

802.11AC DELIVERS BREAKTHROUGH TRANSIT VIDEO PERFORMANCE

INCREASING SAFETY AND SECURITY FOR GTRANS
WITH THE FASTEST WIRELESS TECHNOLOGIES



In early 2014, Gardena's GTrans, formerly Gardena Municipal Bus Lines, launched an industry-wide search for a technologically innovative mobile video surveillance solution for its fixed-route transit service. Increasing safety with seamless integration into their existing network were requirements sought in a first-time mobile surveillance partner. Apollo Video Technology (now Luminator Technology Group) was selected to deliver a proven system with high quality video recordings, an easy-to-use management platform, and the necessary resources to fulfill GTrans' requests.

A 55-vehicle fleet, GTrans services an average of 15,000 rides each weekday. GTrans' search criteria specified the need for a mobile video surveillance partner that demonstrated a commitment to customer and driver safety. This would include an expert engineering team that could build a unique program ensuring uninterrupted video (zero downtime) and fast video download speeds. The solution: a wireless-ready RoadRunner™ system compatible in a Cisco 802.11ac environment.

"We wanted more than a cutting-edge solution, we were looking for a 'bleeding edge' surveillance solution," said Paula Faust, project manager of the bus camera project at GTrans. "Apollo Video was the only company to come back to us and offer a workable solution that met our needs at the right price point. The team of engineers and project managers worked closely with Cisco and our IT department to make sure all the pieces were successfully implemented."

A successful installation is largely due to an attentive and knowledgeable project management team. Luminator

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- Aaron Bonfilio, program manager, VCTC

team members are committed to clear communication with every agency, addressing potential limitations and providing practical solutions with vetted technology that will deliver real benefits to their customers.

For Faust and her team, the company was diligent about explaining system abilities, ensuring that the project team was regularly updated and informed.

GTrans is utilizing the RoadRunner system equipped with 802.11ac wireless equipment and ViM (Vehicle Information Management) Software which provides management and live video streaming for first responders. Compatibility with existing Cisco AC wireless infrastructure guarantees the bandwidth is available to transfer large amounts of data from buses to ViM servers at GTrans’ facilities at a fast download speed. The faster download speeds afforded by the 802.11ac wireless equipment ultimately save the agency time and resources and improve efficiency by allowing workers to focus on other operational tasks rather than spending valuable time waiting for files to transfer.

“GTrans is the first agency of this size to receive our 802.11ac wireless solution, and the fast download speeds of this system are phenomenal and positively influence all areas of transit operations,” said Nima Ostad, network engineer at Luminator Technology Group. “Having enough bandwidth to get high-quality video and audio from one point to another is crucial when transferring these large files, and thanks to this system, transit managers can now access large video downloads in a matter of minutes.”

A mobile video surveillance solution that meets the needs of first responders and law enforcement was a requirement for GTrans. Every bus is outfitted with an onboard wireless router, allowing law enforcement to view live video footage through a mobile application within the vicinity of the vehicle. The 802.11ac wireless capability not only allows first responders to connect to a wireless access point on every bus, but also allows transit managers to connect to GTrans’ surveillance station via remote access, ensuring easy monitoring access for all involved.

“The remote feature is unique to GTrans,” said Faust. “It was an excellent safety feature that Apollo Video was able to provide, and it certifies that in an emergency situation law enforcement personnel are kept informed of bus activity, from speed to location of the vehicle, which above all guarantees the protection of our riders and operators.” Bus operators supported the installation of the system as a way to mitigate unfounded complaints and ensure that patrons are visually accounted for at all times. When a fleet lacks video capabilities, and therefore video evidence, liability claims made against operators and the agency are extremely difficult to disprove. The RoadRunner mobile solution and camera equipment has saved GTrans time and resources.

The clarity of the image quality is critical for confirming that a video system is effective, and Faust says that the image quality provided by the RoadRunner system is some of the best she’s seen. The high quality footage has been leveraged in operator training to show agency best practices and examples, and solutions for improving performance.

A Gold Service contract gives customers access to immediate expertise for any equipment issues that arise and complete fleet-wide system maintenance checks each year. This benefit will help GTrans keep maintenance costs down, increase video uptime after an outage, and mitigate risk and liability. For the maintenance team, it’s peace of mind.

“Apollo Video has provided superior service during every phase of this process, from installation to testing to maintenance,” said Faust. “We are extremely confident that

A Gold Service contract gives customers access to immediate expertise for any equipment issues that arise and complete fleet-wide system maintenance checks each year.

the system's ease-of-use, high image quality, and ability to adapt to our evolving needs ensures that we can continue to provide the best service to our customers and operators."

Installing a fleet-wide surveillance system with advanced technological abilities can be a daunting project for many agencies, and finding the right partner is vital. By working with GTrans to ensure its most pressing requirements were

met, the company has increased safety, saved resources, and improved efficiency for the agency. As GTrans matures and realizes all that can be gained from mobile video surveillance, Luminator will continue to deliver the tools to help this agency achieve its goals.

For more information about this project and other transit solutions please contact Luminator at: 425.483.7100.

INTELLIGENCE, SAFETY AND EFFICIENCY IN TRANSIT

CITY OF GARDENA TRANSPORTATION DEPARTMENT

GARDENA, CALIFORNIA

Number of Fleet Vehicles

49

Annual Passenger Miles

9.9M

Founded

1940

Price of Regular Fare

\$1

Cities Served:

**CARSON,
COMPTON,
GARDENA,
HARBOR CITY,
HAWTHORNE,
LAWNDALE,
LOS ANGELES**



Data obtained from:
<http://ridegtrans.com/about-us/faqs/>
<https://www.transit.dot.gov/ntd/transit-agency-profiles/city-gardena-transportation-department>

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