

ITS Inventory

ITS Element	Description
311 Non-Emergency Information System	Automated phone system that receives "non-emergency" calls. Some of these may be incidents that need reporting.
Archived Data User Systems	Agencies and systems that use traffic data and traffic count data.
ARTIMIS Operations Control Center	Center responsible for managing ARTIMIS information received and dispatching messages to the general population.
Buckeye Traffic	Traffic and roadway information portal providing Ohio travelers with up-to-date information on road conditions, traffic, construction, and other activity affecting roadways managed by The Ohio Department of Transportation (ODOT).
CECOMS - Emergency Communications	Emergency communications; 911 cellular; answers all 911 cellular calls 24/7; hospital status, mutual aid box alarm system, etc. Ambulance to hospital communications, dispatch briefing team. Resource sharing between county dispatch centers. Hospital restriction program - info to the ambulances.
Cellular Probe Data Provider	Cellular Companies that can provide vehicle probe information based on location capabilities for the subscriber phones.
City of Cleveland CCTV	Closed Circuit Television (CCTV) refers to a surveillance system using cameras that transmits visual information over a closed circuit through an electrically conducting cable or wireless transmitter and receiver. It is both used for security purposes and traffic observation.
City of Cleveland DMS	Fixed and portable dynamic message signs operated and maintained by the City of Cleveland.
City of Cleveland Emergency Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on City of Cleveland public safety and emergency vehicles that provides the sensory, processing, storage, and communications functions necessary to support safe and efficient emergency response.
City of Cleveland EOC	The emergency operation center (EOC) coordinates citywide emergency and disaster planning, warning, response and recovery to minimize the adverse impact on area residents and property.
City of Cleveland Maintenance Dispatch	Dispatch of maintenance vehicles for roadway and equipment maintenance.
City of Cleveland Operation Snowbird EOC	Emergency Operations Center (EOC) command center for major snow storms
City of Cleveland Parking Management	Parking management system, including tracking availability of parking space availability and collection of parking fees at park and ride lots or at special events; joint effort by Cleveland and RTA.
City of Cleveland Police, Fire, and EMS Dispatch	This actually represents three different dispatch centers serving the City of Cleveland.
City of Cleveland Roadside Inspection Station	Roadside inspection station for oversized vehicles. Inspections performed by the City of Cleveland Police Department.
City of Cleveland Signal Control System	This represents several closed loop systems for the city of Cleveland.
City of Cleveland Special Events Management	Browns, Indians, all major special events organizers and other large arenas and special event facilities.
City of Cleveland Speed Monitoring Devices	Represents the field equipment that monitors vehicle speeds for enforcement purposes or to advise motorists of their current speeds.
City of Cleveland Traffic Detectors	Traffic and vehicle sensors owned and operated by the City of Cleveland used primarily for traffic signal control.
City of Cleveland Traffic Signals	Traffic signal controllers owned and operated by the City of Cleveland.
City of Cleveland Website	Web portal providing information for the public, including traffic and roadway information such as road conditions, traffic, construction, and other activity affecting roadways in the City of Cleveland.

