



Safety Committee Minutes
July 27, 2011

Meeting brought to order at 6:31 p.m.

Pledge

Present:

Richard Barbera, Mayor Carter, Jim Lovejoy, Chief Burson, and Kathy Rhoads.

Chief's Report

Effective January 1, 2013, we are required to have all radios portable, car and station on Narrow Band Width or Narrow Band Width capable. Arlin Bradford with VASU Communications gave a presentation showing how Narrow banding is the future and what we need to do to be prepared. We will need to consider inventory, plan purchases and infrastructure, upgrades and unintended consequences. We do not have to worry about a tower. That is the County's responsibility. Time for searching for funding is running out. The money available has been cut in half. A copy of Arlin's presentation is attached.

An advertisement for a new police officer has been placed. The interviews will be held week of August 12th and presented to Council on August 15th.

The new car is being painted and having equipment installed and should be on the streets in three weeks.

The canine car is not working. Rittman is asking for the car to have the cage and transmission. The car was donated to the Village of Seville by the City of Wadsworth. It was motioned by Jim Lovejoy to recommend to Council to donate the car to Rittman and seconded by Richard Barbera.

CSX will be raising the speed limit from 10mph to 25mph on August 1st. The Village has posted the information on the website and will send information with the BOPA news. There is concern for the residents that use the tracks for walking.

August 13th will be a POW Awareness Parade down Route 3. They will spend 45 minutes at the fire station then continue downtown and over to the National Cemetery. The event will be posted on the website.

Safety Committee Minutes
July 27, 2011
Page 2

The Medina County Drug Use Committee would like to give us a prescription drop off box. The Task Force would collect and properly dispose of any drugs. This is to help lessen the traces of drugs found in water and drug theft. We can decide where to place the box and how to secure it.

Privilege of the Floor

A resident inquired if there will be a National Night Out this year. There will not be one this year

A concern was expressed for Mr. Barbera's attention to his phone during meetings. It was noted he uses it during meetings for research.

Jon Sobczak provided information for Parks & Streets radios. The radios should be able to be reprogrammed and not necessarily replaced.

A concern for how long these changes will be effective was expressed and Arlin feels technology is constantly changing and there will be more changes in our future.

Unfinished Business:

None

New Business:

It will be presented to the Solicitor to see what responsibilities the Village has with posting signs in regard to the CSX change in speed limit.

The Medina County Drug prescription drop off box was in further discussion of location and how to secure the box. It was motioned by Richard Barbera to recommend to Council to accept the drop off box and seconded by Jim Lovejoy. Aye votes all.

