





Ahead Selects State-of-the-Art Video Recording Solution When Port Authority of Allegheny County police officers would board one of the transit agency's 879 buses to

Pittsburgh's Port Authority of Allegheny County Selects State-of-the-Art

retrieve video evidence from their legacy DVRs, between 30 to 50 per cent of the time there was no video or the image quality was so poor that it could not be used.

"The system wasn't performing to our expectations, so we decided it was time for a change," says Rick Snyder, bus procurement specialist with the Pittsburgh-based transit agency.

"I contacted several other transit agencies and bus manufacturers to learn from their experience and narrowed it down to four vendors. We had each of them come in for a first round of meetings, evaluated their products and asked several of them in for a second round."

Joining Snyder as part of the review process were Authority staff from the claims, police and maintenance departments. When all was said and done, the review team selected March Networks™ as the Port Authority's new preferred supplier.

Reliability was the number one requirement. Transit agencies and bus manufacturers familiar with March Networks recording technology vouched for the company's products, but it was its compliance with SAE standards that sealed the deal.

As examples, Snyder points to the SAE J1455 and J1113 standards for electronic equipment design and electromagnetic interference. Compliance with IP65 standards for dust and water penetration also impressed the review team.

"Although we have very well-trained mechanics, human error can still occur," says Snyder. "These recorders with the J1455 standard are more durable and reliable. You can even plug one into 10 times its recommended voltage without damaging it."

The Port Authority began looking for a new vendor midway through 2006 for 90 new buses it was planning to acquire from Gillig Corporation. The 5308 mobile recorders were factory installed and commissioned on site by March Networks technicians. The Authority is now putting plans in place to retrofit 415 buses equipped with its legacy recorders.

Wireless

Snyder initially saw the value of the 5308's

wireless communication capabilities as a means of keeping tabs on the health status of the recorders, but it didn't take long for the full value of wireless connectivity to hit home.

When the U.S. government decided to change the date for triggering daylight savings time, Authority staff were able to use the March Networks Enterprise Service Manager to wirelessly upload the required software patch to the 90 buses.

"Without wireless capability, a technician would have had to board each vehicle, connect a laptop and upload the software upgrade," says Snyder. "We saved time and money using the wireless upload. A few months later, we also did a system-wide software upgrade that worked seamlessly."

The system also downloads video tagged by bus drivers or staff at headquarters. In the event of an accident or altercation, the bus driver tags the video by pushing a button on the instrument panel. Alternatively, the transit agency's claims staff or police officers can schedule a video download to investigate issues brought to their attention by passengers. Activation of an on-board impact sensor will also tag video for downloading.

Once a vehicle is in range of a wireless LAN at one of the Authority's depots, it takes about one minute to download a half hour of video from five cameras.

The 5308 MDVRs were also acquired with a GPS option pack, allowing security staff to track the progress of a bus on a city map while viewing

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- Rick Snyder Bus Procurement Specialist, Port Authority of Allegheny County





Transit security and passenger safety are a priority at the Port Authority of Allegheny County. Pictured here (from left to right) are Bus Procurement Specialist Rick Snyder, Bus Operations Officer Bill Miller and Transit Security Officer Dave Walters.

Port Authority of Allegheny County

The Port Authority of Allegheny County provides public transportation service within a 775-square mile area encompassing the City of Pittsburgh, all of Allegheny County and portions of surrounding counties. The Authority operates a fleet of 879 buses, a 25-mile light rail system and the historic Monongahela Incline. It also oversees the county's ACCESS paratransit service for senior citizens and persons with disabilities. The Port Authority provides transportation services to 240,000 passengers daily for a total annual ridership of approximately 70 million.

synchronized video in playback mode. It also reports on the speed of the vehicle at any point in time.

"GPS wasn't an essential item in our evaluation for new recorders, but we're very happy that we have it as a safety and data collection tool," says Snyder.

Deterrent

Video surveillance on Port Authority buses serves as a deterrent to bad behavior and provides evidence that protects the Authority against fraudulent liability claims, says Snyder.

"When a bus is involved in an accident, it's not unheard of for people to claim that they were injured on the bus when they weren't. With video, you can disprove that pretty quickly."

From time to time, video from the Authority's recorders has also been used by the local television news media to help law enforcement authorities identify persons of interest in criminal investigations.

Snyder's primary objective as a bus procurement specialist is to ensure that buses and equipment purchased by the Port Authority are going to provide 12 years of service. "The last thing we want is to find ourselves in a situation where the equipment we purchase becomes obsolete after a few years, so we try to get ahead of the curve and select technology that is going to be the standard in four or five years and continue to meet our needs beyond that."

Having experienced the shortcomings of underperforming video surveillance technology, Snyder advises transit authorities to pay attention to compliance with SAE standards and consult with other end users before deciding on a vendor.

"A lot of people look at a system and say 'We can't get what we want, so we're just going to accept a lower quality product.' My advice is don't give up. There are excellent systems out there."