Proposed Project Architecture Changes For Northeastern Illinois Regional ITS Architecture



June 5, 2009

#### **Original**

# ID 2 Chicago Traffic Management Center (TMC) (Status:Planned)

Description: The Chicago TMC is one of the largest and most significant ITS projects being undertaken by CDOT (jointly with City of Chicago Office of Emergency Management and Communications). CDOT currently has an operational "mini-TMC" with the Traffic Control room at 30 N. LaSalle. It will be expanded in 2005 and will serve as the TMC until the permanent location is established.

Timeframe: Phase II - 2005

Geographic Scope:

Service Scope: Covers traffic management, traveler information, emergency/incident management.

Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements: City of Chicago 911 CAD

City of Chicago Incident Center (CIC)

City of Chicago Joint Operation Center (JOC) City of Chicago OEMC Field Equipment City of Chicago Operations Center (OC)

City of Chicago TMC

### **Updated**

### ID 2 Chicago Traffic Management Center (TMC) (Status:Planned)

Description: The Chicago TMC 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 (Status:Existing) 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.

Phase III 2009/2010

Timeframe: Phase II - 2009 Geographic Scope:City of Chicago

Service Scope: Covers traffic management, traveler information, emergency/incident management.

Developer: City of Chicago Maintainer: C Bozic Revision Date: 2-Jun-2009

Associated Elements:

City of Chicago 911 CAD

City of Chicago Incident Center (CIC)

City of Chicago Joint Operation Center (JOC)

City of Chicago Maintenance CAD

City of Chicago OEMC Field Equipment

City of Chicago Operations Center (OC)

City of Chicago OVS

City of Chicago Permit System

City of Chicago TMC

#### Original

# ID 4 Cicero Ave Smart Corridor ATMS (Status:Planned)

Description: This project has been underway for some time with currently deployed systems including 19 signals, 7 CCTVs, 2 DMSs and system detectors. It also includes the development of a Midway Airport Satellite Traffic Management Center. Future enhancements relate to traffic adaptive control on the signals and possibly other roadside device enhancements.

Timeframe: Phase II - Mid

Geographic Scope: Corridor signals from I-55 to Marquette to be interconnected with a fiber backbone. Includes 7 CCTVs, 2 DMSs and system detectors. Ph I uses traffic responsive control. Links to Pulaski &

Central Smart Corridors and Cicero ATIS.

Service Scope: Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements: City of Chicago 911 CAD

City of Chicago DSS Bureau of Electricity Signal Maintenance

City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment

City of Chicago TMC

IDOT District 1 Bureau of Traffic - Arterial Operations

Illinois Gateway

RTA Multimodal Information Kiosks Satellite TMC Midway Airport

# **Updated**

### ID 4 Cicero Ave Smart Corridor (Status: Existing)

Description: This project creates an intelligent network of traffic management devices to operate traffic services on Cicero Avenue from I-55 to Midway Airport. The systems currently deployed under this project include 16 signals, 6 CCTVs, 2 DMSs and system detectors. Future enhancements include enhanced detection and surveillance, traffic responsive signal control, and other roadside device enhancements.

Timeframe: Phase II - Mid

Geographic Scope: Cicero Avenue from I-55 to Midway Airport

Service Scope: Traffic management, monitoring and control, and traveler information

Developer: City of Chicago Maintainer: C Bozic

Revision Date: 2-Jun-2009

Revision Date: 2-Jun-200

Associated Elements: City of Chicago 911 CAD

City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment

City of Chicago TMC

IDOT District 1 Bureau of Traffic - Arterial Operations

Illinois Gateway

#### Original

#### ID 5 Cicero Ave Smart Corridor ATIS (Status:Planned)

Description: This project provides upgrades to several traveler information systems along the smart corridor. Specifically the project will develop HAR upgrades to provide information on closures of highway rail intersections. Enhanced Traveler Information Kiosks, and Dynamic Message Signs.

Timeframe: Mid

Geographic Scope: HAR upgrade/RR notification, enhanced traveler information kiosks, Dynamic

Message Signs, a combination of 4 projects.

Service Scope: Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements:

City of Chicago DOT Traveler Information Kiosks

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment

City of Chicago TMC

#### **Updated**

#### ID 5 Cicero Ave Smart Corridor ATIS (Status:Planned)

Description: The center of the Cicero Ave Smart Corridor Project is the Advanced Traffic Management System (ATMS). The ATMS integrates the following components to provide comprehensive information systems to collect and disseminate traffic information in and around the corridor: 1) traffic sensor devices to report speed, volume, and occupancy 2) upgrade of the Midway Airport highway advisory radio 3) one new DMS on Cicero Avenue and two new DMS on I-55 4) railroad gate downtime from 6 railroad gates around Midway Airport, and 5) an enhanced traveler information kiosk at Midway Airport.

Timeframe: Mid

Geographic Scope: Cicero Avenue from I-55 to Midway Airport

Service Scope: Traffic management, monitoring and control, and traveler information

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 2-Jun-2009

#### Associated Elements:

City of Chicago 911 CAD

City of Chicago DOT Traveler Information Kiosks

City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment

City of Chicago TMC

IDOT District 1 Bureau of Traffic - Arterial Operations

Illinois Gateway

Rail Freight Operations

RTA Multimodal Information Kiosks

## Original

#### ID 6 CDOT Smart Corridors: Pulaski Road (Status: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 Scope: Pulaski Road, Western Ave., Archer/55th, Central Ave., Ashland, Michigan/Indiana,

87th St., 95<sup>th</sup> St., Sheridan/Broadway, Congress Parkway, Cicero (I-290 to Peterson)

Service Scope: Arterial traffic management utilizing fiber interconnected signals, CCTVs vehicle detector

stations and/or VMS. Future consideration for RWIS and environmental sensors.

Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements: City of Chicago 911 CAD

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment

City of Chicago TMC

IDOT District 1 Bureau of Traffic - Arterial Operations

### **Updated**

#### ID 6 Chicago Citywide Smart Corridors (Status:Planned)

Description: This project deploys sensors, signal control equipment, DMS and CCTV technologies on 300 miles of Strategic Route Arterials to detect and report traffic conditions to the Chicago TMC. This information provides for traffic monitoring, centralized signal operations, incident management, and traveler information. Signal timing plans would be dynamically modified to accommodate real-time traffic conditions. Traffic condition information will facilitate incident and emergency response.

Timeframe: Mid

Geographic Scope: City of Chicago (citywide)

Service Scope: Traffic management, monitoring and control, incident management, traveler information.

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 2-Jun-2009

#### Associated Elements:

City of Chicago 911 CAD

City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment

City of Chicago OEMC Field Equipmen

City of Chicago TMC

## Original

### ID 9 CDOT Red-light Camera Enforcement Program (Status:Existing)

Description: Approximately 5 percent (100-200) of traffic signals will be monitored by redlight running cameras with automated process to ticket violators.

Timeframe: Short Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 2-May-2007

Associated Elements: Dept of Driver Services Red Light Running Cameras

# **Updated**

### ID 9 CDOT Red-light Camera Enforcement Program (Status:Existing)

Description: Approximately 5% (133) of the city's signalized intersections now have Red Light running enforcement capability. The City of Chicago has (Status: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 Scope: Chicago citywide at high crash rate intersections

Service Scope: Monitoring and enforcement

Developer: City of Chicago Maintainer: C Bozic

Revision Date: 2-Jun-2009

Associated Elements:

City of Chicago OEMC Field Equipment
City of Chicago TMC
Dept of Driver Services
Red Light Running Cameras
Revenue Administration

# **Original**

# ID 11 City of Chicago Interconnects (Status:Existing)

Description: This project provides coordination of signals on City of Chicago arterials. The project may include signal timing across municipal and county boundaries.

Timeframe: Short

Geographic Scope: May expand regional communications network.

Service Scope: Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment
City of Chicago TMC
Cook County TMC
IDOT District 1 Bureau of Traffic - Arterial Operations
Municipal TMCs

#### **Updated**

### ID 11 City of Chicago Traffic Signal Interconnects (Status: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 Scope: Citywide, may expand as part of regional communications network.

Service Scope: Traffic Monitoring and Control

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 2-Jun-2009

Associated Elements:

Arterial Performance Monitoring System City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment

City of Chicago TMC

IDOT District 1 Bureau of Traffic - Arterial Operations

# **NEW Project**

# ID 12 Chicago Traffic Signals Wireless Interconnect (Status: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 Scope:16 arterial corridors in the City of Chicago

Service Scope: Traffic monitoring and control

Developer: City of Chicago Maintainer: C Bozic

Revision Date: 3-Jun-2009

Associated Elements:

City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment
City of Chicago TMC

# Original

# ID 13 Chicago Skyway Travel Monitoring and Integration with IDOT Gateway (Status: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 Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:
City of Chicago DOT Transportation Website
City of Chicago Incident Center (CIC)
City of Chicago Skyway Field Equipment
City of Chicago Skyway Operations
City of Chicago TMC
Gateway Central

City of Chicago TMC Gateway Central Gateway Website Illinois Gateway

# **Updated**

# ID 13 Chicago Skyway Travel Monitoring and Integration with IDOT Gateway (Status:Planned)

Description: The Skyway Concession Company 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.

Timeframe: Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:

City of Chicago DOT Transportation Website
City of Chicago Incident Center (CIC)
City of Chicago Skyway Field Equipment
City of Chicago Skyway Operations
City of Chicago TMC
Gateway Central
Gateway Website
Illinois Gateway

#### **NEW**

#### ID 14 Chicago Critical Bridge Infrastructure (Status: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 assiste in pre-treatments with chemicals to prevent black ice buildup.

Timeframe: short

Geographic Scope: City of Chicago Service Scope: infrastructure surveillance

Developer: City of Chicago OEMC

Maintainer: C Bozic

Revision Date: 3-Jun-2009

#### Associated Elements:

City of Chicago DSS Bureau of Street Operations Dispatch
City of Chicago OEMC Field Equipment
City of Chicago TMC
MCO Vehicles

## Original

### ID 15 Chicago Truck Route Advisory System (Status: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 Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements: City of Chicago DOT Transportation Website City of Chicago Incident Center (CIC) City of Chicago TMC Mayors Office of Special Events User Personal Computing Devices

#### **Updated**

### ID 15 Chicago Truck Route Advisory System (Status: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 Scope:citywide

Service Scope: traveler information

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 2-Jun-2009

#### Associated Elements:

Arterial Performance Monitoring System
City of Chicago DOT Transportation Website
City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment
City of Chicago TMC
Mayor Office of Special Exerts

Mayors Office of Special Events User Personal Computing Devices

#### **NEW**

# 16 Lake Shore Drive and 18th/31st Street Ramp Congestion Relief Project (Status: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 Scope:Two intersections, Lake Shore Drive at 18th and 31st Streets

Service Scope: Signal coordination

Developer: Chicago Department of Transportation

Maintainer: C Bozic Revision Date: 3-Jun-2009

Associated Elements:

Arterial Performance Monitoring System City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment City of Chicago TMC

#### **NEW**

# ID 17 Chicago Information Integration and Improvement Project (Status:Existing)

Description: This project creates a comprehesive 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 Scope:citywide Service Scope: data provision Developer: City of Chicago OEMC

Maintainer: C Bozic Revision Date: 3-Jun-2009

Associated Elements:

City of Chicago DOT Transportation Website

City of Chicago TMC Illinois Gateway

**User Personal Computing Devices** 

#### **Original**

### ID 18 Parking Information Projects (Status:Planned)

Description: This project will provide real-time parking and traveler information for Navy-pier and Grant

Park/ Millennium Park.