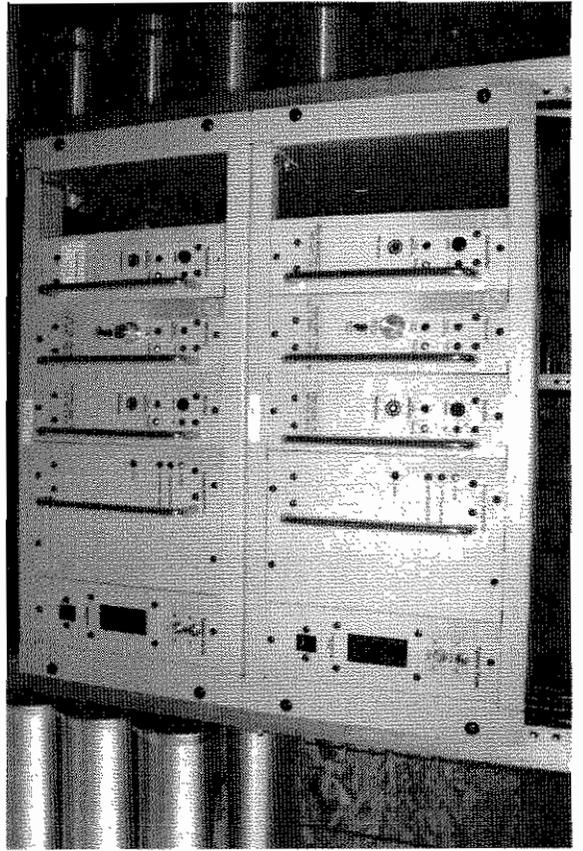
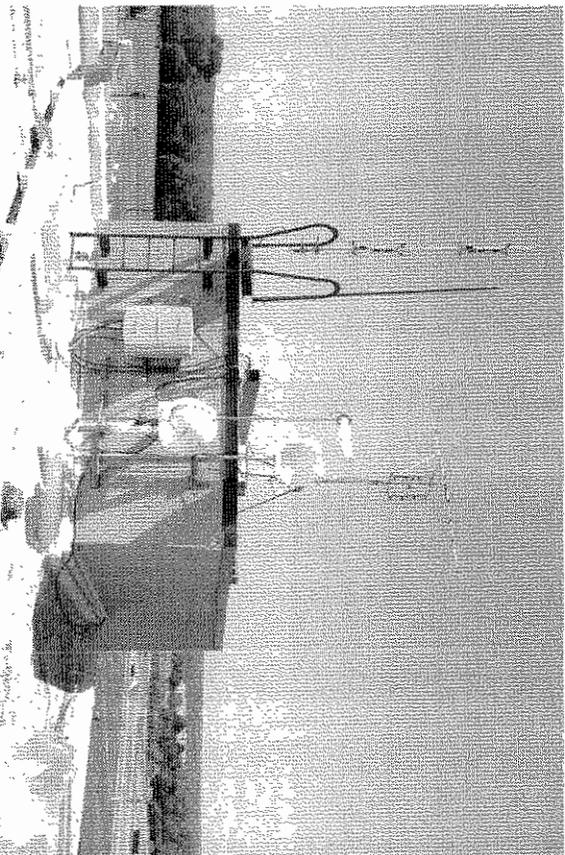
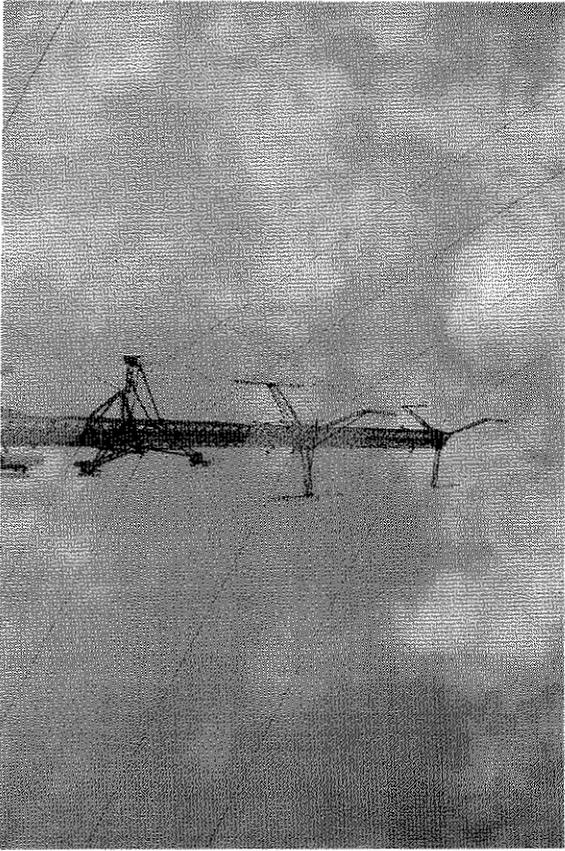
Kathy Rhoads motioned to adjourn the meeting, seconded by Richard Barbera. The meeting was adjourned at 7:37 p.m.

Respectfully Submitted,


Kathy Rhoads
Safety Committee Chair

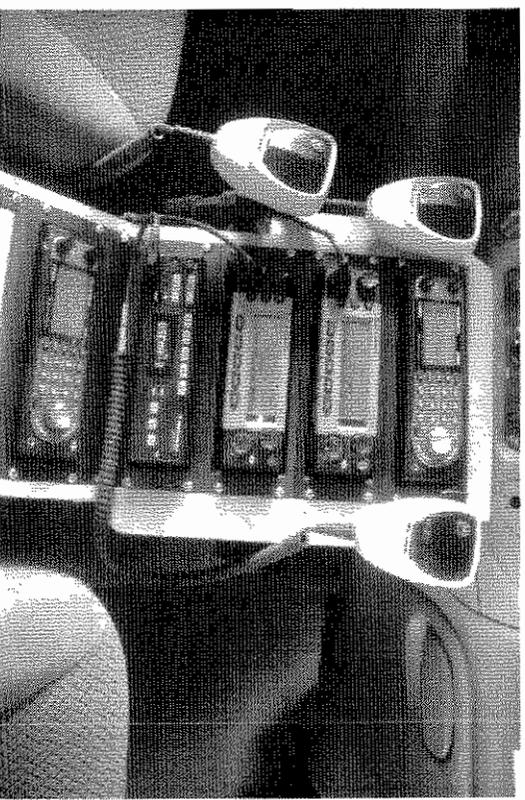
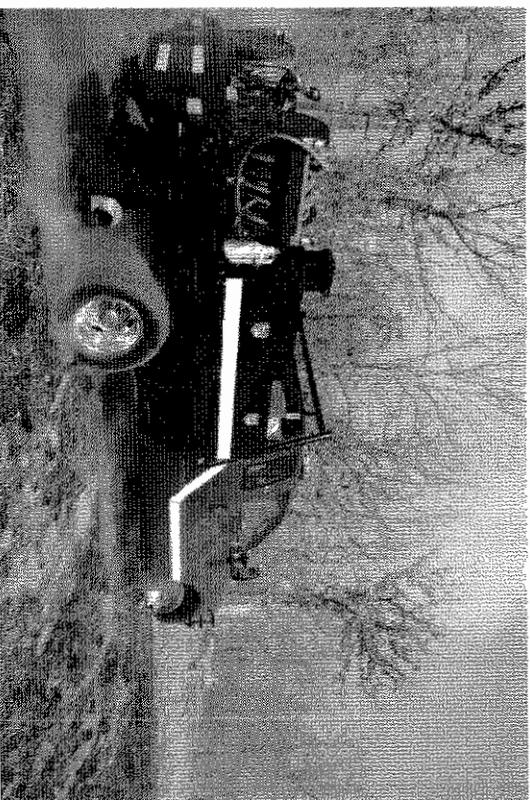
NARROWBANDING

