Architecture Summary

4/23/2014

Architecture Name	Architecture Description	Status

NE Illinois Regional ITS Architecture (Region)

Description: The Northeastern Illinois Regional ITS Architecture is a roadmap for transportation systems integration in the NE Illinois region over the next 15 years.
Timeframe:
Geographic Seven-county area (Cook, DuPage, Kane, Kendall, Lake, McHenry, Will) plus the Aux Sable Township in Grundy County
Service Scope:
Developer:
Maintainer: CMAP
Version: 2.0
Revision Date:

CDOT Ashland Avenue BRT (Project) Planned

Description: Implementation of bus rapid transit along Ashland Avenue. The project includes changes in lane configurations, allowed turns, and transit signal priority, and other traffic signal changes. Transit side equipment will include stations, station fare collection equipment, station passenger information, and unique BRT vehicles.
Timeframe: short
Geographic Ashland Avenue
Service Scope: APTS07: Multi-modal coordination, APTS08: Transit Traveler Information, APTS09: Transit Signal Priority, ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Automated Speed Enforcement (Project) Planned

Description: This project includes the use of cameras and speed detection for automatic ticketing of speeding vehicles. The focus is on safety speed zones (schools and parks).
Timeframe: short
Geographic School speed zones
Service Scope: ATMS19: Speed Warning and Enforcement
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Camera Images for Traffic Surveillance (Project) Planned

Description: Project to expand use of automated enforcement camera images to use as traffic monitoring tools. Video images will be processed and used to count vehicles and pedestrians.
Timeframe: mid
Geographic
Service Scope: ATMS01: Network Surveillance
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Chicago Traffic Management Center TMC ATMS (Project) Existing

Description: The Chicago TMC Advanced Traffic Management System is one of the largest and most significant ITS projects being undertaken by the City to facilitate efficient and faster movement of traffic and emergency vehicles on City streets. This project builds upon traffic management equipment and functions such as the Chicago fiber/wireless backbone communications infrastructure, MIST centralized traffic signal control system, 911 Computer Aided Dispatch system, Operation Virtual Shield (OVS) CCTV cystem, the Chicago Incident Center, the Joint Operations Center, etc. The Chicago TMC provides traffic management operators the ability to monitor, schedule and control field devices such as variable message signs,

highway advisory radio systems, traffic signals, etc., and to facilitate and/or provide a platform for automation of efficient responses to incidents and traffic conditions. Traffic mangement activities are currently housed at the City of Chicago OEMC. While many of the desired traffic management functions exist to some extent today, the overarching Advanced Traffic Management System software and hardware that integrates all the functions is not yet in place. In addition, the geographic coverage of many services, such as centralized signal control, will be expanded in the future.

Timeframe: mid
Geographic
Service Scope: Covers traffic management, traveler information, emergency/incident management.
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

CDOT Chicago Truck Route Advisory System (Project) Planned

Description: This project will provide an interactive web page in which truckers would enter an origin and destination plus characteristics of their truck (height, weight, length), and the web site would provide them with information regarding viaduct clearances, construction, truck route restrictions, weight limits and special permits where needed (e.g., Lake Shore Dr.). Eventually, more dynamic aspects such as street closures and special events would be added.
Timeframe: mid
Geographic
Service Scope: ATIS02: Interactive Traveler Information
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

CDOT Cicero Ave Smart Corridor (Project) Existing

Description: The advanced traffic management system is implemented and has deployed 19 signals, 7 CCTVs, 2 DMSs and multiple system detectors. Future enhancements relate to traffic adaptive control on the signals and possibly other roadside device enhancements.

The other component of the smart corridor is the advanced traveler information system, which provides upgrades to several traveler information systems along the smart corridor. Specifically the project will include highway advisory radio upgrades to provide information on closures of highway rail intersections, and installation of additional dynamic message signs.
Timeframe: mid
Geographic Cicero Avenue between I-55 and Marquette
Service Scope: ATMS01: Network Surveillance, ATMS03: Traffic Signal control, ATMS06: Traffic Information Dissemination
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

CDOT Crash Data Integration (Project) Existing

Description: Implementation of electronic collection of crash reports on-site by Chicago Police Department using mobile data terminals. This is 75% complete and transmits xml formatted data to the Chicago Department of Transportation.
Timeframe: short
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Critical Bridge Infrastructure Surveillance (Project) Existing

Description: This project involves installation of CCTV cameras and weather sensors on City of Chicago bridges. These devices ensure the safety and security of the bridges as well as the motorists. Video and sensor data will provide information to assist in pre-treatments with chemicals to prevent black ice buildup.
Timeframe: short
Geographic

Service Scope: MC03: Road Weather Data Collection, EM05: TRansportation Infrastructure Protection
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Data Pipeline - Communications Backbone (Project) Planned

Description: Provide connectivity from Daley Center to IDOT-CTIC and Gateway Servers at IDOT ITS Program Office. Will include fiber along CTA Blue Line and Tollway to IDOT District 1.
Timeframe: long term
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Interoperable Milwaukee Avenue TSP (Project) Planned

Description: Demonstration of interoperable transit signal priority system on Milwaukee Avenue between Jefferson Park and Golf/Milwaukee. This segment incudes various traffic signals and serves both CTA and Pace buses.
Timeframe: short
Geographic Milwaukee Avenue, Jefferson Park to Golf/Milwaukee
Service Scope: APTS09: Transit Signal Priority, ATMS03:Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Lake Shore Drive and 18th/31st Street Ramp Congestion Relief (Project) Existing

Description: This project implements coordination between Lake Shore Drive and the City of Chicago traffic signals on 18th St. and 31st St. exit ramps. The currently implemented system at the 18th street signal determines the level of congestion on the exit ramp using loop detectors. The signal timing would be modified to clear the off-ramp congestion on Lake Shore Drive. A similar system will be implemented for 31st Street.
Timeframe: short
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS03:Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Mobile Technologies to Measure Travel Times Using Probe Vehicles Existing
(Project)

Description: This project currently measures travel time using CTA buses as probes. The information is provided on the CDOT http://www.chicagotraffictracker.com/ website and the Gateway Traveler Informaion System. This could be expanded to cover other Chicago Roadways
Timeframe: short
Geographic City of Chicago
Service Scope: ATMS02: Traffic Probe Surveillance, ATIS02: Interactive Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 4-May-2007

CDOT Railroad Grade Crossing Delay - Traveler Information System (Project) Planned

Description: This project would develop a Traveler Information System to provide travelers with information regarding delays due to trains.
Timeframe: Short
Geographic
Service Scope: Advanced Traveler Information System ATIS02
Developer: MG
Maintainer:

Version:
Revision Date: 1-May-2007

CDOT Red-light Camera Enforcement Program (Project) Existing

Description: Approximately 5% of the city's signalized intersections now have Red Light running enforcement capability. The City of Chicago has planned for a total of 500 Red Light running enforced intersections over the next three years. The traffic signal phases are monitored by red-light running cameras with automated processing to detect violations, record photographic evidence, and ticket violators. The red-light cameras are also capable of capturing traffic volume and speed.
Timeframe: Short
Geographic
Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 2-May-2007