ITS Element	Description
Clarus	Clarus is a research and development initiative to demonstrate and evaluate the value of "Anytime, Anywhere Road Weather Information" that is provided by both public agencies and the private weather enterprise to the breadth of transportation users and operators. The goal of the initiative is to create a robust data assimilation, quality checking, and data dissemination system that can provide near real-time atmospheric and pavement observations from the collective state's investments in road weather information system, environmental sensor stations (ESS) as well as mobile observations from Automated Vehicle Location (AVL) equipped trucks and eventually passenger vehicles equipped with transceivers that will participate in the Vehicle Infrastructure Integration (VII) Initiative.
Commercial Vehicles	Commercial Vehicles with electronic tags.
County Emergency Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on county public safety and emergency vehicles that provides the sensory, processing, storage, and communications functions necessary to support safe and efficient emergency response.
County Engineers Office	Manages and operates the public works in the county, including designing, building, and maintaining its transportation system.
County EOCs	This element represents the emergency services associated with each county in the greater Cleveland region, except for Cuyahoga which has its own defined elements.
County ITS Field Equipment	Represents ITS field elements owned and operated by County organizations. E.g. portable dynamic message signs and CCTV.
County Maintenance Garages	This element represents the dispatch function for roadway and equipment maintenance at the county level.
County Maintenance Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on snow plows and other maintenance vehicles that are owned and operated by counties not specifically called out in the architecture.
County Public Safety Dispatch	Represents the public safety functions, including electronic crash reporting, emergency management, and dispatch of vehicles, at the county level for counties not specifically called out in the architecture.
County/ Municipal Community Notification System	Home phone notification of emergency (automatically calls homes that are affected by an emergency). Includes cities of Independence and Beechwood. Notification systems are also planned for Cuyahoga County and other counties in the region.
Crash Records Database Users	Agencies and systems that access crash record databases
Cuyahoga County Engineers Office	Manages and operates the public works in Cuyahoga County, including designing, building, and maintaining its transportation system.
Cuyahoga County EOC	Disaster Response Center; major incident management system (CMEIMS); also mobile unit;
Cuyahoga County Field Equipment	ITS field equipment owned and operated by Cuyahoga county, including portable dynamic message signs, CCTV.
Cuyahoga County Maintenance Garages	Garages that dispatch maintenance vehicles for Cuyahoga County.
Cuyahoga County Maintenance Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on snow plows and other maintenance vehicles that are owned and operated by Cuyahoga County.
Cuyahoga County Traffic Count Data Archive	Historical archive of traffic counts on Cuyahoga County roads.
Cuyahoga Regional Information System (CRIS)	Web based access to law enforcement and criminal justice information for Northeastern Ohio. The Cuyahoga Regional Information System (CRIS) is a computer-based Criminal Justice Information System designed for use by Criminal Justice Agencies in and surrounding Cuyahoga County. The CRIS computer system contains a communications network and central repository of criminal justice information. It provides access to statewide (LEADS) and national (NCIC) criminal justice information on driver's licenses, motor vehicles, stolen/recovered property, wanted and missing persons, and criminal records. By linking criminal justice data throughout Northeast Ohio, the CRIS provides a readily accessible source of standardized information on agency activity, custodial status, and the judicial process that provides timely information to field personnel to aid them in making decisions, and streamlines record keeping.

ITS Element	Description
Drivers	Represents the private travelers in vehicles.
Emergency Alert System	Formerly the emergency broadcast system, a regional notification system to the general public. Information may include amber alerts, inclement weather, etc.
Event Operators Information Systems	Information systems for event operators throughout the region. Includes regional universities and colleges such as CASE, Cleveland State, and Cuyahoga Community College.
E-ZPass Tag	E-ZPass vehicle transponder used for electronic payment of toll and other, e.g. Airport Parking.
Financial Institutions	Financial companies that handle electronic transactions.
GCRTA Administration	Administrative functions of METRO that will handle reconciliation of regional electronic fare system.
GCRTA Communications Center	Includes the train control system, the light rail control system, the bus control system, and the traveler information services for RTA. Paratransit and subscription service to be provided in future.
GCRTA Police	Police force that provides security for RTA transit system
GCRTA Police Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on police vehicles operated by GCRTA Police.
GCRTA Transit Traveler Information System	Web site, and phone interface to provide traveler information relating to transit operations.
Geauga County Transit Operations	Dispatch and operations center for Geauga County Transit
Geauga County Transit Vehicles	Paratransit vehicles of Geauga County Transit
Hopkins International Airport and Burke Lakefront Airport	Element represents the traffic management aspect of the airports. Also represents the multimodal information available at the airport.
Hopkins International Airport DMS and HAR	Represents the dynamic message signs and highway advisory radios on the roadway around and within the airport. These devices may provide traveler information such as parking availability and when flights have arrived.
Hopkins International Airport Parking Management System	Parking management system, including tracking availability of parking space availability and collection of parking fees.
Hopkins International Airport Vehicle Classification System	Traffic vehicle classification system to determine vehicle types.
Kent State Bus Operations Center	Bus Operations on the Kent State Campus.
Laketran Operations Center	Dispatch and operations function for Laketran fixed route and paratransit services.
Laketran Vehicles	Fixed Route and paratransit buses of Laketran. In addition to intracounty service, they carry commuters to downtown Cleveland; would like freeway traffic reports.
LCT Bus Operations Center	Fixed Route Bus Operations for Lorain County.
LCT Transit Vehicles	Fixed Route Buses of Lorain County Transit.
Lift Bridge Information System	Provides information on bridge lift times/durations for coordination to reroute vehicles (passenger, transit, commercial, emergency) around bridges
Local Transit Traveler Information Systems	Web pages and phone information systems for the transit agencies in the region (with exception of GCRTA, which has its own traveler information system element).
Mayday/Concierge Services	Private companies that provide mayday or concierge services.
Medina County Transit Operations Center	Dispatch and Operations center for Medina County Transit.
Medina County Transit Vehicles	Paratransit and fixed route transit vehicles of Medina County Transit.
METRO Administration	Administrative functions of METRO that will handle reconciliation of regional electronic fare system.
Mobile Command and Communications Vehicle (Mobile One)	A mobile command center that dispatches emergency vehicles (Mobile One). When Mobile One is operated as an alternate CECOMS, then it uses the same interfaces that are identified in the CECOMS element. The interfaces that are identified reflect community use of this asset for a transportation-related incident.