The Future of Communications



VHF-UHF Radios in...

- ▣ Police Cars
- ▣ Ambulances
- ▣ Fire Trucks
- ▣ Graders
- ▣ Dump Trucks
- ▣ Pool Cars
- ▣ Pickups
- ▣ SUV's



Narrowband Basics

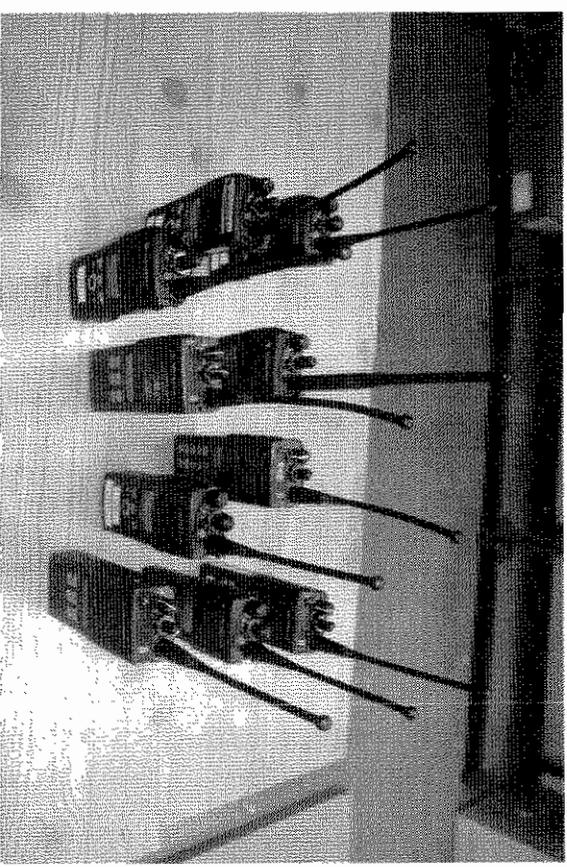
- ▣ Is a mandate from the Federal Communications Commission
- ▣ Applies to VHF High Band and UHF Systems
 - VHF High Band refers to 150-174mHz
 - UHF Refers to 450-512mHz

Why Narrowbanding?

- ▣ The amount of VHF and UHF spectrum available to Public Safety has essentially remained unchanged.

Why Narrowbanding?

- ▣ As agencies have grown, their radio needs have grown, too.



Why Narrowbanding?

- 154.19000 FB2 141.3 150.7900 MO El Reno Fire Dispatch Canadian KCV365
- 154.19000 FB Inola Fire Rogers WPUK995

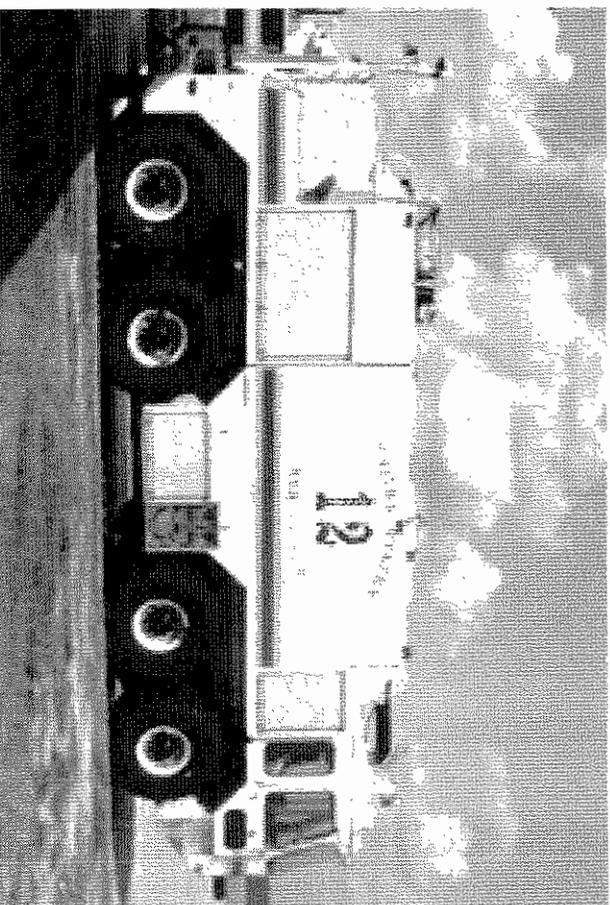
- 154.19000 FB2 192.8 155.8650 MO Johnson County Fire and EMS WPAG264
 - 154.19000 FB2 107.2 150.7750 MO Kiowa County Fire Kiowa WPKR656
- ## ▫ Spectrum

