



# EXECUTIVE OFFICE OF TECHNOLOGY SERVICES & SECURITY

COMMONWEALTH OF MASSACHUSETTS | 1 ASHBURTON PLACE, 8TH FLOOR, BOSTON, MA 02108

**MAURA T. HEALEY**  
Governor

**JASON SNYDER**  
Secretary

**KIMBERLEY DRISCOLL**  
Lieutenant Governor

July 30, 2024

Frank Pozniak  
Executive Director  
State 911 Department  
151 Campanelli Dr., Suite A  
Middleborough, MA 02346

**RE: FISCAL YEAR 2024 - COMIRS 4<sup>TH</sup> QUARTER REPORTS  
(Reporting Period April 1, 2024 – June 30, 2024)**

Dear Director Pozniak,

In accordance with Department of Telecommunication and Cable (hereinafter D.T.C.) Order 18-2 dated June 29, 2018, D.T.C. Order 19-2 dated May 16, 2019, D.T.C. Order 20-1 dated May 26, 2020, D.T.C. Order 21-3 dated May 26, 2021, D.T.C. Order 22-1 dated June 1, 2022, D.T.C. Order 23-2 dated June 14, 2023, D.T.C. Order 24-2 dated June 4, 2024, and the State 911 Department's Guidance Document as issued to the Executive Office of Technology Services and Security (hereinafter EOTSS) on or about September 9, 2020, I respectfully submit the Fiscal Year 2024 4<sup>th</sup> Quarter Report for the Commonwealth's project to modernize, improve and expand its interoperable public safety radio system (hereinafter CoMIRS).

The 4<sup>th</sup> Quarter of Fiscal Year 2024 was highlighted by:

- the continuation of activities necessary to prepare for TDMA radio network implementation,
- the implementation of substantive construction activities at Phase 1A sites,
- the update of site selection across Phases 1A, 1B, 1C, and 1D,
- the development of engineering and leasing documents for planned communications sites in Phases 1B, 1C, and 1D,
- the sharing of program information and coordinated planning with CoMIRS stakeholders, and
- the continued monitoring and auditing of the CoMIRS budget and expenditures.

The details of the program activities recorded during the reporting period, are described below.

**THE COMIRS PROGRAM MANAGEMENT OFFICE'S (PMO) CONTINUATION OF ACTIVITIES IN PREPARATION OF THE IMPLEMENTATION OF THE COMMONWEALTH'S TDMA RADIO NETWORK:**  
(*CoMIRS Strategic Plan Roadmap Major Activity 6.2.8, "Prepare for TDMA Radio Network Implementation"*)

The PMO continues to meet both virtually and in-person with the Motorola project team, multiple times per week, on an unlimited number of technical and/or contract administration issues. Site visits are regularly performed by members of the CoMIRS, Motorola, and subcontractor teams involved in system implementation and construction. Construction teams are managed by a Motorola construction manager and are often accompanied in the field by technicians and engineers from the Department of State Police. The CoMIRS PMO is responsible for the timely execution of agency agreements, the review and approval of engineering designs, the coordination with land and tower owners, the issuances of authorizations to pull building permits and notices to proceed for construction, and the oversight of the overall project schedule.

## **CoMIRS PROGRAM MANAGEMENT OFFICE (PMO) ACTIVITIES YIELDING SUBSTANTIVE CONSTRUCTION MILESTONES:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, Lease or Upgrade Radio Sites”)*

Beginning in December of 2023, the PMO authorized the initiation of major civil construction activities in support of the modernization of the CoMIRS radio system. The construction activities at these sites can include:

- improvements to site access roads,
- installation or repair of equipment shelters,
- improvements to HVAC,
- upgrades to electrical and emergency generator systems,
- installation and/or upgrades of ice bridges and ice shields,
- compound improvements, including gate and fence repairs,
- site access security and video surveillance installation,
- tower remediations,
- custom mount installations,
- decommission of old antenna systems, dishes, lines, and mounts,
- installation of new antenna systems, dishes, lines, and mounts, and
- other services needed to establish mission critical communication sites.

