



The Commonwealth of Massachusetts
Executive Office of Public Safety & Security

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March 23, 2012

Dear Municipal Official:

The Executive Office of Public Safety & Security (EOPSS) is pleased to provide you with a customized summary sheet of your municipality's readiness to meet the upcoming Federal Communications Commission (FCC) "Narrowband Mandate". The attached municipal information sheet is provided to you with an estimated equipment count and narrowbanding status summary. The radio counts and cost estimates are intended to provide a starting point for your own, more detailed assessment. The numbers in the summary were derived from a combination of information sources including FCC and survey data.

The summary provides you with cost estimates, based on information available on the ITT40 state contract, that we hope will help you plan and budget for the FCC narrowband transition. On the back of the sheet you will find a list of some suggested steps to follow in order to complete the narrowbanding process.

As you may be aware, the FCC will require all of its UHF and VHF licensees operating within the 25-kHz bandwidth channels to reduce their bandwidth or "narrowband" by no later than December 31, 2012. This mandate impacts all municipal radio systems. Failure to narrowband may result in fines, the loss of the FCC license to use a particular frequency, interference from other radio systems, and most importantly the potential loss of communications capabilities amongst your public safety personnel and mutual aid partners.

While compliance with the FCC mandate is the responsibility of individual license holders, the local and state agency representatives on the Statewide Interoperability Executive Committee, (SIEC) Chaired by EOPSS, felt that we could assist cities and towns by conducting a statewide assessment of progress toward meeting the mandate. Our hope is that the information included with this letter will help cities and towns more effectively plan to meet the December 31, 2012 FCC deadline. The results of this study indicate that approximately 35% of cities and towns have not yet narrowbanded their licenses and/or radio systems.

If you have any questions or concerns about the information you are receiving please feel free to contact us at Interop@state.ma.us or call our staff project coordinator, Jeff Brownell at (617) 725-3323.

Sincerely,

A handwritten signature in black ink that reads "Kurt N. Schwartz".

Kurt Schwartz
Undersecretary for Homeland Security and Emergency Management
Executive Office of Public Safety & Security



CHILMARK, MASSACHUSETTS

Public Safety Radio Narrowband Status Summary

Estimated Cost to meet Narrowband Mandate*	\$6,629
FCC Narrowbanding Deadline	December 31, 2012

This summary is being provided to you as a service from the Massachusetts Executive Office of Public Safety and Security (EOPSS) in order to help your municipality comply with the Federal Communications Commission (FCC) "Narrowband Mandate" that must be met by midnight December 31, 2012.

This mandate affects UHF and VHF frequencies used by municipal and state public safety radio systems including police, fire, emergency medical services, emergency management, public works, as well as other departments such as schools. If your town has already narrowbanded its radio systems for all public safety agencies, then you do not need to take any further action. Otherwise, the information provided below will help your municipality to complete narrowbanding of affected radio systems. No grant funding is being offered.

In order to derive *estimated* radio equipment counts and produce Narrowband Status Summaries, each Massachusetts municipality was contacted through its chief elected officials, department heads or other municipal staff through surveys, phone calls, emails and interviews. Additionally EOPSS used statistical models to estimate the number of impacted radios when data wasn't available through other means. Your municipality's estimated status is detailed in the tables below.

Public Safety Radio Assets

Estimated Radio Counts by Agency & Type

Legend	Survey based data is <u>underlined</u>			Regression-based data estimates – <i>not underlined</i>			Total radios
	Fire Radios			Police Radios			
Radio	Mobiles	Portables	Stations	Mobiles	Portables	Stations	
Counts:	<u>4</u>	<u>9</u>	<u>1</u>	3	9	0	26

Narrowbanding Status

Radio Types:	Narrowbanding Complete			Must Replace			Must Reprogram		
	Mobiles/ Control Stations	Portables	Base/ Repeater Station	Mobiles/ Control Stations	Portables	Base/ Repeater Station	Mobiles/ Control Stations	Portables	Base/ Repeater Station
	<u>5</u>	<u>13</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>6</u>	<u>0</u>