Crowding

- 154.19000 FB Keystone Vol FD Tulsa KSJ286
- 154.19000 FB Ochelata Vol FD Washington KNJX230
- 154.19000 MO 100.0 none Oklahoma County Fire, Ops-6 WNTJ251
- 154.19000 S Paoli Fire Garvin
- 154.19000 FB2 118.8 153.7700 MO Ponca City Fire and EMS KLA992
- 154.19000 FB2 167.9 159.3450 MO Talihina Fire (Old Co Fire) WPWG234
- 154.19000 FB2 159.1500 MO Welling, Tri-Community Fire WQFN609
- 154.19000 FB2 173.8 159.0450 MO Woodward County Fire WPLG558

800 MHz Trunking

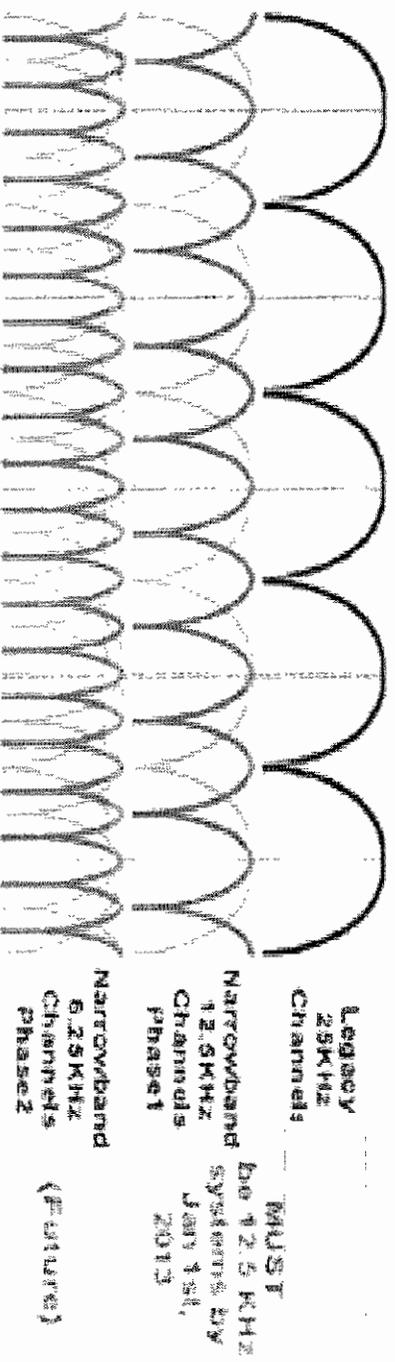
- ▣ Infrastructure is Expensive
- ▣ Mobiles and Portables are expensive
- ▣ Excess Capacity



What is Narrowbanding?

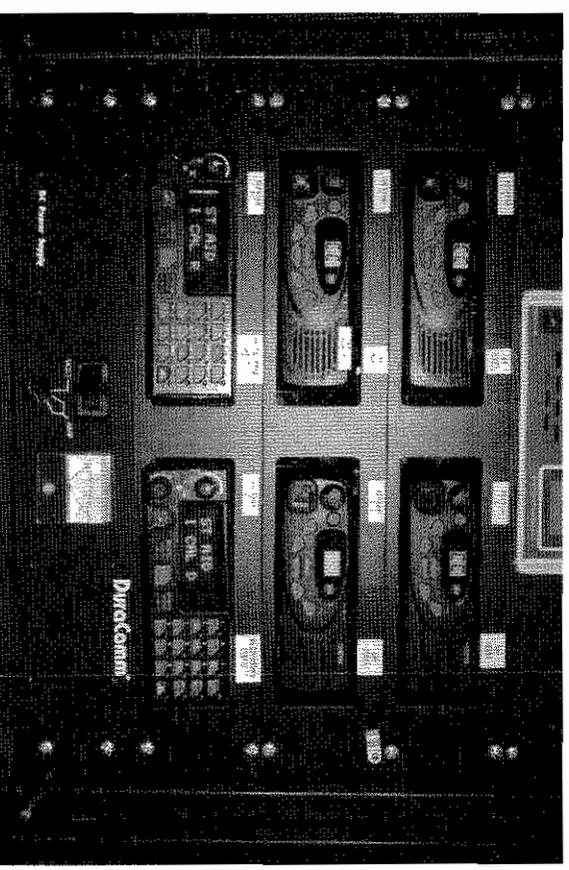
- Accomplishes this by squishing signals in half.
- Reduces channel spacing by half, effectively “doubling” the number of channels.

