

Northeast Ohio Areawide Coordinating Agency (NOACA) Regional ITS Architecture Comprehensive Update

Upcoming Activities

- ❖ **July 2019** – Final drafts of ITS architecture and strategic plan
- ❖ **August 2019** – Project Steering Committee Meeting
- ❖ **September 2019** – Finalize 2019 ITS Architecture Update, NOACA ITS Strategic Plan, post items to NOACA website



Project Website

noaca-its.aecomonline.net

Contacts

Brian Blayney
NOACA Project Manager
bblayney@mpo.noaca.org
216-241-2414, Ext. 302

Ming-Shiun Lee
Consultant Project Manager
ming.shiun.lee@aecom.com
612-376-2048

Since January, NOACA, AECOM, and project stakeholders have been continuing to work together on the regional Intelligent Transportation Systems (ITS) comprehensive update. This brief summary provides a quick overview of the major activities and accomplishments that have occurred during the last few months.

Draft ITS Architecture Released

A draft of the updated NOACA regional ITS Architecture was shared with project stakeholders on April 29. This first draft of the document was released for review and comment to over 150 key stakeholders in traffic planning, operations, and public safety at the state and local level. A second version of the ITS architecture is expected to be released soon, providing one last chance for input before the document is finalized in September.

Stakeholder Workshops

A second round of stakeholder workshops were held in early May 2019 at three locations throughout the five-county region.

Cuyahoga Workshop May 7, 2019 Independence, OH 20 Participants	Lorain/Medina Workshop May 8, 2019 Brunswick, OH 3 Participants	Lake/Geauga Workshop May 9, 2019 Mentor, OH 6 Participants
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At the workshops, AECOM staff demonstrated how to navigate the ITS architecture, showing how ITS elements are organized by stakeholder and how the architecture can be used in project planning. AECOM shared a brief two-page “users’ guide” that summarizes the basics for those using the architecture website. The project team also provided an overview the region’s ITS Strategic Plan. The purpose of the ITS Strategic Plan is to encourage efficient technology deployment to better utilize the region’s infrastructure, enhance communication among regional stakeholders, and position the region for emerging technology. Potential projects were identified to fill needs and build on existing capabilities that stakeholders identified through surveys and at the first round of workshops.

NOACA ITS Strategic Plan

The project team prepared a draft ITS Strategic Plan for the region by considering projects at the state, regional, and local levels. Potential projects were organized into short, medium, and long-term frames for implementation.



In evaluating projects for the Strategic Plan, the project team looked at NOACA's AIM Forward 2040 long range plan, the NOACA Transportation Improvement Program (TIP), NOACA's Overall Work Program (OWP), the Statewide Transportation Improvement Program (STIP), ODOT's Transportation Systems Management and Operations (TSMO) Plan, the ODOT Freight Plan, and DriveOhio's website.

Interagency Agreements

Since the second round of workshops, several stakeholders shared examples of existing agreements that support traffic operation and emergency response across jurisdictional boundaries. Some examples include mutual aid agreements, radio-sharing agreements, signal operation /maintenance agreements, and agreements for emergency vehicle preemption. Such agreements are needed to maximize the potential benefits of ITS infrastructure by communities in the NOACA region.

How ITS Fits into the Future of Transportation

In the coming years, advances in technology are expected to be deployed to support and promote connected and autonomous vehicles at the national level. These advances in technology are expected to improve the quality of life for Americans by providing benefits with respect to safety, mobility, and the environment.

Safety

- 35,092 highway deaths
- 6.3 million crashes
- A leading cause of death for under age of 45



Mobility

- 6.9 billion hours of travel delay
- \$160 billion cost of urban congestion



Environment

- 3.1 billion gallons of wasted fuel
- 60 billion lbs of additional CO₂

Potential Short- and Medium-Term ITS Projects

State ITS Project Prioritization

Time Frame	Project Name	Score
Short term	ODOT Advanced Traffic Management System (ATMS)	0.58
	Expand Traveler Information Delivery Methods	0.52
	Freeway Management System (FMS) Expansion	0.42
	I-90 Lake Effect Corridor	0.41
	Maintenance Vehicle Upgrade	0.36
	Traffic Monitoring Management System Enhancements	0.35
	Expand Road Weather Information System (RWIS)	0.35
	ODOT Traffic Monitoring Permanent Count Program	0.25
	DriveOhio City Use Cases	0.19
	Creation of a GIS Data Centralization Center	0.16

Regional ITS Project Prioritization

Time Frame	Project Name	Score
Short term	Regional Alternate Routes Planning	0.53
	County Transit ITS Updates	0.33
	GCRTA CAD/AVL	0.31
	Laketrans CAD/AVL	0.25
	GCRTA / Laketrans Transit Vehicle WiFi	0.25
	Enhance and expand GCRTA and Laketrans Paratransit services	0.16
	Medium term	Regional Traffic Management Center (TMC)
Regional Traveler Information System (TIS)		0.52
GCRTA Kiosks at Transfer Points		0.25
Transit Signal Priority		0.14

Local ITS Project Prioritization

Time Frame	Project Name	Score
Short term	Signal Timing Optimization Program	0.45
	Cuyahoga County Evacuation Plan Updates	0.44
	Automated Traffic Signal Performance Measures (ATSPMs)	0.42
	Upgrade Traffic Signals in Multiple Municipalities, Corridors	0.33
	City of Cleveland Special Event Traffic Planning	0.27
	Municipal Signal Preemption	0.19
	Medium term	Municipal Computer Aided Dispatch to Emergency Vehicle
City of Cleveland / Cuyahoga County Port Security Camera Installation including Vehicle Tracking System		0.16
Cuyahoga County Port Authority Automated Parking Facilities		0.11
City of Cleveland Automated Parking		0.09