Timeframe: Mid

Geographic Scope: Around Navy Pier and Grant Park/Millenium Park

Service Scope: Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements:
Chicago Park District Parking Management System
City of Chicago DOT Transportation Website
Illinois Gateway
Illinois Transit Hub
MPEA Parking Management
Private ISPs - Travel Information Services

#### **Updated**

#### ID 18 Parking Management System (Status:Planned)

Description: This project provides real-time parking and traveler information for on-street meters and offstreet 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

Chicago central area congestions zones and special facilities such as Navy Pier and GRant Park/

Millinnium Park Geographic Scope:

Service Scope: Traveler information, congestion mitigation

Developer: Chicago Department of Transportation

Maintainer: C Bozic Revision Date: 2-Jun-2009

Associated Elements:

Chicago Park District Parking Management System City of Chicago DOT Transportation Website City of Chicago TMC Illinois Gateway Illinois Transit Hub MPEA Parking Management Private ISPs - Travel Information Services

# **Original**

# ID 19 Cook County Traffic Management Center (Status:Planned)

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 Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 24-Apr-2007

Associated Elements:

Cook County Highway Department Field Equipment

Cook County TMC

#### **NEW**

### ID 20 City of Chicago Snow Command (Status: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 would be used to monitor and route city assets for roadway safety, including snow removal.

Timeframe: mid

Geographic Scope:300 miles of Strategic Regional Arterial roadways

Service Scope: monitoring and maintanance

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 3-Jun-2009

Associated Elements:

Chicago Transit Authority Bus Vehicles
Chicago Transit Authority Control Center
City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)
City of Chicago DSS Bureau of Street Operations Dispatch
City of Chicago OEMC Field Equipment
MCO Vehicles
Weather Services

#### **NEW**

#### ID 21 Chicago Citywide BRT/TSP (Status:Planned)

Description: Bus Rapid Transit (BRT) services to be implemented on four routes initially with expansion citywide expected to follow. The project includes BRT functionality and transit signal priority. The project involves con of one traffic or parking lane to a dedicated bus lane during rush hours, off-board fare payment, multiple entry buses, transit information, upgraded stations, signal priority for BRT buses and other features.

Timeframe: mid

Geographic Scope:citywide

Service Scope: transit services and traffic management

Developer: Chicago Transit Authority

Maintainer: C Bozic

Revision Date: 3-Jun-2009

#### Associated Elements:

Chicago Transit Authority Bus Vehicles
Chicago Transit Authority Control Center
Chicago Transit Authority Farecard Machines
Chicago Transit Authority Smartcard
City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)
RTA Multimodal Information Kiosks
User Personal Computing Devices

#### **NEW**

## ID 22 Chicago Signal Controller Upgrade (Status:Planned)

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 fittled with LEDs.

Timeframe: short

Geographic Scope:citywide

Service Scope: traffic control and management

Developer: City of Chicago Maintainer: C Bozic

Revision Date: 3-Jun-2009

#### Associated Elements:

City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)

City of Chicago OEMC Field Equipment

City of Chicago TMC

#### **NEW**

# ID 23 City of Chicago Traffic Surveillance (Status:Planned)

Description: This project monitors traffic on strategic arterials. Dedicated traffic cameras and video from Chicago Operation Virtual Shield (OVS) video network will be made available for Traffic Monitoring.

Timeframe: mid

Geographic Scope:citywide

Service Scope: traffic and incident monitoring and managment

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 3-Jun-2009

Associated Elements:

City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment

City of Chicago TMC

#### **NEW**

# ID 24 City of Chicago Portable Variable Message Sign (VMS) Communication Upgrade (Status:Planned)

Description: This project allows remote management and operation of the portable VMS using cellular digital dial-up telephone capabilities to communicate with the VMS. Placement and remote management of portable message signs facilitates managing traffic for planned and unplanned events.

Timeframe: mid

Geographic Scope:citywide

Service Scope: traffic management and control

Developer: City of Chicago

Maintainer: C Bozic

Revision Date: 3-Jun-2009

Associated Elements:
City of Chicago 911 CAD
City of Chicago DSS Bureau of Electricity Signal Maintenance (DSS/BOE)
City of Chicago OEMC Field Equipment
City of Chicago TMC

# Original ID 25 DuPage Emergency Management and Signal Preemption (Status:Planned)

Description: This project will plan, implement, operate, maintain and monitor coordinated signal preemption system across county for state, county and municipal systems. It may consider an interface with Glendale Heights EOC.

Timeframe: Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:
DuPage County Field Equipment
DuPage County TMC
IDOT District 1 Bureau of Traffic - Arterial Operations
IDOT District 1 Bureau of Traffic - Arterial Operations Field Equipment
Municipal Public Safety Vehicles
Municipal TMCs
Municipal/Township Field Equipment

# Original

# ID 26 DuPage County Paratransit Coordination (Status:Planned)

Description: This project will look at implementing centralized coordination of local paratransit services as well as provide coordination with public safety and other transit organizations.

