

Proactive Measures

DVRs Secure Tollbooths and Travelers on World's Longest Bridge

It can take up to 40 minutes to cross the Lake Pontchartrain Causeway near New Orleans, but thanks to March Networks DVR systems, staff can view events on either side of the structure in seconds.

THE 24-mile (38.4-kilometer), twin-span structure connects Metairie, Louisiana, with Mandeville on the lake's north shore. Operated by the Greater New Orleans Causeway Commission, it serves an average of 33,000 vehicles daily and is recognized by Guinness World Records as the longest bridge in the world.

An analog video recording system was installed on the bridge several years ago at the request of tollbooth staff concerned about their safety, says the Causeway's communications technology specialist Bryan Little.

A digital video system was installed soon after to complement the tape-based CCTV, but that system didn't last long.

Audio recording

"We had two things happen at the same time," recalls Little. "First, we had a lightning strike which blew up the DVR. Then the general manager requested that we also record audio at the four tollbooths.

"If not for the general manager's request, we probably would have just replaced the unit we already had, but it didn't have audio recording capabilities," says Little.

With support for up to 16 cameras and optional, two-way audio recording, the March Networks™ 4000 Series DVR system met all of the Causeway commission's requirements.

"It was like going from a Volkswagen to a Cadillac," says Little. "With the March Networks DVR, we can see up to 16 cameras at a time if we're doing an overview of the system. With the other DVR, we could only see four cameras at a time.

"We also have more control over video size," he adds. "We can go full screen or we can scale the image size exactly the way we want to. The biggest advantage, though, is the system's audio capability."

Tollbooths

Each of the four tollbooths at the bridge's north end is equipped with a microphone and four cameras. One camera records the transaction, one is positioned to record license plates, one provides an overhead view

of vehicles passing through the tollbooth lane and the fourth is focused on the driver.

A second March Networks DVR system also satisfies the commission's needs at the south end of the bridge, where tolls are no longer collected. Cameras there record Causeway traffic, and both audio and video from an office used by administrative staff during the day and by the commission's police force when necessary.

"That's where the police will bring someone they have apprehended for an incident, such as driving while intoxicated," says Little.

The DVRs record feeds from several cameras owned by various media outlets as well. One of them provides the Causeway's website with a view of southbound vehicles approaching the tollbooths.

Supervisory tool

Although originally installed to provide toll collectors on the night shift with peace of mind, the surveillance system also serves as an effective supervisory tool.

"Our staff deal with the public every day and, from time to time, a driver will complain that a toll collector was rude," he explains. "Sometimes, it's true and sometimes, not."

By checking the recorded audio and video, commission managers are able to determine if a complaint is legitimate.

"We just recently had an issue with a toll collector," recalls Little. "The system gave us absolute proof of what happened and disciplinary action was taken. We just printed out a still image of the employee doing something improper and that was it. Nothing else had to be said."

Police forces on both sides of the bridge regularly request video if there's been a robbery or a vehicle has been stolen, adds Little. At other times, the commission provides evidence to help resolve unusual incidents.

Resolution

"In one case," says Little, "a driver came through the tollbooth pulling a trailer with a mattress in it. At some point the mattress

blew out. Another vehicle drove over it and caught fire after dragging it some distance. The driver pulled into one of the bridge's crossovers and everyone got out safely, but the vehicle itself burned up.

"The owner later called us," he continues, "wanting to know if there was any way we could tell him whose mattress it was. We were able to go back and get a picture of the vehicle and the license plate. It was treated as an accident and handled as an insurance issue."

With a VCR, it would have taken two hours to find the video segment, says Little. With the March Networks DVR, it took five minutes.

Little uses the March Networks DVR Configuration Tool to administer the system, set the recording parameters and manage user privileges. A supervisor of operations at the south end of the bridge has a 42-inch plasma monitor in her office and is also able to access video from any camera on the network using March Networks DVR Viewer software.

"The March Networks system has been great for us," concludes Little. "It does everything it's supposed to do. The biggest benefit is the ability to instantly review anything that comes up, including any questions about the toll collectors or the vehicles using the bridge. Our supervisors can even review video from home." ✨

The Causeway

The Lake Pontchartrain Causeway (www.thecauseway.com) is the longest bridge in the world. It connects Metairie, Louisiana, a suburb of New Orleans, with Mandeville, on the north shore of the lake. The first, two-lane span of the 24-mile (38 kilometer) bridge was built in 1956. A second span was completed in 1969.

Lake Pontchartrain is 40 miles (64.4 kilometers) wide from east to west, and 25 miles (40.2 kilometers) from north to south. French explorers named the lake after the Comte de Pontchartrain, who served as Marine Minister and as Minister of Finance during the reign of Louis XIV.