FCC Part 90 LMR “Narrowbanding” Mandate - 12/24/04



Are you --REALLY- completely on 800 MHz?

- ▣ Tornado Siren Activation
- ▣ Public Utility SCADA Systems
- ▣ Mutual Aid Gateways
- ▣ Cache radios

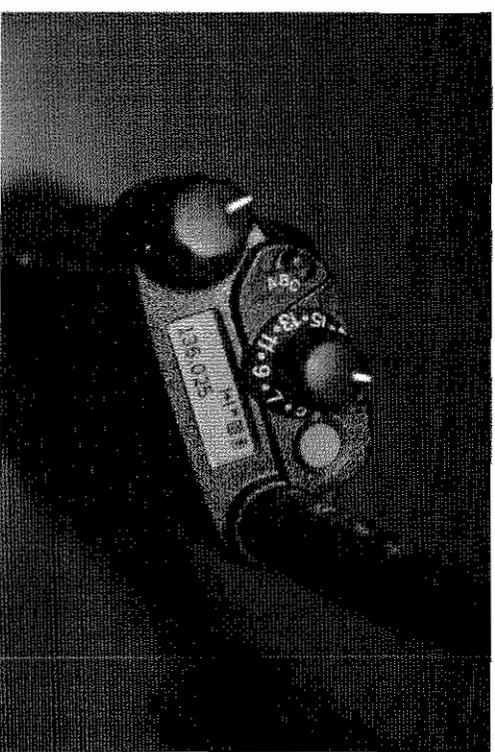
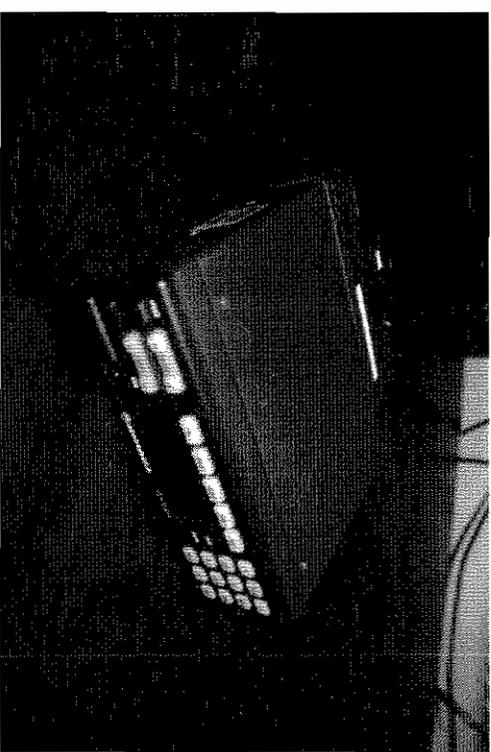


And don't forget paging

- ▣ Older Volunteer Responder Pagers and Monitor Receivers are NOT Narrowband Capable.
- ▣ Minitor I – IV Must Be Replaced
- ▣ Minitor V is Narrowband capable
- ▣ Older Plectron AND other Station Alerting/Siren activation systems are not Narrowband capable.

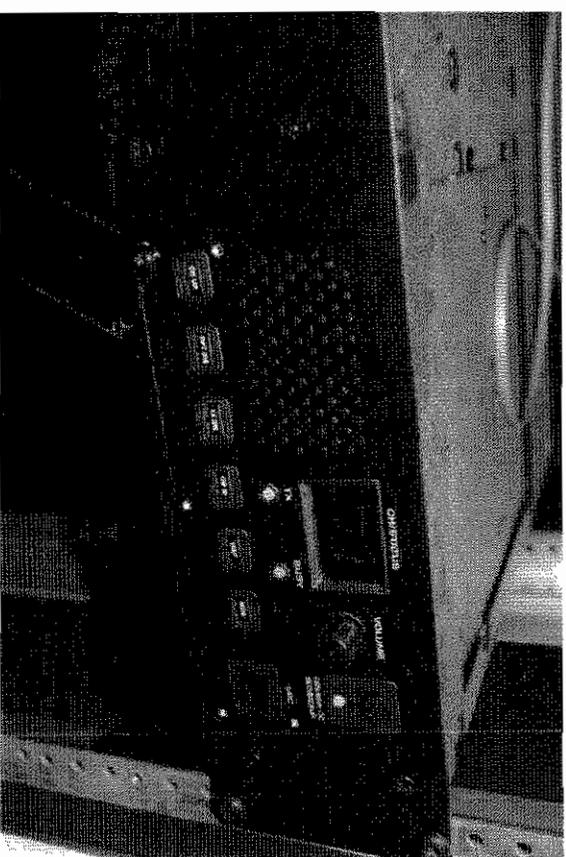
To accomplish Narrowbanding:

- ▣ VHF / UHF Subscriber Radios will have to be replaced if they are roughly 11 years old or older.
- ▣ Newer subscriber radios will require reprogramming.



