**CONFIDENTIAL Issue Brief**

Fire Department-WMATA Radio System Assessment

**Background**

Emergency first responders experienced a failure in radio communications during the January 12, 2015 L’Enfant Plaza event. As a result of this, the region’s fire departments served by Metrorail initiated routine radio testing.

The Metrorail communications system consists of two separate radio systems, one for WMATA and another for first responders. The system is comprised of bidirectional amplifiers (BDAs), antennas and other equipment to transmit radio signals between above and below ground radio equipment. The reliability of BDAs, essential for sending radio signals underground, has been a consistent challenge for first responders. Several, but not all, regional fire departments deploy tactical (portable) BDAs as a backup in the event of stationary BDA failure.

Prior to a response, there is no ability to know if the radio system is fully operable. Testing results and corrective actions were reported between WMATA and the jurisdictions through email correspondence.

**Public Safety Radio System Assessment and Corrective Action**

Prior to April, each jurisdiction with Metrorail service developed a radio testing protocol, initiated testing and provided the results to WMATA. Those results were reported in the response to Senator Warner on March 19. In February and March, the Fire Communications Subcommittee developed and piloted a regional protocol that included a Delivered Audio Quality (DAQ) rating, which combined for consistent regional practices and data.

WMATA developed a web-based reporting form for all jurisdictions to report testing results. The form includes location of testing within a specific Metrorail station and the DAQ levels. The data is transmitted to WMATA and any outages are entered into their online maintenance and operations system for corrective action.

The status of identified failures, system status and corrective actions is reported by WMATA to jurisdictions via a web-based GIS system. The web-interface identifies the location, and a click on the location provides the jurisdictions with the repair status and corrective actions in a specific station.

**Implications for the Region**

Improved situational awareness is a critical component of a safe, reliable Metrorail system. Continued actions are needed for a fully operational and reliable Metrorail communications system.

**Questions/Discussion Framework**

What additional actions are needed for continued Metrorail communication systems improvement?

What is the role of public bodies (state and local governments) – staff and elected officials in advancing Metrorail system communications systems?