Below is a list of the seventeen (17) building permitting authorizations (“BPA”) issued during the 4<sup>th</sup> Quarter of FY 2024 by the CoMIRS PMO. These BPAs are major project milestones issued by the CoMIRS PMO to Motorola Solutions that serve as a formal approval to submit building permitting applications on behalf of the project and initiate mobilization planning for civil construction at the specified communications site. BPAs may include specific conditions for the approved construction activities, issued by CoMIRS, the tower owner, the landowner, an access road owner, or other party. The FY 2024 4<sup>th</sup> Quarter BPAs include:

- Blandford-Otis Stage Rd (SBA Communications, building permitting authorized on 5/20/2024)
- Charlton-Little Mugget MassDOT (MassDOT, building permitting authorized on 5/29/2024)
- Chesterfield-Bofat Hill Rd (SBA Communications, building permitting authorized on 4/10/2024)
- Chester-Skyline Trail FT (DCR, building permitting authorized on 5/20/2024)
- Colrain-Calvin Coombs Rd (Eversource, building permitting authorized on 6/24/2024)
- Great Barrington-Butternut (DCR & Berkshire County, building permitting authorized on 5/24/2024)
- Hawley-Berkshire East (FRCOG & Berkshire East Ski Resort & MSP, building permitting authorized on 6/3/2024)
- New Ashford-Brodie Mtn (DCR, building permitting authorized on 5/20/2024)
- North Adams-Route 2 (North Adams Tower Company Inc, building permitting authorized on 5/29/2024)
- Peru-Hickingbotham Rd (W MA N) (American Tower, building permitting authorized on 5/1/2024)
- Plainfield-N Central St (Eversource, building permitting authorized on 6/24/2024)
- Richmond-Lenox Mtn (DCR, building permitting authorized on 6/14/2024)
- Savoy-Borden Mtn (DCR, building permitting authorized on 5/20/2024)

- Sunderland-Mt Toby (DCR, building permitting authorized on 5/20/2024)
- Tolland-E Otis Rd (Crown Castle, building permitting authorized on 5/29/2024)
- Warwick-Mt Grace (DCR, building permitting authorized on 5/20/2024)
- West Brookfield-Ragged Hill Cable TV (Quigley, Brad & Cheryl, building permitting authorized on 6/14/2024)

Additionally, the CoMIRS PMO has issued six (6) additional notices to proceed (NTPs) for construction at Phase 1A sites during the 4<sup>th</sup> Quarter of FY 2024. NTPs are issued when all appropriate owner, inspector, and other approvals have been obtained and when the CoMIRS PMO concurs with the plan to be implemented at each site, including coordination and planning regarding any outages that existing CoMIRS users may experience during construction activities. Any specific conditions for construction issued by CoMIRS or the tower or site owner are included in the NTP document. The FY 2024 4<sup>th</sup> Quarter NTPs include:

- Buckland-Bray Road (NTP for construction issued on 5/3/2024)
- Hancock-Berry Mtn (NTP for construction issued on 5/24/2024)
- Monterey-Mt Wilcox (NTP for construction issued on 4/24/2024)
- Mt. Washington-Mt Darby (NTP for construction issued on 5/29/2024)
- New Braintree-Dispatch 1 (NTP for construction issued on 4/12/2024)
- West Brookfield-Ragged Hill Cable TV (NTP for construction issued on 6/14/2024)

**THE JOINT CoMIRS-MOTOROLA PROJECT TEAM CONTINUES TO CONDUCT RADIO SITE VISITS:**  
*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

The CoMIRS PMO and the Motorola Solutions project team continue to conduct numerous site visits to assess existing communications sites, evaluate new sites, and plan the RF and backhaul network. Field visits are conducted utilizing joint Commonwealth and Motorola teams, and result in a development of project deliverables, including equipment inventories, compound and tower diagrams, and microwave path reports. These deliverables are used to support lease applications, obtain owner approval for compound and tower changes, inform civil engineers conducting tower structural analyses, perform equipment delivery and installation, and construct communications sites. Project deliverables are posted to the Commonwealth’s Microsoft SharePoint site.

**ONGOING MAPPING AND STRUCTURAL ANALYSIS ACTIVITIES, ENVIRONMENTAL ASSESSMENTS AND PRE-CONSTRUCTION REPORTS FOR COMMUNICATIONS TOWERS:**  
*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

There are forty-four (44) communications towers in Phase 1A of the CoMIRS+P25 system implementation that will require the project team to complete a structural analysis to assure that the added or changed load on the tower can be properly handled by the communications tower and its foundation. If the added load exceeds national standard engineering thresholds for the designated tower class, then the tower must be remediated to handle the additional load. These remediations may include such repairs or improvements as reinforcing tower legs with steel, repouring or expanding tower or anchor foundations, replacing, or adding guyed wires, or, if needed and financially viable, replacing an existing tower. Much of the allowances planned for “Tower Remediation” are reserved to fund these required tower improvements.