Radio Infrastructure

- ▣ Base Stations
- ▣ Repeaters
- ▣ Voter Receivers



Determine If it is Narrowbandable

And it must be done before:

January 1, 2013

January 1, 2011

- No New Systems will be licensed to use Wide Bandwidth.
- No Existing Systems using Wide Bandwidth will be modified.
- New Manufacturer equipment can only be narrowband.

“With the increasing efforts of NPSTC and our member organizations to build awareness of the Jan. 1, 2011 interim deadlines and Jan. 1, 2013 required radio systems are asking detailed implementation users of land mobile radio systems are asking detailed implementation questions and raising a growing list of concerns, and mainly express user questions related to the Jan. 1, 2011 deadline, and mainly express user directly related to the Jan. 1, 2011 deadline, and mainly express user concerns about either interoperability during the two year interim period or concerns to purchase equipment with capabilities beyond what users must costs to purchase equipment with capabilities beyond what users must deploy.”

Narrowbanding will be expensive!

- ▣ Replacing Mobile and Portable radios will be expensive!
- ▣ Replacing Repeater\$, Base \$tation\$ and VHF-UHF link\$ will be even more expensive!
- ▣ Just reprogramming radios\$ and updating licen\$e\$ will be expensive!

Narrowbanding will be expensive!

\$ Only two budget cycle\$ left!

FY 2011, FY 2012

\$ No \$pecific Grant\$ or Federal Funding identified for Narrowbanding.

What to do Immediately

- ▣ Inventory your system
- ▣ Plan your mobile and portable radio purchases
- ▣ Plan your Infrastructure Purchases
- ▣ Plan your system Upgrades
- ▣ Plan for unintended consequences

Mobile-Portable Programming Considerations

Frequencies have always looked like this... And now they also look like this...

154.130

154.1225

154.145

154.1375

154.160

154.1525

154.1675

National Interoperability Frequencies

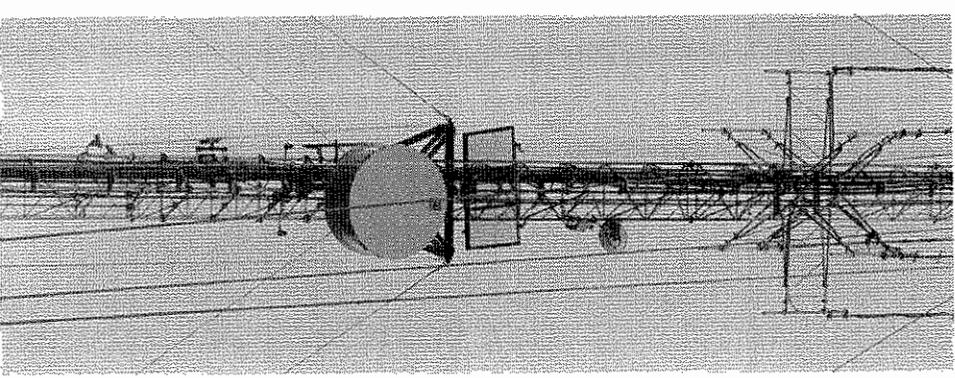
- ▣ V-CALL 10 155.7525 156.7p1 Narrow
- ▣ V-TAC 11 151.1375 156.7p1 Narrow
- ▣ V-TAC 12 154.4525 156.7p1 Narrow
- ▣ V-TAC 13 158.7375 156.7p1 Narrow
- ▣ V-TAC 14 159.4725 156.7p1 Narrow

Planning Considerations for Mobile and Portable Radios

- ▣ Who will do the programming? Will the programming occur on site or at a shop?
- ▣ Do the radios have enough channel capacity?
 - Wide and Narrow versions of all the channels?
 - Different Zone?
- ▣ How many times will each radio have to be programmed?

Planning Considerations for Infrastructure

- ▣ Change over sites one by one
 - Requires wide and narrow channels of the same frequency
- ▣ Change over channels one by one
 - Requires reprogramming radios multiple times
- ▣ Run the new narrowband system concurrently with the old system
 - Requires additional antenna, transmission line, duplexer, etc.