<i>ITS Element</i>	<i>Description</i>
Municipal Emergency Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on municipal public safety and emergency vehicles that provides the sensory, processing, storage, and communications functions necessary to support safe and efficient emergency response.
Municipal Field Equipment	This includes the signal controllers, cameras, signal preemption equipment for each municipality. Also includes roadside equipment that helps blind people cross streets (pushbutton has beeper, closed loop systems, audible voice indicating road is clear to cross).
Municipal Maintenance Garages	This element represents the dispatch function for roadway and equipment maintenance at the municipal level.
Municipal Maintenance Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on snow plows and other maintenance vehicles that are owned and operated by municipalities in the region. This includes the City of Cleveland and surrounding cities.

ITS Element**Description**

Municipal Public Safety Dispatch

This element represents the police, fire, and EMS emergency dispatch functions at the municipal level. This general element also represents each of the community public safety answering points (47 in all) in the Greater Cleveland region. This includes the majority of the following municipalities in Cuyahoga County.

Cuyahoga County
Bay Village City
Beachwood City
Bedford City
Bedford Heights City
Bentleyville Village
Berea City
Bratenahl Village
Brecksville City
Broadview Heights City
Brooklyn City
Brooklyn Heights Village
Brook Park City
Chagrin Falls Village
Balance of Chagrin Falls Township
Cleveland City
Cleveland Heights City
Cuyahoga Heights Village
East Cleveland City
Euclid City
Fairview Park City
Garfield Heights City
Gates Mills Village
Glenwillow Village
Highland Heights City
Highland Hills Village
Hunting Valley Village (pt.)
Independence City
Lakewood City
Linddale Village
Lyndhurst City
Maple Heights City
Mayfield Village
Mayfield Heights City
Middleburg Heights City
Moreland Hills Village
Newburgh Heights Village
North Olmsted City
North Randall Village
North Royalton City
Oakwood Village
Olmsted Township
Olmsted Falls City
Orange Village
Parma City
Parma Heights City
Pepper Pike City
Richmond Heights City
Rocky River City
Seven Hills City
Shaker Heights City
Solon City
South Euclid City
Strongsville City
University Heights City
Valley View Village
Walton Hills Village
Warrensville Heights City
Westlake City
Woodmere Village

