





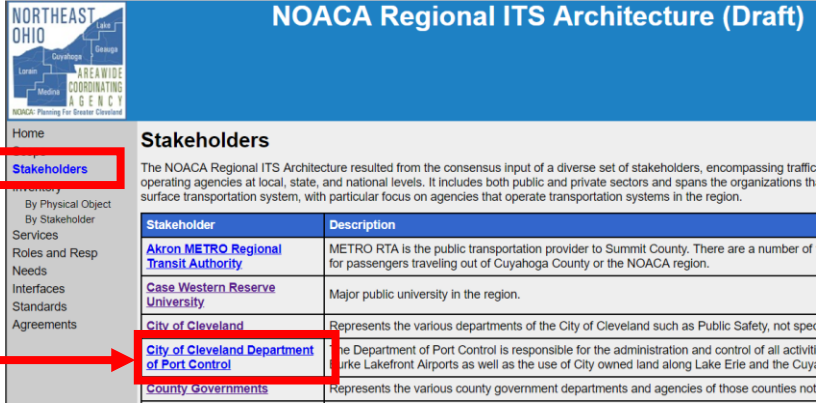

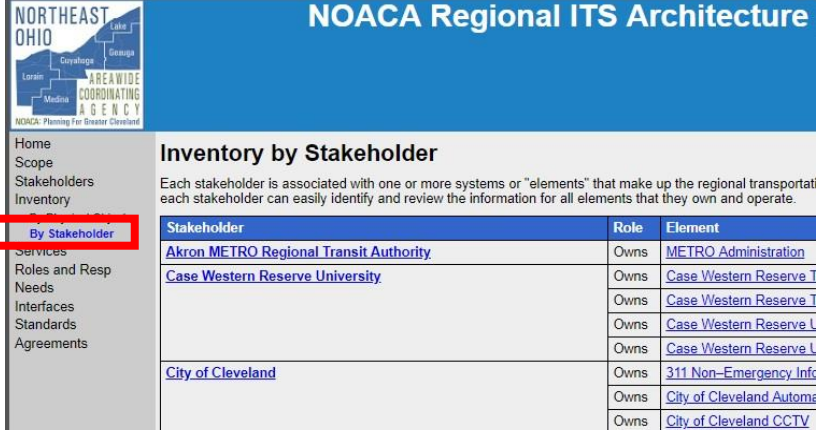
Northeast Ohio Areawide Coordinating Agency (NOACA) Regional ITS Architecture Comprehensive Update

User Guide for Navigating ITS Architecture Website

NOACA has been working over the past few months to update the NOACA Regional Intelligent Transportation Systems (ITS) Architecture and Strategic Plan. This user guide presents the ways in which stakeholders can navigate the architecture website to find information that is relevant to them and verify the accuracy of the information.

The draft architecture website can be found at: <https://noaca-its.aecomonline.net/Web/web/index.html>.