Timeframe: Short Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:
DuPage County Sheriff Communications Center
Metra Consolidated Control Facility
Municipal Public Safety Dispatch
Pace Control Center (IBS)
Regional Paratransit Dispatch

# Original

# ID 28 Kane County Traffic Management Center (Status:Planned)

Description: This project will implement basic traffic management capabilities for Kane County.

Timeframe: Short-Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: Kane County 911 Center Kane County Field Equipment Kane County Maintenance Operations Kane County TMC

#### **Updated**

# ID 28 Kane County Traffic Management Center (Status:Planned)

Description: This project will implement basic traffic management capabilities for Kane County. The feasibility study and conceptual design is completed.

Timeframe: Short-Mid

Geographic Scope:Kane County

Service Scope: Developer: MG Maintainer: C Bozic

Revision Date: 4-Feb-2009

Associated Elements:
Kane County 911 Center
Kane County Field Equipment
Kane County Maintenance Operations

Kane County TMC

#### **Original**

#### ID 31 Lake County PASSAGE (Status:Planned)

Description: This project will continue the system implementation of the Lake County TMC. The initial phase will be 140+ signals. Two more phases are (Status:Planned) with automated di routes, a link to County Sheriff CAD, a link to the Gateway, and links to municipal TMCs, municipal public safety and County EOC.

Timeframe: Short-Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:

IDOT District 1 Bureau of Traffic - Arterial Operations

ISTHA TMC (TIMS)

Lake County Communications Center

Lake County EOC

Lake County Field Equipment

Lake County Highway Maintenance Operations

Lake County PASSAGE TMC Lake County PASSAGE Website Municipal Public Safety Dispatch

#### **Updated**

#### ID 31 Lake County PASSAGE (Status:Existing)

Description: This project will continue the system implementation of the Lake County TMC. Phase I (complete) The initial phase interconnected 140+ signals. to a central TMC, connected 40 PTZ cameras, installed 3 HAR towers, installed a link to the northeastern Illinois Gateway and al ink to the Lake County Sheriff's CAD.

Phase II (underway) Will incorporate an additional 200 traffic signals, install 75 PTZ cameras, add 2 additional HAR towers and create a link to the Vernon Hills police department dispatch center.

Phase III ( (Status:Planned)) This phase will create a wireless network for many of the isolated traffic signals within the county as well as incorporate an additional 4 police department dispatch centers.

Timeframe: Short-Mid

Geographic Scope:Lake County

Service Scope:

Developer: JP Nelson Lake County DOT

Maintainer: C. Bozic

Revision Date: 4-Feb-2009

Associated Elements:

IDOT District 1 Bureau of Traffic - Arterial Operations

ISTHA TMC (TIMS)

Lake County Communications Center

Lake County EOC

Lake County Field Equipment

Lake County Highway Maintenance Operations

Lake County PASSAGE TMC Lake County PASSAGE Website Municipal Public Safety Dispatch

# **Original**

## ID 37 Will County Traffic Management Center (Status: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.

Timeframe: Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: Will County Field Equipment Will County TMC

#### **Updated**

### ID 37 Will County Traffic Management Center (Status:Planned)

Description: This project involves the development of traffic management capabilities for the Will County. One consideration for this TMC is the collocation of the Will County traffic management and Will County emergency operations centers. The feasibility study for this project has been completed.

Timeframe: long

Geographic Scope:Will County

Service Scope: Developer: MG Maintainer: C Bozic

Revision Date: 4-Feb-2009

Associated Elements: Will County EOC Will County Field Equipment Will County TMC

#### **Original**

#### ID 41 Integration of Centers (Status:Planned)

Description: This project will connect regional police districts (II State Police and Chicago) to Gateway Traveler Information System in order to share incident and other information.

Timeframe: Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: City of Chicago 911 CAD Illinois Gateway Illinois State Police Dispatch (Districts 2, 5 and Chicago) Illinois State Police District 15 Operations Desk

#### **Updated**

#### ID 41 Integration of Centers (Status:Planned)

Description: This project will connect and integrate the Chicago TMC with regional transportation management, emergency management, and operations centers including the Gateway Traveler Information System in order to share traffic operations, incident, and other information.

Timeframe: Mid

Geographic Scope: Chicago and northeastern Illinois

Real-time traffic, transit, incident, and ievent information including congestion, delays, closures, detours, crashes, and construction.

Service Scope:

Developer: City of Chicago OEMC

Maintainer: C Bozic

Revision Date: 2-Jun-2009

Associated Elements:
City of Chicago 911 CAD
City of Chicago TMC
Illinois Gateway
Illinois State Police Dispatch (Districts 2, 5 and Chicago)
Illinois State Police District 15 Operations Desk

# Original ID 42 Interagency Operations and Signal Coordination (Status:Planned)

Description: This project will consider the coordination of signals on Strategic Regional Arterials throughout NE Illinois. This includes coordination from IDOT District 1 Bureau of Traffic Signal Unit to other traffic management elements in the architecture.

Timeframe: Mid-Long

Geographic Scope: Includes signal timing across municipal and county boundaries. Also includes

coordination among counties and municipalities without IDOT.

Service Scope: May expand regional communications network, and may involve IDOT coordination with

local TMCs Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:
City of Chicago Incident Center (CIC)
City of Chicago TMC
Cook County TMC
DuPage County TMC
IDOT District 1 Bureau of Traffic - Arterial Operations
Indiana DOT Arterial TMC
Kane County TMC
Lake County PASSAGE TMC
McHenry County TMC
Municipal TMCs
Will County TMC

# **Original**

# ID 46 Surveillance of Critical Bridge Infrastructure (Status:Planned)

Description: Installation of lighting, fencing and CCTV on 16 bridges in northeast Illinois.