ITS Element	Description
Municipal Signal Control Systems	This element represents the traffic signal control systems owned or operated by cities in the Greater Cleveland Region other than the City of Cleveland.
Municipal Traffic Count Data Archives	This element represents the historical traffic count archives maintained at the municipal level.
National Weather Service	General weather information available from the National Weather Service
NOACA Regional Transportation Data Archive	Traffic counts and accident report data (available from website). Also links to transit data.
ODOT 511 Information System	Traveler information by dialing 511 number; provided by ODOT and private partnership.
ODOT Animal Detection Sensor	Roadside sensors used to detect animals approaching a roadway or highway. Upon possible detection of an animal approaching a roadway or highway, will trigger another roadside device warning drivers in the surrounding area of possible danger from animals.
ODOT CCTV	Closed Circuit Television (CCTV) refers to a surveillance system using cameras that transmits visual information over a closed circuit through an electrically conducting cable or wireless transmitter and receiver. It is both used for security purposes and traffic observation.
ODOT Central Office	Central statewide traffic operations center for ODOT. Manages the BuckEyeTraffic.org website. For redundancy, able to remotely operate district traffic management centers.
ODOT District 12 Equipment Repair Facility	Facility responsible for vehicle and equipment repair for the district.
ODOT District 12 Freeway Management Center	Control system to manage lane restrictions, closures, future ramp meters, incidents; includes OTIS web page for giving information about road work and snow). Also dispatches the road CrewZers.
ODOT District 12 Maintenance Garages	Dispatch function for ODOT roadway and equipment maintenance vehicles. These garages are county based. Provide roadway and equipment maintenance for ODOT assets in the district.
ODOT District 12 Office	Provides central administrative focus for maintenance and construction management for the District.
ODOT District 12 Public Information Office	Office responsible for providing information to the public.
ODOT District 3 Equipment Repair Facility	Facility responsible for vehicle and equipment repair for the district.
ODOT District 3 Maintenance Garages	Dispatch function for ODOT roadway and equipment maintenance vehicles. These garages are county based. Provide roadway and equipment maintenance for ODOT assets in the district.
ODOT District 3 Office	Primary traffic management point for ODOT managed roads in District 3. Also will collect environmental data.
ODOT District 3 Public Information Office	Office responsible for providing information to the public.
ODOT Dynamic Message Signs	Fixed and portable dynamic message signs operated and maintained by ODOT.
ODOT HAR	Highway advisory radios used to provide traveler information to the traveling public.
ODOT Infrastructure Monitoring Sensors	Infrastructure monitoring equipment including IR, cameras and motion detectors. These sensors and detectors are operated by ODOT to monitor and protect infrastructure and facilities, and not for traffic monitoring.
ODOT IntelliDrive Roadside Equipment	This element represents the roadside equipment that provides vehicle-to-infrastructure communications. This data communication is used for data collection from IntelliDrive-equipped vehicles and to provide information to IntelliDrive-equipped vehicles.
ODOT Kiosks	Traveler information kiosks
ODOT Lane Control Devices	Lane control devices owned and operated by ODOT to manage lanes. These include lane control signals on bridges.
ODOT Maintenance and Construction Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on snow plows and other maintenance vehicles that are owned and operated by OTC.
ODOT Portable Freeway Management System	This system is a "virtual" TMC that allows direct control of freeway field equipment (e.g., variable message signs) from remote locations, using simple equipment (e.g., a laptop computer.) Can be used for portable workzone applications.

