

STATE OF OHIO

MARCSIP Business Plan/Rollout

May 9, 2012 – Ohio APCO/NENA Combined Chapter Business Meeting

SHARED COMMUNICATIONS
SERVICES FOR OHIO PUBLIC
SAFETY in the 21st Century

SHARED SERVICES—Saves
Money, Maximizes Interoperability,
SAVES LIVES

**MARCS
TODAY**

- Statewide, robust, stable platform
 - Over 40,000 radios activated
 - Originally designed for 8,500
 - 700 user agencies
 - Original design – 8 agencies!
- Solid Infrastructure
 - 218 towers statewide
- Reliability maintained
 - 20,010,102 minutes airtime
4/1/11 – 4/1/12
 - 89,249,881 push-to-talks
- Continued high performance
 - Average Grade of Service – 99.8373%
 - Maximum hourly Utilization – 57.3917

**MARCS CHALLENGES****•ECONOMICS**

- 1337 Radio Systems in Ohio results in duplicative spending, reduces/negates interoperability

•CAPACITY

- Current MARCS platform service has met growth needs but is out of Radio IDs.

•LIFECYCLE SUPPORT

- Current MARCS platform – core parts availability is a critical issue.

•NARROWBANDING

- Federal mandate means many agencies are faced with large scale upgrades – MARCS needs to be a viable option, and is!



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**MARCS'S
SOLUTION****• STATEWIDE PROJECT 25 STANDARD UPGRADE**

- Project 25 upgrade to improve interoperability and eligibility for future federal grants.
- Upgrade is fully P-25 compliant, meeting all standards, including capability of migration to P-25 Phase 2.

• SYSTEM OF SYSTEMS

- Reduce the number of autonomous infrastructures by connecting and sharing network capacity. System capacity grows to 128,000 IDs.
- #1 Strategic and Tactical Goal, Ohio Statewide Communications Interoperability Plan (SCIP)

• RANK ORDER PHASED

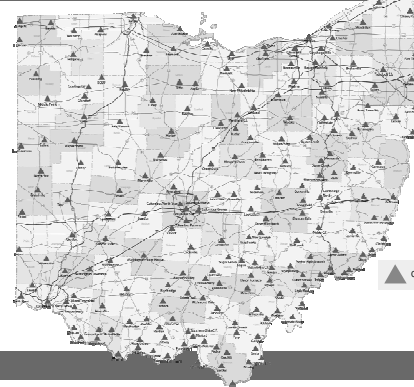
- Phases will be implemented first in areas of critical need.

• REUSE OF EXISTING HARDWARE

- Reuse of existing hardware has been emphasized to maximize cost savings.

