



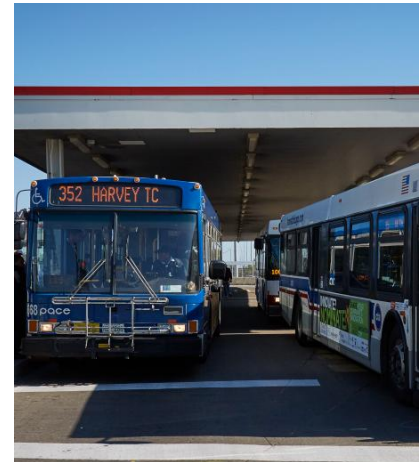
Chicago Metropolitan
Agency for Planning

Transportation Technology and Operations Coalition

November 6, 2025

9:30 – 11:00 a.m.

When you are not speaking, please mute your microphone to reduce background noise.



1.0 Welcome

Stephen Zulkowski, DuDOT (Chair)

2.0 Agency updates

Open discussion among TTOC members regarding current work projects, topics of interest for upcoming meetings, etc.

3.0 CMAP announcements

Aaron Brown and Noah Harris, CMAP

4.0 Regional ITS Architecture update

Matthew Letourneau, AECOM

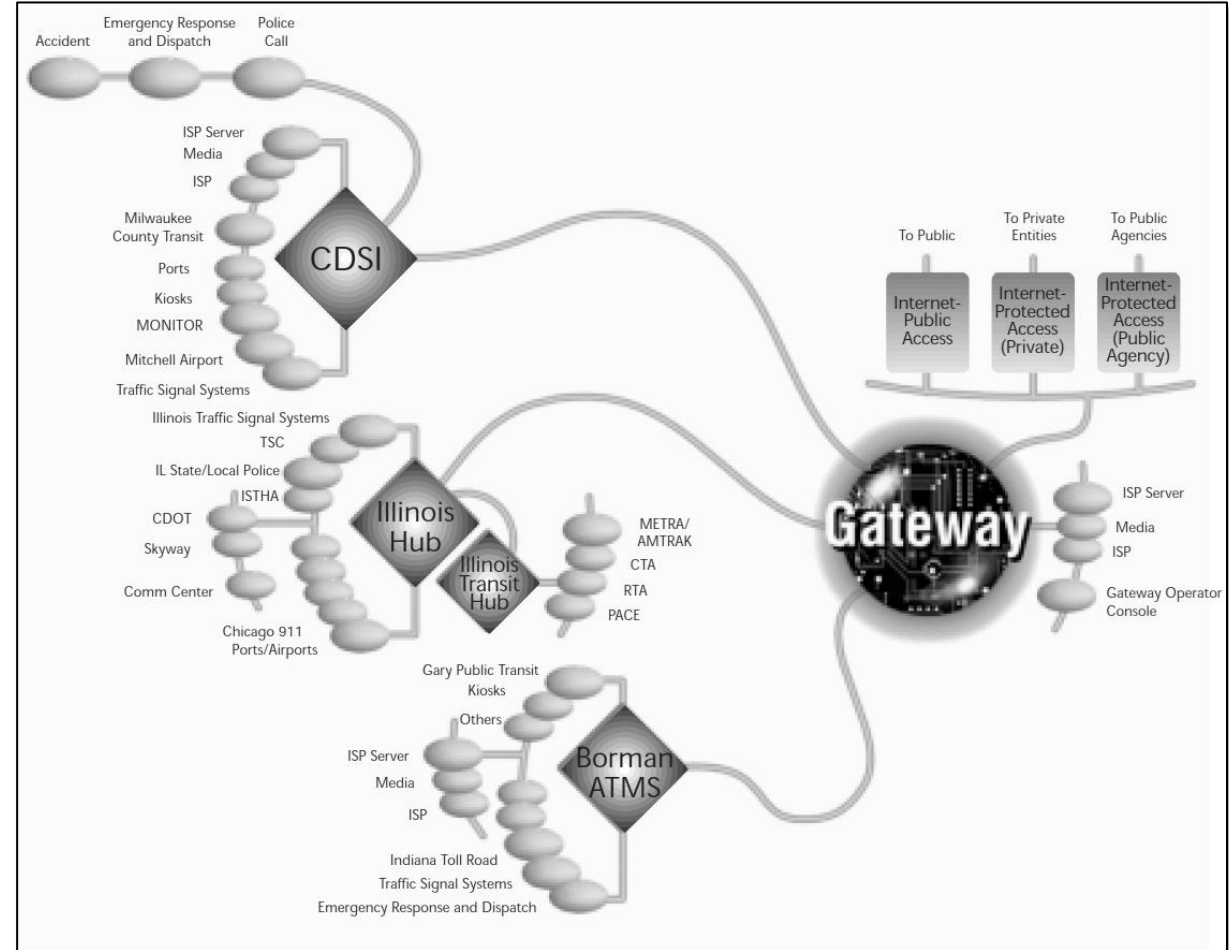
Northeastern Illinois ITS Architecture Update