CDOT Smart Corridors (Project) Planned

Description: This project involves multiple "smart corridors" which utilize arterial traffic management with fiber-interconnected signals, CCTVs vehicle detector stations and/or VMS. These smart corridors are selected based upon a priority model developed by CDOT. The exact capabilities implemented may vary by location, which will mean that some subset of the elements and interfaces will actually be implemented.
Timeframe: Short
Geographic Pulaski Road, Western Ave., Archer/55th, Central Ave., Ashland, Michigan/Indiana, 87th St., 95th St., Sheridan/Broadway, Congress Parkway, Cicero (I-290 to Peterson)
Service Scope: Arterial traffic management utilizing fiberinterconnected signals, CCTVs vehicle detector stations and/or VMS. Future consideration for RWIS and
environmental sensors.
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

CDOT Transportation Data Archive (Project) Existing

Description: This project creates a comprehensive archive of traffic related data. Data stored in the current archive includes average daily traffic, crash data, and a traffic signal inventory and operational information. Data can be combined and displayed on maps to get a comprehensive view. Currently data is accessible through an internal website with a map interface. In the future the interactive web-based map will be made available to the public.
Timeframe: short
Geographic
Service Scope: AD1: ITS Data Mart
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT US41 Lake Shore Drive Surveillance and Information System (Project) Potential

Description: Installation of traffic surveillance equipment to collect information and the addition of variable message signs providing traveler information regarding travel conditions on Lake Shore Drive
Timeframe: long term
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS06: Traffic Information Dissemination
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CDOT Western Avenue TSP (Project) Planned

Description: Transit signal priority for buses traveling on Western Avenue
Timeframe: mid
Geographic Western Avenue in Chicago
Service Scope: ATMS03: Traffic Signal Control, APTS09: Transit Signal Priority

Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

Chicago East-West BRT (Project) Planned

Description: An east west BRT corridor in downtown, which will be identified at the end of the current alternatives analysis.
Timeframe: short
Geographic Service Scope: APTS02: Transit Fixed-Route Operations, APTS08: Transit Traveler Information, APTS09: Transit Signal Priority, ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

Chicago OEMC City of Chicago Interconnects (Project) Existing

Description: This project coordinates and centralizes the command and control of traffic signals on City of Chicago arterials. The project encompasses three different types of interconnects: MIST, CLMATS, and CLS-DOS. About 470 of the nearly 3,000 signals in the City of Chicago are interconnected. Detectors used in the MIST system are capable of collecting traffic volume, speed and occupancy.
Timeframe: Short
Geographic Service Scope: May expand regional communications network.
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

Chicago Parking Information Projects (Project) Planned

Description: This project provides real-time parking and traveler information for on-street meters and off-street spaces. Central area parking will be monitored for occupancy, availability and pricing. Parking at special facilities such as Navy Pier and Grant Park/Millennium Park could also be monitored. The information would be tied to congestion levels and the parking prices varied dynamically as a congestion reduction strategy. Various methods would be used to distribute real-time parking, pricing and congestion information to travelers and operators including internet, mobile devices, alerts and variable message signs.
Timeframe: Mid
Geographic Service Scope: Chicago central area
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

Chicago Signal Controller Upgrade (Project) Existing

Description: This project upgrades signal controllers on the City of Chicago traffic signal network. About 300 older controllers will be replaced with advanced traffic controllers (ATC) with increased functionality and communications capabilities. In addition, about 600 signal heads will be fittted with LEDs.
Timeframe: short
Geographic Service Scope: ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

Chicago Skyway Travel Monitoring and Integration with IDOT Gateway (Project) Planned

Description: This project provides network surveillance on the Chicago Skyway by placing RTMS devices at 1/2 mile intervals along the Skyway. The information would be used to generate real-time travel time data that would be sent to the Chicago TMC and integrated in the IDOT/GCM regional expressway/tollway travel time maps. While this project is currently listed in the CDOT section, the Skyway has been leased by

Chicago to a private consortium who began operating it in 2005.

Timeframe: Mid
Geographic
Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

Chicago Snow Command (Project) Planned

Description: This project installs in-ground sensors and other sensor technology to report road surface temperature, moisture levels, and traction level on over 300 miles of strategic arterial roadways in the City of Chicago. The data will be transmitted to both the Snow Command desk and the Chicago TMC. Data will be used to monitor and route city assets for roadway safety, including snow removal.
Timeframe: mid
Geographic 300 miles of Strategic Regional Arterial Roadways
Service Scope: MC03: Road Weather Data Collection, MC04: Weather Information Processing and Distribution
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

Chicago Special Events Advisory System (Project) Planned

Description: System to provide event, shuttle and parking information to the public via the CDOT website and automatically provide event information to the Gateway Traveler Information System and the Truck Route Advisory System.
Timeframe: long
Geographic
Service Scope: ATIS02: Interactive Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

Chicago Wireless Traffic Signal Interconnects (Project) Planned

Description: This project will interconnect signals along 16 arterial corridors in the City of Chicago. The signals will be connected to each other and a central server over a hybrid wireless/fiber network. Where possible, signals will be operated under a centralized signal control.
Timeframe: mid
Geographic
Service Scope: ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 7-May-2013

CMAP Congestion Pricing (Project) Planned

Description: GO TO 2040 recommends implementing congestion pricing. Any investment in ITS infrastructure which supports congestion pricing is consistent with the region's ITS Architecture.
Timeframe: mid
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 8-May-2013

CMAP Dedicated and Managed Truckways (Project) Potential

Description: GO TO 2040 plan recommendation: Implement truckways or truck-only lanes, in order to improve safety and increase efficiencies through separating large trucks and passenger vehicles. Provide an alternative for freight to avoid certain corridors due to peak hour passenger vehicle congestion. Potential corridors: Illiana Expressway, I-55/Stevenson Expressway or connections between intermodal freight terminals.
Timeframe: long

Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 8-May-2013

CMAP Northeastern Illinois Regional Data Archive and Management System (Project) Existing

Description: GO TO 2040 plan recommendation. The concept is to create one regional system/database that archives all traffic performance data for the entire Northeastern Region. While individual systems would be responsible for ultimately archiving greater level of detail on their systems,connections, and standards will be adopted so that the regional archive could access the more detailed data for smaller individual efforts. This project is underway at CMAP and is collecting real time data flowing through the Gateway Traveler Information System.
Timeframe: Mid
Geographic Northeastern Illinois
Service Scope: Archive Data Management
Developer: LS
Maintainer:
Version:
Revision Date: 6-Sep-2007

CMAP Parking Management (Project) Potential

Description: GO TO 2040 plan recommendation. Local governments can utilize parking pricing along with other parking management strategies to promote efficient use of existing parking. Examples of parking management strategies include shared parking plans, improved information on availability of parking, and reforming city ordinances to reduce parking requirements for new developments, which are typically designed to accommodate rare peak demand. Revenues generated can assist local governments in the maintenance and management of their existing transportation infrastructure or help improve transit service.

