2017 Annual Workplan and Budget

Regional Public Safety Communications Program Strategic Plan

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The mission of the regional public safety communications program is to maintain, enhance and coordinate the 9-1-1 system as the primary means of access for those in the region who need emergency public safety services and to enhance the ability of public safety personnel and emergency responders to effectively communicate through all phases of emergency incidents and planned events.

- Provide citizens and public safety professionals with a high-quality, financially secure and well-maintained system of 9-1-1, interoperable radio and data communication services.
- Serve as a model of excellence, ensuring any person needing access to emergency services is able to immediately reach assistance and facilitate a quick response.
- Provide all public safety professionals with a baseline for seamless voice and data communications to ensure an effective public safety response.
- Educate the public, elected officials and public safety professionals about the services provided and the requirements to support the system.

2016-2017 Goals and Objectives

Upon reviewing the goals and objectives from the 2011–2015 strategic plan, accomplishments to date and the outcome of regional workshops, the strategic planning executive committee developed the following goals and objectives for 2016–2020.
Achieving the Goals and Objectives

Goal A: Enhance the quality of the regional 9-1-1 system to ensure people in the region have access to public safety communication services that are reliable, current, redundant, secure and diverse.

Goal A — Objective 1: Continue to improve the accuracy of location data received from non-wireline service providers.

**Project: Call Routing Validation**
Continue to annually review call routing for at least 30 percent of all wireless sectors with a goal of validating routing on each tower sector at least once every three years.

**2016 Progress**
All routing errors received via 9-1-1 error reports are researched. If deemed valid, the appropriate carrier is notified for investigation and resolution on their end. If invalid, the PSAP is contacted and an explanation is given so that proper information can be relayed back to the dispatcher and training provided. As of December 31, there were over 7,914 cell sectors in the regional map. In 2016, 646 new cell sectors were added or modified.

A cell tower audit for AT&T was completed in 2016 in which 5,201 tower sectors were reviewed. From that, 124 PSAP changes were made, 1,563 sectors were added and 1,750 address corrections were submitted. AT&T also had multiple cell sectors for the same facing on one tower and those were combined to eliminate duplicate listings. This brought the overall cell sector count down to 3,680.

An audit for U.S. Cellular was also completed for towers in Miami County, Kansas. From this audit, three sectors were corrected.

**2017 Action Plan**
An audit of T-Mobile and Verizon is planned for 2017. The audit consists of working with the wireless carriers and the regional map provider to compare and update cell tower data. Staff is also taking a more proactive approach to spot check 9-1-1 calls for carriers that are not part of the annual audit. This will ensure the information sent during a 9-1-1 call matches what is in the database and Phase I wireless calls plot on the mapping software correctly.

**Project: Database Audit**
Conduct an annual call-routing review and validation process in the stand-alone ALI database. MARC staff will compare and resolve discrepancies between data from non-wireline service providers (or their appointed database providers) and the region-owned database.
2016 Progress
In 2016, 976 pANIs were added or corrected in the wireless routing database. There are currently 5,310 pANIs in the database.

2017 Action Plan
MARC staff will continue to work with carriers and their third-party providers to make database records more consistent and follow national standards. This is an ongoing project in which records are added, modified and deleted throughout the year.

Project: Communication with Non-Wireline Service Providers
Continue to proactively identify and complete interconnection agreements with non-wireline service providers. These agreements ensure service providers are correctly connected to the region’s network, maintain accurate database records and comply with remittance requirements. In an effort to stay informed of new technologies or changes in existing technologies, MARC staff will contact each service provider annually to review existing agreements, provide updates on changes to 9-1-1 in the region and gather information on new technologies.

2016 Progress
In the last few weeks of 2016, Onvoy Spectrum, a new company that had intentions of bringing new service to the region in 2017, contacted MARC staff. An initial call was held and information shared.

2017 Action Plan
In 2017, MARC staff will work with Onvoy Spectrum and also reach out to non-wireline service providers to review existing agreements and ensure all information is current and relevant. Staff will also continue to identify carriers with which MARC does not have agreements and work with them to develop agreements.

Project: New Services and Technologies
Research new services and technologies available and coordinate interconnection agreements, ensure vendors are properly connected to the region’s network and verify that calls route accurately and plot on the regional map.

2016 Progress
No new services or technologies were added to the regional network.

2017 Action Plan
In 2017, staff will continue to research new services and technologies.

Project: Monitor Developments in Location Technology
Monitor advancements in wireless location technology, including, but not limited to, Z-axis (elevation) location information. Technicians will also monitor the Federal Communications Commission for any proposals regarding new location accuracy requirements.
2016 Progress

The National Emergency Address Database (NEAD) is currently targeted for a 2018 release date. This database will include the dispatchable locations of Bluetooth beacons and Wi-Fi access points that are visible by cellular devices during wireless 9-1-1 calls. Staff continues to monitor the percentage of calls delivered with Phase II information to regional PSAPs. The following chart details Phase II call delivery in the region.

2017 Action Plan

Z-axis location information availability is still several years out. Staff plans to have representation on the NENA wireless location workgroup to monitor developments.

Goal A — Objective 2: 
Ensure the geographic diversity and redundancy of 9-1-1 systems.

Project: Last-Mile Study

Improve last-mile network redundancy and geographic diversity.

2016 Progress

PSAPs upgraded to VESTA 9-1-1 were connected by dual paths through Point-to-Point (PTP) microwave, fiber and Multi-Protocol Label Switching (MPLS) circuits. These links replaced T-1s and increased network bandwidth capacity. Staff continued to work with local exchange carriers (LECs) to diversify CAMA trunks within their networks, based on the FCC mandate to ensure redundancy and diversity.

2017 Action Plan

MARC staff will continue to work with LECs and other service providers to identify and develop action plans to repair wireline trunks with chronic issues. Staff will update LEC network configurations, replace LEC last mile facilities with PTP microwave, fiber and MPLS where possible, with the goal of providing cost-effective ways to improve last-mile network redundancy and geographic diversity for PSAPs. This is an ongoing project.
**Project: Review Service Provider Central Office Isolation Plans**

MARC staff will annually review and update wireline service providers’ central office isolation plans. These plans will be distributed to each PSAP annually or when a change is made.

**2016 Progress**

The purpose of the central office isolation plan is to outline steps to switch 9-1-1 calls to a PSAP or a predetermined public safety agency in the event of an isolation. MARC staff worked with LECs to determine the geographic areas served by each central office and with PSAPs and public safety agencies on appropriate locations and numbers to route 9-1-1 calls in the event of an isolation. Meetings were held with a number of agencies to collect central office information, PSAP and public safety agency contact information and associated ten-digit numbers. The plan will include steps to inform PSAPs and MARC when a central office isolation occurs so that agencies designed to handle calls will receive proper notification.