Timeframe: Short Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 2-May-2007

Associated Elements: IDOT Bureau of Bridges and Structures Field Equipment IDOT District 1 Maintenance Management

# Original ID 48 CCTV Surveillance Sharing (Status: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 Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:

IDOT District 1 Bureau of Traffic - Arterial Operations

IDOT District 1 ComCenter

IDOT District 1 Traffic Systems Center (TSC)

# Original

# ID 49 IDOT CCTV Systems, Expressway (Status:Planned)

Description: This project involves augmenting the CCTV systems IDOT has deployed along the expressways.

Timeframe: Long Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: IDOT District 1 ComCenter

IDOT District 1 ComCenter Field Equipment IDOT District 1 Traffic Systems Center (TSC)

IDOT District 1 Traffic Systems Center Field Equipment

#### **Original**

#### ID 50 Integrated Expressway/Arterial Corridors (Status: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 Scope: Pilot project on I-290/Eisenhower Expressway:

Service Scope: Expressway management integrated with ramp terminal signal management, and

possibly (often parallel) arterial incident management.

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:

Arterial Performance Monitoring System
City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment
City of Chicago TMC
IDOT District 1 Traffic Systems Center (TSC)
IDOT District 1 Traffic Systems Center Field Equipment
Illinois Gateway

#### **Updated**

## ID 50 Integrated Expressway/Arterial Corridors (Status:Planned)

Description: This project coordinates operations of the regional expressway and arterial systems. The project enables active management of expressway/arterial corridors in a cooperative manner based on real-time traffic conditions on the respective facilities and segments. The project may require upgrade of detection and surveillance on the integrated corridors. Control strategies could include ramp meters, dynamic message signs, lane control, variable speed limits, signal timing and coordination, highway advisory radio, and traffic signals. The project iwll install ramp queue detectors, both for on-ramps and off-ramps. Ramp terminal signal control would be modified to either hold entry on to I-290 (on-ramp congestion) or clear the off-ramp (spillback onto I-290). Future projects will include Halsted Street exit on I-57 and Cicero Avenue exit on I-55. The implementation might link City signals with the IDOT Traffic Systems Center and/or to ramp meters locally.

Timeframe: Mid

Geographic Scope:Pilot project on I-290/Eisenhower Expressway:

Service Scope: Traffic operations, monitoring and control

Developer: City of Chicago Maintainer: C Bozic Revision Date: 2-Jun-2009

Associated Elements:

Arterial Performance Monitoring System
City of Chicago Incident Center (CIC)
City of Chicago OEMC Field Equipment
City of Chicago TMC
IDOT District 1 Traffic Systems Center (TSC)
IDOT District 1 Traffic Systems Center Field Equipment
Illinois Gateway

# Original

# ID 53 Regionwide Emergency Traffic Operations Systems (ETOS) Upgrade (Status:Planned)

Description: The project will be the follow-on to a pilot project that involved 6 ETP equipped vehicles (5 maintenance vehicles & 1 command vehicle) which has been recently completed. Purpose of the initial project was to get incident info to the Gateway. The follow-on project will likely involve both AVL and simplified MDT (keypad) to input basic incident info at the vehicle and send it to the Com Center and ETP dispatch on the private radio network.

Timeframe: Short Geographic Scope:

Service Scope: Advanced Traveler Information System

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: IDOT District 1 ComCenter IDOT Emergency Traffic Patrol (ETP) IDOT Emergency Traffic Patrol Vehicles

## **Original**

#### ID 56 Statewide 511 Service (Status:Planned)

Description: This project provides implementation of a statewide integrated traveler information system using a common three digit number 511. The project would include RTA and Gateway links.

Timeframe: Short Geographic Scope:

Service Scope: Advanced Traveler Information System

Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements: Gateway Central Illinois 511 System Illinois Gateway Illinois Transit Hub

## **Updated**

#### ID 56 Statewide 511 Service (Status:Potential)

Description: This project provides implementation of a statewide integrated traveler information system using a common three digit number 511. The project would include RTA and Gateway links.

Timeframe: Long Geographic Scope:

Service Scope: Advanced Traveler Information System

Developer: MG Maintainer: C Bozic

Revision Date: 4-Feb-2009

Associated Elements: Gateway Central Illinois 511 System Illinois Gateway Illinois Transit Hub

# Original

# ID 59 Accident Database and Reporting System (Status: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 Scope:

Service Scope: Emergency Mngmnt

Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:

Illinois Local Accident Reporting System

# Original

# ID 60 ITS Applications for WorkZones (Status: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: Mid Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 4-May-2007

#### Associated Elements:

IDOT District 1 Bureau of Construction

IDOT District 1 Bureau of Traffic - Arterial Operations Field Equipment

IDOT District 1 Bureau of Traffic - Expressway Operations Unit

IDOT District 1 ComCenter Field Equipment

IDOT District 1 Maintenance Management

IDOT District 1 Traffic Systems Center Field Equipment

**IDOT Maintenance Vehicles** 

#### New

## ID 103 Illinois Tollway Smart Work Zones (Status:Existing)

Description: This project will involve the use of mobile technology to monitor the area around construction zones for improved safety and to provide information to the traveling public.