Similar to congestion pricing, the mechanism of "variable pricing" for parking can be used as a demand management tool for congested road facilities, and also raise considerable revenues. Variable parking pricing seeks to apply a free market-inspired pricing system to more efficiently allocate parking supply, with higher prices charged at times and locations of peak demand. Variable pricing has the promise of both effective congestion mitigation and the ability to raise considerable sums for local government.
Timeframe: long
Geographic
Service Scope: ATMS16: Parking Facility Management, ATMS17: Regional Parking Management
Developer:
Maintainer:
Version:
Revision Date: 8-May-2013

CMAP Unified Oversize/Overweight Permit System (Project) Potential

Description: GO TO 2040 recommends creating a more efficient freight system. Currently, multiple permit applications are required for oversize/overweight vehicles. System operators are working to improve each of their own permit processes. Ultimately, however, it is desirable for the state to have a unified web-based permitting system.
Timeframe: long
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 8-May-2013

CMAP VMT Pricing (Project) Potential

Description: GO TO 2040 plan recommendation. As the fuel efficiency of automobiles increases along with the use of non-petroleum based fuels, there will be a long term need to replace the MFT. This could take the form of a VMT fee. Existing Global Positioning System (GPS) technology has the dynamic potential to charge fees based upon location/roadway and time of day. (GO TO 2040)
Timeframe: long

Geographic regionwide
Service Scope: ATMS25-VMT Road User Payment
Developer:
Maintainer:
Version:
Revision Date: 26-Mar-2013

Cook County Central Signal Control (Project) Planned

Description: Cook County signal interconnects are currently closed loop systems but a few of them are linked together. Cook county also currently has 3 different types of signal systems. This project will implement a centralized control capability for the traffic signals.
Timeframe: mid
Geographic
Service Scope: ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Cook County Department of Transportation and Highways Fleet AVL (Project) Planned

Description: Project to equip Cook County DOTH vehicles with automatic vehicle location technology for improved tracking and management of department operations.
Timeframe: short
Geographic
Service Scope: MC01: Maintenance and Construction Vehicle and Equipment Tracking
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Cook County Field Device Expansion (Project) Potential

Description: Expansion of the Cook County field implementation including cameras, arterial dynamic message signs, arterial performance monitoring equipment, emergency vehicle pre-emption and road weather stations.
Timeframe: mid
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS08: Traffic Incident Management System, ATMS06: Traffic Information Dissemination, MC03: Road Weather Data Collection
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Cook County Lake-Cook Travel Demonstration (Project) Potential

Description: Arterial travel management including advanced incident detection and response, traveler information, and performance monitoring.
Timeframe: long
Geographic Lake Cook Road
Service Scope: ATMS01: Network Surveillance, ATMS08:Traffic Incident Management System, ATIS01: Broadcast Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Cook County Signal Interconnects (Project) Planned

Description: Expansion of Cook County signal interconnects. Currently >50% of signals are interconnected. This may include coordination of signal timing across municipal and county boundaries, and also expansion of the Cook County communication infrastructure.
Timeframe: mid
Geographic
Service Scope: ATMS03; Traffic Signal Control
Developer:
Maintainer:

Version:
Revision Date: 3-May-2013

Cook County Traffic Management Center (Project) Potential

Description: This project would develop a Cook County TMC capability. The center may be located in Schaumburg, initially covering northern Cook County. Alternatively the center capability could be collocated with CDOT or IDOT TMC rather than a stand alone facility.
Timeframe: Long
Geographic Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 24-Apr-2007

Cook DuPage Smart Corridors (Project) Planned

Description: Implementation of Smart Corridors identified in the Cook-DuPage Corridor Planning Study. Initial corridors have been identified. There are a broad range of potential Smart Corridors improvements, including signal interconnects, time-of-day parking restrictions and other right-of-way capacity improvements, real-time transit information, Transit Signal Priority (TSP), intersection improvements, information technology, Ethernet-based communication systems, crossover improvements, safety improvements, transit service and upgrades including route and stop locations, and policy issues to promote multijurisdictional coordination
Timeframe: mid
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 24-May-2013

CTA Audio Announcement Upgrade (Project) Planned

Description: Implement ambient noise monitoring at remote locations and adjust audio announcement volumes to appropriate levels.
Timeframe: mid
Geographic Service Scope: APTS08:Transit Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA 4G Communications Network (Project) Planned

Description: Establishment of a mobile 4G network that will work in the subway, allowing vehicle tracking by GPS and customers to use mobile devices. This may be a public-private partnership.
Timeframe: mid
Geographic Service Scope: APTS01: Transit Vehicle Tracking, Communications Network
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

CTA Automatic Train Supervision (ATS) System (Project) Existing

Description: This project provides an updated CTA train tracking system made up of a) full communication of signal indications to CTA control center, b) Centralized Traffic Control (CTC) and c) new software in CTA control enter. "Quick Tracks" tracks the trains using positions relative to switches. This may be converted to GPS when 4g communication network is established and allows GPS to work in the subway.
Timeframe: Short-Mid
Geographic Service Scope: APTS01: Transit Vehicle Tracking, APTS02: Transit Fixed-Route Operations
Developer: MG
Maintainer:

Version:
Revision Date: 25-Apr-2007

CTA Building Management Security System (Project) Planned

Description: Centralized system to provide secure access and tracking of entering personnel at CTA buildings, including offices and garages.
Timeframe: short
Geographic
Service Scope: APTS05:Transit Security
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Bus Fuel Management System (Project) Planned

Description: System associating a fuel pump, amount of fuel, and bus to track fuel use.
Timeframe: mid
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Bus Rapid Transit (Project) Planned

Description: Implementation of a bus rapid transit system (BRT). Jeffrey Jump was the first corridor. Ashland and Western Avenues are currently under study/planning. This project includes ITS elements needed to operate the service: agreements with CDOT for traffic signal operations, on board technology, wayside technology, and back office management systems.
Timeframe: short
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Bus to Control Center Communications (Project) Planned

Description: Equip buses with technology providing improved communication between driver and control center.
Timeframe: short
Geographic
Service Scope: APTS02: Transit Fixed-Route Operations
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Infrastructure Surveillance (Bus and Yard) (Project) Planned

Description: Installation of CCTV system at every bus garage and rail yard to protect infrastructure, with wireless access points to allow wireless communication of this information.
Timeframe: short
Geographic
Service Scope: EM05: Transportation Infrastructure Protection
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Infrastructure Surveillance (Subway Tunnels) (Project) Planned

Description: Installation of communication hubs and cameras to allow surveillance of subway tunnels.
Timeframe: short
Geographic

Service Scope: EM05:Transportation Infrastructure Protection
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Platform Personal Security (Project) Planned

Description: Help buttons installed on rail platforms that will activite a flashing blue strobe light. A camera will focus on the location and the image will be available at the control center. The control center will have a collocated Chicago Police Department station which can respond.
Timeframe: short
Geographic
Service Scope: EM03: Mayday and Alarms Support
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

CTA Rail Line of Site Monitors (Project) Planned

Description: Installation of cameras that allow operators to view the entire train (especially on curved track locations) to ensure all passengers have cleared the doors.
Timeframe: mid
Geographic
Service Scope: APTS05:Transit Security
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Remote Work IT System Center (Project) Planned

Description: ITS technology monitoring, repair and upgrade center similar to an information technology center whose purpose is to maintain field technologies remotely.
Timeframe: mid
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Station Master Project (Project) Planned

Description: Upgrading and standardizing communications, hardware, software, and field equipment at CTA rail station systemwide. Communications hubs will be installed systemwide. This will improve maintenance efficiency and the improve the ability to monitor and manage station located technology remotely.
Timeframe: mid
Geographic
Service Scope: ATPS05: Transit Security, APTS08, Transit Traveler Information, EM05: Transportation Infrastructure Protection
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Subway CCTV Station Security (Project) Planned

Description: Installation of a system of security cameras to monitor subway exit portals to supplement current alarm system. City of Chicago OEMC will have access to all camera images.
Timeframe: short
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Train Passenger Information System (Project) Existing

Description: This project provides LED display of train arrivals at all stations on a countdown clock.
Timeframe: short
Geographic
Service Scope: Transit Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