Motorola Solutions has begun the evaluative activities for the fifty (50) tower sites affiliated with Phases 1B, 1C and 1D. The consolidation of project implementation activities, including tower mappings, geotechnical analysis, and foundation mappings, for Phases 1B, 1C, and 1D will help assure the timely completion and roll-out of the CoMIRS+P25 system.

**AUTHORIZED SITE ACQUISITION CHANGES:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.11, “Enhance and expand backhaul network”)*

During the 4<sup>th</sup> Quarter of Fiscal Year 2024, the CoMIRS PMO authorized the change in site candidates for one (1) Phase 1A communication site and ten (10) Phase 1B+ sites. One Phase 1B+ site (Woburn-Zion Hill) requires two communication sites to replace the original planned site, which was abandoned due to a lack of available leasing options for that location. The “replacement sites” listed below will be pursued as the proposed site for these geographic locations going forward, unless otherwise reported by the CoMIRS PMO.

<b>Original Site</b>	<b>Replacement Site</b>
Barnstable-Clay Hill	Barnstable-Oak St
Bourne-Bournedale Rd	Bourne-Bournedale
Foxboro-High Rock	Wrentham-Washington St
Monson-Hovey Hill	Monson-Hovey Rd
Norwell-Judges Hill	Scituate-Clapp Rd
Oxford-Tower Hill Rd	Sutton-Town Farm Rd
Plymouth-Pine Hill	Plymouth-State Rd
Rehoboth-Long Hill	Rehoboth-Martin St
Saugus-Mt Hood	Peabody-Lakeland Park
Woburn-Zion Hill	Burlington-Blanchard Rd
Woburn-Zion Hill	Waltham-Bear Hill
Yarmouth-Workshop Rd	Yarmouth-Whites Path

Activities and expenses reported in quarterly and annual reports for the project will include approved activities and expenditures for both original and replacement sites.

**Phase 1A Site Work Summary Through June 30, 2024**

Below are the major activities completed through the end of this quarterly reporting period. The metrics reported below are based on site completions. For instance, a site may have multiple antenna systems installed on its tower. The “Antennas and Lines (A&L) Completed” metric below will show a completion of “1” for each site where all antenna systems planned for that site are installed. It is not a count of the number of antenna systems installed, but rather a count of the completion of a major activity at each of the planned communication sites. Additionally, metrics may change across reporting periods based on changes to approval status, changes to project needs, evolution of engineering designs, or other criteria.

Each major activity is described in narrative, including a discussion of why that project activity is needed. Under each narrative description is a table summarizing the total number of communication sites that need that major activity completed and how many have been completed through the end of the reporting period for the whole project and for just those sites in Phase 1A. At the far right of these tables are counts by quarter through FY2024 in which it is reported that this activity has been completed at a communication site. Please note that some activities are recorded as “TBD” until a formal determination has been made about the need for that activity at each individual communication site.

**Site Walks Completed:** Site walks are physical visits to potential equipment site locations, typically including both CoMIRS and contractor personnel. Contractor personnel take pictures and measurements

of the visited site and discuss with CoMIRS personnel the viability of the site for use on the CoMIRS project. Site walks allow engineers to begin preparing initial site designs and identify early in the project potential site issues or unanticipated project costs.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
129	0	104	81%	50	0	46	92%	0	0	0	12

**Lease Exhibits Completed:** Lease exhibits include drawings showing a high-level overview of work proposed at a site. Lease exhibits provide documented agreement on the scope of work for each site and provide a baseline for more detailed construction drawings. Lease exhibits are also used to finalize leases or site usage agreements with third party site owners.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
100	0	57	57%	40	0	40	100%	1	0	0	7

**Lease Amendment Completed:** A lease amendment is a change to an existing lease at a site. Lease amendments are needed when existing equipment is changed or new equipment is added to a leased communications site. Upon completion, the new lease captures the proposed loading and ground space changes. Obtaining an amended lease agreement is a necessary step to implement needed changes at an existing leased site.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
68	0	24	35%	40	0	23	58%	7	11	0	4

**Structural Analysis Completed:** A structural analysis is a calculated determination of the loading of a tower compared to its loading capacity, done to meet the TIA/EIA-222 standard. All discrete loads (antennas, dishes, other items attached to the tower) and continuous cabling loads are considered in the analysis. The analysis is based on a proposed final loading of the tower. A structural analysis validates the structural integrity of the tower to support the proposed loading through inclement weather, including ice.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
93	0	31	33%	44	0	29	66%	3	2	4	3