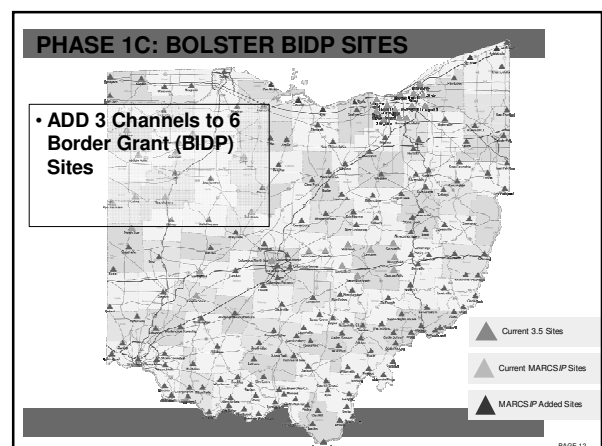
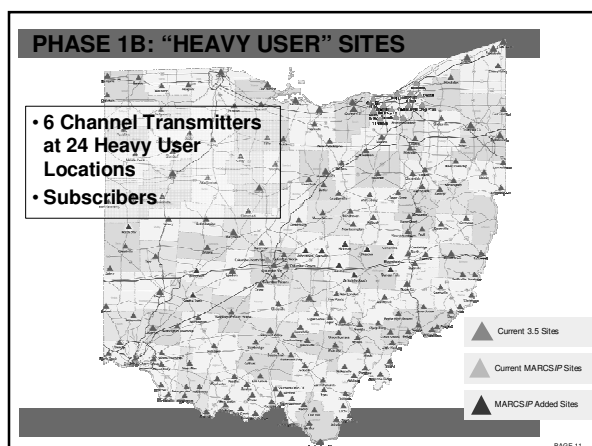
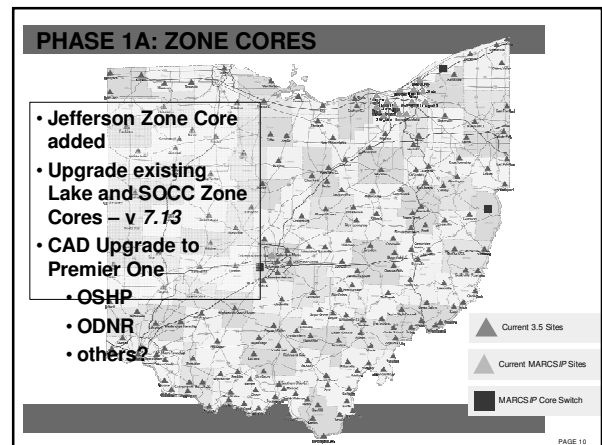
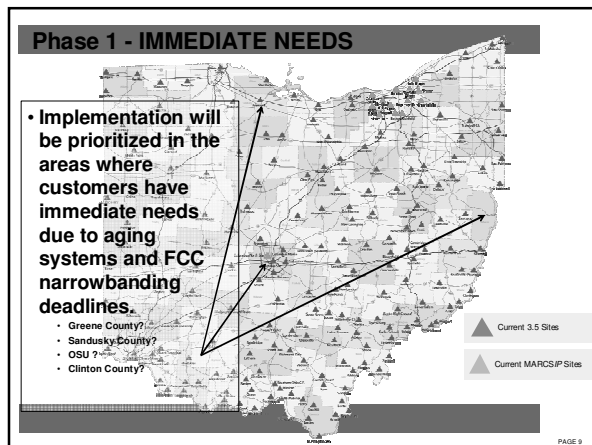
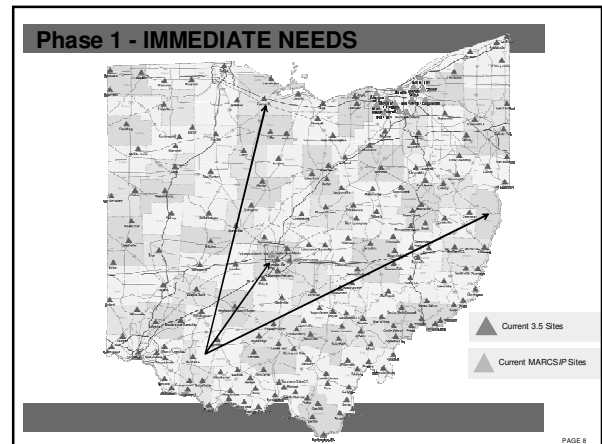
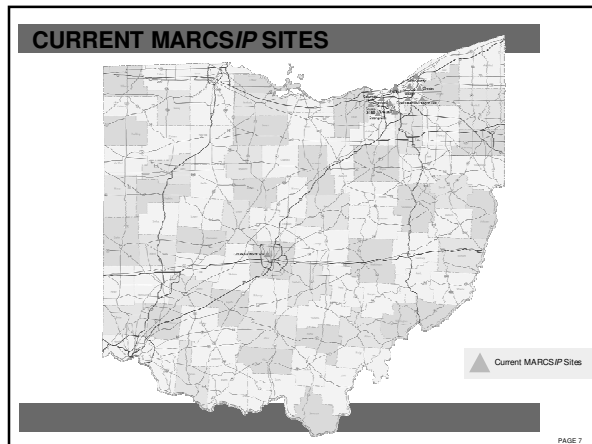
**HIGH – LEVEL ROLL-OUT PLAN**SHARED COMMUNICATIONS SERVICES FOR OHIO PUBLIC SAFETY in the 21st Century

