Moving from a Project to a Program

- Defined processes and documented them
- Invoked LEAN
- 3-month wait for IDs. This has been improved to less than 24 hours
- Vendor on-boarding processes defined. Using technology to improve both end user and MARCS duties. Has resulted in improved operations for both
- Redefined MARCS responsibilities – we’re a radio program, not IT.
Moving from a Project to a Program

Began utilizing

- OIT storage
- Virtual environment
- Backup
- On-boarded to state’s security for AV, patches and more
- Domain migration
- Cisco, VMWare, VoIP, ServiceNow maintenance savings
Moving from a Project to a Program

- The personnel and dollar savings from utilizing shared services allowed us to dedicate our resources to focus on communications for Ohio’s first responders
- The result has been improvements to the system and improved operations
- Need to evaluate ROI for extending services (County level CAD/RMS for example)
Moving from a Project to a Program

Assessment study. Looking at the operations and functionality of MARCS overall. We are using the recommendations to continue to streamline operations.

Using the previously mentioned IT positions, we implemented recommendations such as updating job descriptions to redefine staff positions, enabling us to get back to our core function.

Much less reliance on contracted employees.
New Challenges
Grant Issues

- Interoperability is with the largest system available to an agency
- P25 letter from Homeland Security (SAFECOM and NCSWIC) to all State Administrative Agency (SAA) about grants running through SWIC
- Ohio Development Services Agency (DSA) grants
- Added costs to MARCS from grants
Radio Sales to Private Entities

Due to revenue generation limitations of the tax exempt bonds Ohio used to fund many projects, we are restricted in subscribing private users.

Shops know to check with us before quoting sales to a private entity. This includes Federal agencies (FBI, DEA, IRS…)
Successes
MARCS visions and planning from the SIEC delivers

- Pagers – There are now 1,486 P25 pagers on MARCS supporting agencies wanting out of the pager as well as radio business such as volunteer fire departments.
Successes

Held first annual radio shop meeting on April 26th

• Attended by all manufacturers and their shops, even from Pennsylvania, Indiana, West Virginia
• Introduced MARCS personnel, policies, and program initiatives, bringing them on the team
Successes – Rick’s Roofing Quotes

- P25 compliance allows different radio vendors operating on system, resulting in radio costs being driven down
- Shops for all manufacturers are listed on our web site
- Vendors have provided training and equipment
- RRQ was used successfully in Springfield – Paul Hicks
- Upcoming “Radio Rodeo” at the October 31st SIEC at Fire Marshal’s facility
## Successes – Rick’s Roofing Quotes

COMPETITION IS WORKING!

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<td>EF Johnson</td>
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<td>2%</td>
<td>4%</td>
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<td>Harris</td>
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<td>1%</td>
<td>1%</td>
<td>5%</td>
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<td>Kenwood</td>
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<td>0%</td>
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</table>
Successes - Ohio State University Incident
Monday, November 28, 2016
Public University Table Top Exercise  
Monday, February 12, 2018

In conjunction with Federal Homeland Security, Office of Emergency Communications’ Interoperable Communications Technical Assistance Program, the Universities of Ohio Interoperable Communications TTX took place on February 12, 2018 at the University of Cincinnati and included 76 participants from 34 local, regional, state, and federal agencies, including 9 universities.

Quote from the conclusion of a 68 page “After Action Report and Improvement Plan”:
The Universities of Ohio Interoperable Communications TTX was an important step toward increasing and improving communications interoperability throughout the Ohio University campuses in preparation for horrific but inevitable incidents. The findings in this report are based directly on the observations expressed by the local, state, and federal agencies that participated in the exercise, feedback from TTX players, and Hotwash discussions. By continually assessing progress and making improvements, Ohio universities and supporting agencies will continue to excel in their dedication to disaster preparedness and their mission to achieve an optimal level of interoperable communications for the State of Ohio. Their efforts to date have been exemplary and will serve the area admirably for years to come.
The Governor opted in to the FirstNet program in November 2017. AT&T is responsible for providing the promise of FirstNet, a national public safety grade network and will discuss in more detail later in the agenda.
State of Ohio MARCS
Multi-Agency Radio Communications System

Jennifer Allwine
MARCS Business Office Manager
Moving from a Project to a Program

• Fiscal Oversight and Compliance
  • Consolidated all legacy inventory systems into ServiceNow
  • Reconcile all devices listed in ServiceNow to Motorola PM
    • Device ID and Serial number pairing compliance
  • Ensure all device IDs are invoiced within 60 days of activation
    • State Annual or Quarterly Fiscal Terms (July-June) or (July, October, January, April)
  • Secure Service Subscription Agreements for all MARCS customers
  • Ensure that all requests are initiated by the agency end-user with signing authority
  • Proof compliance annually with Auditor of State
MARCS Financial Oversight Teams