CTA Transit Signal Priority Corridors (Project) Planned

Description: Implementation of a system of TSP corridors in the CTA service area. This project will include vehicle equipment on the transit side, and roadside equipment.
Timeframe: short
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

CTA Video Archiving System (Project) Planned

Description: Development of efficient and indexed video archiving system.
Timeframe: mid
Geographic
Service Scope: AD1: ITS Data Mart
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Centralized Traffic Signal Control (Project) Planned

Description: Hardware, software and communications infrastructure needed to centrally manage DuPage County signals. This will initially provide a centralized signal and CCTV management system for 100 intersections iin northern DuPage County. Full buildout will include 900 signals throughout the county with interfaces to incident, fleet, transit, law enforcement and to Aurora and Naperville TMCs. In the future, this could be monitored and managed at the planned DuPage County TMC.
Timeframe: short
Geographic
Service Scope: ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Dynamic Alternate Route System (Project) Planned

Description: This system will respond to real time planned or unplanned events, identifying alternate routes based on traffic conditions, provide input to traffic signal operations serving alternate routes if needed and include a GIS database to provide multiple agencies with access to alternate route information as well as incident and emergency management information through a secure Internet website.
Timeframe: long
Geographic
Service Scope: ATMS08: Traffic Incident Management System, ATMS09: Transportation Decision Support and Demand Management. ATIS04: Dynamic Route Guidance
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Field Device Expansion (Project) Potential

Description: This project will plan, implement, operate, maintain and monitor coordinated signal systems and upgrades, communications infrastructure, RWIS, CCTV, DMS, emergency pre-emption and transit signal

priority, vehicle and pedestrian detection.

Timeframe: Mid
Geographic
Service Scope: ATMS01: Network surveillance, ATMS06: Traffic Information Dissemination, , MC03: Road Weather Data Collection, APTS07: Multi-modal Coordination, EM02: Emergency Routing
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

DuPage County Gateway Integration (Project) Planned

Description: Communication, hardware and software needed to exchange travel information with the Gateway Traveler Information System, which provides real time traffic information on TravelMidwest.com
Timeframe: long
Geographic
Service Scope: ATMS06: Traffic Infromation Dissemination
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Highway-Rail Information System (Project) Planned

Description: This project will consist of systems to monitor the status of highway-rail crossings and provide real-time highway-rail blockage updates to emergency responders, traffic managers, and the traveling public.
Timeframe: long
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS06: Traffic Information Dissemination
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County ITS Hub (Project) Planned

Description: Development of a central computer system to receive, disseminate and archive transportation information. Building on Recommendations from the "Feasibility Study for Multi-Jurisdictional Signal Timing and Monitoring in DuPage County, Illinois," this project would expand current DuPage County efforts to create a centralized data source that allows any participating agency to access traffic data across the county (e.g., tube counts, intersection turn movement counts, traffic signal timing plans, CCTV video).
Timeframe: mid
Geographic
Service Scope: AD1: ITS Data Mart, ATS06, Transportation Operations Data Sharing,
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Multi-Jurisdictional Communications Channel Integration (Project) Planned

Description: Integration of communications channels to ensure interoperability and the ability to communicate efficiently, especially during emergency situations. This project builds on existing efforts to provide a common frequency for responders to communicate directly with each other.
Timeframe: mid
Geographic
Service Scope: ATMS08: Traffic Incident Management System
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Paratransit Coordination (Project) Existing

Description: Centralized coordination of local paratransit services as well as provide coordination with public safety

and other transit organizations. This project exists, but does not cover entire county.

Timeframe: Short
Geographic Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

DuPage County Signal Interconnects (Project) Existing

Description: Coordination of signals on county highways. May include signal timing across municipal and county boundaries. May require expanding county communication network. DuPage County currently has a number of multi-jurisdictional signal interconnects: on St. Charles Road in Elmhurst, Villa Park and Lombard; also on 75th street in Naperville, DuPage County, and IDOT. Responsibility is split between maintenance and timing, with the owner being responsible for maintenance and DuPage County being responsible for signal timing.

Timeframe: Short
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County TMC (Project) Planned

Description: This is a cooperative effort between DuPage County DOT, Naperville, and Aurora to develop traffic management center capabilities. This includes the hardware, software, and communications necessary to monitor traffic conditions, communicate with field devices, coordinate operations, and respond to incidents to reduce improve operations and reduce congestion.

DuPage County is currently drafting plans to upgrade the Traffic Management Center to provide Centralized Signal System software for the 100+ traffic signals in the north central area of the County and to expand the current CCTV system with enhanced video management software to reduce delays. The long range goal of the TMC is to connect the Central Signal System with the rest of the 800 signals in the County to provide the most efficient adaptive arterial traffic flow and to communicate with all enforcement and local agencies to provide motorists with real time incident notification and alternative route management.

Timeframe: mid
Geographic Service Scope: ATMS01: Network Surveillance, ATMS03: Traffic Signal Control, ATMS07: Regional Traffic Management, ATMS08: Traffic Incident Management System
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

DuPage County Video Management System (Project) Planned

Description: System to collect, archive and retrieve video data.
Timeframe: long
Geographic Service Scope: AD1: ITS Data Mart
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

IDOT - Illinois State Police Integration of Centers (Project) Planned

Description: Integration of videos and data systems for sharing video and incident management information between IDOT District One headquarters and the Illinois State Police. This includes installation of communications infrastructure, hardware and software for transmitting incident information and improved incident management.

Timeframe:
Geographic Service Scope:

Developer:
Maintainer:
Version:
Revision Date: 29-May-2013

IDOT Accident Database and Reporting System (Project) Planned

Description: This project involves development of an accident or crash database for use by law enforcement and other incident response agencies to aid in incident response.
Timeframe: Mid
Geographic
Service Scope: Emergency Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

IDOT Automated Expressway Construction Closure System (Project) Planned

Description: This web-based system will receive contractor requests for lane closures in real time, process approvals and automatically forward appropriate information to Gateway Traveler Information System and other real time traffic information systems for distribution to the public.
Timeframe: short
Geographic Statewide
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 25-Mar-2013

IDOT CCTV Surveillance Sharing (Project) Planned

Description: This project considers sharing of video information among traffic management elements in the region. Several ways of implementing this capability are being considered. These include use of the internet with password protected access to images and control of the cameras. The agencies involved could include both public and private agencies through some sort of partnership.
Timeframe: Mid
Geographic
Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

IDOT CCTV Systems, Expressway (Project) Planned

Description: This project involves augmenting the CCTV systems IDOT has deployed along the expressways. The goal is to have a system spaced at intervals of 1 mile or less. The project is ongoing.
Timeframe: Long
Geographic IDOT Expressways
Service Scope: ATMS01: Network Surveillance, ATMS08: Traffic Incident Management Systems
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

IDOT Gateway Traveler Information System (GTIS) (Project) Existing

Description: The GTIS is the computer system facilitating the integration and interoperation of ITS within the LMIGA Corridor. The GTIS collects information from various systems, validates, and fuses this information for dissemination via the www.travelmidwest.com . Information handled by the Gateway Traveler Information System includes both incidents and planned event data (construction and special events) that impact operations, and data from field devices such as vehicle detectors, cameras, and DMS, as well as derived traffic measures such as congestion, travel times, and speeds. The www.travelmidwest.com website included maps and tabular information, the ability to sign up for automated traffic alerts and trucker reports.
Timeframe: short
Geographic Northern Illinois from Quad Cities to Chicago