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CURRENT MARCS 3.5 SITES

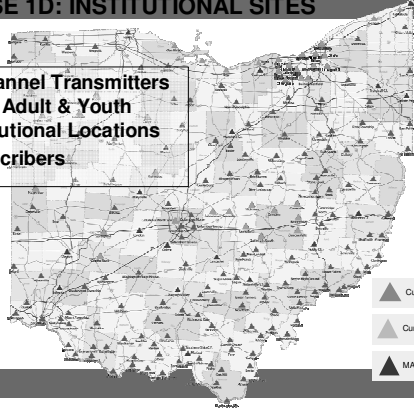
▲ Current 3.5 Sites

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PHASE 1D: INSTITUTIONAL SITES

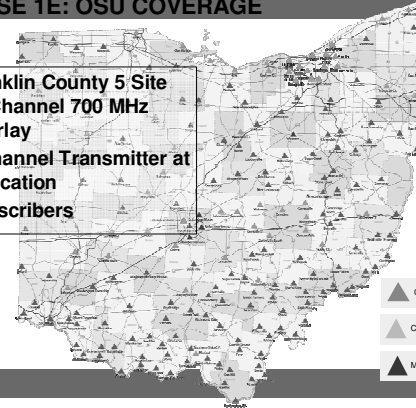
- 6 Channel Transmitters at 19 Adult & Youth Institutional Locations
- Subscribers



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PHASE 1E: OSU COVERAGE

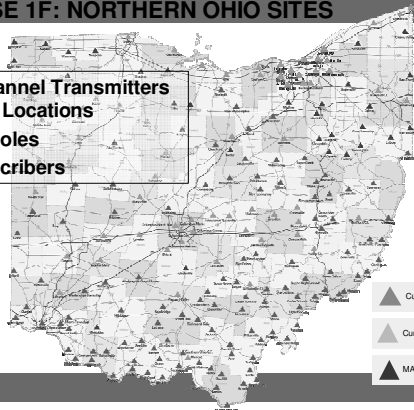
- Franklin County 5 Site 12 Channel 700 MHz Overlay
- 6 Channel Transmitter at 1 Location
- Subscribers



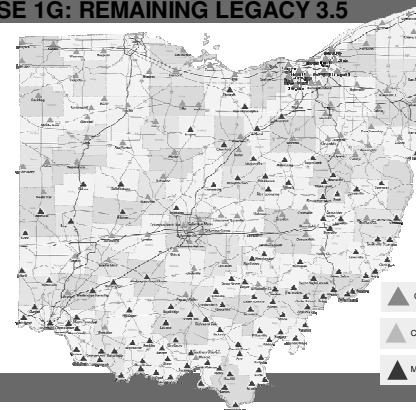
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PHASE 1F: NORTHERN OHIO SITES

- 6 Channel Transmitters at 29 Locations
- Consoles
- Subscribers



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PHASE 1G: REMAINING LEGACY 3.5

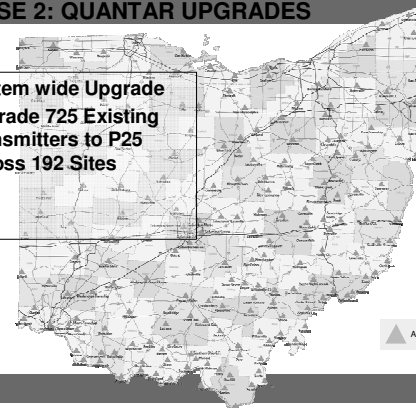
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PHASE 1 COMPLETE!!!!

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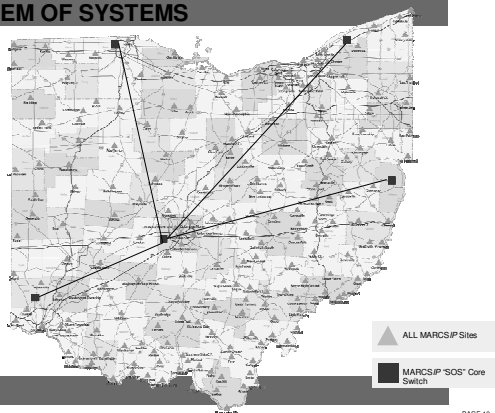
PHASE 2: QUANTAR UPGRADES