Estimated Narrowbanding Costs

Narrowband status:	Replacement Cost			Reprogramming cost			Total
Radio types:	Mobiles / Control Stations	Portables	Base / Repeater Station	Mobiles/ Control Stations	Portables	Base/ Repeater Station	
Unit price	\$2,657	\$1,000	\$16,616	\$35	\$35	\$150	
Total Cost	\$5,314	\$1,000	\$-	\$105	\$210	\$-	\$6,629

Suggested Steps on Next Page

* The Estimated Cost to meet the FCC Narrowband Mandate is based upon a combination of FCC licensing data, information provided to EOPSS from your municipality or regression-based modeling analysis and prices derived from the ITT40 state contract using specific sample radio products and reprogramming costs. The sample radios were- Portable: Motorola model XTS1500 @ \$1,000 each; Mobile: Motorola XTL2500 \$2,457 plus \$200 installation= \$2,657; Repeater/Base Station: Motorola GTR8000, \$16,119 plus \$500 installation= \$16,619. Your equipment selection and installation variables will affect actual costs.

Steps to Narrowband Compliance

- 1. Convert current wideband licenses to the corresponding narrowband license** - This approach avoids both the risk of losing primary access to public safety frequencies and also protects licensees from any FCC legal action to impose fines or stop wideband voice-radio transmissions that will be considered illegal after 12/31/2012.
- 2. Take an inventory of your radios** - Verify the estimates provided in this summary. Equipment purchased during the last ten years likely is narrowband capable and can be re-programmed. Older equipment will likely need to be replaced.
- 3. Reprogram existing radios** – Narrowband capable equipment can be easily converted
- 4. Paging Channels** - If you perform radio paging on your radio system verify whether that channel is designated by the FCC as a "paging only" channel. "Paging only" channels are exempt from the FCC's narrowbanding requirements. It is important to note that if your system sends out pages on channels that also support voice and if that channel is currently operating in a wideband mode, then a new system FCC license will need to be obtained and all radio equipment on that channel, including pagers, must be narrowbanded.
Data Only Channels - are exempt from the FCC narrowbanding requirement if that equipment supports a data equivalency of 19.2 Kbps for a 25 KHz channel.
- 5. Develop budget requirements and explore funding options** - There are no grant funding sources that are dedicated to covering narrowband conversion costs so municipal funding is likely the most viable option.
- 6. Establish a conversion and implementation schedule** - Make sure that all aspects of compliance are completed in 2012 before the FCC deadline.
- 7. Coordinate your conversion with neighboring public safety agencies** - This will help ensure continued interoperability among your mutual aid partners and minimize communications interference
- 8. Conduct tests during conversion** - Ensure that your system continues to provide similar coverage and help determine if transmitter site changes or additions will be required to compensate for possible coverage reductions.

Although **complying with the narrowband mandate is the responsibility of individual FCC license holders**, EOPSS hopes that the results gathered from its statewide narrowband needs assessment provides valuable information upon which local officials can base their decision-making and planning for narrowbanding.

It has been found that those cities and towns that have already narrowbanded, relied on their own internal funding sources – such as town meeting articles or other special funding articles. Neither the FCC nor EOPSS has identified any funding sources that are specifically dedicated to meet this mandate. **Cities and towns should ensure that any funding needed to complete narrowbanding activities is included in municipal budgets in time to meet the midnight, December 31, 2012 deadline.**

For questions about this summary document, please contact the Executive Office of Public Safety and Security, Office of Grants and Research, Homeland Security Division, interop@state.ma.us or Jeff Brownell at 617-725-3323.

Detailed information and references to other resources concerning narrowbanding are available from the FCC at www.fcc.gov/narrowbanding.