System Considerations

- Narrow Band systems may not have the same coverage as a comparable Wide Band system.
 - Most engineering documents indicate reduced range, when the only change is narrowing the signal
 - (Power, antenna, frequency stay the same)
 - Additional sites / equipment may be required

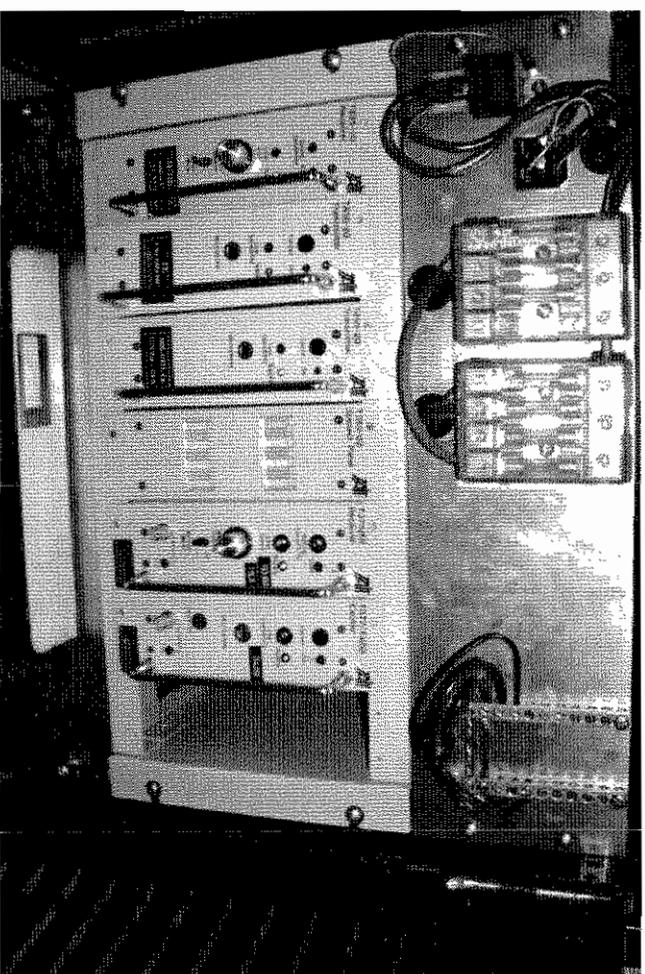
APCCO-25 Phase I

- ▣ Digital Signals
- ▣ Additional features
 - Unit ID, Emergency button, Individual Call, etc.
- ▣ Improved efficiencies provide comparable coverage
- ▣ Equipment is more expensive

APCCO P-25 EXAMPLE

- ▣ Install a new, P-25 repeater and operate it in MIXED MODE.

Replace Mobiles
and Portables
and Use
MIXED MODE
for in-agency
communications



Use an additional channel in the radio that transmits AND receives in ANALOG, to maintain interoperability communications!

