



# Oklahoma Office of Homeland Security

*Prevent, Protect, Prepare*

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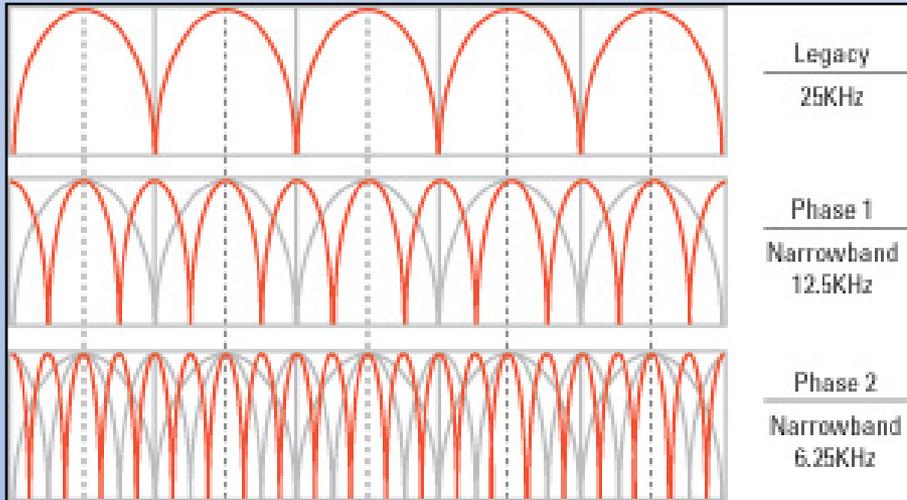
## ***Narrowbanding Basics***

# Today's Radios

- **Currently, VHF and UHF land mobile frequency bands are highly congested**
- **There is often not enough available spectrum for agencies to expand their radio systems**
- **The purpose of Narrowbanding is to open up additional channels within the same spectrum space**



# Overview



Source: National Institute of Justice

- **Mandated by the Federal Communications Commission**
- **Migration from 25 kHz to 12.5 kHz channel bandwidth (eventually to 6.25 kHz)**