**100% Construction Drawing Completed:** A construction drawing (CD) is a multi-page document with work details, relevant specifications, and drawings of the work proposed at a site. The final set is stamped and sealed by an engineer of record that all work is specified according to best standards and industry practices. Construction drawings provide an on-site reference for the crew of the work to be completed and how to properly complete it. CDs also serve as an agreement document between vendor and customer on what work is to be completed and how it is to be completed.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
94	0	34	36%	45	0	33	73%	11	13	1	5

**Building Permit Pulled:** A building permit (BP) is required for most site work involving changes to tower and compound equipment. The building permit is needed to ensure compliance with any authorities having jurisdiction where the sitework is being performed. Depending on the ownership of the communication site land, the building permit may be pulled with the approval of a municipal building inspector or state building inspector.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
93	0	24	26%	44	0	23	52%	0	12	0	3

**Notice to Proceed for Construction Issued:** A notice to proceed (NTP) is a formal acknowledgement issued by the site owner and/or caretaker allowing a contractor to begin the proposed work at a site. Written permission from a site owner is required by most jurisdictions. It is an important legal step in the sitework process and assures that the landowner is fully aware of the proposed work prior to commencement of construction activities. NTPs often include the rules governing the construction approval, including any required notifications, access controls, and completion deadlines.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
99	18	28	28%	50	0	27	54%	0	8	3	6

**Construction Started:** This milestone denotes the formal beginning of construction activities at a site. Construction activities typically include a pre-construction kickoff meeting where all involved parties meet to discuss the work to be performed and any rules or considerations for accessing the site or completing the agreed upon scope of work. Tracking the date of construction start helps in tracking work progress.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
99	0	16	16%	50	0	15	30%	0	6	5	5

**Underground Grounding Completed:** This activity tracks when any underground grounding halo and connections to the halo are complete. Having a complete and continuous underground grounding system provides electrical protection to outdoor and indoor equipment at a site. Grounding systems prevent damage to equipment from lightning and/or electrical surges and are typically installed prior to electronic equipment delivery and installation.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
10	77	10	100%	9	34	9	100%	0	5	4	1

**New Generator Set:** This activity tracks when a new generator has been set on its foundation, configured, and is ready for power connection. The new generator provides emergency backup power in case of commercial power failure.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
30	17	1	3%	8	2	1	13%	0	0	0	1

**Fuel Tank Utility Connection Complete:** This activity tracks when all connections required to and from the fuel tank have been completed. These include fuel connections as well as electrical connections for monitoring capabilities. Connection of the fuel tank allows for monitoring of fuel levels without the need for a physical visit to a remote site.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
30	19	1	3%	10	2	1	10%	0	0	0	1

**Ice Bridge Installed:** This activity tracks when the ice bridge posts and grating have been installed and grounded. The ice bridge provides protection and support for proposed antenna cabling. Due to the protection it provides, ice bridges are required to be installed before antennas and lines can be installed.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
1	43	1	100%	1	8	1	100%	0	0	0	1

**Compound Final Grade Completed:** After all below grade work has been completed, the compound is brought up to final grade and compacted, with a specified rock fill distributed over top. The final grading of a site returns the ground level to a condition set for that site work. This activity provides a level surface for final stoning and filling of a site.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
2	48	2	100%	2	10	2	100%	0	1	0	1

**Gate Installed:** This activity tracks when the addition of a man-gate or vehicle gate to a site compound's fence line has been completed. A man-gate allows additional means of access to a site when a vehicle gate may be blocked by heavy snowfall.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
4	42	4	100%	4	7	4	100%	0	1	2	1

**Antennas and Lines (A&L) Completed:** This activity tracks when all antennas and lines have been installed, relocated, or removed as called out in the scope of work. Antennas and lines being installed allows for the delivery and installation of FNE equipment in the shelter. Without antennas and lines, the FNE equipment cannot be configured and optimized.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
84	9	12	14%	42	3	12	29%	0	4	4	4

**Line Sweeps Completed:** Line sweeps are measurements taken by a spectrum analyzer or service monitor tool to capture performance of any installed RF cabling. Line sweeps provide assurance that lines and antennas are to specification and will operate as intended. The line sweeps provide a mechanism for identifying issues along lines and connections to antennas and other equipment.

