional ITS projects 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.

Tom Fowler welcomed everyone to the meeting and thanked stakeholders for their participation in the update of the Cleveland Regional ITS Architecture. Everyone in attendance then introduced themselves and identified the agency that they represented.

## **PROJECT OVERVIEW PRESENTATION**

Terrance Hill and Tom presented on the progress of the update to the Cleveland Regional ITS Architecture and Deployment Plan. Tom briefly introduced key sections of the document and described their purpose. The first draft of the Regional ITS Architecture document was made available to stakeholders for review on March 21, 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 April 5, 2017.

<http://www.kimley-horn.com/projects/tennesseeITSarchitecture/cleveland.html>

Tom 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 Cleveland 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 Cleveland 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 Cleveland Regional ITS Architecture in 2008. The following is a summary of ITS deployments and projects identified by the stakeholders in attendance at the workshop:

### **City of Cleveland**

- The City of Cleveland noted that installing a dynamic roadway warning system at the Inman Street East low bridge underpass near the City center remains a high priority. This system would include a sensor that can detect overweight vehicles approaching the underpass and trigger lights that would draw attention to the low clearance warning sign mounted to the bridge.
- The City is currently upgrading its traffic signal controllers to the latest technology. These traffic signal upgrades will be an ongoing project for the City. The City does not have any plans to continue deploying additional CCTV cameras at these intersections as a part of the traffic signal controller upgrades.

- The project team discussed with City of Cleveland staff how ITS elements should be designated in the ITS Architecture. In the previous version, certain elements were assigned to City of Cleveland Public Works, while others were assigned to Cleveland Utilities. Stakeholders agreed that the project team should update the architecture so that these elements are all designated as “City of Cleveland” elements, rather than assigning each one to a specific City department.
- The City is considering using a Gridsmart detection system to potentially bring video feeds of traffic flow in the City back to the City’s traffic operations center (TOC). The City has not made a decision on whether to investigate the use of this technology any further.
- The City of Cleveland Emergency Medical Services (EMS) staff has expressed a desire for the City to continue deployment of traffic signal preemption technology. Every traffic signal cabinet in the City currently has the capability to support signal preemption.
- The City of Cleveland TOC is currently staffed on an as-needed basis. 24/7 operation is not currently seen as a need, but if there were a public demand for 24/7 TOC operation in the future, the City would consider staffing enhancements.

## **TDOT**

- TDOT does not currently deploy HELP freeway service patrol vehicles along Interstate 75 in the Cleveland MPO region. Sometimes HELP vehicles will travel north from Chattanooga to Exit 20 on I-75, where they proceed to exit the freeway, enter again in the other travel direction, and return to Chattanooga.
- Interstate 75 Exits 20, 25, and 33 have inductive loop detectors installed to detect queues that may extend back toward the freeway. Exit 27 does not currently have this infrastructure installed but traffic operations would likely benefit from the installation of similar technology there. The City of Cleveland expressed interest in working with TDOT to deploy I-75 off ramp queue detection systems that can communicate with nearby traffic signals maintained by the City so that signal timings can change to relieve queues before they extend back to the freeway.
- TDOT staff noted that the project team should consider including a project or other detail in the Deployment Plan that describes the ongoing infrastructure maintenance required once other ITS technologies included in the plan have been implemented.

## **Other Comments**

- One stakeholder mentioned the possibility of installing DMS units along APD-40 and other major through routes in the area. This idea has not yet been vetted by most stakeholders. The City of Cleveland noted that they would prefer that TDOT maintain these units if they are eventually deployed, since the City’s TOC does not currently maintain any DMS units and does not have the technology available in the TOC to control DMS.
- Cleveland State Community College has indicated interest in installing pedestrian hybrid beacons (HAWK signals) at busier student crossings along city roads near the campus. No representative from the school was present, but city staff noted that funding for the installation of these HAWK signals may already be identified. These signals will most likely be isolated, meaning they will not relay information back to the TOC once installed.

- Cleveland Utilities owns a drone, and two drone pilots are on staff. So far, the drone has been used for conducting flyovers of transportation projects that the City did not already have updated aerial imagery for. This new imagery has allowed the City to improve its mapping capabilities. In an unrelated effort, TDOT is currently developing guidelines for drone use to aid in their projects and other efforts.
- The CHCNGA TPO and regional planning authority based in Chattanooga began a ride-matching and transportation demand management program several years ago known as GreenTrips. The program was funded as a part of the City's CMAQ application with the goal of encouraging alternatives to single occupancy vehicle trips, including carpooling, telecommuting, and biking or walking to work. The program includes several corporate partners and a ride-matching database. CHCNGA TPO has approved the extension of these services to the Cleveland region, and the Cleveland City Council has committed matching funding to allow the community to participate in the program. Currently, CHCNGA TPO is determining how to best handle the expansion of the program.

### 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 the stakeholder's agency) and provide comments by **April 5, 2017**. Stakeholders were also encouraged to contact any of the project team members if they had any questions. Contact information is included below:

*Cleveland Metropolitan Planning Organization:*

Greg Thomas  
gthomas@clevelandtn.gov  
(423) 479-1913

*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