**2017 Action Plan**

MARC staff will continue to work with LECs, PSAPs and other public safety agencies to complete isolation plan updates in 2017. It is anticipated that work will be completed for Leavenworth, Miami and Wyandotte county agencies in March 2017. The Cass, Clay, Jackson, Platte and Ray County isolation plans will be completed by late June 2017. MARC staff will review plans annually to ensure that contact information, alternate agencies and phone numbers are accurate. MARC staff expects to work with local agencies to complete the Johnson County plan in January, 2017.

**Project: Interconnection with Other Networks**

Work with microwave network owners to establish interconnection agreements that provide access to their networks. These interconnections increase the 9-1-1 network footprint and create a backbone network that is diverse and redundant through network elements.

**2016 Progress**

In Johnson County’s microwave network, the Ethernet module in the Adtran multiplexer was upgraded and Leavenworth County’s microwave network DS-3 #3 was converted to Ethernet. Agreements were completed with the city of Lee’s Summit, the Kansas City, Missouri Fire Department, Fort Leavenworth, Leavenworth County and Platte County. This is an ongoing project.

**2017 Action Plan**

MARC staff will work with service providers, microwave owners, building owners, and city and county officials to develop interconnection agreements to build and maintain a reliable, diverse and redundant network. These agreements will allow interconnection between RAMBIS and other microwave networks to connect PSAPs to the 9-1-1 network. Staff will continue to upgrade network elements in RAMBIS and other networks to increase the 9-1-1 network footprint, bandwidth, reliability and redundancy.
Goal A — Objective 3:  
Ensure ongoing quality maintenance and operation of the regional 9-1-1 system.

Project: Equipment and Maintenance Reference Information
Continue to keep detailed documentation on maintenance and repair activities, developing a knowledge base that will decrease future repair times for similar trouble reports. Staff will also continue to create how-to postings for troubleshooting by calltakers and dispatchers in the PSAP.

2016 Progress
As of December 31, 2016, the maintenance technicians entered a total of 895 trouble tickets, the bulk of which were speed dial changes for PSAPs on the VESTA 9-1-1 platform. These tickets are reflected in the “software” category in the chart below. Additionally, a Text to 9-1-1 training video was developed and distributed to PSAPs prior to the region-wide implementation.

2017 Action Plan
Trouble tickets will continue to be tracked and analyzed to identify common issues. As remaining PSAPs are upgraded to the VESTA 9-1-1 platform, it is anticipated that the number of software trouble tickets will continue to increase. How-to postings and other specialized training materials will be created on an as-needed basis.

Goal A — Objective 4:  
Ensure the effectiveness of back-up plans and disaster-recovery procedures.

Project: Public Safety Program Continuity of Operations Plan (COOP)
Review and conduct an exercise of the program COOP annually and whenever significant programmatic changes occur.

2016 Progress
The notification system was exercised in the third and fourth quarters of 2016.
2017 Action Plan
The current notification system will be retired by MARC in the near future. Staff will explore other options for notification in the event of a COOP activation, as well as changes to the file backup process.

Project: PSAP Reroute and Backup Planning
Work with PSAPs and service providers to verify processes and procedures for PSAP reroutes. MARC staff will work with committees, PSAPs and service providers on PSAP backup planning, set up and test PSAP reroutes every two years and check the effectiveness of each PSAP’s reroute plans. Staff will prepare an after-action report after every reroute.

2016 Progress
MARC staff collaborated with agencies and service providers to reroute PSAPs to their backup locations. The reroute process and procedures were tested during these activities. During 2016, the Kansas City, Missouri Police and Fire Departments were rerouted to the South Patrol backup facility without incident. Additionally, the Prairie Village Police Department was rerouted to the Leawood Police Department successfully. MARC staff worked with committees, agencies and service providers to review PSAP reroute processes and backup locations.

2017 Action Plan
MARC staff will work with PSAPs and service providers throughout 2017 to test and validate that PSAP reroutes are effective and efficiently performed. Staff will work with committees, PSAPs and service providers on predetermined reroute plans and to determine practicality of backup PSAPs. Staff will also prepare an after-action report after every reroute.

Project: Agency-Specific COOP Planning
MARC staff will assist agencies in preparing their own COOP plans by providing a framework for them to use and sharing resources as needed.

2016 Progress
No requests for assistance were received from agencies in 2016. A training course covering succession and COOP planning was added and offered to agency personnel.

2017 Action Plan
MARC staff will work with PSAP managers to identify opportunities to verify and exercise agency backup plans. Specific requests from agencies will be addressed on a case-by-case basis.

Goal A — Objective 5: Ensure accuracy of the regional 9-1-1 database.

Project: MSAG and GIS Improvements
Continue to work with local governments to improve the quality of the regional Master Street Addressing Guide (MSAG) and map data layers through its ongoing review process. MARC staff will continue to conduct meetings, one-on-one sessions or an annual review and outreach process with MSAG coordinators, addressing and mapping personnel and PSAP constituents to explain the importance of accurate map data.
2016 Progress

MARC staff distributed the annual database true-up request to 28 wireline, VoIP and third party database providers in the region in September, 2016. These companies were asked to conduct a true-up by comparing customer database information in-house with information the 9-1-1 database service provider had on record. From that, over 534 corrections were made to customer records.

| 2016 Database Totals:          |
|-----------------------------|---|
| MSAGs changed               | 1,004 |
| MSAGs reviewed              | 4,533 |
| TNs affected by MSAG changes| 8,403 |
| TNs reviewed                | 5,233 |
| TNs corrected               | 483  |
| Error Reports               | 2,800 |

MARC staff has continued to work with local governments to receive new addressing and map updates as well as review existing data. With synchronized data, a larger percentage of wireline 9-1-1 calls will plot correctly on the regional map used by PSAPs. This project is also directly related to NG9-1-1, in which the MSAG will be absorbed into the map data. Staff provided reports to communities in all counties within the region. This information came from a geocode project that is conducted quarterly, which includes the match rate of map data to customer records in the wireline 9-1-1 database, along with a listing of the addresses that did not match. Over 91 communities worked with MARC staff to clean up address data from the geocode project.