Total IS-1				Total Phase 1A				FY2024			
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Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
89	9	12	13%	47	3	12	26%	0	2	6	4

**Site Restoration Completed:** Site restoration is the cleanup and final grading of soil at a site as well as any seeding needed to bring the site back to pre-construction condition. Site restoration returns the site to a condition agreed upon by the site owner. A third-party inspection will usually not be conducted until site restoration is complete, as it will be a part of the inspection.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
111	6	16	14%	50	0	15	30%	0	4	6	6

**Video Surveillance Completed:** This activity tracks when the installation and configuration of site security video cameras is completed. Installation and configuration of the video surveillance equipment provides security and site awareness from the point of turn-up. This is critical for maintaining the security and operations of each site.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
16	70	15	94%	14	29	14	100%	0	0	0	11

**Access Control Completed:** This activity tracks when the installation and configuration of site access control panels is completed. The access control system provides a centralized access control system for authorized personnel to gain entry to sites. This is critical for maintaining the security and operations of each site.

Total IS-1				Total Phase 1A				FY2024			
Needed	TBD	Completed	% Completed	Needed	TBD	Completed	% Completed	Q1	Q2	Q3	Q4
15	73	15	100%	14	30	14	100%	0	0	0	11

**AUTHORIZED STRUCTURAL IMPROVEMENTS TO COMMONWEALTH OWNED TOWERS:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

The CoMIRS Modernization Project continues to improve Commonwealth owned assets as part of the overall modernization of the statewide radio network. A major investment in Commonwealth infrastructure is the remediation of towers to address structural deficiencies under the proposed new loading for each tower. Addressing the remediation of towers is often a critical path activity for other tower construction activities.

Task Order 015 approved the tower remediation for existing towers at Richmond-Lenox Mtn and West Brookfield-Ragged Hill. Task Order 019 approved the tower remediations at Chester-Skyline Trail Fire Tower, Savoy-Borden Mtn, and Sunderland-Mt Toby. Task Order 025 approved the tower remediation at Warwick-Mt Grace. Planning and preparation for the remediation of these towers continued during this period, including field mappings on April 10 and April 18 leading to the creation of shop drawings for the cutting of steel reinforcement components designed specifically for each tower. Show drawings were posted to the CoMIRS SharePoint site on May 23. Tower remediation activities are planned for the 1<sup>st</sup> Quarter of FY 2025.

**AUTHORIZED CHANGE OF SCOPE VIA CHANGE ORDER 004:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

Change Order 004 (CO 004) is a multi-part change order that addresses aggregate, to-date changes to the planned microwave network supporting the CoMIRS+P25 communications sites and the security systems that secure individual communications sites from unauthorized access or property damage. Included in this change order are:

- Cumulative additions or changes to the CoMIRS+P25 microwave backhaul network for Phase 1A, including both equipment and services. Details of these changes by site are included in Attachment 1 to CO 004.
- Additional services to remove or relocate existing microwave and other communications equipment currently located on planned CoMIRS+P25 communications towers.
- Due chiefly to model availability, the surveillance cameras selected to help secure CoMIRS+P25 communications sites were changed. The model change resulted in the selection of a camera system that is currently manufactured and supported by Avigilon, a subsidiary of Motorola Solutions. The newly selected models include upgrades to video storage, video features, and video clarity.
- Motorola Solutions will provide fifty (50) key fobs and fifty (50) proximity cards for Avigilon Access Control. Details of Avigilon related expenses are included in Attachment 2 to CO 004.
- A no-cost change was included in CO 004 to document the agreed upon change in alarming module equipment. The bid SDM3000 alarming module is being replaced by the new MC Edge unit. SDM3000s in the field will be replaced by Motorola Solutions with the MC Edge modules.
- A no-cost change was included in CO 004 to change the proposed RF antenna mount from the originally proposed PSA-6 mounts to the HS6-K mounts for all 10’ and 17’ omni antennas. This includes 97 mounts planned for use at 46 Phase 1A sites. This change was made to utilize an antenna mount that met the structural needs of the current project. Motorola Solutions provided an engineering letter signed and sealed by Airosmith Engineering of Saratoga Springs, NY that detailed the sufficiency for the use of the new mounts for the proposed antennas and placements.
- The total cost of Change Order 004 is \$1,267,432.79. Below is a breakdown of the major cost components of CO 004:
  - Microwave equipment changes for Phase 1A (\$12,953.00, budgeted to Backhaul Improvements)
  - Microwave services and additional charges changes for Phase 1A (\$1,100,971.95, budgeted to Backhaul Improvements)
  - Microwave changes to construction management support (\$75,680.00, budgeted to Backhaul Improvements)
  - Avigilon camera and access control changes (\$77,827.84, budgeted to Site Improvements)

CO 004 will be paid via approved milestone certificates billed to Task Order 027. Change Order 004 was approved on June 28, 2024.