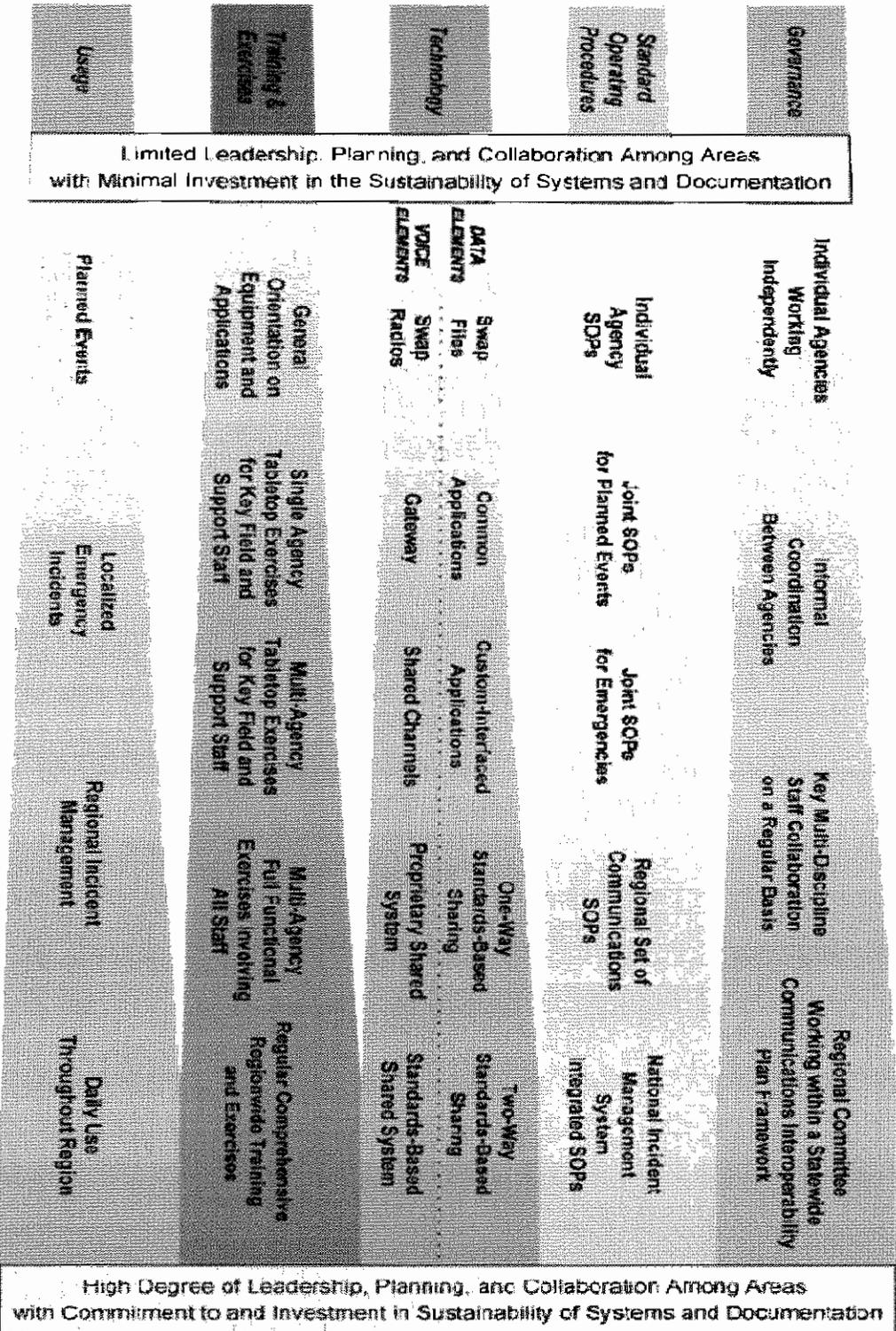
Replacing an entire system

- ▣ Some vendors will attempt to steer you towards a proprietary system
- ▣ This will lock you into sole-source vending



Homeland Security

Interoperability Continuum



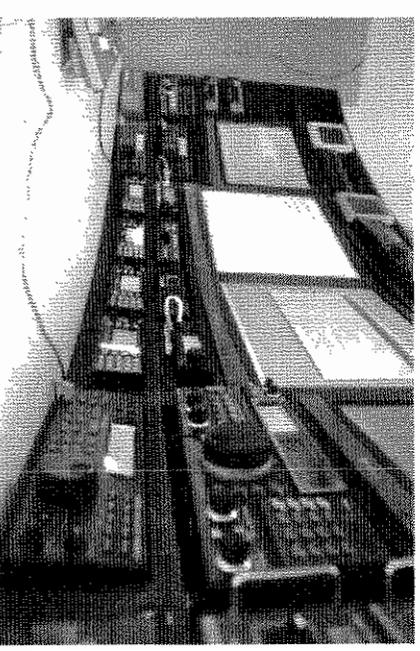
Proprietary Digital

- ▣ Outside agencies cannot communicate with you on your repeater
- ▣ Use a gateway between your system and an analog channel
- ▣ Buy enough radios for normal mutual aid partners (proprietary shared)

External Agency Coordination

- ▣ Mutual Aid Partners
 - Police, Fire, EMS, Tow Trucks, Road Crews, etc.

- ▣ State Mutual Aid Channels
 - State Fire 154.280
 - State Law MA 155.370
 - HEAR 155.340
 - Local Gov't MA 155.805



State Fire – 154.280MHz

- ▣ In use for over 40 years
- ▣ Simplex, no PL tone
- ▣ An interoperability solution before it became “trendy”
- ▣ Used Statewide
- ▣ LICENSED BY INDIVIDUAL AGENCIES!

NarrowBand on a WideBand Channel

- ▣ Received audio may be very soft and quiet
- ▣ Wideband radios must turn up volume to hear.
 - Once a second wideband radio transmits, the original wideband radio's received audio will be very loud
- ▣ Audio may not be picked up by wideband receiver

WideBand on a NarrowBand Channel

- ▣ Received audio may be loud, distorted, or inaudible
 - Turning down the volume may mean missed calls from a NarrowBand radio
- ▣ Communications may work at a distance but not close together

Possible Solutions & Suggestions

- Program both a “wide” and “narrow” version of each MA Channel
- Append the label of the NarrowBand Version with an “N”
- Communicate with your mutual aid partners
- Use this opportunity to do operator training

Remember DTV?

- Complaints:
 - about expense
 - Why, oh, WHY, didn't anyone TELL ME!
 - Can't we just leave things alone?
- Worries that Gramma won't get tornado warnings
- Huge outcry that we're not ready
- Tremendous pressure from constituents
- DATE WAS MOVED BACK LESS THAN FOUR MONTHS.

Public Safety is no longer Protected

- FCC Fines can be thousands per day, per violation.
- Spectrum is too crowded to allow “courtesy release.”
- Ensure your licensing is accurate
- Latest recommendations are automatic cancellation of wide band licenses on

January 1, 2013

Questions?

Arlin Bradford

Vasu Communications

(419) 524-7970