Northern Indiana from Gary to the Ohio State Line
Southern Wisconsin from Madison to Milwaukee and down to the Illinois border
Southwestern Michigan from Holland to Albion and down to the Indiana State Line

Service Scope: Traffic Management, Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 6-Sep-2007

IDOT Highway Advisory Radio System Coordination (Project) Potential

Description: Coordinate HAR operations across agencies (IDOT and County systems, or IDOT and O'Hare/Midway Airports systems) This may include text to voice conversion, two-way communication with other agencies and automated sharing of event informationt.
Timeframe: long
Geographic
Service Scope: ATMS06:Traffic Information Dissemination, ATMS08:Traffic Incident Management System
Developer:
Maintainer:
Version:
Revision Date: 29-Mar-2013

IDOT I-290 ITS Elements (Project) Planned

Description: An EIS process studying adding additional roadway capacity to I-290 between Mannheim and Racine is underway. ITS elements will be include in the final design and will include traffic surveillance, traveler information, and may include a managed lane or congestion pricing on a managed lane. This project was recommended in the GO TO 2040 plan.
Timeframe: mid
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 8-May-2013

IDOT I-55 Managed Lane (Project) Planned

Description: GO TO 2040 plan recommendation. IDOT will implement one managed lane in each direction in the median of I-55. The I-55 managed lanes project consists of two (one each direction) additional managed lanes from Weber Road east to I-90/94. A bus on shoulder service is currently in operation. Management could include tolling as congestion pricing.
Timeframe: mid
Geographic Will and Cook Counties
Service Scope: ATMS23-Dynamic Lane Management and Shoulder Use, ATMS10-Electronic Toll Collection
Developer:
Maintainer:
Version:
Revision Date: 26-Mar-2013

IDOT Interagency Operations and Signal Coordination (Project) Planned

Description: Coordination of signals on Strategic Regional Arterials throughout northeastern Illinois. This often includes signal timing across municipal and county boundaries. Also includes coordination among counties and municipalites with IDOT. This may also rely on the expansion of the regional fiber network and development of additional subregional TMCs. This project is ongoing.
Timeframe: mid
Geographic regionwide
Service Scope: ATMS03: Traffic Signal Control, ATMS07: Regional Traffic Management
Developer:
Maintainer:
Version:
Revision Date: 29-Mar-2013

IDOT ITS Applications for WorkZones (Project) Planned

Description: This project is an IDOT initiative for deploying various technologies like CCTVs, DMS etc. in workzone areas to improve traveler conditions, worker safety etc.

Timeframe: short
Geographic Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 4-May-2007

IDOT Joliet Remote Bridge Operations System (Project) Planned

Description: The project will include a command center, surveillance equipment, remote control systems and staff to control 6 moveable bridges in Joliet.
Timeframe: mid
Geographic Service Scope: Currently limited to Joliet area bridges.
Staff and systems to cotrol moveable bridges.
Developer:
Maintainer:
Version:
Revision Date: 25-Mar-2013

IDOT Predictive Travel Time Development (Project) Potential

Description: This project would use archived data from the Gateway Traveler Information system to predict near-term highway performance and provide it to system operators and travelers.
Timeframe: long
Geographic Service Scope:
ATMS09: Transportation Decision Support and Demand Management, ATIS 02: Interactive Traveler Information, ATIS04: Dynamic Route Guidance,
Developer:
Maintainer:
Version:
Revision Date: 29-Mar-2013

IDOT Regional Communications Backbone (Project) Planned

Description: Installation of communications infrastructure regionwide, undertaken by the Illinois Department of Transportation and Illinois Central Management Services. This will connect major transportation, public safety and research entities in the region (e.g. Illinois Tollway, Chicago 911 center, county TMC's, University of Illinois in Chicago). Fiber installation is typically accomplished as a part of road construction or road reconstruction projects. Fiber capacity may also be provided through shared use agreements with public or private entities. Communciation services for transportation management and control functions may also be provided by wireless technology.
Timeframe: Mid
Geographic Service Scope: regionwide
communications infrastructure
Developer:
Maintainer:
Version:
Revision Date: 26-Mar-2013

IDOT Signal Interconnects (Project) Planned

Description: Coordination of signals on state highways. May include signal timing across municipal and county boundaris and centralized traffic control. This project is ongoing
Timeframe: long
Geographic Service Scope: IDOT arterials
ATMS03: Traffic Signal Control, ATMS07: Regional Traffic Management
Developer:
Maintainer:
Version:
Revision Date: 29-Mar-2013

IDOT Smart Highway I-94/US 41 (Project) Planned

Description: Traffic surveillance, road weather surveillance, communications infrastructure, VMS, incident detection, dynamic lane management and incident management on I-94 and US 41, which are parallel facilities. I-94 is operated by the Illinois Tollway, wile US 41 is operated by the Illinois Department of Transportation, requiring high levels of cooperation and coordination to implement and operate the project.

Timeframe: short
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 29-May-2013

IDOT Suburban Chicago ATMS - Centralized Traffic Control (Project) Potential

Description: Infrastructure, softrware/workstation licensing and intital set-up/monitoring of an ATMS in the Chicago Northwest Suburbs. Coordination of over 200 signals on IL 62, Arlington Heights Rd, US 20 and Barrington Road. Also video monitoring and detection on a fiber backbone with a central hub at IDOT District 1 Schaumburg. This involves IDOT Dsitrict 1, and Cook County Department of Transportation and Highways.
Timeframe: long
Geographic Service Scope: Northwest Cook County
ATMS01: Network Surveillance, ATMS03: Traffic Signal Control, ATMS06: Traffic Information Dissemination, ATMS07: Regional Traffic Management, ATMS08: Traffic Incident Management System.
Developer:
Maintainer:
Version:
Revision Date: 29-Mar-2013

IDOT Surveillance of Critical Bridge Infrastructure (Project) Planned

Description: Installation of lighting, fencing and CCTV on 16 bridges in northeast Illinois. This currently exists at multiple locations.
Timeframe: Short
Geographic Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 2-May-2007

IDOT-CDOT Integrated Expressway/Arterial Corridors (Project) Planned

Description: This project considers coordination between expressway and arterial systems. Plans for a Pilot Project would involve a tie-in of Eisenhower Expressway to Chicago DOT signals by having ramp queue detectors, both for on-ramps and off-ramps. Ramp terminal signal control would then be modified to either hold entry to I-290 (on-ramp congestion) or clear the off-ramp (spillback onto I-290). The implementation might link CDOT signals with IDOT Traffic Systems Center, or whether have local links to ramp meters only.
Timeframe: Mid
Geographic Service Scope: Pilot project on I-290/Eisenhower Expressway:
Expressway management integrated with ramp terminal signal management, and possibly (often parallel) arterial incident management.
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Illinois Department of Transportation Truck Parking System (Project) Potential

Description: Electronic truck parking information system to provide truck drivers with real time parking availability information. This will reduce the numbers of trucks parking in undesignated or unsafe locations and help drivers meet rest requirements to reduce the possibility of fatigued driving.
Timeframe:
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Illinois Tollway DMS Expansion (Project) Planned

Description: The Illinois Tollway uses a number of ways to provide information to drivers, including Dynamic Message Signs. This project will expand he use of DMS by replacing and upgrading existing DMS signs, adding large portable Type III DMS and small Type II DMS signs.
Timeframe: near
Geographic Regional tollroads
Service Scope: ATMS06: Traffic Information Dissemination
Developer:
Maintainer:
Version:
Revision Date: 2-Apr-2013