The annual error report contest was conducted for an entire year’s worth of data. PSAPs were encouraged to submit every valid 9-1-1 and map error they discovered. Twenty-nine agencies submitted valid error reports, and the winning PSAPs were awarded a trophy and a perpetual plaque located in the 9-1-1 training center was updated with the names of the winners. MARC staff visited every participating PSAP and provided donuts to express appreciation.

Staff continued to assist in the coordination of the AED (automatic external defibrillation) database which contains records of AED devices that have been registered, as well as contacts for each community. In 2016, over 150 entries were added and 48 were updated in the database.

2017 Action Plan

MARC public safety staff will continue working with MARC GIS staff to receive and enhance regional map data. Additionally, staff will continue to work with local governments to receive new addressing and map updates, and review existing data. Staff will also continue to review geocode reports and provide data to local governments in an attempt to ensure that accuracy continues to improve. These efforts support the region’s transition to NG9-1-1.
**Project: Database Provider**

Continue to work closely with the 9-1-1 database provider, conducting conference calls to address current projects and outstanding issues. MARC staff will also continue to request and analyze Very Large Query (VLQ) reports from the 9-1-1 database provider for comparison with the community, county and carrier totals previously provided. Cleanup work will continue based on trends and discrepancies found in the data that may not be identified using other methods. Provide progress reports to the Public Safety Communications Board.

**2016 Progress**

In 2016, MARC staff received quarterly VLQ database downloads from the wireline database provider. VLQ requests were delayed by several weeks due to the database provider switching platforms. From this data, reports were run to study totals and trends and help identify areas in need of special attention. As of December 2016, the regional database totals had decreased slightly by 0.24 percent from the previous year.

The Private Switch (PS9-1-1) project continued in 2016. Before the new school year started, MARC staff contacted the nine school districts in the region that subscribe to PS9-1-1, requesting they review and update any database records as appropriate. Seven school districts responded, three of which advised that they no longer subscribe to the service. All others stated that their records were up-to-date.

**2017 Action Plan**

MARC staff will continue to monitor services provided by the regional wireline database provider and other carrier activity by participating in monthly conference calls. VLQ requests will continue on a quarterly basis, with a detailed analysis conducted and a summary provided. Staff will attempt to identify areas that need further attention and work with carriers to correct errors.

**Project: Database Software**

MARC staff will research technology and software solutions to improve automation of identifying database discrepancies or errors.

**2016 Progress**

MARC GIS and database staff began using add-on tools for existing ESRI software that can be used to conduct quality control of map data and compare different sources of data used for 9-1-1. These tools were used by database and GIS staff at MARC for quarterly geocoding, topology quality control (QC), Kansas NG9-1-1 statewide data preparation and other data layer comparisons.

**2017 Action Plan**

MARC staff will continue to seek out technology or software that is capable of automating processes.

**Project: Emergency Notification Systems**

Continue to work with local governments — by assisting with agreements and obtaining, analyzing and providing data — to establish or improve their emergency notification systems.
2016 Progress
MARC staff worked with the city of Liberty and Cass County to complete agreements with the database service provider and obtain data for their emergency notification system. Trends show a decline in the use of emergency notification systems due to cost, the availability of social networks and other systems.

2017 Action Plan
MARC staff will continue to work with local governments to provide assistance with agreements, data requests and data analysis.

Project: Assist Agencies in Implementing Operational Changes
MARC staff will assist PSAPs with changes to operations, such as PSAP routing and coordination, ESN updates or emergency response boundary changes.

2016 Progress
As of October 25, 2016, there were no operational changes within PSAPs requiring assistance.

2017 Action Plan
Public safety staff will provide assistance to PSAPs that need help with operational changes as needed in 2017.

Goal A — Objective 6: Ensure accuracy of the regional GIS data.

Project: GIS Constituents
MARC staff will continue to work with GIS coordinators, addressing personnel and PSAP constituents to provide and maintain accurate map data.

2016 Progress
2016 marked the seventh year that staff worked with the MARC GIS department to maintain regional GIS data. MARC GIS provides an annual report and meets regularly with MARC staff.

Through December 2016, several jurisdictions completed a large number of map data reviews. MARC staff received nearly 339 tracking packets of map data. Some jurisdictions, such as Johnson and Wyandotte counties, provide digital map data for multiple communities. As of December 31, 2016, there had been 13,759 street segments, 32 boundaries added or changed and 42 ESN changes. Mile marker, pipeline, railroad and water features were also updated.

Additionally, the address point subcommittee finalized an address point guideline. As part of the Kansas NG9-1-1 project, address point data was received from Leavenworth and Wyandotte counties. GIS and database staff ensured all mandatory fields were included and followed required format.
MARC staff continues to be active in the Kansas NG9-1-1 project on the GIS subcommittee, and worked with state approved contracted vendors and local governments to clean up data. The first two quarterly updates to the state were successfully uploaded.

A total of 807,168 address points were acquired from local jurisdictions. A schema has been completed to follow the NENA, Kansas and regional standards/guidelines.

A GeoLynx Super User group was established and met. Recommendations were provided to GeoComm on current views, features and suggested future changes.

Staff identified and communicated with a number of GeoLynx Server users to discuss the functionality of the product.

2017 Action Plan
Staff will continue to research GeoLynx Server, and it is anticipated that the region will upgrade its mapping software in 2017, which was classified as a capital project. Staff will also continue to identify strengths and opportunities for improvement of the mapping software, such as streamlining map updates on 9-1-1 workstations, working with MARC GIS staff to simplify internal use of the data, reducing operating costs and improving workflow efficiency.

Project: Regional Aerial Imagery
Research the opportunity to include aerial imagery in the regional 9-1-1 map.

2016 Progress
Aerial imagery from MARC GIS is being used in a pilot of new regional mapping software. A flyover was conducted throughout the region to capture the latest aerial imagery.

2017 Action Plan
Updated aerial imagery will be available from MARC GIS in early 2017. The deployment of a server-based mapping system will allow the display of aerial imagery.

Project: Map Data Layers
MARC staff will incorporate existing map data to enhance the 9-1-1 map and provide better call location detail. MARC staff will also work with users to determine additional map data needs and identify the resources necessary to obtain them.

2016 Progress
In 2016, several map layers were added to the regional mapping software, including parks, railroad crossings and mile markers and street car routes and stops.

2017 Action Plan
MARC will continue to request and receive address point map data from local governments, which will be incorporated into a regional dataset. Staff will also attempt to identify additional data layers that could be beneficial to 9-1-1.
Project: Trails Mapping for Public Safety

Continue to work with local constituents to identify and develop trail data to be incorporated into the regional 9-1-1 map. Continue to provide information to communities interested in installing emergency location signage.

