



**Metro**

Los Angeles County  
Metropolitan Transportation Authority

One Gateway Plaza  
Los Angeles, CA 90012-2952

213.922.2000 Tel  
metro.net

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**TO: BOARD OF DIRECTORS**

**THROUGH: ARTHUR T. LEAHY** *by per*  
**CHIEF EXECUTIVE OFFICER**

**FROM: LONNIE MITCHELL** *li*  
**CHIEF OPERATIONS OFFICER**

**SUBJECT: LACMTA STATUS OF FCC NARROWBAND  
COMPLIANCE OF JANUARY 1, 2013**

**ISSUE**

In order to meet the ever expanding requirements of the Land Mobile Radio (LMR) community, particularly in the high-population/high-utilization areas of the United States, the Federal Communications Commission (FCC), in the later part of the 1990's decided to increase the available number of radio channels for users. With the application of new technological advances in modulation/demodulation, the FCC decided to double the number of available radio channels by halving the channel width (narrowbanding). This maintains the same overall bandwidth available to the LMR community and doubles the number of available radio channels.

This decision, or in FCC parlance, mandate, has been extended numerous times at the request of other public and private agencies that are a part of the LMR community, because of lack of off-the-shelf equipment as well as problems in identifying sources of funding for radio equipment upgrading. This FCC Narrowbanding mandate is now set to take effect January 1, 2013. This is the first report regarding Metro's current status of implementing the FCC Narrowbanding Mandate of January 1, 2013.

**DISCUSSION**

The following Metro Radio Systems are broken out on a per frequency band basis:

## **VHF Band**

Rail Radio System - Equipment Scope of Work is in the solicitation phase in Procurement. Award is expected in the November/December 2011 time frame with equipment receipt and installation to commence three months thereafter. Staff anticipates at this time that the January 1, 2013 FCC Narrowband Mandate will be met.

## **UHF Band**

Security Radio System - Equipment already purchased and is to be provisioned and installed starting January 2012.

ATMS Data System - Plans are in place to narrowband existing radio equipment. Because the existing data radio equipment was designed to be narrowband compliant per the FCC Requirements for New Equipment Manufactured after 2000, the equipment requires only programming and realignment for FCC compliance. However, because of the FCC Narrowbanding Mandate, radio propagation range will be lost. This loss is somewhat significant as it is currently estimated by the ATMS Prime Contractor to be in the range of 15% loss of range because of lower data rates, but is offset somewhat by the same power in half the bandwidth. The 15% loss of range will be addressed by adding additional radio sites in the network.

## **900 MHz**

ATMS Voice System - The equipment used for voice operation on ATMS is already FCC Narrowband Mandate compliant, as it is already operating in narrowband mode.

## **NEXT STEPS**

Metro's staff will continue to implement the FCC Narrowband Mandate in order to meet the January 1, 2013 deadline.