Illinois Tollway Dynamic Ramp Speed Limits (Project) Planned

Description: Implementation of dynamic speed limits on entering and exit ramps based on traffic and weather conditions.
Timeframe: mid
Geographic Illinois tollway ramps
Service Scope: ATMS22: Variable Speed Limits
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Fleet Automatic Vehicle Location AVL (Project) Planned

Description: GPS tracking of Illinois State Police District 15, maintenance, and HELP vehicles. The Illinois Tollway may track the location of maintenance and construction vehicles and other equipment to ascertain the progress of their activities. These activities can include ensuring the correct roads are being plowed and work activity is being performed at the correct locations.
Timeframe: mid
Geographic
Service Scope: MC01: Maintenance and Construction Vehicle Tracking
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Freight Efficiency Improvements (Project) Planned

Description: This project consists of a number of freight related capabilities. Truck pre-clearance capabilities supported by Automated Vehicle Identification (AVI), weigh in motion sensors, transponders, back office databases and permanent truck scales at maintenance yards. Weigh in motion and preclearance is already used on a limited basis.
Timeframe: mid
Geographic Illinois Tollway systemwide
Service Scope: CVO03 Electronic Clearance, CVO06 Weigh in motion
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway I-90 Smart Corridor (Project) Planned

Description: The Illinois Tollway is rebuilding and widening the Jane Addams Memorial Tollway (I-90) as a 21st century, state-of-the-art corridor linking Rockford to O'Hare International Airport. The Jane Addams Memorial Tollway is part of Interstate 90 (I-90), the longest interstate in the United States, and covers 77 miles extending from near the Wisconsin border to the Kennedy Expressway. The I-90 corridor from Chicago to Rockford serves nearly one million travelers per day. This project was included in GO TO 2040, the regional comprehensive plan, as a managed lane.

The project includes all ITS equipment and systems that may support developing the corridor as a state-of-the-art expressway corridor, including those technologies supporting congestion pricing, V2I testbed status/and connected vehicle roadside integrations and system surveillance and operations. The project includes ramp queue detection which may be implemented in a way to also allow it to function as wrong way driving detection. The project is currently underway, but will take a number of years to complete.

Timeframe: mid
Geographic I-90 from Rockford to O'Hare Airport

Service Scope: ATMS01: Network Surveillance, ATMS08: Traffic Incident Management, ATMS10: Electronic Toll Collection, ATMS12: Roadside Lighting System Control, ATMS 23: Dynamic Lane Management
Developer:
Maintainer:
Version:
Revision Date: 1-Apr-2013

Illinois Tollway Lane Control Demo (Project) Planned

Description: Dynamic multi lane management demonstration project which may include dynamic speed limits, dynamic lane use control and shoulder lanes.
Timeframe: mid
Geographic One segment of the Illinois Tollway, perhaps I-355.
Service Scope: ATMS01: Network Surveillance, ATMS23: Dynamic Lane Management and Shoulder Use
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Oversize Vehicle Detection at Open Road Tolling Locations Planned
(Project)

Description: Installation of devices at open road tolling locations which can detect oversized vehicles.
Timeframe: mid
Geographic Illinois Tollway open road tolling locations
Service Scope: CVO03 Electronic Clearance
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Portable Queue Detection System (Project) Potential

Description: Acquisition of approximately 10 portable "hot spot" queue detection systems to warn motorists. The system will detect excessive back-ups and warn motorists via DMS.
Timeframe: long
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS24: Dynamic Roadway Warning
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Ramp Queue Detection (Project) Planned

Description: Traffic backing up on an off-ramp and onto the main line is dangerous and reduces capacity. Ramp queue detectors will monitor for traffic backups and allow the agency operating the arterial traffic light to clear the ramp. This is currently in operation on Army Trail Road at I-355. Tollway ramp devices initiate an alarm at the DuPage County Division of Transportation (DDOT) office and activate a pre-installed timing program in the Aries signal controller software, designed to clear ramps of queued traffic prior to having traffic back up onto the through lanes of the expressway. The goal is to implement this capability at all major interchanges.
Timeframe: long
Geographic Illinois Tollway systemwide
Service Scope: AMTS01: Network Surveillance, ATMS03: Traffic Signal Control, ATMS
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Remote Traffic Microwave Sensor (RTMS) Expansion (Project) Planned

Description: Installation of RTMS devices at system to system ramps and expansion of these devices on the mainline.
Timeframe: short
Geographic Illinois Tollway systemwide
Service Scope: ATMS01: Network surveillance
Developer:
Maintainer:

Version:
Revision Date: 10-Apr-2013

Illinois Tollway Road Weather Information System Expansion (Project) Planned

Description: Expand road weather monitoring by implementing environmental sensor stations ESS on 17 bridge decks that will measure a range of weather-related conditions, including pavement temperature and status (wet, dry, snow), subsurface pavement temperature, wind speed and direction, precipitation (amount, occurrence, type), water level conditions, humidity, and visibility. Weather data collected by agencies allows them to coordinate the pre-treating of roads via anti-icing practices; efficiently plan winter maintenance routes; reduce the amount of chemicals, sand, and salt used in roadway clearing operations; and reduce wear and tear on maintenance vehicles. This information can also be disseminated along with other incident data as real time transportation information.
Timeframe: short
Geographic 17 bridge decks along the Illinois Tollway system
Service Scope: MC03: Road Weather Data Collection
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway Systemwide Open Road Tolling (ORT) (Project) Existing

Description: This project covers upgrades to the Tollway Toll Plazas for capabilities such as mixed use truck/car lane enhancements at all toll booths and use of "open-road" tolling (no stopping required). The project is completed.
Timeframe: Short
Geographic
Service Scope: Traffic Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Illinois Tollway Systemwide Open Road Tolling Conversion to No Cash (Project) Planned

Description: All toll collection locations on the Illinois Tollway system are equipped with electronic toll collecton equipment. Most are also equipped to accept cash tolls. The system will be gradually converted to all electronic collection. Tolls for vehicles unequipped with toll transponders will be collected via other methods, such as license plate recognition or in the long term with vehicle based RFID tags.
Timeframe: long
Geographic Illinois Tollway toll collection locations
Service Scope: ATMS10: Electronic Toll Collection
Developer:
Maintainer:
Version:
Revision Date: 30-Apr-2013

Illinois Tollway Time of Day Shoulder Running Demo (Project) Planned

Description: This project would manage tollway shoulders as additional capacity during certain times of the day. There are locations, such as at I-94 at IL 132 which accesses Great America, where traffic backs up dangerously and the shoulder could be used as storage capacity to keep autos out of traffic, or other locations which can use the shoulders at certain times of the day. This demo will help determine whether this is a useful strategy which should implemented more widely.
Timeframe: short
Geographic Illinois Tollway system
Service Scope: ATMS01: Network Surveillance, ATMS23, Dynamic Lane Management and Shoulder use
Developer:
Maintainer:
Version:
Revision Date: 10-Apr-2013

Illinois Tollway TIMS Enhancement (Project) Planned

Description: This project will expand the software capabilities of the TIMS, including enhanced connectivity to the Gateway and other centers in the region.
Timeframe: Short

Geographic
Service Scope: Maintenance and Construction Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Illinois Tollway Truck Parking Information System (Project) Planned

Description: This system would collect and distribute information on available parking for truck drivers. Without such information, trucks often park at unauthorized locations which can cause safety hazards or drive while fatigued.
Timeframe: short
Geographic
Service Scope: ATMS16: Parking Facility Management, ATIS02: Interactive Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 30-Apr-2013

