NVT Phybridge Helps Metropolitan Transportation System Leverage Existing Coax Infrastructure to Deploy IP Security Cameras

A large transportation system is modernizing its security system to continue executing the mission of providing safe and reliable transit. Public transportation is the foundation for building strong, connected communities, and everyone should feel safe traveling to work, school, or their weekend event.

The organization was relying on an outdated analog CCTV security system and decided to modernize to an IP-based solution across the major bus terminals and parking lots. To ensure the safety of the 340,000 daily riders, the organization is upgrading 110 analog devices to new high-resolution IP cameras. The new security system will deter criminal activity, as well as increase surveillance and recording capabilities.

Respect for Riders and Taxpayers
A project of this magnitude would usually take years to complete, as the traditional upgrade method involves ripping/replacing/rebuilding the network infrastructure to support IP devices. This process is extremely costly and would create significant disruption to riders. However, by applying Modern LAN design principles, the organization designed an upgrade plan that would eliminate these concerns.

Using the NVT Phybridge CLEER24 switch, the organization will leverage its existing Coax-based infrastructure to transmit data and power to the new IP cameras. The solution will eliminate the need to rip-and-replace miles of cabling, reducing deployment time by 90% and saving over $15,000 of taxpayer funds. The switch's long reach capabilities will allow the customer to connect cameras up to 6,000ft. (1,830m) away, providing complete surveillance coverage in the vast open spaces of the bus terminals and parking lots.

Environmental Responsibility
The transportation system is committed to environmental responsibility and continuous improvement. The SmartDriver program provides training to all operators, which is proven to reduce emissions and fuel consumption. The training also teaches operators how to reduce wear and tear on vehicle components, extending their life span, and reducing material consumption. When the decision was made to modernize the security system, the organization was concerned about the project's environmental impact.

Aligned with the organization's sustainability programs, the security modernization will prevent 6,600 pounds of Coax cable from ending up in a landfill. The transportation system has also eliminated the need to upgrade the existing server closets, further reducing the project's e-waste and ongoing energy consumption.

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Change the Conversation; Improve the Outcome

The transportation system took a pro-active approach to find new and better ways to support its IP modernization objectives in a financially and socially responsible manner. By applying Modern LAN principles and leveraging NVT Phybridge CLEER technology, the organization will save taxpayer money, eliminate risk and disruption, reduce the negative impact on the environment, fast track the IP modernization, and build a secure and robust platform for its new IP security solution.

The customer changed the conversation around traditional network design to eliminate the headache of ripping-and-replacing the existing and proven Coax-based infrastructure. Completely satisfied with the IP modernization, the customer can now provide the safest commuter experience with the new surveillance system. Thanks to the CLEER24 Ethernet over Coax solution, the customer was able to:

Deploy over 110 IP cameras with no disruption to riders

Reduce infrastructure costs by $15,000, allowing more budget to be spent on IP endpoints and applications

Reduce deployment time by 90%, accelerating the project's ROI