Coalition for Emergency Response and Critical Infrastructure

NEW YORK 4.9 USAGE CASE STUDY

Metropolitan Transportation Authority (MTA)

The 4.9 GHz band is a band of spectrum licensed by the Federal Communications Commission (FCC) to state and local government entities and nongovernmental organizations that support communications essential to protecting the safety of life, health, and property. The 4.9 GHz band is used by multiple public-safety entities across the country, in a wide range of communities, including major metropolitan areas and more rural locations.

In New York, there are a total of 221 active licenses in the band, including 6 statewide area licenses, 43 countywide area licenses, and 174 other licenses. Government entities in New York currently operating in the 4.9 GHz band or with plans to do so in the near future include: Metropolitan Transportation Authority (MTA) and its affiliate agency New York City Transit (NYCT), New York State Department of Transportation (NYSDOT), New York City Police Department (NYPD), New York City Fire Department (FDNY), Port Authority of New York and New Jersey (PANYNJ), New York State Division of Homeland Security and Emergency Services (DHSES), New York City Department of Information, Technology and Telecommunications (DOITT), and the New York City Office of the Chief Medical Examiner (OCME).

Among the most essential of these licensees is the MTA. MTA is North America's largest transportation network, serving a population of 15.3 million people across a 5,000-square-mile travel area surrounding New York City, Long Island, southeastern New York State, and Connecticut. MTA has used the 4.9 GHz band throughout the NYCT subway system to deploy an emergency call box system allowing passengers to call for assistance in an emergency and has utilized the 4.9 GHz band above ground on camera equipped NYCT buses.

The 4.9 GHz band is a critical resource for MTA as it works to enhance safety for users of public transit in its vast transportation network. To prevent train collisions and derailment caused by overspeed or improper switch operation, MTA utilizes a communication-based train control (CBTC) system. In an effort to keep pace with leading technology and deploy innovative ways to ensure rider safety, MTA is in the process of upgrading to a next generation CBTC technology. After an exhaustive internal technical review and selection process, MTA determined that the 4.9 GHz band is the only viable solution for its CBTC program.

The FCC is considering potential changes to the band and recently decided to retain local public safety use of the band while allowing other uses that can operate on a secondary basis. However, a pending proposal from the Public Safety Spectrum Alliance (PSSA) seeks FCC authority to grant AT&T-FirstNet a nationwide license to the 4.9 GHz band. If the FCC grants the proposal and FirstNet's operations are allowed to interfere with existing and planned uses by the public safety community, such action will undermine use of the band for local public safety services, including those provided in New York by MTA and other public safety entities.

MTA has emphasized to the FCC the importance of maintaining local control of the band. In recent filings, MTA stated that "[i]ncorporation of the 4.9 GHz band into the [nationwide public safety broadband network] would not accommodate the operation of truly localized operations intended to promote public safety..." (2023 reply comments, p. 7). MTA has further stated that incorporating the band into the Nationwide Public Safety Broadband Network is concerning, "as this would be incompatible with MTA's proposed use of the band for CBTC."

MTA's uses of the 4.9 GHz band to enhance public-safety services are prime examples of why local agencies should retain primary use of the spectrum and are best positioned to determine what works best for their community's public-safety communications needs.