Kane County Randall Road Adaptive Signal Control (Project) Planned

Description: Installation of adaptive signal control at 12 locations on Randall Road.
Timeframe:
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Kane County Randall Road Safety Improvements (Project) Planned

Description: Randall Road is a high volume and higher speed arterial which also provides access to shopping and residential areas. This project includes ITS elements that are intended to improve safety along the roadway, including speed surveillance and driver alerts.
Timeframe: mid
Geographic
Service Scope: ATMS01: Network Surveillance, ATMS19: Speed Warning and Enforcement,
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Kane County Signal Interconnects (Project) Planned

Description: Installation of traffic signal interconnects where needed and upgrade of 5-6 closed loop systems to ethernet for improved ability to manage signals.
Timeframe: short
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Kane County Stearns Road Smart Corridor (Project) Planned

Description: This project will equip Stearns Road between Randall and Dunham road with a number of ITS elements to improve congestion and safety, including road weather stations, CCTV, fiber integration with ATMS, traffic surveillance sensors, dynamic message signs, traffic signals, and speed surveillance with driver feedback signs.

Interconnection/integration of 6 existing traffic signals (including 2 existing traffic signal
closed loop systems) and various new ITS systems throughout the Stearns Road/IL 25 Bridge Corridor into the
County's Advanced Traffic Management System (ATMS) network.

Existing traffic signal locations include:
1. Randall Road & McDonald/Stearns Road
2. Stearns Road & McLean Road
3. McLean Boulevard & IL 31
4. Stearns Road & Stearns Road (IL 25)
5. Stearns Road (IL 25) & Gilbert Street
6. Stearns Road (IL 25)/Stearns Road & Dunham Road/IL 25

ITS systems include the following:
1. Adaptive Traffic Signal Control for all 6 signals locations.
2. Roadway Information Systems (RWIS) for identifying adverse pavement conditions and activate warning
beacons on the Fox River bridge as well as identify local meteorlogic conditions.
3. Dynamic Message Signs (DMS) to provide roadway user information such as travel times and incident notification.
4. Remote CCTV Cameras at all signal locations and at the Fox River bridge to monitor traffic conditions and incidents.
5. Automated Traffic Data Collectors at various locations along the corridor to determine travel times,

Timeframe: short
Geographic Service Scope: ATMS01: Network Surveillance, ATMS03: Traffic Signal Control, ATMS06: Traffic Information Dissemination, ATMS19: Speed Warning and Enforcement, MC03: Road Weather Data Collection
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Kane County Traffic Management Center (Project) Planned

Description: This project is underway and includes the hardware, software, field devices and communication needed to implement: network surveillance, traffic signal control, traffic information dissemination, and traffic incident management. Coordination with PSAP organizations (KaneComm and additional municipal 911 centers) is also included, and those organizations will likely be granted PTZ camera control as needed.

Kane County DOT is also coordinating with the City of Elgin. Stakeholder outreach showed that there was a desire by Elgin to share video and connectivity. This will be further pursued as the Kane County TMC is developed.

Timeframe: Short-Mid
Geographic Service Scope: ATMS01: Network Surveillance, ATMS03: Traffic Signal Control, ATMS06: Traffic Information Dissemination, ATMS08: Traffic Incident Management
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Lake County Adaptive Signal Control (Project) Planned

Description: CMAQ funded implementation of new signal technology which uses real-time traffic congestion information to modify signal operation and reduce congestion. This is being installed at 7 signals on Aptikisic Road and 6 signals on Gilmer road.

Timeframe: short
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

Lake County PASSAGE (Project) Existing

Description: This project will continue the system implementation of the Lake County TMC by expanding the coverage area, number of signals and cameras, communication infrastructure and connections to local public safety answering points. PASSAGE is currently connected to over 300 traffic signals, 200 traffic monitoring cameras, and nearly 400 video detection cameras. The data from this equipment is brought back to the TMC on over 200 miles of Fiber and various wireless data links.

PASSAGE is an Intelligent Transportation System designed to provide motorists real time traffic congestion information due to crashes and construction events. These events are communicated by police department's Computer Aided Dispatch (CAD) systems, sent directly to the Transportation Management Center (TMC), and then communicated back to highway users via www.lakecountypassage.com, PASSAGE Highway Advisory Radio (HAR) 1620 AM, variable message signs, smartphone applications, and a varietv of social media outlets.

Timeframe: Short-Mid
Geographic Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Lake County Signal Interconnects (Project) Existing

Description: Communications between traffic signals. Some are already interconnected, and the system is being expanded. As the system is developed, linked traffic signals also communicate with the Lake County Traffic Management Center central control.

Timeframe: mid
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

Lake County Smart Street Lighting (Project) Potential

Description: LED street lighting combined with sensors and communication infrastructure and management system. LED lights are long lasting and feature adjustable light levels, and can report health back to TMC. Sensors may detect whether traffic is present and lighting is needed, and adjust lighting based on ambient lighting.

Timeframe: long
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 2-May-2013

Metra Automatic Passenger Counts (Project) Potential

Description: Installation of automatic passenger counting equipment
Timeframe: long
Geographic Service Scope: APTS10: Transit Passenger Counting
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Contactless Electronic Fare Collection (Project) Planned

Description: Implementation of touchless electronic fare collection. This includes all hardware, software and communications infrastructure needed to implement the project. Metra plans to complete this project by 2015.

Timeframe: short
Geographic Service Scope: APTS04: Transit Fare Collection Management
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Downtown Station CCTV Expansion (Project) Planned

Description: Installation of 800 cameras in and around downtown Metra stations. This is part of Operation Virtual

Shied.
Timeframe: short
Geographic
Service Scope: APTS05: Transit Security
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Electric CCTV Expansion (Project) Planned

Description: Installation of 370 cameras on Metra Electric platforms and stations.
Timeframe: short
Geographic
Service Scope: APTS05: Transit Security
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Fiber Communications Backbone (Project) Planned

Description: Completion of fiber communication network along all Metra rail lines. This project will support communications with station based equipment, for passenger wi-fi use and electronic fare collection.
Timeframe: mid
Geographic systemwide
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Positive Train Control (Project) Planned

Description: Positive train control (PTC) is advanced technology specifically designed to automatically stop or slow a train before certain accidents occur. In particular, PTC is designed to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where repairs are being made and movement of a train through a track switch left in the wrong position. Currently planned to be completed by the end of 2015. This project covers all hardware, software and communications needed to implement this service.
Timeframe: short
Geographic
Service Scope: APTS01: Transit Vehicle Tracking, AVSS11: Automated Vehicle Operations, CVO01: Carrier Operations and Fleet Management
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Station-Based Variable Message Signs (Project) Planned

Description: Expansion of the number of stations with variable message signs. Currently 135 stations have VMS, there are 106 left to complete.
Timeframe: mid
Geographic
Service Scope: APTS08: Transit Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Ticket Vending Machine Expansion (TVM) (Project) Potential

Description: Currently the Metra Electric District and downtown stations have electronic ticket vending machines. This project includes adding additional TVM locations.
Timeframe: long
Geographic
Service Scope: APTS04: Transit Fare Collection Management

Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Metra Wi-Fi Service (Project) Potential

Description: Provision of wi-fi service for passenger use and to potentially support on-board ticketing.
Timeframe: long
Geographic Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Naperville Coordinated Traffic Signal Network (Project) Planned