ITS Element	Description
ODOT Public Radio Station	Public radio station owned and operated by ODOT for providing public traveler information, among other information.
ODOT Ramp Meters	Represents ramp metering devices that are owned and operated by ODOT.
ODOT Road Crewzers	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on vehicles that provide motorist assistance and congestion mitigation. Note that there are private parties that provide a similar service such as CVS Samaritans.
ODOT Roadway Gates	Represents automated road closure gates owned and operated by ODOT used for the remote closure of roads, lanes or ramps. Intended to be for areas where ice or snow or other adverse weather conditions exist on a frequent basis and that cause hazardous conditions for motorists.
ODOT Roadway Treatment Devices	Roadway treatment devices (deicing equipment, sensors, etc.) owned and operated by NMDOT to treat roads (usually ice, snow, etc.).
ODOT RWIS	RWIS stands for Roadway Weather Information System. ODOT owns over 100 weather stations, which provide coverage in all 88 of Ohio's counties. A central service located in Columbus processes the information from each station. ODOT garages use the information collected by the stations to plan their road treatment activities, especially during snow and ice conditions. ODOT also makes road conditions available to the public via a Web server (www.buckeyetraffic.org). The weather stations and sensors are located along interstates, U.S. routes, and state routes.
ODOT Speed Monitoring Devices	Represents the field equipment that monitors vehicle speeds for enforcement purposes or to advise motorists of their current speeds.
ODOT Storage Facilities	Depots and garages where materials are stored for ODOT.
ODOT Traffic Counters	Permanent traffic sensors used to perform traffic counts.
ODOT Traffic Data Archive System	Statewide archive of traffic data. Inputs data from new automatic traffic counters
ODOT Traffic Detectors	Traffic and vehicle sensors owned and operated by ODOT used primarily for monitoring traffic flow conditions on the regional roadways.
ODOT Traffic Signals	Signal controllers operated and maintained by ODOT.
Ohio DPS Crash Records Database	Statewide database of crash records.
Ohio EOC	Ohio Emergency Operations Center (EOC).
Ohio State Highway Patrol Posts	Dispatch of Highway Patrol Vehicles. One per county.
Ohio State Highway Patrol Vehicles	Represents the ITS equipment, e.g., mobile data terminals and AVL systems, on highway patrol vehicles.
OSHP State Communications Center	The State Communication Centers is a dispatch facility that connects to ODOT and controls emergency operations. It also provides for joint dispatch to incidents.
OTC Central Dispatch	Dispatch maintenance and incident management (private tow/wreckers, local/municipal fire/EMS). (Co-located with Highway Patrol). Dispatch contractors for construction and sometimes maintenance.
OTC Field Equipment	Represents ITS field equipment owned and operated by Ohio Turnpike Commission. Includes CCTV cameras and DMS.
OTC Maintenance and Construction Vehicles	Represents the ITS equipment, e.g., mobile data terminals, on snow plows and other maintenance vehicles that are owned and operated by OTC.
OTC Maintenance Dispatch	Dispatch function for OTC roadway and equipment maintenance vehicles. Provides roadway and equipment maintenance for OTC assets in the region.
OTC Toll Administration	Represents the backoffice administration systems for the electronic payment systems, including the customer service centers.
OTC Toll Collection Equipment	Electronic toll collection roadway equipment. E.g., tag readers, toll booth equipment, lane curtains, etc.
OTC Website	Web site and information portal (including account information) for E-ZPass customers.
Other County Engineers Office	Manages and operates the public works in the county, including designing, building, and maintaining its transportation system.
Other County Public Safety Dispatch	Represents the public safety functions, including electronic crash reporting, emergency management, and dispatch of vehicles, at the county level for counties not specifically called out in the architecture, including for counties bordering on the region (Ashland, Ashtabula, Huron, Portage Summit, Trumbull, and Wayne).

