Case Study

Staying on Track

A fail-safe voice and data network helps Cleveland's Transit Authority keep its trains and buses—and 1.4 million riders—moving forward.

At any given moment, the Greater Cleveland Regional Transit Authority (GCRTA) has 60% of its 2,750 employees on the move—all of whom need to stay in touch. Clearly, a reliable data and voice network is the GCRTA's backbone. In fact, the ability to communicate affects GCRTA services every day in myriad ways. Most critically, GCRTA Transit Police have to respond to 911 calls. And in emergencies, information must be quickly and clearly disseminated to riders. The GCRTA voice and data network also facilitates key customer-support services. Calls constantly come in from people requesting transit information; riders also expect to be able to plan trips and buy fare cards online.

To meet these needs, the GCRTA has long maintained its own fiber-optic lines. It has also leased voice and data lines from AT&T in order to communicate with the 16 satellite locations out of the range of its fiber-optic network. But until recently, the leased lines had no built-in redundancy features, which made the system vulnerable to outages, says Hamid Manteghi, chief information officer for the Transit Authority.

That vulnerability was made clear during the blackout that struck the Midwest and Northeast. Communication with the GCRTA's satellite locations was impaired and several critical systems were unavailable, including a service that Transit Police use to find information on offenders. "This was an intense situation," says Manteghi.

So the GCRTA began researching ways to make its network more secure. This year, it switched to AT&T's Dedicated SONET Ring Service, a single streamlined system that relies on a high-speed Synchronous Optical Network, or SONET. SONET provides a virtually self-healing, secure, private network for GCRTA. It is managed 24/7 by AT&T's Network Operating Center to ensure the reliability of the network. It routes voice and data traffic around any problems—an accidentally cut line, for instance—redirecting traffic around trouble within 50 milliseconds of detection.

The GCRTA also uses AT&T's Dedicated SONET Ring Service to back up its own fiber-optic network, safeguarding against problems that could arise when massive construction is under way in the neighborhood surrounding the GCRTA's headquarters, its data centers, and its dispatch offices and police stations. "There's always the danger of a backhoe slicing through a connection," explains Jeanine Wilson, the AT&T account manager working with the GCRTA.

The transit authority also worked with AT&T to implement several less complex but still significant network upgrades. First and foremost was an enhancement to the voice network assisting the 911 system that directly routes calls from the transit authority's premises to transit police instead of first going through the County Public Safety Answering Point, improving response time. By using AT&T's ISDN Prime service, the transit authority also optimized the type of services supporting its phone systems to handle critical emergency calls.

In the future, Manteghi says he plans to extend wireless Internet access across the GCRTA's entire coverage area, enabling employees to communicate more easily with one another. One day, Internet access may even extend to riders with mobile computing devices, he adds.

Greater Cleveland Regional Transit Authority Facts

- **Client Needs**
  A reliable, redundant network to supplement and back up the transit authority's existing fiber-optic network
- **Technology Solutions**
  An AT&T Synchronous Optical Network (SONET) providing automatic redundancy for voice and data services
- **Business Value**
  Providing excellent communication within the organization while ensuring safe, efficient and on-time travel
- **Industry Focus**
  Transportation
- **Size**
  624 buses and 108 train cars covering 458 square miles

at&t

Until that happens, the transit authority's communications network plays a crucial role getting Job One done: delivering on-time service. "If customers have to wait more than a few minutes for a bus or train, that's an important issue for them," says Manteghi. "Maintaining safety, on-time service and uninterrupted communication with our clients requires a very sound and reliable system. We have that now."

The new streamlined system redirects voice and data traffic around trouble within 50 milliseconds of detection.

For more information, contact your AT&T representative or visit us at www.att.com/business.

at&t
Your world. Delivered.