2016 Progress

MARC staff continued to work with local governments to implement trails mapping and signage in their jurisdictions. In 2016, six trail segments were added or updated, and 82 trail sign address points were added to the regional file and incorporated into the regional mapping software. MARC staff assisted several communities with the gathering of GPS data along trails and sign location addressing, including Smithville Lake and an extension to a Kansas City parks trail. Once completed, this will include an additional 200 trail sign address points.

2017 Action Plan

MARC staff will continue to assist local governments with the trails mapping project.

Goal A — Objective 7: Continued implementation of Next Generation 9-1-1 (NG911) technologies.

Project: Next Generation 9-1-1 Upgrade

MARC staff will monitor developments in NG9-1-1 technologies, and will work with the Public Safety Communications Board and its subcommittees to develop regional NG9-1-1 standards that align with national standards. MARC staff meets with the service provider on a bi-weekly basis to review VESTA upgrade plans including budgeting, scheduling individual PSAP upgrades, as well as network and server upgrades. Meetings with PSAPs are scheduled prior to ordering equipment to verify connectivity, schedules and PSAP modifications. Bi-weekly conference calls are held with Airbus to discuss specific issues.

Staff will work with an outside consultant, Airbus and service providers to determine bandwidth and equipment requirements necessary to provide NG9-1-1 technologies. MARC staff will continue to participate in local, state and national organizations and activities to learn about NG9-1-1 technologies and services.

2016 Progress

Staff worked with a consultant, MARRS committees, equipment vendors, and service providers to determine bandwidth and equipment requirements necessary to provide NG9-1-1 technologies. MARC staff attended APCO, NENA and Kansas APCO conferences to increase knowledge about NG9-1-1 technologies and services. Ethernet modules within Johnson County’s microwave network were upgraded to increase network reliability, and Ethernet modules were installed in Leavenworth County’s microwave network to increase bandwidth. Throughout 2016, new PTP microwave links were added in the city of Kansas City, Missouri, the city of Lee’s Summit, Johnson County, Fort Leavenworth, Leavenworth County and Platte County.

Additionally in 2016, all host and remote sites were upgraded from VESTA 4.2 to VESTA 6.1. The Sugar Creek Police Department, the Ray County Sheriff’s Office and the Excelsior Springs Police Department were upgraded to the VESTA 9-1-1 platform. There were connectivity challenges with many of the remaining PSAPs yet to be upgraded, which delayed the installation schedule.
The remaining PSAPs to be upgraded include:

- American Medical Response
- Fort Leavenworth Provost Marshal
- Kansas City, Kansas Fire Department
- Kansas City, Kansas Police Department
- Leavenworth County Sheriff’s Office
- Leavenworth Police Department
- Overland Park Police Department
- Platte County Sheriff’s Office

All upgrades will be completed by the end of 2017.

2017 Action Plan

Staff will continue to work with vendors and service providers to address network bandwidth and determine the appropriate equipment necessary to provide NG9-1-1 technologies. MARC staff will continue to participate in local, state and national organizations and activities to learn about NG9-1-1 trends, technologies and services. Staff will also continue to work with microwave owners, fiber providers and local governments to ensure PSAPs have dual connection points into the regional 9-1-1 network.

**Project: Texting to 9-1-1**

MARC staff will continue working with wireless providers to implement SMS to 9-1-1 in a phased approach, beginning with the largest PSAPs. A texting subcommittee will assist with the development of outreach materials and training tools for the PSAPs. MARC staff will continue to work with wireless providers and the 9-1-1 equipment manufacturer to ensure the region has the most efficient texting solution available.

2016 Progress

Text to 9-1-1 was implemented region-wide via a phased approach. Implementation was completed on February 11, 2016 and the official public announcement media event took place on February 19, 2016. Specialized training was developed to provide a consistent resource to ensure PSAP staff readiness. Additionally, MARC staff met with groups with specific needs for Text to 9-1-1 for an in-depth, hands on demonstration. Through September, 10,469 text messages have been received, which includes test messages as well as live calls for service. This constitutes .72 percent of all 9-1-1 calls received in the region. As anticipated, texting has not had a significant impact on PSAPs.

MARC staff continued to work with PSAPs and carriers to perform any testing and troubleshooting measures needed.

2017 Action Plan

In 2017, MARC staff will continue to work with the Texting Subcommittee and PSAP personnel to address concerns regarding text call handling. Text to 9-1-1 will be tested on a by-PSAP and by-carrier basis at the direction and discretion of MARC staff and committees. Training materials will continue to be updated as necessary.
Project: Connection to Kansas Statewide 9-1-1 Network
MARC staff will work with service providers, wireline carriers, wireless carriers, committees and Airbus to connect to the Kansas statewide 9-1-1 network. MARC staff will ensure this connection is built with redundancy, diversity and with high-level network security.

2016 Progress
The state of Kansas continued to build out its ESINet, but was not ready to connect to other regional and/or state networks.

2017 Action Plan
MARC will continue to monitor the progress of the state of Kansas’s ESINet implementation and work toward future connectivity.

Project: Network Security
Work with the regional service provider, Airbus, NENA and APCO to ensure network security is compliant with industry standards. MARC staff will provide provisions and policies to prevent unauthorized access, misuse, modifications to the 9-1-1 network.

2016 Progress
The MARC Public Safety Communications Board approved the purchase of antivirus software for all workstations and servers in the region. This project is currently out for hardware bids. Additionally, USB port locks were installed on all workstations and servers, both legacy and next-generation. These locks require a special key to remove and prevent users from plugging rogue devices into the equipment. Technical staff attended numerous presentations, as well as conducted independent research on cybersecurity in order to plan for future security needs. MARC also hosted a cybersecurity information session for PSAP personnel and made cybersecurity presentations.

2017 Action Plan
MARC technical staff will update the contract with the 9-1-1 support vendor to include a section on appropriate password policies for users and devices going forward. Staff will also continue to follow industry cybersecurity recommendations and best practices. Antivirus software will be installed on all 9-1-1 workstations and servers.

Goal B: Enhance collaboration and communications capabilities among all regional public safety and emergency services agencies.

Goal B — Objective 1: Collaborate on delivering shared services to regional agencies when possible.

Project: CAD-to-CAD Interface
MARC staff will work with regional partners to develop a system of interfaces or direct connections for public safety computer-aided dispatch systems.
2016 Progress
Staff continued to work with MoDOT, Johnson County and other entities to utilize the KC Scout fiber ring. The MARC 9-1-1 selective routers will be connected to the ring once final splicing work is completed.

