PennDOT 800 MHZ Radio Legislative Hearing Remarks

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Good morning! I'm Charles Goodhart, Director of the Bureau of Maintenance and Operations for the PA Department of Transportation. My Bureau oversees the operation and management of PennDOT's 800 MHz safety radio program. Thank you for allowing me the time to explain the status of the 800 MHz safety radio system as it relates to PennDOT maintenance operations.

Currently we have the following types and numbers of radios:

Vehicle Mounted – Dash Mount – 3652 Trunk Mount – 1376 Total = 5028

Base Stations – Control Station – 89 Desk Top – 92 Total = 181

Portable - Hand Held – 1662

Portable V-Tac - Emergency Kits – 16

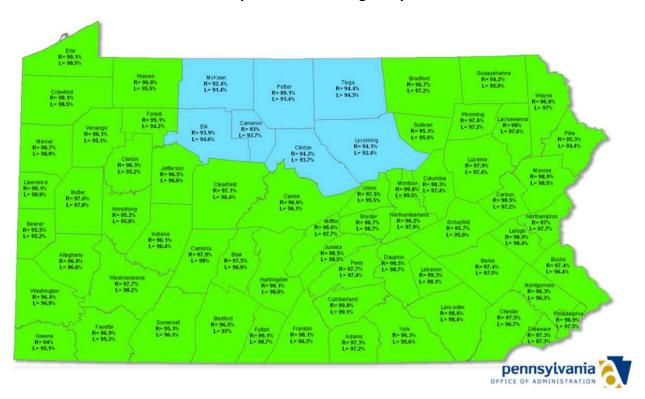
Total Units = 6887

Purpose - The basic purpose of radio communication within the maintenance community is to maintain situational awareness. This tool allows for communication both during winter operations and other emergency events and during routine maintenance operations. It provides for enhanced safety for our employees as well as the motoring public. Mobile to mobile and base to mobile communication allows managers and supervisors as well as equipment operators to maintain awareness of activities and insure work is performed both efficiently and effectively and to provide improved response time for emergency situations. Portable units are essential to providing safe and efficient Work Zone Traffic Control operations.

PennDOT has also utilized the 800 MHz radio system since the fall of 2009 as part of a short term solution to provide an Automated Vehicle Location System (AVLS) for use by PennDOT managers and supervisors. PennDOT entered into an agreement with the Office of Administration to use the AVLS module of the Geospatial Analysis of Threats and Incident Reports (GATIR) application, hosted within the Commonwealth Technology Center (CTC). The GATIR application polls the location of vehicles with 800 MHz radios (Vehicle Mounted) and the location of these vehicles is reported through the 800 MHz system and graphically displayed on a web page. We are currently working to develop requirements for a long solution to provide enhanced capabilities for our AVLS.

800 MHZ Coverage Area – All PennDOT county maintenance organizations with the exception of Potter County enjoy 90% or better coverage within their geographic area. The northern tier rural areas continue to work with the OA Radio Office to identify gaps and come up with viable solutions to coverage concerns.

Operational Coverage Map



Blue = Coverage area between 90- 95% - Green = Coverage areas greater than 95%

Maintenance Costs – Below is the annual costs for 800MHz radio repair, maintenance and transfers.

This cost is broke down for both vendor and PennDOT performed repairs.

Internal Cost - (PennDOT performing routine maintenance and transfers) -\$115,580.16

External Cost – (Vendors performing routine maintenance/repairs and transfers) –\$138,125.00

(Parts purchase from Harris Communication) -\$72,616.00

Total – \$326,321.16

❖ Totals do not include AVL costs and are from 7-1-10 to present.