**AUTHORIZED EXPENDITURES FROM CONTRACT “ALLOWANCES”:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

As part of the contract with Motorola Solutions, a portion of the overall contract price was reserved for project expenses that could not be fully identified or costed at the time of contract signing. These include large expenditures like tower remediations and smaller expenditures like required NEPA studies.

During the 4<sup>th</sup> Quarter of Fiscal Year 2024, the PMO authorized new expenditures from the Allowances in the amount of \$1,837,952.96, including:

**TO 024 Ragged Hill Transition Improvements -- Site Improvements (\$170,448.51)**

TO 024 funds the creation of a temporary radio site to be used at the Ragged Hill site while the existing shelter is removed and replaced with a new shelter. This task order includes the purchase of a reusable outdoor electronics cabinet for use during transition and available after transition, as well as the costs associated with changes in fiber and utilities for the temporary cabinets. (Approved 5/3/2024)

**TO 027 Change Order 004 Adjustments -- Site and Backhaul Improvements (\$1,267,432.79)**

TO 027 funds changes to scope related to the CoMIRS microwave network and surveillance cameras at radio sites. The details of this Task Order are listed in Change Order 004. (Approved 6/28/2024)

**TO 028 Phase 1A Misc Site Costs -- Site Improvements (\$48,616.73)**

TO 028 funds miscellaneous approved costs to Phase 1A sites, including structural analyses, IM/EME studies, mount analyses, tower mappings, foundation mappings, and civil modifications identified during construction, among others. (Approved 5/3/2024)

**TO 029 Utility Power Coordination -- Site Improvements (\$35,904.39)**

TO 029 funds a change of project responsibility from CoMIRS to Motorola Solutions to coordinate utility planning at sites with changes in electrical needs. (Approved 4/5/2024)

**TO 030 Site Visits and Path Studies -- Site Improvements (\$142,321.95)**

TO 030 funds additional visits to potential alternate radio sites and for Aviat Networks of Milpitas, California to evaluate potential microwave backhaul links. (Approved 4/5/2024)

**TO 031 Brimfield Generator Foundation Relocation -- Site Improvements (\$35,631.20)**

TO 031 funds the relocation of a generator concrete pad within the communication site compound at Brimfield to address direction provided by the utility provider. (Approved 5/3/2024)

**TO 032 Wilbraham Geo and FM – Tower Remediation (\$14,573.00)**

TO 032 funds geotechnical analysis, foundation mapping, and utility markouts to be performed by All-Points Technology Corporation, based on the direction of the site owner. (Approved 4/10/2024)

**TO 033 MW Path Studies (Phase 1B+) -- Backhaul Improvements (\$123,024.39)**

TO 033 funds additional site visits, path walks, and path studies for potential microwave backhaul paths to support communications sites planned for Phases 1B, 1C, and 1D. These path studies are in addition to studies previously approved for the project. (Approved 5/3/2024)

Additionally, during the 4<sup>th</sup> Quarter of Fiscal Year 2024 the PMO authorized payment for previously authorized expenditures in the amount of \$386,907.98, including:

**TO 013 3rd Party Pre-Construction Services & Documents – Tower Remediation (\$6,073.17, approved May 15, 2024)**

**TO 018 Mt Toby New DC Power – Site Improvements (\$44,547.17, approved May 15, 2024)**

**TO 022 Charlton MassDOT Engineering** – Tower Remediation (\$3,384.10, approved May 16, 2024)

**TO 028 Misc Ph1A Documents & Services** – Site Improvements (\$48,616.73, approved June 21, 2024)

**TO 030 Site Visits and Path Studies** – Site Improvements (\$125,631.22, approved June 21, 2024)

**TO 031 Brimfield Generator Foundation Relocation** – Site Improvements (\$35,631.20, approved May 15, 2024)

**TO 033 MW Path Studies (Phase 1B+)** – Backhaul Improvements (\$123,024.39, approved May 16, 2024)

Below is the summary budget for each Allowance category. The full value of all Allowances is still \$18,476,554.00. Through the end of the 4<sup>th</sup> Quarter of FY 2024, \$6,012,417.68 has been authorized to be expended from Allowances, and \$2,030,596.18 has been expended (approved for payment). \$12,464,136.32 (67.5%) remains in the Allowances.