2017 Action Plan
After connecting the selective routers to Scout fiber as a proof-of-concept, MARC staff will work toward linking the CAD systems in Johnson County and Kansas City, Missouri through the fiber network.

Project: KC Scout Fiber Project
Work with KC Scout, the city of Kansas City, Missouri, Johnson County, Kansas, and the MARRS Management Council to implement and manage the fiber connection between the city and county. The fiber connection will be provided for public safety purposes, such as redundancy and diversity of computer-aided dispatch and 9-1-1 needs.

2016 Progress
Unfinished splicing work on the Scout fiber ring has delayed the connection of the MARC 9-1-1 selective routers. MARC staff anticipates completion of these connections before the end of the year.

2017 Action Plan
Once the selective routers have been connected as a proof of concept, MARC staff will begin working on other projects that can utilize the Scout fiber network, such as the CAD-to-CAD interface, as well as VESTA host and PSAP connectivity.

Project: Regional Dispatching
At the request of MARC member agencies, staff will support local officials in discussions on the feasibility of implementing a regional dispatch center for public safety.

2016 Progress
Modest progress on the regional dispatching project occurred in 2016 due in part to lack of progress of 9-1-1 legislation at the state level in Missouri.

2017 Action Plan
MARC will help facilitate regional dispatching discussions as needed throughout the year.

Project: Shared Systems (CAD, RMS)
Working with regional agencies, opportunities for cost sharing of technology systems will be identified. MARC staff will work with local agencies to facilitate discussions and potential partnerships.
2016 Progress

As agencies consider regional dispatching plans, opportunities may arise that will allow for the sharing of CAD and RMS systems. The CORE4 group met to discuss and identify resources that could be shared by utilizing KC Scout fiber.

2017 Action Plan

Once connections are made to the KC Scout system, MARC will support efforts to connect the Johnson County and Kansas City, Missouri CAD systems. Once these systems are linked, other agencies may decide to connect to them as well to reduce costs and increase efficiency. MARC staff will continue to work with local officials to identify additional shared service opportunities.

Goal B — Objective 2: Support and coordinate regional interoperability.

Project: Metropolitan Area Regional Radio System (MARRS)

Provide support to the MARRS Management Council and all committees that report to the council. This will include scheduling meetings, monitoring and facilitating agreements between agencies and maintaining MARRS-related documents, such as standard operating procedures.

2016 Progress

MARC staff continued to work with area agencies that are part of the MARRS system by providing support for the users and technical subcommittees. A new five-year cost model was developed during the year with the aid of a consultant and plans for future infrastructure replacement are in development.

2017 Action Plan

MARC staff will continue to support the MARRS Management Council, as well as the technical and users subcommittees. These committees will consider system sustainment plans. The city of Lee’s Summit plans to join the system in 2017.

Project: MARRS Maintenance Upgrades

System maintenance costs will be reviewed and a new five-year subscriber and port-cost model will be developed. Long-range needs for infrastructure upgrades and replacement will be identified.

2016 Progress

MARC staff worked with a consultant to update the current cost model and meetings were held with infrastructure vendors to discuss long-term equipment replacement.

2017 Action Plan

MARC staff will continue to work with the hired consultant to complete the MARRS sustainment plan, which will be presented during the year.
**Project: Connection of MARRS to State Systems**

The Regional Interoperability Communications Committee and the MARRS Technical Committee will work with state agencies to ensure interoperable communications and regional talkgroups are in place and operating. Testing and training will be conducted.

2016 Progress

A connection to the Missouri Statewide Interoperability Network (MoSWIN) was completed in 2016 to allow communication with agencies outside the MARRS footprint.

2017 Action Plan

MARC staff will continue to work with the state of Missouri to finalize the connection of MoSWIN to MARRS and execute necessary agreements. Testing and training will be offered to agencies and state resources.

**Goal B — Objective 3:** Maintain RAMBIS to support communications among public safety professionals.

**Project: Support Web Emergency Operations Center (WebEOC) Activities**

Provide administrative support for the monthly WebEOC subcommittee meetings and serve as a liaison between end users and vendors to address the software functionality as it relates to the needs of the region.

2016 Progress

The WebEOC subcommittee has tested and exercised fused local and state-wide systems for functionality and improvements. In August, Intermedix delivered administrator training locally to benefit users who were unable to attend the national conference in May. Staff provided support to the WebEOC subcommittee co-chairs and members during monthly meetings and as needed throughout the year.

2017 Action Plan

In 2017, the WebEOC subcommittee will test and exercise the fused system. Staff will continue to provide support to the WebEOC subcommittee co-chairs and members during monthly meetings and as needed throughout the year.

**Project: RAMBIS Maintenance and Upgrades**

Continue to monitor the RAMBIS network and other connected systems to ensure optimal performance. This will be accomplished by system monitoring, routine maintenance and upgrading components as needed.

2016 Progress

MARC staff continued to send out maintenance alerts and monitor monthly roll calls, and ensured maintenance contractors and the service provider performed maintenance activity. This included replacing batteries in UPS units at half of the RAMBIS sites, replacing failed equipment and repairing HVAC units. Staff also worked with site owners to address issues concerning facility upkeep.
2017 Action Plan

MARC staff will continue to develop and implement RAMBIS maintenance procedures for all microwave network components and interconnection facilities. Staff will work with the service provider to plan and implement a microwave overlay, one of the three capital projects identified by the Public Safety Communications Board. This overlay will add 190 Mb of bandwidth to the RAMBIS microwave network.

Additionally, staff will review and enhance procedures for monitoring, repairing and upgrading network elements of the radio equipment, microwave equipment, DC power equipment and antennas. Batteries will also be replaced in UPS devices at the remaining RAMBIS sites. Staff will continue to work with a consultant to update the existing map indicating all interconnections and their respective capacities used in the regional microwave system.

Project: Monitoring and Participating in FirstNet Activities

Coordinate with members of the Regional Interoperability Communications (RIC) Committee and the state points of contact to remain current on FirstNet activities. This will include gathering information as requested and coordinating outreach efforts.

2016 Progress

A FirstNet meeting was held for local officials on both the Kansas and Missouri side of the region in 2016. MARC worked with FirstNet officials to stress the need of approaching the project regionally rather than at the state level.

2017 Action Plan

FirstNet deployment is scheduled to begin in late 2017. MARC staff will assist FirstNet officials and local agencies as requested.

Goal B — Objective 4: Ensure that the TICP continues to be exercised, evaluated and modified as needed.

