



## New York's Rockefeller Center Concourse Provides Tenants and Visitors with Seamless Wireless Connectivity

### **INDUSTRY:** Work Spaces

#### **THE BACKGROUND:**

The underground Rockefeller Center Concourse is one of the highest traffic commuter thoroughfares in Manhattan, with an average of 65,000 commuters and visitors passing through each day, increasing to over 100,000 a day during the holiday season. It is comprised of over 40 shops and restaurants, and the public space overlooks the Plaza's famed skating rink. The area is the principal passageway for tenants of the adjacent office buildings, commuters, and visitors.

#### **THE CHALLENGE:**

The Concourse owners, known for providing world-class amenities to their tenants and guests, wanted to supply seamless wireless connectivity for multiple wireless services in the heavily trafficked thoroughfare.

However, wireless signals cannot penetrate the labyrinthine concourse, which winds underground through several city blocks in the heart of Manhattan.

The only way to provide coverage was to install an in-building distributed antenna system (DAS), but the owners didn't want to disrupt the ebb and flow of commuter traffic by installing a coverage solution that required ongoing upgrades and extra equipment each time carriers or services were added to the system.

#### **THE SOLUTION:**

It was clear that a shared in-building wireless infrastructure would not only benefit all parties but also be the most efficient and cost-effective solution. Black Box and the property owners shared a vision from the outset of how the system would work and the benefits that would be derived from installing the company's DAS solution in the Concourse.

BBOX worked closely with the Concourse owners and wireless carriers to design and engineer a system that would meet their needs. Highly trained and experienced radio frequency engineers from BBOX

#### **OBJECTIVE**

To enable the use of wireless applications and devices throughout the underground Concourse, which is one of the highest traffic commuter thoroughfares in Manhattan.

#### **RESULTS**

- Increased communications
- Convenient wireless connectivity for tenants and visitors
- Multiple services and providers supported on a unified, strategic system
- Cost-effective and low maintenance
- Capable of supporting additional services, protocols, and frequencies to bring future benefits to both Concourse owners and wireless providers

#### **MAJOR CHALLENGES**

- Materials used in the construction of large buildings degraded and distorted the radio frequency signals.

conducted a comprehensive site survey, taking into account building construction materials and coverage requirements.

Black Box's team of project managers oversaw every aspect of the system design, procurement, installation, testing, and acceptance, working closely with all involved parties to ensure a quality installation with minimum disruption to tenants, enterprises, and visitors.

The benefits of the Black Box DAS extend beyond the wireless users and visitors of the Concourse by expanding the coverage area for national wireless carriers including AT&T, T-Mobile, and Sprint. By providing wireless coverage for hundreds of thousands of visitors to Rockefeller Center, the carriers are ensuring their customers will remain connected to the people and information that matters the most in their lives through the latest smartphones.

Black Box solution also provides additional options for the Concourse. Capable of supporting multiple services, protocols, and applications, including two-way radio, paging, and fire/life/ safety emergency services, this wireless utility can meet the Concourse's future wireless needs.