- System wide Upgrade
- Upgrade 725 Existing Transmitters to P25 Across 192 Sites

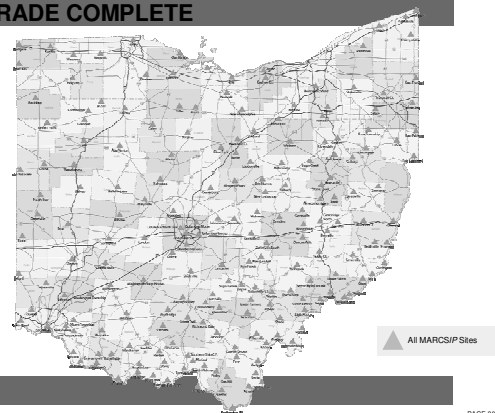


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SYSTEM OF SYSTEMS



UPGRADE COMPLETE

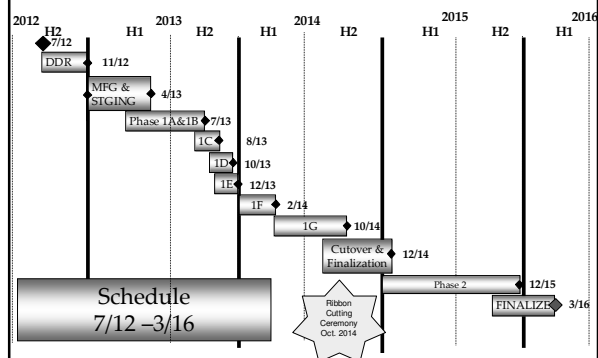


LTE OPTION INCENTIVE

- LTE Option bundled with P25 System
 - Core located at the SOCC
- 4 Remote Sites
- Motorola Push to Talk (MPPT)
 - Connection between Project 25 Voice System and LTE System
- Motorola VPN (MVPN)
- 90 Vehicular Modems
- 10 USB Dongles
- 50 Handheld Devices



PROJECT SCHEDULE



MARCSIP Results

- Statewide Project 25 Standard Upgrade
 - Project 25 upgrade meets required eligibility for future federal grants.
- System of Systems
 - Reduce the number of autonomous infrastructures by connecting and sharing network capacity.
 - Meets Ohio SCIP Strategic Goal #1 and Tactical Goal #1.
- Exponential Increases in Capability and Capacities
 - Radio ID's up to 128,000
 - Talk path capacity
 - Portable radio coverage
- The Bottom Line
 - *Saves taxpayer's dollars - Maximizes interoperability - SAVES LIVES*



MARCSIP Partnership Tiers

- Tier 1 - Basic Subscriber
 - Purchase radios, pay annual maintenance fees
- Tier 2 - Enhanced Local Infrastructure
 - Local partner funds enhanced capacity/coverage
 - MARCSIP rebates 50% of costs via user fee rebate
- Tier 3 - Connecting P-25 Zone Controllers
 - Lucas & Butler Counties
- Tier 4 - Sharing Core Resources
 - County/Regional tower farms connected to MARCSIP Zone Controller - generates cost avoidance
- Tier 5 - Shared Zone Controllers
 - Lake & Jefferson Counties



MARCS/IP Financing

- **COPS Funded**
 - Up to \$90,000,000.00
 - Subject to Controlling Board approval – 5/21/2012
- **Debt Reduction**
 - Via maintenance fees from end users
- **Future Upgrades**
 - Software refreshes, TDMA (narrowbanding of 700 MHz)
 - Infrastructure – also via maintenance fees
- **Goal**
 - 50,000 additional radios (&/or radio proxies) on system within next five years, allowing current \$20/mo maintenance fee to remain stable



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MARCS/IP – Partnership Support

- Please help spread the word!
- Shared Services, 21st Century “System of Systems” concept critical to more effective governmental spending & public safety communications!
- Please do not consider a new radio system, or an upgrade to existing systems, or additional “interoperability band-aids” without considering and contacting MARCS/IP!
- Outreach Points?



MARCS/IP - Discussion

- Questions?
- Answers!
- Follow-up
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 - 614-207-4453
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- 24/7/52!!

