Network Design & Architecture

MetroLink Transit Facility Video Surveillance

Technical White Paper

System & Master Planning | **Network Design & Architecture** | Infrastructure Design | Network Operations & Maintenance (NOM) | Integration & Troubleshooting | Training

Metrolink's new state of the art facility required the need for video surveillance to monitor all activities on the property. Our team assisted with the design and installation of high resolution cameras provides an increase in overall security and safety. They have proven to be a valuable instrument for the owner when investigating accidents, clarifying incidents, and the need to resolve disputes arise.

Situation

In 2015, the Rock Island County Metropolitan Mass Transit District, commonly referred to as Metrolink, completed construction on their new transit maintenance facility in Moline, IL, along with the addition of a new bus terminal located in downtown Rock Island, IL.

These new state of the art facilities accented the need for video surveillance to monitor all activities on each property. To complete this, Metrolink hired us as their network and camera system technical consultant. Our role role was to ensure the installed pan-tilt-zoom camera system, and the supporting facility-wide communication network provided Metrolink with a system that ensures the welfare of their employees, safeguards passengers, and protects the general investment in the facilities.

For Metrolink, these cameras have been proven to be a valuable instrument when investigating accidents, clarifying incidents, and resolving disputes. The presence of cameras also discourages individuals from committing crimes on the properties.

Solution

Network Design & Architecture

While both facilities were under construction, our team evaluated the buildings plan sets along a physical assessment concerning line of sights, peripherals and possible alternate camera locations. We also determined the number and placement of cameras needed based upon construction plans.

During consultation, we also made recommendations concerning fiber hub locations, termination panel locations, conduit locations and fiber switches to create a viable network for the video system. Additional equipment to facilitate the camera operations included video management hardware, video storage options, infrared and the option to add license plate recognition.

Results

State of the Art Facility

After consultation, our team assisted Metrolink with the cameras system write-up for the RFP, provided specifications of the equipment, attended pre-bid meetings to answer questions from potential bidders and reviewed bid packages that meet the specifications and awarded the bidder that met or exceeded all technical conditions and provisions.

Conclusion

New Technology

In the case of the Metrolink Transfer Station and Rock Island Bus Terminal; our team worked with our clients to evaluate and select the best technology solutions to meet existing communication requirements. Our staff members are communication system specialists who understand that each agency's communication network, operations, and management approach is unique, and therefore the requirements to create workable solutions must be tailored to match each agencies requirements and needs.

> Technology's really going to be, I think, the element that's going to change and make transit viable in a community."
>
> MetroLink General Manager Jeff Nelson

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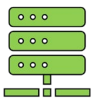
System & Master Planning – This is the first step in understanding and developing a modern communications and system management network. Without a plan, it just a parade of projects that may or may not work together in harmony and provide the results intended.

Network Design & Architecture – "The Intelligent application of the newest technologies and procedures to make you system operate efficiently". If only it was that easy – continued operation and support of legacy systems and hardwares, while taking advantage of new technologies, make the design of the network architecture the most critical link in the development of your system.



Infrastructure Design – Creating design plans that meet the requirements of funding agencies and provide the needed information for the proper installation of physical assets is a fundamental component of all wide area management and communication networks. Our licensed professional engineers understand how to make this happen efficiently.

Network Operations & Maintenance (NOM) – "Technology installed but not maintained in misplaced technology." Just because you built a great communication and management system, doesn't mean it will always work as intended or when needed. The ongoing monitoring and review of any operational management system is critical if you intend to utilize said network when it's really needed.

Field Integration & Troubleshooting – The best installed and maintained system will eventually meet with unintended issues. Have a plan on how to mitigate and respond to periodic breakages and device failures – our trained and certified staff can help.

Training – Experience has taught that most technologies are not utilized to anywhere near their capabilities or capacities. This is often due to the fact that system operators don't know what the new systems are capable of doing. Trained staff can maximize the benefit of any technology or system.

Communications & Technology

by Design