

Case reference  
Teleste Video Security and Information

# Chicago Transit Authority



# Chicago Transit Authority

AT A GLANCE  
1.7 million daily passengers  
Increased safety.

Distributed IP video solution around the Chicago area.

## Case in brief

CTA, the second largest public transportation system in the United States, provides nearly two million rides every day. Since 2005, Teleste has helped the CTA build an IP video transmission, management, recording and storage system that allows operators to view and control cameras during daily operations and to respond quickly in the case of any type of emergency.

As of today, the CTA system contains approximately 9600 cameras throughout the 146 station platforms, rail lines, garages, bridges, river crossings and on-board rail cars. The latest addition on the security video platform is an on-board and mobile video network recorder (mNVR) for rail cars. Results are indicating that Teleste's technology is helping, as statistics for 2012 indicate a 25% drop in robberies.

### Chicago Transit Authority

The CTA is a regional transit system that serves 35 suburbs, and provides 83 percent of the public transit trips in the six-county Chicago metropolitan area.

### CTA Average Performance 2012:

- Daily ridership: 1.7 million
- Monthly ridership: 19.3 million (rail), 26.2 million (bus)
- Total ridership: 545.6 million
- Service population: 3.8 million
- Rail cars: 1200, Rail lines: 8, Rail stations: 146
- Buses: 1781, Bus routes: 129, Bus stops: 11493





## Objectives

- Ability to stop criminal activity as it is happening.
- Optimizing crime investigations.
- Easily scalable and maintainable system.

- Interagency video content exchange.

## Solution

- Ability to view live video and control cameras across the network, search and view recorded video across the network, access both live and recorded video over the Internet, receive alarms from third-party systems, such as SCADA, respond to alarms in an automated/predefined manner, export encrypted & authenticated video for the prosecution of criminals, share video with other agencies.
- MPEG-4 and H.264 video streaming devices include a comprehensive video recording and storage capacity. System arbitration for fluent multi-client operations at several control sites.
- Field-hardened, fully managed Ethernet edge switches that provide network connectivity. Teleste MPX series MPEG-4 encoders for digitizing, compressing and migrating video from analogue CCTV cameras to the IP network. All cameras whether analogue or IP are seamlessly integrated into the Teleste video management system.
- An onboard video system in rail cars is provided by IP cameras, a PoE switch and a Teleste mobile network video recorder that is specially designed to meet strict vibration requirements.
- Use of video multicasting: only video streams that are being viewed are transmitted over the network (reducing network bandwidth requirements). Additionally, multiple authorized users can simultaneously subscribe to the same streams (as opposed to sending separate stream to each user).
- The heart of the CTA video system is the Teleste VMX video management, recording and storage solution. The VMX solution is based on a distributed architecture, which makes it possible to place servers and other components at any location within the network.



**Teleste was selected for the project based on technology, integration of third-party systems, willingness to meet the CTA needs, and proven track record of delivering complex, large-scale systems."**

– Representative,  
Chicago Transit Authority.

Distributed by



1-800-236-0112  
www.tapconet.com

5100 West Brown Deer Road  
Brown Deer, WI 53223

