New Jersey Transit

NJ Transit is New Jersey’s public transportation corporation. Its mission is to provide safe, reliable, convenient and cost-effective transit service with a skilled team of employees, dedicated to its customers’ needs and committed to excellence.

Covering a service area of 5,325 square miles, NJ Transit is the nation’s third largest provider of bus, rail and light rail transit, linking major points in New Jersey, New York and Philadelphia. The agency operates a fleet of 2,027 buses, 711 trains and 45 light rail vehicles. On 236 bus routes and 11 rail lines statewide, NJ Transit provides nearly 223 million passenger trips each year.

The Challenge

NJ Transit planned to build a new Rail Operations Center (ROC) which would contain a large display wall for train control in the main room that had to be visible from both the main floor and mezzanine. There would be a separate room for power traction. The new display system needed to integrate seamlessly with the Supervisory Control and Data Acquisition (SCADA) power dispatching system that would be designed by Arinc, a leader in transportation communications and systems engineering. NJ Transit required a state-of-the-art ROC to be used as a command, control and communication center in order to aid its employees in their quest for superior performance and customer satisfaction.

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Activu’s Solution

We formed a strategic alliance with Arinc to provide a sophisticated solution designed specifically for NJ Transit.
that would work with their existing network and software. A display wall consisting of 50” Mitsubishi MegaView Wall™ rear screen projection cubes, with an excellent contrast ratio and high resolution (364 pixels per sq. inch), enabled operators to see the entire rail system clearly. The wall, made up of 193 cubes and spanning an impressive 1/8th of a mile, is organized into various territory configurations.

Activu integrated successfully with Arinc’s SCADA system to provide a powerful and dynamic means of displaying the vast quantity of critical information streaming into the ROC on a continual basis. Activu allows for increased versatility by showing the entire rail system, as it also gives a high level of visibility to detail. As a result, operators could easily locate a problem, isolate the affected area, and re-route service to an unaffected portion of the track without major disruption of service since all necessary information is simultaneously displayed on one wall. This solution provided the necessary scalability for adding cubes and information sets, at any time, to accommodate future growth, without having to replace the existing installation.

Transporting the citizens of New Jersey efficiently is vital to the state’s economic and social wellbeing, as well as its quality of life. The Activu solution continues to aid NJ Transit Field Track and support personnel in their effort to stay in direct contact with the Rail Operations Center, rail stations and each other, enhancing safety and efficiency.