Timeframe: Short

Geographic Scope:Regional, mobile

Service Scope: Developer: Benda Maintainer: C Bozic

Revision Date: 4-Feb-2009

Associated Elements:

ISTHA Computer Aided Dispatch Center ISTHA Maintenance and Construction

ISTHA Maintenance Vehicle

ISTHA TMC (TIMS)

ISTHA TMC Field Équipment

## Original

# ID 62 Mobile Technologies to Measure Travel Times Using Probe Vehicles (Status:Planned)

Description: Combined initiative of IDOT, City of Chicago, ISTHA and RTA. Would involve using cell phone GPS technologies to measure real-time travel conditions on roadway network

Timeframe:

Geographic Scope: Service Scope: Developer: Maintainer:

Revision Date: 4-May-2007

#### Revised

# ID 62 Chicago Arterial Performance and Monitoring System (APMS) (Status:Planned)

Description: The Chicago Arterial Performance and Monitoring System (APMS) will receive input from both stationary and mobile assets to estimate traffic congestion on 300 miles of strategic arterial routes. The congestion data will be displayed on a color-coded web-accessible map to indicate traffic conditions relative to predefined norms. CTA buses in combination with stationary in-ground sensors and toll-tag readers are being considered as source data components to implement this strategy. The traffic condition information will be used for operations decisions such as signal timing/coordination and for traveler information.

Timeframe: mid

Geographic Scope:citywide

Service Scope: Traffic monitoring, traveler information, operations

Developer: City of Chicago Maintainer: C Bozic

Revision Date: 2-Jun-2009

#### Associated Elements:

Arterial Performance Monitoring System Chicago Transit Authority Bus Vehicles Chicago Transit Authority Control Center City of Chicago DOT Transportation Website City of Chicago OEMC Field Equipment Illinois Gateway

# Original ID 64 Railroad Grade Crossing Delay - Traveler Information System (Status:Planned)

Description: This project would develop a Traveler Information System to provide travelers with information regarding delays due to trains.

Timeframe: Short Geographic Scope:

Service Scope: Advanced Traveler Information System

Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:
City of Chicago Incident Center (CIC)
City of Chicago TMC
Gateway Central
Gateway Website
IDOT District 1 Bureau of Traffic - Arterial Operations
Illinois Gateway
Illinois Transit Hub
Lake County PASSAGE TMC
Rail Freight Operations

# **Original**

# ID 66 Traveler Information Archive (Status:Planned)

Description: This project will develop an electronic archive for the travel information collected by GCM corridor.

Timeframe: Mid Geographic Scope:

Service Scope: Data Management

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: Gateway Central GCM Data Archive

# **Project deleted**

# Original

# ID 69 ISTHA TIMS Enhancement (Status: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 Scope:

Service Scope: Maintenance and Construction Mngmnt

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: ISTHA Maintenance and Construction ISTHA TMC (TIMS)

# **Original**

# ID 72 ISTHA Systemwide Open Road Tolling (ORT) (Status:Planned)

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).

Timeframe: Short Geographic Scope:

Service Scope: Traffic Mngmnt

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: ISTHA IPASS Business Center ISTHA I-Pass Toll Plazas ISTHA TMC (TIMS)

#### Revised

# ID 72 ISTHA Systemwide Open Road Tolling (ORT) (Status: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).

Timeframe: Short Geographic Scope:

Service Scope: Traffic Mngmnt

Developer: MG Maintainer: Bozic

Revision Date: 9-Jan-2009

Associated Elements: ISTHA IPASS Business Center ISTHA I-Pass Toll Plazas ISTHA TMC (TIMS)

# Original

#### ID 75 Transit Hub:APTS (Status: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 Automatic Fare Collection System—This effort involves planning, design, and deployment of a regional transit fare collection system. The latter two efforts represent uses of the Transit Hub to share information between transit centers in the region.

Timeframe:

Geographic Scope: Service Scope: Developer: MG Maintainer:

Revision Date: 26-Apr-2007

Associated Elements:

Chicago Airports

Chicago Transit Authority BusInfo Signs

Chicago Transit Authority Active Transit Station Signs

Chicago Transit Authority ATSS System Chicago Transit Authority BusInfo System Chicago Transit Authority Control Center

Chicago Transit Authority Parking Management Guidance System

Illinois 511 System Illinois Gateway

Independent School District Dispatch

InfoTrans Signs

Media

Metra Consolidated Control Facility

Metra GPS Center (TIMS)

Metra Parking Management Guidance System Metra Passenger Information Display System

Metra Public Address System

Metra Suburban Passenger Information Display Signs Municipal Parking Management Guidance System

Municipal Transit Operations

Pace BusInfo Signs

Pace BusInfo System

Pace Control Center (IBS)

Private Bus Dispatch

Private ISPs - Travel Information Services

Private Taxi Dispatch

Public/Non-Profit Paratransit Services

Regional Paratransit Dispatch

Regional Ridesharing and Vanpooling

Regional Transportation Authority Travel Information Center (TIC)

RTA Multimodal Information Kiosks

RTA Multimodal Trip Planner

**User Personal Computing Devices** 

# **Original**

# ID 77 Illinois Transit Hub (Status:Existing)

Description: This project entry covers the transit traveler information aspects of the 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:

Geographic Scope:

Service Scope: Data Management and Transit Mngmnt

Developer: MG Maintainer:

Revision Date: 26-Apr-2007

Associated Elements:
Chicago Transit Authority Control Center
Illinois Gateway
Illinois Transit Hub
Illinois Transit Hub Website
Metra Consolidated Control Facility
Metra GPS Center (TIMS)
Pace Control Center (IBS)
Regional Transportation Authority Travel Information Center (TIC)

#### **Original**

# ID 80 Automatic Train Supervision (ATS) System (Status:Planned)

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.

Timeframe: Short-Mid Geographic Scope:

Service Scope: Transit Mngmnt

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:

Chicago Transit Authority Control Center

Chicago Transit Authority Rail Signaling Equipment Chicago Transit Authority Rapid Transit Vehicles

# **Original**

# ID 81 Train Passenger Information System (Status:Planned)

Description: This project provides LED display of train arrivals at all stations on a countdown clock.