Allowance Category	Baseline Budget	Authorized	Expended	Remaining (Baseline - Authorized)	Remaining Percent
Approved Additional Expenditures	\$ 28,752.00	\$ -	\$ -	\$ 28,752.00	100.0%
Backhaul Improvements	\$ 1,510,592.00	\$ 1,312,629.34	\$ 123,024.39	\$ 197,962.66	13.1%
Frequency Licensing	\$ 88,174.00	\$ -	\$ -	\$ 88,174.00	100.0%
Permitting, NEPA & Compliance	\$ 550,324.00	\$ 53,353.66	\$ 46,951.21	\$ 496,970.34	90.3%
Site Improvements	\$ 6,994,080.00	\$ 2,820,860.55	\$ 1,455,154.62	\$ 4,173,219.45	59.7%
Tower Remediation	\$ 9,304,632.00	\$ 1,825,574.13	\$ 405,465.96	\$ 7,479,057.87	80.4%
<b>Total</b>	<b>\$ 18,476,554.00</b>	<b>\$ 6,012,417.68</b>	<b>\$ 2,030,596.18</b>	<b>\$ 12,464,136.32</b>	<b>67.5%</b>

As some Task Orders are completed with authorized funds remaining on those Task Orders, funds will be returned to the Allowances pool for authorization and expenditure on other approved project activities and equipment. Several new Task Orders are expected to account for Phase 1B, 1C, and 1D sites (together referred to as “Phase 1B+”) and for additional, unplanned construction expenses related to Phase 1A sites.

**EXECUTION OF MASTER SERVICE AGREEMENTS WITH COMMERCIAL COMMUNICATION SITE PROVIDERS:**  
*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.10, “Build, lease, or upgrade radio sites”)*

The communication sites that are planned for the CoMIRS+P25 system include a combination of Commonwealth agency owned sites, county or municipality owned sites, and commercial or privately-owned sites. For Phase 1A of the CoMIRS+P25 system implementation, many of the planned sites are already subject to a formal lease. The approach for communications sites with existing leases focuses on amending existing leases under the existing agreements with the site owner.

As previously reported, the Land Mobile and Microwave Radio Communication Equipment Site and Tower Installation Rights Procurement (COMMBUYS Bid# BD-22-1060-ITD00-ITD00-70921) was structured to have two parts. Part 1 established a list of pre-approved communications sites vendors. Part 2 solicited bids for the use of communications sites within twenty-seven specific geographic areas.

To further enhance the PMO’s ability to identify and leverage additional communication sites, the PMO reopened the Land Mobile and Microwave Radio Communication Equipment Site and Tower Installation Rights Procurement on February 13, 2024. The reopened procurement allowed new vendors to be added

to the department contract and allowed existing and new bidders to submit bids on thirty (30) different communications sites throughout Massachusetts.

To date, five apparent successful awards have been announced and master service agreements have been executed with American Tower LLC, Crown Castle USA Inc., and Industrial Tower & Wireless LLC. These master agreements will facilitate the execution of site-specific agreements that will ultimately form the CoMIRS+P25 network constellation. The CoMIRS PMO is authorized to enter into lease negotiations for sites procured through this RFR with companies that have executed a master service agreement under this contract. Master service agreements with additional bidders and lease negotiations at several sites are on-going.

**REVIEW, ANALYZE, AUTHORIZE AND PROCESS THE PURCHASE OF REPLACEMENT SUBSCRIBER UNITS FOR OPERABLE USERS OF THE CoMIRS NETWORK:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.2.7, “Acquire TDMA Digital Radios for Current [Network] Users”)*

The program initiative to replace non-compliant subscriber units has been completed and is closed. Notwithstanding the conclusion of the replacement initiative, the PMO has been developing plans to “upgrade” an additional 4,000 subscriber units. Although these 4,000 units did not meet the threshold for full replacement, they may require additional feature sets or licenses to operate on the CoMIRS+P25 network. The installation of feature sets will be a logistical challenge as each radio must be individually examined to determine what specific features the radio needs. Once the radio has been examined and payment has been approved, the necessary feature sets will be installed. The PMO has allocated project funds to complete the upgrade initiative and will report further on the initiative once it is planned to be implemented in full.