Transportation Technology and Operations Coalition (TTOC)
Quarterly Meeting, November 2025

Matt Letourneau
Ming-Shiun Lee
Dan Nelson

Agenda

- 01 Need for an ITS architecture
- 02 Update process overview
- 03 Agency collaboration
- 04 Next steps

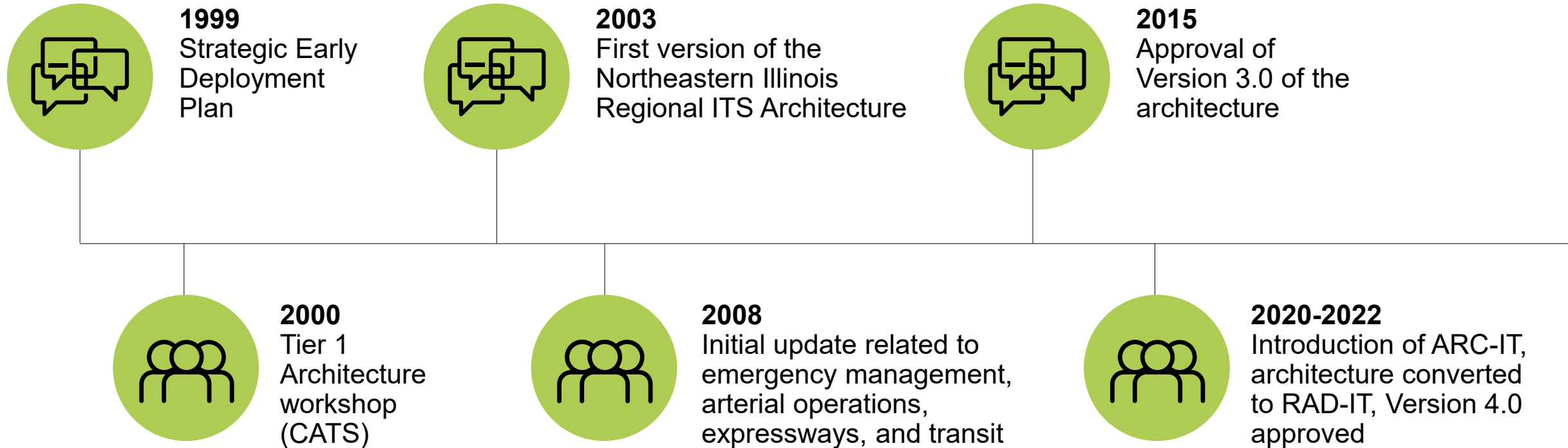


Defining the ITS Architecture

- Roadmap for transportation systems integration
- Reflects the goals of ON TO 2050
- Developed and updated through collaboration among regional transportation stakeholders
- Defines the stakeholders, elements, services, functions, interfaces, agreements, and projects that make up our ITS landscape
- Consists of a website, RAD-IT database, and supporting documents

