



## Case Study

Market: Transportation

Region : United States

Company: [Transit Wireless](#)

Deal implemented: October 2012-2016

Number of users: 330,000+ per day

As an industry leader in cellular, Wi-Fi, co-location facility and fiber network infrastructure design and development, Transit Wireless is continuously delivering innovative solutions that expand and improve communications for public and private applications. Transit Wireless provides connectivity for the New York City subway system through a large fiber network that spans 4 boroughs and approximately 276 subway stations.

### Challenges

The main challenge was finding a network switch that could handle intense traffic density and work reliably in the harsh underground environment. All switches are housed in protective enclosures where the temperature can reach 70°C, making rugged equipment a necessity. Transit Wireless needed the solution to work seamlessly with its existing multi-vendor network. With network-dependent initiatives on the horizon, such as new HD information displays, Transit Wireless was looking for scalability and flexibility as well.

### Product and services

Alcatel-Lucent OmniSwitch® 6855 Hardened LAN Switch

### What made the difference?

Transit Wireless had heard about the reliability of the OmniSwitch® 6855 and was satisfied that the switch's passive cooling mechanism could withstand scorching temperatures.

In addition, the company was convinced by the port density and aggregate throughput capabilities.

### Benefits

#### Technical

The passive cooling, fan-less design makes the OmniSwitch® 6855 very reliable despite the harsh environment; a critical benefit given the switch's importance. All traffic in and out of the subway station passes through the OmniSwitch® 6855. Over 330,000 users per day can connect to the Wi-Fi thanks to high throughput (including 10Gig uplinks), great port density and excellent traffic management. The open standards support has proven essential in Transit Wireless' heterogeneous multi-vendor environment. The expandable network will support new growth initiatives like the upcoming 802.11ac rollout and the implementation of new HD displays and safety points.

#### Financial

Savings are achieved thanks to support for link aggregation that provides options for simpler, more cost effective deployment. The quality of Wi-Fi services is an important selling point for partners and advertisers, representing a significant revenue opportunity going forward.

#### User Experience

Subway passengers benefit from cellular, Wi-Fi, and E911 services across all of New York's stations. Owing to the network's reliability, users enjoy added services from partner companies. For example, Penguin Books' "Subway Reads" program offered free e-books, delivered on the subway platform, for transit users.

 "Thanks to the Alcatel-Lucent Enterprise solution, more than 330,000 users access free Wi-Fi in the New York subway every day. We're always moving the technological needle forward and have plans to increase bandwidth and quality, while monetizing the network. ALE USA, inc is proactive in proposing new products that will help us achieve these goals. We look forward to continued cooperation and mutual success."

*Thomas McCarthy, Director of Network Operations, Transit Wireless*