Device Management
(Jack Haueisen & Lance Johnson)

Subscriber Management
(Tamara Byers & Lori Malinovsky)
MARCS FY18 Subscriber Mix

- Local/Regional, 81.2%
- Statewide/Private, 14.5%
- Tier 2 Partners, 3.1%
- Tiers 3 - 5 Partners, 1.3%
MARCS FY18 Revenue

Statewide/Private, 35%

Local/Regional, 65%

FY18 Growth

• 21% Overall

• 43% with Local/Regional Subscribers
OHIO MARCS RADIO TECHS

STEVE GARWOOD
ARLIN BRADFORD
KEVIN KELLY
ROBERT MAURER

STEVE GARWOOD
ARLIN BRADFORD
KEVIN KELLY
ROBERT MAURER
Other MARCS Staff

Frequency Coordinator
Bob Bill

Voice Engineer
Tony Mans

Database Management
Mike Carillon

Infrastructure Specialist
Sean Kelly
Services

Computer Aided Dispatch
Matt McLaughlin and Jackie Miller

Mobile Data Terminal
Matt McLaughlin/Jackie Miller

Records Management
Jason Mathias
MARCS System Key(s)

Agency Owns and holds the key(s)
- Shop uses the agency key(s)

MARCS Key Pool
- Shop can request key(s) for project based use.
- Keys will be set up for each specific project. (Range and Time limited)

State Code Plug
- State programmers write files and email to field tech for loading
MARCS Code Plug(s)

Verified Settings
- MARCS Required Base Code plug
- Talk Group names *Required* to match what is in the PM

Reduces Troubleshooting
Submitting Code Plugs - Required
Interstate Interoperability

Indiana
Pennsylvania
West Virginia
Kentucky
Michigan
State of Ohio MARCS
Multi-Agency Radio Communications System

Jason Kirby
MARCS Network Administrator/
Operations Center Supervisor
LEADS TAC
MARCS Helpdesk and NOC

MARCS Helpdesk / NOC:
- Manned 24/7
- Monitors entire system as well as sites
- Staff utilizes Service Now for ticketing and incident management
- Preventative Maintenance scheduling
Use of Service Now during Mt. Vernon Site Flooding
MARCS Deployable Assets
- Cache Radios and TOW’s (Tower On Wheels)
- 200 Cache Radios with accessories
- 3 – TOW’s
- 7 - Towable generators
Contacting the Helpdesk; 866-OHMARCS

- Incident immediately needing a TOW, radios, or generator
- Reserving a TOW, radios, or generator
- Reporting an outage
- System status
- Reporting a maintenance need (Strobe, HVAC, weeds, etc)
- Verify a customer device RID
State of Ohio MARCS
Multi-Agency Radio Communications System

Dick Miller
MARCS Field Operations Manager
COM-L
Three TOWs
80-ft Tall
Emergencies
Events
190 Cache
Radios.
A Call Away
## Site Utilization Summary

5/25/18 – 5/28/18

<table>
<thead>
<tr>
<th>Site</th>
<th>Channels</th>
<th>PTTs</th>
<th>Busies</th>
<th>Air Minutes</th>
<th>Busy Seconds</th>
<th>&lt; 90%</th>
<th>90-95%</th>
<th>95-98%</th>
<th>98-100%</th>
<th>100%</th>
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<tbody>
<tr>
<td>Friday - All Sites Combined Totals</td>
<td>2,537,868</td>
<td>227</td>
<td>218,360</td>
<td>389</td>
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<td>1.0%</td>
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<td>Saturday - All Sites Combined Totals</td>
<td>2,154,636</td>
<td>88</td>
<td>187,514</td>
<td>180</td>
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<td>0.08%</td>
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<td>Sunday - All Sites Combined Totals</td>
<td>2,011,316</td>
<td>75</td>
<td>174,859</td>
<td>148</td>
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<td>0.0%</td>
<td>0.0%</td>
<td>0.08%</td>
<td>99.92%</td>
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<tr>
<td>Monday - All Sites Combined Totals</td>
<td>2,004,112</td>
<td>90</td>
<td>175,288</td>
<td>235</td>
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<td>0.0%</td>
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<td>0.01%</td>
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<td>99.90%</td>
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<tr>
<td>4-Day Total for All Sites</td>
<td>8,707,932</td>
<td>480</td>
<td>756,021</td>
<td>952</td>
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<td>0.00551%</td>
<td>0.00210%</td>
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GOS < 98% for 25% or more of total period
GOS < 98% for up to 15% of total periods
MARCS Provides:

- Interoperability
- Reliability
- Portable In-Street Coverage
- 99.5% State-Wide Mobile
- Partnerships
Partnerships

- Tuscarawas County
- City of Warren
- Trumbull County
- Summit County
- Stark County
- Defiance County
- City of Springfield
- Paulding County
Questions?