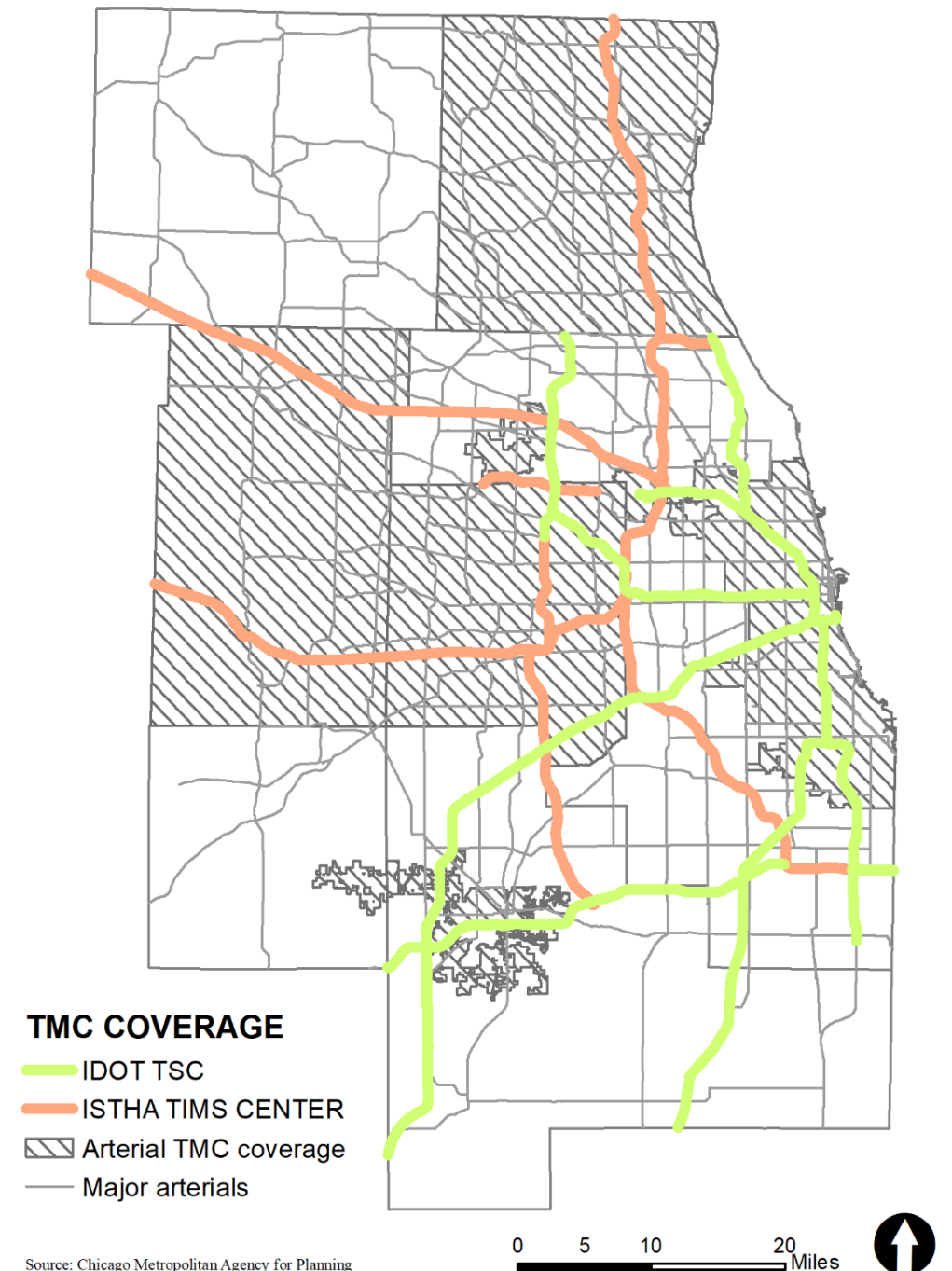


Evolution of the Regional Architecture



Why Do We Have an ITS Architecture?

- Supports upcoming MPO federal certification process
- Required to apply federal funds toward ITS projects
- Effective tool for collaborative planning transportation technology deployments
- Promotes integration, information sharing, operational coordination
- Provides visibility into the relationship between individual projects



Scope of this Update Cycle

1. Add outstanding projects to the architecture
2. Review and update architecture items
3. Update the architecture website
4. Revise the architecture executive summary
5. Provide guidelines for element interfaces



CMAP ITS Architecture v4.0

- Home
- Scope**
- Stakeholders
- Inventory
 - By Physical Object
 - By Stakeholder
- Services
- Roles and Resp
- Functions
- Interfaces
- Standards
- Agreements
- Projects

Architecture Scope

The scope of the Regional ITS Architecture can be described in terms of: 1) the size of the region and jurisdictions covered (geographic scope), 2) the planning or time horizon, and 3) the variety of transportation services that are covered. This scope is defined in the context of adjacent and overlapping Regional ITS Architectures.