Project: TICP Review

MARC staff, along with the RIC Committee, will annually review the Tactical Interoperability Communications Plan (TICP). The Communications Unit (COMU) subcommittee has identified training objectives, which include ensuring the TICP is a component in yearly training exercises. MARC staff will present revision recommendations to the Public Safety Communications Board.

2016 Progress

The TICP was reviewed and updated when needed in 2016 to reflect changes to regional radio systems, users and other interoperable assets. Components of the TICP were implemented in March during the Kansas Speedway exercise. The Tactical Interoperable Communications Field Operations Guide (TICFOG) has been distributed to appropriate personnel throughout the region and MARC staff is working with a consultant to create a mobile application of the TICFOG.
2017 Action Plan
The TICP will continue to be updated as needed and exercised during planned events. Two TICP Orientation classes will be held on May 23 and December 5. These classes are part of the recurring training to support homeland security efforts in the region.

**Goal C: Enhance communications, networking and information exchange among public safety agencies and strengthen relationships with public service agencies and professional organizations.**

**Goal C — Objective 1:**

Enhance communications with and among agencies.

**Project: Information Sharing**
MARC will use various existing resources, such as the public safety intranet, the PSAP managers’ forum, the MARC website and the Metro Communicator newsletter to provide up-to-date public safety communications information. MARC will ensure information is distributed using the most appropriate method based on the sensitivity and target audience of the correspondence.

**2016 Progress**
Two issues of the Metro Communicator newsletter were sent electronically to all public safety communications contacts and committees in 2016. Links to current and past issues are available on the MARC public safety website and the 9-1-1 intranet. A Text to 9-1-1 brochure was created and shared throughout the region, and the 9-1-1 brochure was updated to include information about Text to 9-1-1. The yearly training calendar, which includes class schedules and other information, was provided to agencies.

**2017 Action Plan**
MARC staff will continue to encourage local agencies to share stories with the rest of the region through the Metro Communicator and PSAP manager events. Staff will also continue to provide valuable information to agencies through the 9-1-1 intranet site.

**Project: Assist Agencies in Implementing Operational Changes**
Assist PSAPs with operational requests that will allow them to work in an effective and efficient manner.

**2016 Progress**
MARC staff assisted a number of agencies in operating more efficiently by evaluating circuit usage and eliminating unused resources. Staff also helped agencies coordinate with vendors when necessary.

**2017 Action Plan**
MARC will continue to assist PSAPs with operational changes on an as-needed basis.
Goal C — Objective 2: Continue to involve and expand stakeholder participation in various committees.

**Project: Regional Network Facilitation**
Work with individuals and agencies to facilitate and create opportunities for members of the public safety community to meet and discuss issues of common interest.

2016 Progress
In 2016, MARC staff held quarterly meetings for PSAP supervisors to meet and discuss relevant issues. Additionally, MARC hosts a yearly PSAP managers luncheon, and other meetings that give agencies the opportunity to interact.

2017 Action Plan
MARC will continue to provide PSAP staff opportunities to meet and discuss relevant issues.

**Project: Dispatch Supervisor Roundtable**
Coordinate quarterly roundtable for dispatch supervisors to meet and discuss issues of common interest in public safety dispatching.

2016 Progress
MARC held four roundtable meetings with dispatch supervisors in 2016. Supervisors discussed issues such as staffing and training opportunities. Regional radio policies were also considered and are now shared in training classes.

2017 Action Plan
MARC will continue to host roundtable meetings on a quarterly basis.

**Project: PSAP Manager Orientation**
Continue to provide orientation and a PSAP managers’ handbook for new public safety communications personnel at the management level on an as-needed basis. The orientation will provide an overview of MARC’s services and role in regional public safety communications.

2016 Progress
One orientation session was held for new PSAP managers in 2016.

2017 Action Plan
Orientation sessions will be held as needed throughout the year.
Goal C — Objective 3: Participate in national associations to support professional development and technical proficiency.

Project: Public Safety Association Participation

MARC staff will continue to take an active role in public safety communications committees, including training, database, technical, public outreach, education and other industry-related committees.

2016 Progress
MARC staff members continued to play an active role with state associations by participating in committee work and obtaining board memberships. The 9-1-1 database manager is a member of a NENA NG9-1-1 workgroup, and the training coordinator is a member of the Missouri Governor’s Advisory Council on EMS and the Kansas Training Standards Subcommittee. Three staff members are active in support of the Kansas 9-1-1 Coordinating Council.

2017 Action Plan
MARC staff will continue to take an active role with associations, committees and groups related to public safety communications. Staff will also look for other opportunities to represent the region by participating in regional, state and national meetings and conferences.

Project: Regional Training Standards

Using the MARC committee structure, MARC staff will review and reference state and national standards to develop regional training standards for telecommunicators. Due to their dynamic nature and seeking continuous improvement, the regional training standards are refined and modified to address changes in the profession and standards annually.

2016 Progress
An application for renewal of MARC’s training program as a Missouri Telecommunications Training Site was submitted and was granted a new certification for a period of three years.

MARC staff participates in development of Kansas Telecommunicator Training Standards and a vendor has submitted a final draft of a training standards plan for telecommunicators in Kansas.

2017 Action Plan
It is anticipated that the Kansas training standard plan will be approved and implemented in 2017. When approved, MARC will work with Public Safety Communications Users Committee to ensure the regional training program meets the needs of the Kansas PSAPs.

Project: Maintenance Activity Professional Development

In an effort to stay current with technological advances, MARC staff will seek out annual training on emerging technologies.
2016 Progress
Staff attended the APCO Emerging Technologies Forum, and one of the communications technicians attended the NENA Standards and Best Practices Conference and Critical Issues Forum on Cybersecurity. All of the technicians attended either the APCO or NENA national conference in 2016.

2017 Action Plan
MARC staff will continue to attend relevant conferences and training.

Goal C — Objective 4:  
Ensure program excellence through quality assurance.

Project: Customer Satisfaction
MARC staff will use various quality assurance methods to measure program quality and satisfaction. Public safety staff will distribute surveys through email and online, as well as offer feedback forms at the conclusion of trainings and outreach events. MARC staff will review and consider the results when preparing the following year’s action plans.

2016 Progress
A customer satisfaction survey was distributed online and through email in November to allow staff to report the findings at the final Public Safety Communications Users Committee and Communications Board meetings of the year.

2017 Action Plan
Customer satisfaction is an ongoing goal of the maintenance team, and the survey is a tool used to measure both performance and the needs of the region. Staff will continue to distribute the survey to PSAP management, which will be enhanced to include all appropriate program areas.

