# Northeastern Illinois ITS Deployment Plan Update

# Project Summary

## July 2005

*The Northeastern Illinois ITS Deployment Plan Update provides a blueprint for Intelligent Transportation System (ITS) investment and deployment in northeastern Illinois for the next fifteen years.*

**Chicago Area Transportation Study**

The *Northeastern Illinois ITS Deployment Plan Update* builds on the foundation created by the *Northeastern Illinois Strategic Early Deployment Plan for Intelligent Transportation Systems (SEDP)* adopted in June 1999. This was the first blueprint for the integrated deployment of advanced transportation technologies across the region and it was recognized that the dynamic nature of ITS would necessitate periodic updates to the *SEDP*. The first such update is the **ITS Plan Update**, which was developed under the direction of the Advanced Technology Task Force of the Chicago Area Transportation Study (CATS).

The **ITS Plan Update** also relates projects to the **Regional ITS Architecture** for northeastern Illinois, which was adopted in 2003. The architecture is a 15 year roadmap for integrating transportation systems in the region. It represents a shared vision of how each agency's systems will work together, sharing information and resources, to provide a safer and more efficient transportation system.

The **ITS Plan Update** looks ahead to ITS deployment over the next fifteen years. The heart of the report is a listing of ITS projects agencies plan to implement. This list was developed through meetings held with stakeholders throughout the region. The plan also includes the estimated cost of deploying those projects, and identifies the current shortfall in funding.

## Where we are and where we go from here
The **ITS Plan Update** offers an overview of ITS deployments that major agencies in northeastern Illinois are currently operating in the region. It also provides an assessment of deployment progress made since approval of the *SEDP* in 1999. Of the 30 projects identified in the *SEDP's* Deployment Action Plan, almost all have moved beyond the planning phase into some stage of implementation.

The core of the **ITS Plan Update** is a list of 100 ITS projects agencies plan to implement. The scope of these projects ranges from a small geographical area to region-wide implementation. Some projects are low cost, while others are multi-million dollar efforts. Some will have short deployment time frames and others will be phased in over a number of years. The total cost for deploying these projects is estimated to be $834.6 million. Of this amount, $306 million remains unfunded.

Over the last several years planners and implementers of ITS in the region have identified three overarching priorities in ITS deployment:

- **Accumulation and dissemination of real-time travel information** includes information on networks and travel routes, travel times and congestion, and incidents. Travel information can be in the form of electronically

gathered data or video images captured by closed-circuit television cameras.

• **Pro-active incident management** covers not only detection and verification, but also response and clearance of the incident, as well as site and area traffic management. Incidents include disabled vehicles, traffic crashes, spilled cargo or other debris in the road, road construction and non-emergency special events.

• **Traffic management** of freeways and arterials includes facility surveillance, ramp metering, surface street traffic signal control and electronic toll collection.

These broad priorities will help shape the implementation of ITS in the region for years to come.

## ITS Plan Update Components

The **ITS Plan Update** also addresses other important topics on ITS deployment in the region:

• A regional **vision** for ITS deployment in northeastern Illinois and major **goals** to achieve.

• A **prototype operational concept** for incident management, which documents agencies' roles and responsibilities (at a high level) in the operation of the regional ITS system.

• A guide for estimating the **benefits** of ITS projects.

• An **action plan** addressing the ITS funding shortfall, early action projects that serve as building blocks for later deployments, gaps between the **ITS Plan Update** and the **Regional ITS Architecture**, and updates to be made to the Regional Architecture.

• A discussion of how the **ITS Plan Update supports the goals and objectives** of *Shared Path 2030*, the region's long-range transportation plan.

## Regional Cooperation

Through the Advanced Technology Task Force, a broad range of agencies and implementers in the region participated in the development of the **ITS Plan Update**. Without their assistance development of this regional ITS plan would not have been possible.

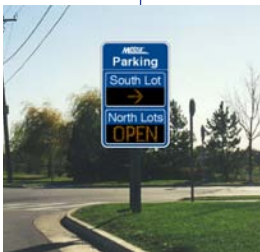| | | | |
|---|---|---|---|
| CATS | CTA | Kane Co. | RTA |
| City of Chicago | DMMC | Lake Co. | SWARIM |
| City of Naperville | DuPage Co. | McHenry Co. | UIC |
| Cook Co. | IDOT | Metra | Will Co. |
| | ISTHA | Pace | |

## A Vision for Transportation Technology …

*Use advanced technologies (including computer, electronic, and communications devices) to share information to improve the operation, management and use of the region's transportation system in order to provide safer, more accessible, more reliable, and more secure roadway and transit services to our customers.*



### A Long History of ITS Deployment …

IDOT has operated the Traffic Systems Center, which monitors the operation of expressways in northeastern Illinois, for more than 40 years.



The **ITS Plan Update** is available on-line.  Go to http://catsmpo.com/prog.htm and select "ITS Planning".

Following are some of the Regionally Significant projects that are a part of the **ITS Plan Update:**

Chicago Traffic Management Center

Lake County Traffic Management Center

CCTV Surveillance Sharing – IDOT Lead

Gateway Traveler Information System, Phase II – IDOT Lead

Illinois State Toll Highway Authority Open Road Tolling

Illinois Transit Hub – RTA Lead

Region Wide Transit Signal Priority Deployment – Pace Lead

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