ITS Element	Description
Other Municipal Field Equipment	This includes the signal controllers, cameras, signal preemption equipment for each municipality. Also includes roadside equipment that helps blind people cross streets (pushbutton has beeper, closed loop systems, audible voice indicating road is clear to cross)
Other Municipal Maintenance Garages	Represents other municipal maintenance garages and dispatches, including those municipalities that border the region.
Other Municipal Public Safety Dispatch	This element represents the police, fire, and EMS emergency dispatch functions at the municipal level. This general element also represents each of the community public safety answering points (47 in all) in the Greater Cleveland region.
Other Municipal Signal Control Systems	This element represents peer municipal signal control systems that coordinate with the Municipal Signal Control Systems element.
Other ODOT District Offices	This element represents the traffic operations centers in other ODOT districts.
Other ODOT Maintenance Garages	County based garages responsible for roadway and equipment maintenance.
Ozone Action Day System	Receives information from the city of Cleveland and Ozone monitored data from other sources, weather information, and forecasts Ozone Action Days. The media, traffic management, emergency management, and information service providers are provided with these alerts.
Port of Cleveland Infrastructure Monitoring Sensors	Infrastructure monitoring equipment including intrusion sensors, CCTV cameras and motion detectors. These sensors and detectors are operated by the Port of Cleveland to monitor and protect infrastructure and facilities.
Port of Cleveland Operations Center	Represents the Port of Cleveland's management operations and dispatch systems.
Port of Cleveland Station	Roadside equipment used to check the credentials of commercial and freight vehicles entering and leaving the Port of Cleveland.
Private Fleet and Freight Operators	Represents the private commercial fleet management operations and dispatch systems operating in the Region.
Private Tow and Wrecker Dispatch	Dispatch function for privately owned tow or wrecker service.
Private Tow and Wreckers Vehicles	Represents the ITS equipment, such as mobile data terminals or AVL systems, on tow or wrecker vehicles.
Private Traveler Information Systems	Represents the private traveler information providers serving the region. This element could, in the future, provide support to the National Traveler Information 511 number since it collects information from a broad array of operating centers. Could also include a website.
Private Weather Service Systems	Systems that provide customized transportation weather forecasts or road weather information.
Railroad Operations Center	Source of information for train crossing times/durations for coordination to reroute vehicles (passenger, commercial, transit, emergency) around RR tracks. CSX and Norfolk Southern in the Cleveland metro area.
Railroad Wayside Equipment	Active highway/rail interfaces (flashing gates when train is detected)
Region II Fusion Center	Operated and maintained by the Cleveland Police Department, the Regional Fusion Center collects information and intelligence, analyze the information for homeland security threats and pushes their analysis and information out to the municipalities.
Regional Airport	Includes Cuyahoga County Airport
Regional Hospitals and Trauma Centers	Hospitals and trauma centers in the region.
Regional Smart Card Reconciliation Network	System that provides fare reconciliation between peer agencies using a common travel card.
Regional Traveler Smart Card	Smart Card used for transit and possibly other services in the region
RTA CCTV Cameras	Closed Circuit Television (CCTV) cameras used to monitor transit facilities, including transit stops, for security purposes.
RTA Fixed Route Vehicles	AVL-equipped transit vehicles that support communications to/from vehicles, security communications; signal priority. Transit vehicles may include trains, light-rail cars, and buses.

<i>ITS Element</i>	<i>Description</i>
RTA Kiosks	Traveler information at kiosks at Park and Rides and transit stops; have multimodal information recommendations; traveler information of a more general nature. Traveler information at kiosks at Park and Rides; have multimodal information recommendations; traveler information of a more general nature.
RTA Paratransit Vehicles	AVL-equipped rapid transit vehicles that support communications to/from rapid transit vehicles, security communications
School Buses	School Buses operated by area school districts.
School District Dispatch	Dispatching systems for school districts buses.
Special Police Dispatch	Dispatch of public safety for special jurisdictions. E.g. University Circle Police, Housing Police, park police, Cleveland Clinic, etc.
Traveler Information Devices	Personal devices used by the traveling public. Includes PCs, pagers, etc.
Traveler Vehicles	Represents the ITS equipment inside private vehicles.
TV and Radio Stations	Local TV, radio, and newspapers.
US DHS TWIC	Administered by the Transportation Security Administration (TSA) division of the U.S. Department of Homeland Security, the Transportation Workers Identification Credential (TWIC) is a tamper-resistant credential that contains biometric information about the holder which renders the card useless to anyone other than the rightful owner. Using this biometric data, each transportation facility can verify the identity of a worker and help prevent unauthorized individuals from accessing secure areas.
USCG District HQ Bridge Office	US Coast Guard Office that manages swing and lift bridges.
USCG Infrastructure Monitoring Sensors	Infrastructure monitoring equipment including intrusion sensors, CCTV cameras and motion detectors. These sensors and detectors are operated by USCG to monitor and protect infrastructure and facilities.