Goal D: Ensure the financial stability of the regional 9-1-1 and public safety communications systems to sustain their long-term viability as models of excellence.

Goal D — Objective 1:  
Ensure that the costs of 9-1-1 and public safety interoperability systems are shared equitably among participating jurisdictions.

Project: Financial Planning
Implement the financial planning policies enacted by the Public Safety Communications Board as part of the 9-1-1 system budget process. A new MARRS cost model and long-range financial infrastructure sustainment plan will be developed.

2016 Progress
The Public Safety Communications Board worked with MARC staff to consider changes in funding to address capital projects that will be completed over the next several years. Meetings with county officials were also held to discuss project funding. A new MARRS cost model was developed, and long-range infrastructure planning began.
2017 Action Plan
MARC staff will continue to work with the Public Safety Communications Board to ensure that appropriate financial planning policies are in place to maintain the integrity of both the 9-1-1 and regional radio systems.

Project: System Inventory
Continue to keep a detailed inventory of the region’s growing physical and digital assets. An annual true-up will be conducted to ensure that all assets are accurately accounted for.

2016 Progress
New equipment was added to the system inventory as it was installed at PSAPs. With several PSAPs remaining on the legacy equipment, the annual true-up will be deferred to 2017.

2017 Action Plan
With all PSAPs upgraded to the VESTA 9-1-1 platform, a full system inventory will be conducted.

Goal D — Objective 2:
Seek additional funding to support regional public safety communications systems.

Project: Grant Opportunities
Research and seek out grant funding on an annual basis and as new grant opportunities become available.

The MARC Public Safety program will continue to seek funding to strengthen survivability and disaster recovery for the regional 9-1-1 system and to support the national priorities established by the U.S. Department of Homeland Security. MARC will research and seek out grant funding on an annual basis and as new grant opportunities arise.

Project: Missouri and Kansas 9-1-1 Legislation
Monitor legislation at the state and federal level that could have an impact on 9-1-1 and communications in the region. When necessary, MARC staff will represent the region by presenting testimony or providing information to elected officials.

2016 Progress
A bill was introduced in the Missouri House of Representatives that would enable counties to place a question on the ballot to tax any device capable of contacting 9-1-1. The bill passed the House by a wide margin, but did not make it to the Senate floor for a vote. The bill would also have created a grant fund that would assist those areas that did not have enhanced 9-1-1 by taxing prepaid wireless services.

The Missouri 9-1-1 Coalition met in September and agreed to submit the legislation again. MARC staff met with the sponsor of the bill to discuss strategies for the upcoming session. Changes in leadership roles in the General Assembly were discussed to determine how they might impact the bill.
There was no Kansas 9-1-1 legislation in 2016. MARC staff met with Representative Kevin Yoder and FCC Commissioner Ajit Pai to discuss the effort to make the Kelsey Smith Act a federal law. The bill was not passed.

2017 Action Plan
MARC staff will provide information as needed to members of the Missouri Legislature and work with the Missouri 9-1-1 Coalition to develop legislation that will address the 9-1-1 funding needs of the region.

Goal D — Objective 3: Seek innovative cost-saving initiatives while maintaining or improving the quality of regional systems.

Project: 9-1-1 Migration to ESINet
Work with service providers, wireline carriers, wireless carriers, committees and Airbus to continue migrating 9-1-1 traffic from the present network to an ESINet platform. MARC staff will ensure the ESINet platform is built with redundancy, diversity and has a high level of network security.

2016 Progress
Staff worked with city of Lee's Summit, Leavenworth County, Ft. Leavenworth and Platte County to establish PTP microwave links to their PSAPs. Before PSAPs were upgraded to VESTA, MARC staff worked with the service provider to identify the best network options for providing dual path connections to the PSAP. MARC staff also worked with microwave owners to develop cost effective ways to interconnect RAMBIS with their microwave networks. Discussions were held with the microwave vendor to upgrade the RAMBIS network capacity from 150 Mb to 340 Mb.

2017 Action Plan
MARC staff and the regional service provider will continue to install new microwave links and upgrade PSAPs. Staff and local government representatives will work diligently to implement capacity access, facility access and develop tower agreements. These agreements are necessary for MARC to interconnect to other networks and provide network links to regional PSAPs.

Project: Public Safety Vendor Review
MARC staff will continue to review contracts, services and financial reports provided by existing vendors, and ensure the region is receiving the most competitive pricing for vendor services.

2016 Progress
Staff reviewed vendor pricing and services on a regular basis. Additionally, new contracts were developed for agreements with the regional service provider.

2017 Action Plan
Staff will continue to ensure vendors are providing competitive pricing for services.
Goal E: Provide high-quality training and education programs for public safety professionals.

Goal E — Objective 1: Explore and implement alternative training delivery methods.

Project: Training Delivery Methods
MARC staff will research new and innovative ways to deliver training to the region’s public safety communications professionals. Pilot classes will help measure the effectiveness of alternative training delivery methods. Alternate methods planned for consideration and further study include taking certain courses on the road, developing online courses and use of alternate facilities to increase capacity.

2016 Progress
MARC staff attended conferences to explore and research different styles of training delivery. The conferences were invaluable in helping to identify topics and speakers for the MARC Public Safety Professional Development Series.

Staff delivered both targeted subject and general training courses at four different PSAPs in the region in 2016. A total of 72 hours of training were conducted offsite to assist agencies in keeping their staffing costs under control.

After further consideration of using Blackboard® and Moodle® for development and administration of online training courses, it was found to be extremely time-demanding for administration of the courses.

2017 Action Plan
MARC staff will continue to develop an online course to offer through one of these programs and will write grant proposals for course development and administration in 2017. Three agencies have requested offsite training classes in 2017.

Project: Cost-Benefit Analysis
A cost-benefit analysis will be used to determine what alternative training methods might be viable options for the region. The public safety training coordinator will verify that alternative methods comply with state and federal training regulations when applicable.

2016 Progress
A cost-benefit analysis was conducted using online learning platforms that are anywhere from free to very expensive. The initial and maintenance costs of the for-profit platforms were secondary to the staff time required to administer the classes online.

2017 Action Plan
Utilizing one of the free online educational platforms, at least one online class will be developed, conducted and evaluated in 2017.
Goal E — Objective 2:
Ensure that the regional public safety training program is kept current, with contemporary training topics that appeal to various constituencies, and provides participants the opportunity to meet all applicable training requirements.