Timeframe: Long Geographic Scope:

Service Scope: Transit Mngmnt

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements:

Chicago Transit Authority Control Center

# Original

# ID 94 Pace Intelligent Bus System (Status:Planned)

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 Scope:

Service Scope: Transit Mngmnt

Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements: Illinois Transit Hub Pace Control Center (IBS) Pace Transit Bus Vehicles

# Original ID 97 Pace Transit Operations Decision Support System (Status:Planned)

Description: This project will create a system that will quickly develop new bus routes when an incident impacts an (Status:Existing) route.

Timeframe: Mid Geographic Scope:

Service Scope: Transit Management

Developer: MG Maintainer:

Revision Date: 25-Apr-2007

Associated Elements: Pace Control Center (IBS) Pace Transit Bus Vehicles

# Original ID100 Regionwide Transit Signal Priority Deployment (Status:Planned)

Description: This project will provide a system that will give priority to Pace buses at traffic signals in the region.

Timeframe: Long Geographic Scope:

Service Scope: Transit Management

Developer: MG Maintainer:

Revision Date: 1-May-2007

Associated Elements:

City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment

City of Chicago TMC

Cook County Highway Department Field Equipment

Cook County TMC

DuPage County Field Equipment

**DuPage County TMC** 

IDOT District 1 Bureau of Traffic - Arterial Operations

IDOT District 1 Bureau of Traffic - Arterial Operations Field Equipment

Kane County Field Equipment

Kane County TMC

Lake County Field Equipment

Lake County PASSAGE TMC

McHenry County Field Equipment

McHenry County TMC

Pace Control Center (IBS)

Pace Transit Bus Vehicles

Will County Field Equipment

Will County TMC

#### Original

#### Illinois Gateway (Status: Existing)

Description: GCM Corridor Architecture - Illinois Gateway and NE Illinois

Timeframe:

Geographic Scope:

Service Scope: Traffic Management, Traveler Information

Developer: Maintainer:

Revision Date: 6-Sep-2007

Associated Elements: \*999 Cellular Express Line

Academic/Research Organizations Data Warehouse

AMTRAK Rail Chicago Airports

Chicago Transit Authority Active Transit Station Signs

Chicago Transit Authority Bus Vehicles Chicago Transit Authority Control Center Chicago Transit Authority Parking Management

Guidance System City of Chicago 911 CAD

City of Chicago DOT Transportation Website City of Chicago Incident Center (CIC)

City of Chicago OEMC Field Equipment City of Chicago Skyway Field Equipment

City of Chicago Skyway Operations

City of Chicago TMC

CMAP Northeastern Illinois Regional Data Archive

Commercial Vehicles

Cook County Highway Department Field Equipment Cook County Highway Department Maintenance Bureau

Operations
Cook County TMC

CVO Crash Reporting (MCSAP) CVO Inspection Reporting (ASPEN)

**DuPage County EOC** 

DuPage County Field Equipment DuPage County Maintenance Operations

DuPage County TMC Gateway Central Gateway Website GCM Data Archive

Hazmat Management and Cleanup

IDOT Central Bureau of Operations Field Equipment

**IDOT CVO Inspection Facility** 

IDOT CVO Permitting - Oversize/Overweight IDOT District 1 Bureau of Construction

IDOT District 1 Bureau of Traffic - Arterial Operations IDOT District 1 Bureau of Traffic - Arterial Operations

Field Equipment

IDOT District 1 Bureau of Traffic - Expressway

**Operations Unit** 

IDOT District 1 ComCenter

IDOT District 1 ComCenter Field Equipment IDOT District 1 Maintenance Management

IDOT District 1 Traffic Systems Center (TSC)

IDOT District 1 Traffic Systems Center Field Equipment

ISTHA Computer Aided Dispatch Center

ISTHA IPASS Business Center

ISTHA I-Pass Toll Plazas

ISTHA Maintenance and Construction

ISTHA TIMS Kiosks ISTHA TMC (TIMS)

ISTHA TMC Field Equipment

Kane County EOC

Kane County Field Equipment
Kane County Maintenance Operations

Kane County TMC

Lake County Field Equipment

Lake County Highway Maintenance Operations

Lake County PASSAGE TMC Mayors Office of Special Events

McHenry County EOC

McHenry County Field Equipment
McHenry County Maintenance Operations

McHenry County TMC

Media

Metra Consolidated Control Facility

Metra Parking Management Guidance System Metra Passenger Information Display System

Metra Trains Municipal EMCs

Municipal Public Safety Dispatch

Municipal TMCs

Municipal Transit Operations OHare Air Cargo Terminal Pace Control Center (IBS) Pace Transit Bus Vehicles

Port of Chicago Intermodal Facilities

Private Bus Dispatch

Private ISPs - Travel Information Services

Private Parking Lots

Private Sector Maintenance Contractor Operations

Private Taxi Dispatch

Private Tow and Recovery Operations Public/Non-Profit Paratransit Services

Rail Freight Operations Regional Hospitals

Regional Paratransit Dispatch

Regional Ridesharing and Vanpooling

Regional Transportation Authority Travel Information

Center (TIC)

RTA Multimodal Information Kiosks

Satellite TMC OHare Airport

#### Proposed Changes to Northeastern Illinois ITS Architecture Project Architectures

June 5, 2009

IDOT Emergency Traffic Patrol (ETP)

IDOT Rest Area Kiosks IDOT Weigh Stations

Illinois Environmental Protection Agency (EPA) Illinois

Gateway

Illinois Single State Registration System

Illinois State Police Dispatch (Districts 2, 5 and Chicago)

Illinois State Police District 15 Operations Desk

Illinois Transit Hub Indiana Gateway Trucking Distribution Centers
User Personal Computing Devices

Vehicles

Weather Services
Will County EOC

Will County Field Equipment

Will County Maintenance Operations
Will County Sheriff Communications Center

Will County TMC

#### Revised

ID 101 Illinois Gateway (Status:Existing)

(same information, added ID number to title)

#### **Original**

# Northeastern Illinois Regional Data Archive and Management System (Status:Potential)

Description: 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.