Description

The Northeastern Illinois Regional ITS Architecture is a roadmap for transportation systems integration in the seven county NE Illinois region over the next 15 years. The systems included in the Architecture support the goals of the region's comprehensive plan, ON TO 2050. Specifically, items are included that support the Regional Mobility recommendations, which include 1) Invest Strategically in Transportation, 2) Increase Commitment to Public Transit and 3) Create an Efficient Freight Network. The Architecture also contains the building blocks needed to implement ON TO 2050 recommendations, including: congestion pricing, modernizing the existing highway and transit system, ITS components of major capital projects, bus rapid transit and transit signal priority, and many projects which support the freight industry.

The architecture has been developed through a cooperative effort by the region's transportation agencies, covering all modes and all roads in the region. The architecture represents a shared vision of how each agency's systems will work together in the future, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers in the region. The architecture is an important tool that is intended to be used by

- Planning agencies to better reflect integration opportunities and operational needs into the transportation planning process.
- Operating agencies to recognize and plan for transportation integration opportunities in the region.
- Other organizations and individuals that use the transportation system in the Northeastern Illinois region.

Time Frame 15 years

Geographic Scope

Seven-county Chicago Metropolitan Area: Cook, DuPage, Kane, Kendall, Lake, McHenry, Will

Service Scope

The architecture covers the broad spectrum of Intelligent Transportation Systems, including Traffic Management, Transit Management, Traveler Information, Maintenance and Construction, Emergency Management, Vehicle Safety, Commercial Vehicle Operations, and Archived Data Management over this time horizon.

[Send Email Comments](#) Phone Comments: Claire Bozic @ 312-386-8744 5/14/2020

Add Outstanding Projects to the Architecture

No.	Title of Change	Project Status
01	Truck Route Management	Proposed
04	Common Communication Platform	Proposed
05	Centralized Traffic Signal System (CTSS)	Proposed
06	Construction Information Data Portal	Proposed
07	Computer Aided Dispatch (CAD) Integration	Proposed
08	Interconnected Traffic Signal Systems	Existing
09	Community Alert System Expansion	Proposed
10	Smart Work Zone Management Systems	Proposed
11	Intermodal Facility Data Sharing	Proposed
12	Traffic Management Center (TMC)	Proposed
13	Smart Truck Corridors	Proposed
14	Commercial Vehicle Alerts	Proposed
15	Third Party Traffic Data	Proposed
16	Infrastructure Asset Management System	Proposed
17	Highway Rail Crossing Notification System	Proposed
18	Gateway System Link	Proposed
19	Weigh-in-motion (WIM) Stations	Proposed
20	Countywide Transportation Information Repository	Proposed


Implementation Plan

Northeastern Illinois Regional ITS Architecture Change Request Form

Stakeholder	Name: Will County DOT		
Proposing Change	Phone: (815) 727-8476		
	Email: highways@willcountyillinois.com		
	ATTF Sponsoring Agency: Will County DOT		
Date	November 30, 2021		
Description of Change	Title of Change: Will County ITS Implementation – Truck Route Management		
	System/Project Change ☒ New ☐ Deleted ☐ Modified	Change in (check all that apply): ☒ Project definition ☒ Stakeholder ☒ Project status ☐ Project priority ☐ National Architecture ☒ Regional needs ☐ Other, describe	Action (check all that apply): ☒ Add new element ☒ Add new information flows ☒ Add new service ☐ Delete element ☐ Delete information flows ☐ Modify element ☐ Modify information flows ☐ Other (describe)
Detailed Description: (what is to be added, deleted, or modified): Digitization of truck routes and restrictions, as well as work zones and other long-term disruptions, across the county and sharing of this data with commercial vehicle navigation system providers. This project shall meet the needs as shown below: 1) Better define, connect, and enforce truck routes 2) Improve navigation for truck drivers Stakeholders - Will County Division of Transportation - Will County Emergency Management Agency (EMA) - Illinois Department of Transportation (IDOT) - Municipalities/Townships - Federal Highway Administration (FHWA) - Mid-West Truckers Association - Commercial vehicle navigation system providers Inventory - Will County Communications Infrastructure* - Will County EMA* - Will County DOT Field Equipment* - Will County TMC* - Commercial vehicle navigation system Services - Freight-Specific Dynamic Travel Planning (CVO09) - ITS Data Warehouse (DM01)			