# Who is Affected?

- Applies to all FCC Part 90 VHF High Band and UHF Systems

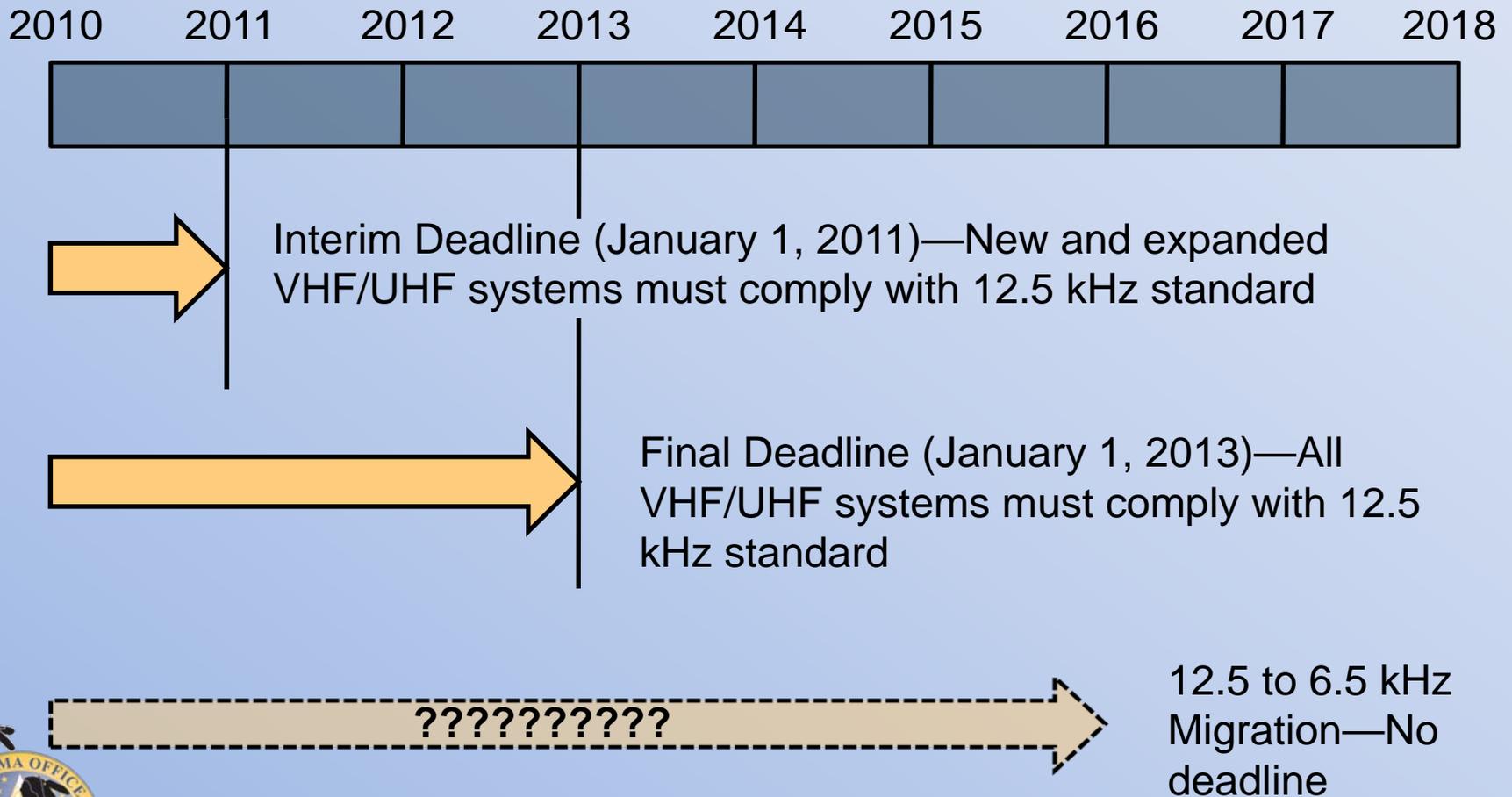
VHF High Band: 150-174 MHz

UHF: 421-512 MHz

**The FCC may cancel your license or issue monetary fines if you're not in compliance by January 1, 2013.**



# Timeline



# How to verify if your radio is narrowband capable

- Contact your manufacturer to determine whether your existing equipment is narrowband capable
- A few products that comply:  
<http://www.apcointl.com/frequency/documents/narrowbandingequipment.pdf>
- Buyer Beware!



# Meeting the Deadline

1. Inventory all FCC Part 90 radio assets to determine what must be replaced and what is already capable of narrowband operation.
  - a) VHF/UHF subscriber radios will have to be replaced if approximately 11 years or older.
  - b) Newer subscriber radios will require reprogramming.
2. Determine budget requirements and identify funding.
3. Obtain new or modified licenses.
4. Establish a conversion and implementation schedule.  
Make sure to work closely with neighboring agencies to ensure continued interoperability.



# How to Check the Status of Your License

- Use online tool available at [www.publicsafetytools.info](http://www.publicsafetytools.info) and click on “Narrowbanding License Status Tool.”
- Enter *specific* location
- Green balloon=Narrowband Transmitter  
Blue balloon=Narrowband/Wideband Transmitter  
Red balloon=Wideband Transmitter



**Total Transmitters: 676**      [Display Transmitter Totals](#)

**Location:**

**State:**

**Regions:**  (dropdown menu with options: Oklahoma, Okmulgee, Osage, Ottawa, Pawnee, Payne)

Use the Ctrl key to select / de-select more than one county

**Cities:**

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**Frequency:**  
 UHF & VHF Freqs     UHF Freqs     VHF Freqs