Timeframe: Mid

Geographic Scope: Northeastern Illinois Service Scope: Archive Data Management

Developer: LS Maintainer:

Revision Date: 6-Sep-2007

Associated Elements: Academic/Research Organizations Data Warehouse Arterial Performance Monitoring System Chicago Transit Authority Data Archive City of Chicago TMC Gateway Central IDOT Central Bureau of Operations Field Equipment IDOT District 1 Traffic Systems Center (TSC) ISTHA TMC (TIMS)
Lake County PASSAGE TMC
Northeastern Illinois Regional Data Archive Pace Data Archive

#### **Updated**

# ID 102 Northeastern Illinois Regional Data Archive and Management System (Status: Planned)

Description: This project is intended to to create one regional system/database that archives all traffic performance and traveler information for Northeastern Illinois. Operators will have remote access to the data via the internet for operational decisionmaking. 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 will be led by CMAP as a part of CMAP's regional data warehouse program.

Timeframe: Mid

Geographic Scope:Northeastern Illinois Service Scope: Archive Data Management

Developer: CMAP
Maintainer: C Bozic
Revision Date: 4-Feb-2009

Associated Elements: Academic/Research Organizations Data Warehouse Arterial Performance Monitoring System Chicago Transit Authority Data Archive City of Chicago TMC Gateway Central IDOT Central Bureau of Operations Field Equipment IDOT District 1 Traffic Systems Center (TSC) ISTHA TMC (TIMS)
Lake County PASSAGE TMC

Northeastern Illinois Regional Data Archive

Pace Data Archive

#### **Original**

#### Transit Management (Status:Planned)

Description:

Timeframe:

Geographic Scope: Service Scope: Developer: Maintainer:

Revision Date: 4-May-2007

Associated Elements:

Chicago Transit Authority ATSS System Chicago Transit Authority Bus Tracker Website Chicago Transit Authority BusInfo System Chicago Transit Authority Control Center Chicago Transit Authority Garages

City of Chicago 311 Center City of Chicago 911 CAD

City of Chicago DOT Transportation Website City of Chicago Incident Center (CIC) City of Chicago OEMC Field Equipment City of Chicago Operations Center (OC)

City of Chicago TMC DuPage County EOC Gateway Central

Gateway Website GCM Data Archive

IDOT Central Bureau of Operations Roadway and

Weather Information System

IDOT District 1 Bureau of Construction

IDOT District 1 Bureau of Traffic - Arterial Operations IDOT District 1 Bureau of Traffic - Arterial Operations

Field Equipment

IDOT District 1 ComCenter

IDOT District 1 ComCenter Field Equipment IDOT District 1 Maintenance Management

IDOT District 1 Maintenance Yards

IDOT District 1 Traffic Systems Center (TSC)

IDOT District 1 Traffic Systems Center Field Equipment

IDOT Emergency Traffic Patrol (ETP)
IDOT Emergency Traffic Patrol Vehicles

IDOT Maintenance Vehicles IDOT Transportation Website

Illinois 511 System Illinois DOT Info Illinois Gateway Illinois Transit Hub

Illinois Transit Hub Website

Independent School District Dispatch

Indiana Gateway

ISTHA TMC (TIMS)

ISTHA TMC Field Equipment
Kane County Field Equipment
Kane County Maintenance Operations
Kane County Maintenance Vehicles

Kane County TMC

Kendall County 911 Center Lake County Field Equipment

Lake County Highway Construction Operations Lake County Highway Maintenance Operations

Lake County PASSAGE TMC Lake County PASSAGE Website Metra Consolidated Control Facility

Metra GPS Center (TIMS)

Metra Passenger Information Display System Municipal Parking Management Guidance System

Municipal Public Safety Dispatch Municipal Public Safety Vehicles

Municipal TMCs

**Municipal Transit Operations** 

Municipal/Township Field Equipment Municipal/Township Maintenance Operations

NICTD Dispatch
Pace BusInfo System
Pace Control Center (IBS)
Private Bus Dispatch

Private ISPs - Travel Information Services

Private Taxi Dispatch

Public/Non-Profit Paratransit Services Regional Paratransit Dispatch Regional Ridesharing and Vanpooling

Regional Transportation Authority Travel Information

Center (TIC)

RTA Multimodal Trip Planner Satellite TMC OHare Airport WebWatch Internet Site Will County Field Equipment

Will County Maintenance Operations

Will County TMC

Wisconsin Gateway (MONITOR)

# **Updated**

ID 105 Transit Management Systems (Status:Planned)

(same data, added ID to title)

#### New

# ID 104 Google Transit Trip Planner (Status:Existing)

Description: Public private partnership between Google and transit agencies to provide interactive trip planning through the google mapping service.

Timeframe: short

Geographic Scope: regionwide

Service Scope: Metra and CTA are currently participating. The service does not provide Pace information.

Developer: Google Maintainer: Bozic

Revision Date: 9-Feb-2009

Associated Elements:

Private ISPs - Travel Information Services

Status Codes

Existing – some part of the project is already in operation Planned - currently funded/undergoing planning or design

Potential- currently is not funded and is not being planned but a need for the project has been identified