AECOM
A-3

Add Outstanding Projects to RAD-IT

FileHomeOutput

CopyCutPaste

Synchronize ElementsUpdate StatusAdd Physical ObjectsAdd FlowsFlow Aliases

Check FlowsArchitectureSpelling Manage Spelling Dictionary

ClipboardToolsReview

StartPlanningStakeholdersInventoryServicesUser NeedsR & RFunctionsInterfacesCommunicationsAgreements

Current Region: NE Illinois Regional ITS Architecture v4.0

Architectures

Regional

NE Illinois Regional ITS Architecture v4.0

Region to ProjectNewDelete

Project

CDOT Automated Speed Enforcement
CDOT Bus Rapid Transit System
CDOT Chicago Traffic Management Center TMC ATMS
CDOT Cicero Ave / Midway Smart Corridor
CDOT Crash Data Integration
CDOT Critical Bridge Infrastructure Surveillance
CDOT Data Pipeline - Communications Backbone
CDOT Divvy Bike Share
CDOT Dynamic Ridesharing and Shared Use Transportation
CDOT Interoperable Demonstration Milwaukee Avenue TSP
CDOT Irving Park Road Conversion to Adaptive Signal Control (ASC)
CDOT Lake Shore Drive and Columbus Drive Adaptive Signal Control (ASC)
CDOT Mobile Technologies to Measure Travel Times Using Probe Vehicles
CDOT Red-light Camera Enforcement Program
CDOT Smart Signal System
CDOT Traffic Advisory System
CDOT Transportation Data Archive
Chicago Camera Images for Traffic Surveillance
Chicago Data Sharing and Open Data Portal
Chicago Parking Information Projects
Chicago Signal Controller Upgrade

Project to RegionNewDelete

Related

NewDelete

Regional Architecture Attributes

Name

NE Illinois Regional ITS Architecture v4.0

Description

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Developer

Maintainer

CMAP

Version

Date/Time

4.0

4/6/2020 2:21:10 PM

Change Log

ApplyCancel

RAD-IT up-to-date

Review and Update Architecture Items



Northeastern Illinois Regional ITS Architecture (V4.0)
List of ITS Projects

October 15, 2025

This document includes a listing of the 146 individual ITS projects contained in Version 4.0 of the Northeastern Illinois Regional ITS Architecture. As a regional ITS stakeholder, your input is needed to identify updates to these projects. This includes changes in status, timeframe, or other project details. Please filter to your agency's projects in column A (be sure to include "multiple" for multi-agency projects that involve your agency) and add your comments in the highlighted cells (column F) to identify desired changes. To share more specific details about a project listed below, or to provide information about a new ITS project that is not shown in this list, please use the new online [Architecture Change Request Form](#).
When you have finished adding your comments, please save and send this file to Matt Letourneau at matt.letourneau@aecon.com. Thank you.