**Transmitter Type:**  
 Fixed     Mobile

**Radio Services:**

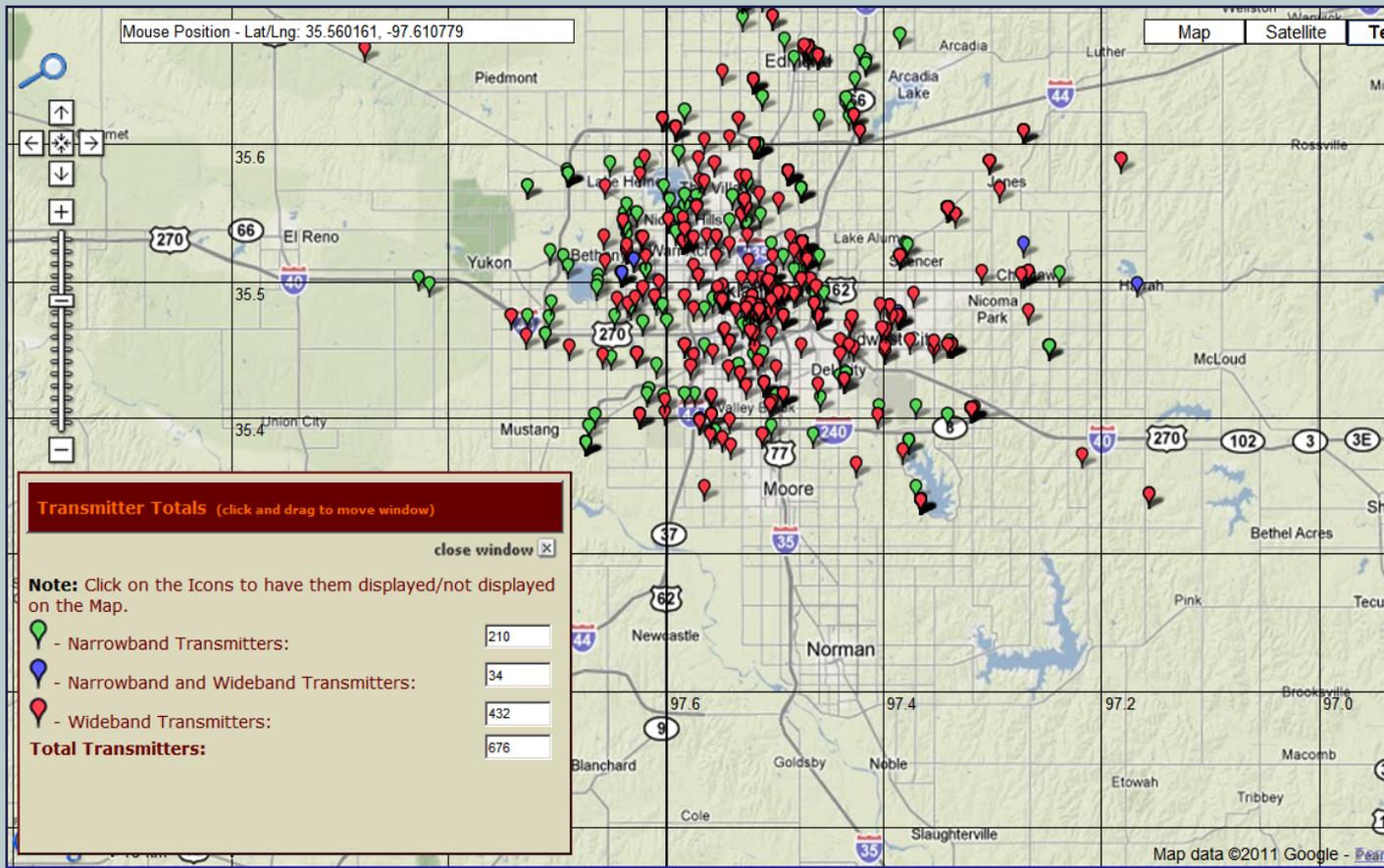
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**Include/Exclude FRNs and/or Call Signs:**

include

include

**Date Last Updated: 06/19/11**  
(LMR Private Database: 3,828,762 Frequency Records)



Based on FCC Universal Licensing System (ULS) Database as of: 6/20/11



# Obtaining New or Modified Licenses

- To move to narrowband operations, organizations must apply for new frequencies or modify existing licenses.
- An organization that is licensed for a 25 kHz-wide channel is not guaranteed two 12.5 kHz channels.
- Licensees will have to justify to the FCC why they need additional channels. Consideration of applications for new narrowband licenses will follow the same process as a new license application.
- As organizations migrate to narrowband operation, however, the pool of available frequencies will increase.



# Questions?

Visit: [www.ioc.ok.gov](http://www.ioc.ok.gov)

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