# NEW YORK CITY SUBWAY: If you can make it there, you'll make it anywhere.

Enabling wireless coverage is not always as easy as it may seem. Putting up a tower in an open field is one thing, but providing coverage in areas and situations having harsh conditions and challenging spaces require innovative solutions from innovative communications manufacturers. SOLiD is one of those companies.

SOLID SOLID 800 Klein Road Suite 200 Plano, TX 75074 solid.com 888.409.9997 sales@solid.com

As a global provider of Distributed Antenna Systems (DAS), Optical Network Transport and Passive Optical LAN solutions, SOLiD takes areas that may have once not been suited for wireless coverage and finds a way to make it work. This was recently proven when SOLiD DAS equipment was selected by Transit Wireless to support delivery of wireless coverage throughout one of the world's busiest transportation systems - the New York City subway system. A subsidiary of Broadcast Australia, Transit Wireless owns and operates the subway station wireless communications networks and acts as a neutral host for extending wireless coverage throughout the lines. The project included 277 subway stations that serve 1.6 billion riders each year. This averages out to 5.3 million riders on weekdays, 3 million riders on Saturdays and 2.4 million riders on Sundays.

## Why is this deal substantial?

Building out a DAS in any venue has its challenges, but the difficulty of doing so in an underground subway system is unparalleled. Mike Collado, director of marketing at SOLiD, explained that the New York City subway system is particularly daunting because it is very old and poses multiple constraints.

"The New York City subway system operates 24 hours per day, 365 days per year and that means working in an environment underground that people are constantly



using," Collado explained. "There is limited space, so infrastructure has to be sized and placed accordingly for that environment."

It was these circumstances under which Transit Wireless was tasked to identify a solution that could survive underground in

these harsh conditions, support all carrier networks and be approved by the New York City transit authority.

## Why SOLiD?

GLOBAL EXPERIENCE

One of the key reasons that SOLiD was chosen for this undertaking was because of their previous experience with a comparable deployment. SOLiD completed a similar DAS project for the Seoul Metropolitan Subway in South Korea. That project took four years to complete and offered similar challenges to that in New York City. The Seoul subway, however, was constructed more recently, making the project a bit easier to manage. Having completed a DAS project of similar scale in Seoul successfully assured the folks at Transit Wireless that they were selecting not only a qualified, but an experienced solutions partner.

"Transit Wireless is building one of the most expansive DAS networks in the world," said Transit Wireless CEO, William A. Bayne, Jr. "SOLiD's extensive subway experience in South Korea and ability to rapidly customize products and applications make the company ideally-suited to support our mission to enable state-of-the-art wireless coverage to all underground subway stations in New York City."

## PUBLIC-SAFETY RUGGEDIZED STANDARDS

SOLiD also holds a unique place in the marketplace as it innovated its DAS to support commercial cellular and public-safety including two-way radio service on the same converged platform. In order to be public-safety approved, there are certain guidelines that must be met. SOLiD adopted the National Electrical Manufacturers Association's 4 X standard which



# **QUICK FACTS:**

## New York City Subway:

World's largest by number of stations (277)

1.6 billion riders each year

5.3 million riders each weekday

#### Seoul Metropolitan Subway: World's longest system by

length (957.3km) World's second largest by number of stations

2.5 billion riders each year

6.9 million riders each weekday

signifies the enclosure is resistant to dust, water and corrosion so the electronics inside the box are protected. This differentiator further solidified the decision for Transit Wireless.

## What's Next?

HIGHER POWER

SOLiD is continuing to advance innovative solutions to pragmatically address the objective to enable wireless communications throughout subway tunnels. Unlike train platforms, there is often little-to-noroom for running any extra infrastructure. Besides, subway trains typically keep running 24 hours per day.

## WIDER VERTICAL REACH

Because of the sheer size of the New York City subway system, the project is slated to be completed over a five-year period. But that doesn't mean SOLiD hasn't been busy thus far. In fact, more than 30 stations are in progress with completion expected in the next few months including the multiple platforms that comprise the Times Square and Columbus Circle stations.

To be sure, the scale and harsh subterranean environment make this one of the most challenging DAS projects in the world. Being selected is a testament of SOLiD's pedigree within the DAS market which is why the company's solutions are similarly being deployed at marquee projects within other verticals such as sports venues, hospitals, colleges/universities, hotels, corporate headquarters and more.

As the song says about New York... If you can make it there, you'll make it anywhere!