Stakeholder	Project	Status	Timeframe	Description	Stakeholder Update Comments
CDOT	CDOT Automated Speed Enforcement	Existing	Short	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). The cameras are also capable of capturing traffic volume and speed data, which can be accessed by CDOT. There are plans to expand CDOT access to system cameras to view live video streams.	
CDOT	CDOT Bus Rapid Transit System	Existing	Short	This project refers to the implementation of bus rapid transit and related systems. This project covers the road side of BRT development which includes changes in lane configurations, allowed turns, and transit signal priority (TSP), and other traffic signal changes. The TSP aspect consists of street side equipment including communications, signal upgrades, and agreements. Two projects have been completed which only dealt with the road side of BRT and implemented TSP: Ashland Avenue and Western Avenue. The transit side project elements, listed under the CTA BRT project include stations, station fare collection equipment, station passenger information, and unique BRT vehicles. Two projects have been completed which implemented the road side and transit side of BRT: Loop Link (East-West Downtown BRT) and Jeffrey Jump. The Chicago DOT received UWP funding to develop a Chicago Bus Rapid Transit Master Plan in FY 13.	
CDOT	CDOT Chicago Traffic Management Center TMC ATMS	Existing	Mid	The project supports the City of Chicago's Smart City Initiative and includes the planning, design, and deployment of an integrated system that ties numerous diverse systems and technologies together. Parsons worked with the Chicago Department of Transportation (CDOT) to meet the City's goal of collecting and processing data from multiple sources across departments to optimize transportation planning, design, management, and maintenance activities.	
CDOT	CDOT Cicero Ave. Midway Smart Corridor	Planned	Short	The advanced traffic management system is implemented and has deployed 19 signals, 7 CCTV's, 2 DM5's 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 delays and closures at highway rail intersections, and installation of additional dynamic message signs.	
CDOT	CDOT Crash Data Integration	Existing	Short	Implementation of electronic collection of crash reports on-site by Chicago Police Department using mobile data terminals. This is 100% complete and transmits xml formatted data to the Chicago Department of Transportation.	
CDOT	CDOT Critical Bridge Infrastructure Surveillance	Planned	Long	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.	
CDOT	CDOT Data Pipeline - Communications Backbone	Existing	Short	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.	
CDOT	CDOT Devvy Bike Share	Existing	Short	Bicycles and bicycle docking stations available to the public by daily payment or annual subscription. Wireless centralized tracking of docking station use is monitored and trucks are dispatched to balance bicycle supply between stations. The bicycles are equipped with GPS devices so their locations can be tracked. Wireless centralized payment system is also in place. The system is existing but is being expanded to locations throughout the city. The system is currently owned by the City of Chicago and is operated by the company Motivate, owned by Lyft, under a contract with the City of Chicago until 2028.	
CDOT	CDOT Dynamic Ridesharing and Shared Use Transportation	Planned	Short	Reflects current and planned use of car sharing applications in region and data sharing with Chicago open data portal. Also reflects E-Scooter pilot project in 2019 that will expand in 2020. Pilot tested the viability of scooters from multiple companies as a mobility option. Scooter vendor companies required to make trip data available to the City that is posted to the City's Open Data Portal.	
CDOT	CDOT Interoperable Demonstration	Existing	Short	Demonstration of inter operable transit signal priority system on Milwaukee Avenue between Jefferson Park and Golf/Milwaukee. This segment includes various traffic signals and serves both CTA and Pace buses. Transit signal priority system is installed and	



Northeastern Illinois Regional ITS Architecture Change Request Form

Please use this electronic form to request changes to the Northeastern Illinois Regional ITS Architecture (<https://its.cmap.illinois.gov/scope.html>). If you have questions about this form, please contact CMAP at ITS@cmap.illinois.gov. CMAP staff may contact you with any questions if any information you provide requires further clarification.

1. Full name *

Enter your answer

2. Phone number *

Enter your answer

3. Email address *

Enter your answer

4. Sponsoring agency *

Enter your answer

5. Date *

Please input date (M/d/yyyy)

6. Do you have a secondary contact for this request? *

Yes

No

Next Steps

- Gather stakeholder input
- Conduct targeted stakeholder interviews
- Incorporate projects into the architecture
- Update the website and executive summary
- Develop the architecture interface guidelines document



Chicago Metropolitan
Agency for Planning

Thank you.

Links:

- [ARC-IT website](#)
- [Northeastern Illinois Regional ITS Architecture](#)
- [ITS architecture change request form](#)

5.0 2026 meeting dates

February 5, 2026

May 7, 2026

August 6, 2026

November 5, 2025

6.0 Adjournment

February 5, 2026

Location: TBD



Chicago Metropolitan
Agency for Planning

Transportation Technology and Operations Coalition

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