Navigation Steps for NOACA Regional ITS Architecture Website

| <u>Items for Review</u> | <u>Website Images</u> | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|-------------|--|--|---|--|---|--|--|--|------------------------------------|---|--|-------|--|-----------------------------------|-------|---------------------------------------|--|-------|---|--|-------|--|
| <p><u>Stakeholder and Descriptions:</u></p> <ol style="list-style-type: none"> Click on “Stakeholders” to view the listing of all stakeholders in the region.  Descriptions can also be viewed in the table and also by clicking on the link for each stakeholder.  |  <p>NOACA Regional ITS Architecture (Draft)</p> <p>Home Stakeholders Inventory Services Roles and Resp Needs Interfaces Standards Agreements</p> <p>The NOACA Regional ITS Architecture resulted from the consensus input of a diverse set of stakeholders, encompassing traffic operating agencies at local, state, and national levels. It includes both public and private sectors and spans the organizations that surface transportation system, with particular focus on agencies that operate transportation systems in the region.</p> <table border="1"> <thead> <tr> <th>Stakeholder</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Akron METRO Regional Transit Authority</td> <td>METRO RTA is the public transportation provider to Summit County. There are a number of for passengers traveling out of Cuyahoga County or the NOACA region.</td> </tr> <tr> <td>Case Western Reserve University</td> <td>Major public university in the region.</td> </tr> <tr> <td>City of Cleveland</td> <td>Represents the various departments of the City of Cleveland such as Public Safety, not spe</td> </tr> <tr> <td>City of Cleveland Department of Port Control</td> <td>The Department of Port Control is responsible for the administration and control of all activi</td> </tr> <tr> <td>County Governments</td> <td>Represents the various county government departments and agencies of those counties not</td> </tr> </tbody> </table> | Stakeholder | Description | Akron METRO Regional Transit Authority | METRO RTA is the public transportation provider to Summit County. There are a number of for passengers traveling out of Cuyahoga County or the NOACA region. | Case Western Reserve University | Major public university in the region. | City of Cleveland | Represents the various departments of the City of Cleveland such as Public Safety, not spe | City of Cleveland Department of Port Control | The Department of Port Control is responsible for the administration and control of all activi | County Governments | Represents the various county government departments and agencies of those counties not | | | | | | | | | | | | |
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| <p><u>Inventory Elements by Stakeholder:</u></p> <ol style="list-style-type: none"> Click on “By Stakeholder” under the Inventory to review ITS elements for each stakeholder.  Regional stakeholders are listed in alphabetical order in the table. |  <p>NOACA Regional ITS Architecture</p> <p>Home Scope Stakeholders Inventory By Stakeholder Services Roles and Resp Needs Interfaces Standards Agreements</p> <p>Each stakeholder is associated with one or more systems or “elements” that make up the regional transportati each stakeholder can easily identify and review the information for all elements that they own and operate.</p> <table border="1"> <thead> <tr> <th>Stakeholder</th> <th>Role</th> <th>Element</th> </tr> </thead> <tbody> <tr> <td>Akron METRO Regional Transit Authority</td> <td>Owens</td> <td>METRO Administration</td> </tr> <tr> <td>Case Western Reserve University</td> <td>Owens</td> <td>Case Western Reserve T</td> </tr> <tr> <td></td> <td>Owens</td> <td>Case Western Reserve L</td> </tr> <tr> <td></td> <td>Owens</td> <td>Case Western Reserve L</td> </tr> <tr> <td>City of Cleveland</td> <td>Owens</td> <td>311 Non-Emergency Inf</td> </tr> <tr> <td></td> <td>Owens</td> <td>City of Cleveland Autom</td> </tr> <tr> <td></td> <td>Owens</td> <td>City of Cleveland CCTV</td> </tr> </tbody> </table> | Stakeholder | Role | Element | Akron METRO Regional Transit Authority | Owens | METRO Administration | Case Western Reserve University | Owens | Case Western Reserve T | | Owens | Case Western Reserve L | | Owens | Case Western Reserve L | City of Cleveland | Owens | 311 Non-Emergency Inf | | Owens | City of Cleveland Autom | | Owens | City of Cleveland CCTV |
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| <i>Items for Review</i> | <i>Website Images</i> | | | | | | | | | | | | | | | | | | |
|--|---|--------------|------|-------------|------|-------|----------|-------------------|-------------|--------------|------------------------------|---|-------|---|---|-------|-----------------------------------|--|-------|
| <p>Example ITS Element (Ohio DOT DMS):</p> <ol style="list-style-type: none"> Status (Existing / Planned) Description Interfaces (Context Diagram) (see below) Interfaces (Element Diagram) (see below) | <p>Ohio DOT DMS</p> <p>Status: Existing</p> <p>Description Represents fixed and portable Dynamic Message Signs (DMS) locations throughout the state. DMS are electronic traffic signs used on roadways to give travelers information about special events, DMS warn of traffic congestion, accidents, incidents, road work zones, or speed limits on a specific highway segment. Ohio DOT operates and maintains DMS along freeways throughout the state to provide accident and work zone and other alert information. Ohio DOT plans to install and/or full route DMS.</p> <table border="1"> <thead> <tr> <th>Stakeholder</th> <th>Role</th> <th>Role Status</th> </tr> </thead> <tbody> <tr> <td>ODOT</td> <td>Owner</td> <td>Existing</td> </tr> </tbody> </table> <p>Physical Objects ITS Roadway Equipment</p> <p>Functional Objects</p> <table border="1"> <thead> <tr> <th>Functional Object</th> <th>Description</th> <th>User Defined</th> </tr> </thead> <tbody> <tr> <td>Roadway Field Device Support</td> <td>Roadway Field Device Support monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.</td> <td>False</td> </tr> <tr> <td>Roadway Traffic Information Dissemination</td> <td>Roadway Traffic Information Dissemination includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.</td> <td>False</td> </tr> <tr> <td>Roadway Work Zone Traffic Control</td> <td>Roadway Work Zone Traffic Control controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic message signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.</td> <td>False</td> </tr> </tbody> </table> <p>Interfaces To View Context Diagram</p> <p>Ohio DOT ATMS Ohio DOT District 1 Maintenance Garages Ohio DOT District 3 Maintenance Garages Ohio DOT Portable Freeway Management System Regional Traffic Management Center</p> | Stakeholder | Role | Role Status | ODOT | Owner | Existing | Functional Object | Description | User Defined | Roadway Field Device Support | Roadway Field Device Support monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices. | False | Roadway Traffic Information Dissemination | Roadway Traffic Information Dissemination includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios. | False | Roadway Work Zone Traffic Control | Roadway Work Zone Traffic Control controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic message signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones. | False |
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| Interface (Context Diagram) | Interface (Element Diagram) |
|--|--|
| <p>Context Diagram - Ohio DOT DMS</p> <p>Shows connections between ODOT systems: Regional Traffic Management Center, Ohio DOT ATMS, Ohio DOT DMS, Ohio DOT District 1 Maintenance Garages, Ohio DOT District 3 Maintenance Garages, and General Public Drivers.</p> | <p>Interface: Ohio DOT ATMS - Ohio DOT DMS</p> <p>Shows data flow: Ohio DOT ATMS sends 'roadway dynamic signage status' to Ohio DOT DMS, which sends 'roadway dynamic signage data' back to Ohio DOT ATMS.</p> <p>Architecture Flow Definitions roadway dynamic signage data (Existing) Applicable ITS Standards Information used to initialize, configure, and control dynamic message signs. This flow can provide message content and delivery attributes, local message store maintenance requests, control mode commands, status queries, and all other commands and associated parameters that support remote management of these systems. roadway dynamic signage status (Existing) Applicable ITS Standards Current operating status of dynamic message signs, highway advisory radios, or other configurable field equipment that provides dynamic information to the driver.</p> |
| <p>Context diagram presents how the element connects with other systems/devices</p> | <p>Interface diagram isolates two elements for understanding the flows of information, described at the bottom of the web page.</p> |

Questions / Comments?

Please send questions and comments to Dan Nelson of AECOM at:

- Email: dan.nelson@aecom.com
- Phone: 612-376-2061

Thank you for your review!

Draft NOACA Regional ITS Architecture Website: <https://noaca-its.aecomonline.net/Web/web/index.html>