Description: Long term plan to integrate all of Naperville's closed loop systems into a coordinated traffic signal letwork. The initial phase consists of Washington Street signal system improvements, which will create a north/south spine by combining three existing interconnected signal systems that will communicate with centralized traffic management system software. Additional signal systems will be added to the network in future phases.
Timeframe: short
Geographic Service Scope: ATMS03: Traffic Signal Control, ATMS07: Regional Traffic Management
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Naperville Washington Street Adaptive Signal Control (Project) Planned

Description: Installation of detection devices, hardware and softwware necessary at 31 signalized intersections on Washington Street in Naperville to operate adaptive signal control.
Timeframe: short
Geographic Service Scope: ATMS03: Traffic Signal Control
Developer:
Maintainer:
Version:
Revision Date: 3-May-2013

Pace Bus on Shoulders (Project) Existing

Description: Pace buses leaving travel lanes to operate on shoulders during parts of the day or under specific traffic conditions. This was successfully tested on I-55 and may be expanded to other parts of the systems. This lane is often used by emergency vehicles. Surveillance of traffic conditions is used.
Timeframe: short-mid
Geographic Service Scope: Currently I-55, but may be expanded.
Developer:
Maintainer:
Version:
Revision Date: 1-May-2013

Pace Call and Ride (Project) Planned

Description: Demand responsive service where traveler can use a cell phone to call for a ride in a designated area of about 9 square miles. This could also work by texting the request. Two-way commuication will confirm the ride, and the dispatch center can create a route in real time if there are multiple pickups and dispatch the vehicle to complete the request. This is being tested at some locations now, and may be expanded.
Timeframe: mid
Geographic Service Scope: ATIS:02: Interactive Traveler Information
Developer:
Maintainer:
Version:

Revision Date: 1-May-2013

Pace Intelligent Bus System (Project) Existing

Description: This project is the continuation of an on-going effort to deploy an integrated bus management system incorporating automatic vehicle location and fleet management technologies.
Timeframe: Short-Mid
Geographic
Service Scope: Transit Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

Pace Paratransit Management System (Project) Existing

Description: System to manage routing and scheduling to support regional ADA paratransit, dial a ride service and call and ride service. It requires software, mobile data terminals (MDTs) and vehicle AVL/GPS systems.
Timeframe: short
Geographic
Service Scope: APTS03: Demand Response Transit Operaions
Developer:
Maintainer:
Version:
Revision Date: 1-May-2013

Pace Queue Jump (Project) Potential

Description: A system with bus-specific signal indications and signs will provide right of way early green to allow bus to move ahead of long traffic queues at signalized intersections. The study is completed.
Timeframe: long
Geographic
Service Scope:
Developer:
Maintainer:
Version:
Revision Date: 1-May-2013

Pace Seat Broker Program (Project) Potential

Description: This project would track the number of empty seats on vanpools in real time and use a web based system to match them with individual rider demand in real time.
Timeframe: long
Geographic
Service Scope: ATIS02: Interactive Travel Information
Developer:
Maintainer:
Version:
Revision Date: 1-May-2013

Pace Transit Operations Decision Support System (Project) Existing

Description: This project will create a system that will quickly develop new bus routes when an incident impacts an existing route.
Timeframe: Mid
Geographic
Service Scope: Transit Management
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

Rail Freight Positive Train Control (Project) Planned

Description: Positive train control (PTC) is advanced technology specifically designed to automatically stop or slow a train before certain accidents occur. In particular, PTC is designed to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where repairs are being made and movement of a train through a track switch left in the wrong position.

Timeframe: short
Geographic
Service Scope: APTS01: Transit Vehicle Tracking, AVSS11: Automated Vehicle Operations, CVO01: Carrier Operations and Fleet Management
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

RTA Goroo Real Time/Predictive Trip Planner (Project) Potential

Description: This project will incorporate real time and predictive information to the Goroo trip planner.
Timeframe: long
Geographic
Service Scope: ATIS02:Interactive Traveler Information
Developer:
Maintainer:
Version:
Revision Date: 30-Apr-2013

RTA Illinois Transit Hub (Project) Existing

Description: This project entry covers the transit traveler information aspects of the RTA Transit Hub. The project covers dissemination of transit information to Gateway and service boards. Includes development of a Illinois Transit Hub website, and an interface to the RTA Travel Information Center.
Timeframe: short-mid
Geographic
Service Scope: Data Management and Transit Mngmnt
Developer: MG
Maintainer:
Version:
Revision Date: 26-Apr-2007

RTA Regional Transit Signal Priority Implementation Program RTSPIP (Project) Existing

Description: This project implements transit signal priority regionwide for selected routes in the Pace and CTA bus systems.
Timeframe: short
Geographic
Service Scope: Transit Management
Developer: MG
Maintainer:
Version:
Revision Date: 1-May-2007

RTA Transit Hub:APTS (Project) Planned

Description: This project involves design and development of the Illinois Transit Hub to better manage transit operations. This project heading is used to cover three separate efforts:
-Deployment of the Illinois Transit Hub itself
-Transfer Connection Protection-- This effort involves real-time monitoring of CTA, PACE, and Metra operations to protect against missed transfers.
-Regionwide Unified Fare Collection System (CTA and Pace) —This effort supports deployment of a unified transit fare collection system.

The latter two efforts represent uses of the Transit Hub to share information between transit centers in the region.
Timeframe: mid
Geographic
Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 26-Apr-2007

RTOC Integration of Centers (Project) Planned

Description: This project will integrate local traffic management centers (IDOT, Illinois Tollway, Counties, Municipalities) to provide efficient flow of information between them, and also to the Gateway Traveler Information Center. This is especially important for PSAP coordination, which provides a secure connection for PSAP operators to send selected information and relevent information should be passed on to other centers and to the Gateway Traveler Information System. The project includes network connections and software, and will often use the regional communications backbone (Project 106).
Timeframe: Mid
Geographic regionwide
Service Scope: ATMS07-Regional Traffic Management
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007

RTOC PSAP Integration (Project) Planned

Description: Highway operators benefit from knowledge about emergency situations occurring on their systems which impact operations. The counties, IDOT, city of Chicago, and the Illinois Tollway are pursuing (individually and as a group) information sharing with public safety answering points and emergency responders. Information sharing is desired to be automated, through established communications between PSAP, emergency responders, and transportation system operators. Highway operators are able to share camera images with emergency responders to evaluate emergency situations, while highway operators are able to respond to operational impacts. Lake County, Kane County, the Illinois Tollway, and IDOT have established some sharing.
Timeframe: mid
Geographic regionwide
Service Scope: ATMS08-Traffic Incident Management System
Developer:
Maintainer:
Version:
Revision Date: 26-Mar-2013

Will County Highway Department Vehicle Fleet Management (Project) Existing

Description: Continued development of fleet management procedures based on recently acquired GPS locational equipment installed on all highway department vehicles.
Timeframe: short
Geographic
Service Scope: MC01: Maintenance and Construction Vehicle and Equipment Tracking,
Developer:
Maintainer:
Version:
Revision Date: 6-May-2013

Will County Traffic Management Center (Project) Planned

Description: This project involves the development of traffic management capabilities for the Will County. One consideration for this TMC is the collocation traffic management and emergency operations centers. The plan for this was completed in 2007.
Timeframe: Mid
Geographic
Service Scope:
Developer: MG
Maintainer:
Version:
Revision Date: 25-Apr-2007