

## Client

Chicago Department of Transportation

## Location

Chicago, Illinois

## Services

- Design, install and test a highway advisory radio (HAR) station at Navy Pier
- Construction Management
- Establish intertie with TSC to download travel times and congestion limits for LSD
- Coordinated Training Program and Operation Guides
- Provide Documentation

## Date

October 2004

## Key Personnel

Joseph Brahm, P.E.

# Chicago DOT Lakefront Highway Advisory Radio Design, Install, and Integration

## Scope of Services

Delcan was selected by the Chicago Department of Transportation to design, install, and test a highway advisory radio station at Navy Pier adjacent to the Lakefront in downtown Chicago. This project included the preparation of installation details, wiring diagrams, coordination of permitting, and utility service installation. Project work included coordinating procurement of hardware, managing hardware installation and equipment testing. Specific tasks included the installation of antenna, transmitter, power connection (120 VAC single phase), phone connection and cabinet on concrete pad. Delcan also coordinated work for buried phone and electrical conduit and connections required by electrical and phone companies. Following all installation, Delcan restored the trenched areas to original condition and performed preliminary acceptance tests and demonstrations with CDOT staff. In addition, work included the set-up of the HAR control system, the development of new message structures designed to address closures, construction, special events, parking, directions, transit and other messages. The system was also upgraded with new features including the ability to input parking lot status information, special event information, transit and general traveler information. An intertie was established with the TSC to download travel times and congestion limits for Lake Shore Drive. New response formats and message outlines were also developed for events on arterials along with supporting table structures. Finally, Delcan provided training, operations guides, and documentation for the project.

## Project Description

The City of Chicago was looking to implement a flexible and automated Highway Advisory Radio System along Lake Shore Drive to provide real time traffic conditions, parking, transit, incident and event information to motorists. The project needed to be designed, installed and integrated with the IDOT Traffic System Center.

## Results

Professional quality broadcasts that can be created and modified in a timely manner.