Project: Training Program Development
MARC staff will attend appropriate local, state and national conferences to learn about new and emerging topics in public safety and monitor industry publications for material that can be used to update the program’s curriculum. The public safety training program will strengthen its instructor pool by seeking knowledgeable and effective teaching professionals. The public safety training coordinator will conduct an annual instructor workshop to provide new teaching techniques and continue to develop instructors’ teaching abilities.

2016 Progress
MARC staff attended conferences at MONENA, the national APCO conference, the national NAEMT/EMS EXPO conferences, and others to select new and relevant topics to update program curriculum.

2017 Action Plan
Six new topics are in development for 2017 with two course confirmed and all four Professional Development Series topics and speakers confirmed.

Project: Training Needs Assessment
MARC staff will conduct a training needs assessment to identify any gaps within the public safety training program. The public safety training coordinator will develop recommendations, based on the results of the assessment, to be presented to the Public Safety Communications Board.

2016 Progress
A training and information flyer is under development to help communicate GeoLynx updates and other software and system updates. In addition, four new courses were developed and taken out into areas bordering the MARC region (training consortium members and non-members) to assist their telecommunicators in obtaining their required continuing education hours. As within the region, critical staffing shortages exist in bordering municipalities. Staff at the agencies were unable to obtain needed continuing education units (CEUs) due to mandatory overtime to fill empty seats in PSAPs. MARC assisted by taking training to these outlying areas.

2017 Action Plan
Staff will continue to offer off-site training on an as-needed basis to accommodate PSAPs requiring assistance. Staff will also use subject matter experts or power users as part of the training staff.

Project: Regional Interoperable Training
MARC staff will work with the Regional Homeland Security Coordinating Committee’s Training and Exercise Subcommittee to continue to fund and provide interoperable communications training to public safety personnel. Communications Unit Leader courses will be offered annually. MARC’s public safety training program will host applicable interoperable communications courses as they become available.
2016 Progress

One COML class, multiple interoperability classes and a COMMEX Train-the-Trainer course featuring two MARC adjunct instructors were offered in 2016.

2017 Action Plan

Staff will continue conducting interoperability and related training as needed for the region. Staff will also work with federal and state training coordinators on funding for NIMS and position-specific courses. A COML class is scheduled for June 27–30, 2017, and additional interoperability classes are also scheduled.

Project: Stress Reduction Research Study for 9-1-1 Telecommunicators

The need for stress reduction for PSAP personnel is greatly important especially with the desire to move forward with NG9-1-1. A study was designed specifically for the call center environment and stressors faced by 9-1-1 Telecommunicators. The goal is to reduce 9-1-1 Telecommunicator burnout and turnover, resulting in cost savings, within our Regional PSAPs.

2016 Progress:

MARC staff has worked with a team of researchers and clinical psychologists at the University of Washington on a seven week online stress reduction training program. The PSAP managers received a toolkit which included evidence-based resources on worksite wellness, conflict, bullying, technostress, overtime and personal stress reduction. 9-1-1 telecommunicators who finish the mindfulness-based training will receive 12 CEUs through MARC’s 9-1-1 Training Facility.

2017 Action Plan:

MARC staff will receive regional stress reduction research categorical results from the University of Washington and will use them to consider new training opportunities for the 9-1-1 training program.

Goal F: Educate the public and elected officials about regional public safety communications services and the resources needed to provide them.

Goal F — Objective 1: Educate and reach out to the public about the proper use of 9-1-1.

Project: Volunteer Base

MARC will conduct volunteer orientations for current and prospective public outreach and education volunteers on an as-needed basis. These orientation sessions will ensure a consistent message is delivered throughout the region and will provide volunteers with the tools, information and confidence to make presentations in schools and at outreach events.
2016 Progress
MARC staff provided materials and helped coordinate multiple outreach events that took place in 2016, including numerous community events, 9-1-1 Hero ceremonies, and 9-1-1 Day at the Ballpark. Additionally, more than 8,000 students from over 40 area schools learned the proper way to use 9-1-1 by attending Cell Phone Sally program presentations.

2017 Action Plan
MARC staff will host public outreach volunteer orientations at the MARC Conference Center and will conduct on-site orientations as needed. Staff will also continue to partner with the AT&T Pioneers to deliver 9-1-1 education to schools around the region.

**Project: Education and Outreach Materials**
MARC staff will continue to update the Important Tips about Calling 9-1-1 and Text to 9-1-1 brochures as well as 9-1-1 legislation, interoperability and mapping fact sheets. Other education and outreach resources will be updated as needed.

2016 Progress
Two children were recognized as 9-1-1 Heroes this year for using 9-1-1 to get help for family members who needed emergency medical attention, and two additional nominations were received. MARC staff updated the Spanish 9-1-1 brochure. The 9-1-1 brochure was updated with Text to 9-1-1 language and printed in 2016. Also, the Text to 9-1-1 brochure was printed and distributed to local community groups and PSAPs.

2017 Action Plan
Cell Phone Sally and other outreach materials will continue to be available for all regional agencies to reserve and use in their public education and outreach efforts.

**Project: Wounded Warrior Project**
MARC staff will work with the region’s local governments to identify, develop and maintain an ongoing list of employment opportunities. These job listings will be shared with the regional Wounded Warrior Project contact to be used in their employment acclimation efforts for returning veterans.

2016 Progress
MARC staff continued to maintain a weekly listing of available employment opportunities based on data obtained with the cooperation of local governments. To date, over 800 employment opportunities have been listed for the Warriors to Work and Wounded Warrior Project.

2017 Action Plan
Staff will continue to work with local governments and the Wounded Warrior program to share employment information.
Goal F — Objective 2: Educate elected officials about policy and financial issues related to public safety communications.

Project: Inform Regional Leadership

MARC staff will respond promptly to requests from local officials to provide updates on projects and activities within the program. MARC staff will also provide timely information for the Metro Communicator, ReMARC and other news outlets.

2016 Progress

MARC staff will meet with officials in each county on an annual basis to discuss emerging regional public safety communications issues, such as funding options.

2017 Action Plan

Staff will continue to work with local leaders and regional agencies to ensure they are up to speed on regional projects and plans.
### Coordination Services Revenue Comparison 2017

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<tr>
<th>Revenue</th>
<th>2016 Budget</th>
<th>2017 Budget</th>
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<tr>
<td>PS Coordination Fee</td>
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<td>PS Pub Ed/Promo Revenue</td>
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<td><strong>Total Revenue</strong></td>
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<td><strong>$1,896,451</strong></td>
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### Coordination Services Expenses Comparison 2017

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<tr>
<th>Expenses</th>
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<td>Salaries and Wages</td>
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