**THE CoMIRS PMO CONTINUED ITS EFFORT TO MIGRATE THE FRANKLIN COUNTY PUBLIC SAFETY AGENCIES ONTO THE CoMIRS NETWORK:**

*(CoMIRS Strategic Plan Roadmap Major Activity 6.3.1, “Determine Potential Expanded Users of CoMIRS”)*

The CoMIRS PMO continued to work with the Franklin Regional Council of Governments (FRCOG) on its transition to the CoMIRS radio system and to coordinate the decommissioning of the existing Franklin County Emergency Communications System (FCECS). FCECS is the legacy radio system in Franklin County that has been determined to be end-of-life and in urgent need of replacement. Most Franklin County public safety agencies and users have transitioned over to the CoMIRS system. The FCECS is still operational and used to provide radio coverage in areas not currently covered by the existing CoMIRS system. Additionally, many fire departments in the county use the legacy system for local paging needs. The CoMIRS PMO continues to work with FRCOG to support FRCOG’s plan to decommission the FCECS and transition paging operations to the CoMIRS system. FRCOG and Franklin County public safety agencies are responsible for the purchasing of digital paging devices that will work on the planned CoMIRS+P25 system.

**THE PMO CONTINUES TO MEET WITH CoMIRS STAKEHOLDERS AS A MEANS TO KEEP THEM INFORMED OF THE PROJECT’S PROGRESS AND IMPLEMENTATION SCHEDULES AND TO NEGOTIATE AGREEMENTS FOR THE NEW DIGITAL SYSTEM:**

In the 4<sup>th</sup> Quarter of Fiscal Year 2024, the PMO conducted outreach to many of the user agencies that have subscriber radio fleets that will need upgrading, provisioning, and programming to use the new digital system. Additionally, to transition to the new CoMIRS+P25 system many core-connected console

agencies will need to coordinate self-financed site infrastructure upgrades to meet the minimum requirements of the new system. The CoMIRS PMO has been available to help answer questions regarding these infrastructure and radio subscriber investments. The CoMIRS PMO is also working with user agencies on changes to how their users will use the new system, including changes to talkgroups to better support the operational use of the new system.

At the request of the EOPSS Office of Grants and Research and the Massachusetts Statewide Interoperability Coordinator, a related planning meeting was held on March 5 to discuss how to maintain interoperability with UASI agencies as some agencies are considering transitioning from CoMIRS to a separate City of Boston system, currently in development. A follow-up action item from that meeting was to examine the full integration of the new City of Boston system with the CoMIRS+P25 system. That integration would promote interoperability throughout the metro Boston area and be the most efficient use of spectrum and funding for the region. The CoMIRS PMO is in support of this option and is working to schedule a follow-up meeting with representatives of the City of Boston. Information requests to the City of Boston were still outstanding as of the end of the 4<sup>th</sup> Quarter.

The CoMIRS PMO has been actively engaged with the Department of Conservation and Recreation (DCR) to formalize a four-party memorandum of agreement (MOA) with DCR, MSP, EOPSS, and EOTSS. Fundamentally, this draft agreement establishes the conditions for the use of the new digital system by DCR in part in exchange for CoMIRS access to DCR lands and tower space for CoMIRS communication equipment. During the 4<sup>th</sup> Quarter of FY 2024, final revisions to this MOA were agreed to by the four signatories to the agreement. The MOA was partially executed by DCR Commissioner Brian Arrigo on June 27, 2024. The CoMIRS PMO is coordinating the execution of the agreement and expects the agreement to be fully executed by the remaining three signatories in the 1<sup>st</sup> Quarter of FY 2025. Related to this agreement, the CoMIRS PMO expects to facilitate the execution of around twenty (20) DCR high ground permits for use of DCR lands for CoMIRS communications equipment. Seven (7) draft high ground permits have been submitted to DCR for review and approval to support construction activities in western Massachusetts as part of the CoMIRS Modernization Project. The MSP may also utilize this multi-party MOA to request high ground permits for communications sites used by the State Police outside the scope of the CoMIRS Modernization Project.

The CoMIRS PMO continues to work with the City of Worcester and the Town of Shrewsbury on a shared infrastructure agreement for the integration of the five site Worcester-Shrewsbury system in the CoMIRS+P25 system. A draft agreement has been provided to representatives of the City of Worcester and the Town of Shrewsbury. Follow-up activities on this agreement are expected in the 1<sup>st</sup> Quarter of FY 2025.

**MONITORING AND AUDITING OF THE PROJECT BUDGET AND EXPENDITURES:**

During the 4<sup>th</sup> Quarter of Fiscal Year 2024, the PMO, the Director of Finance for the State 911 Department, and the Director of Finance for EOTSS collectively and individually monitored the program’s expenditures. Authorized expenditures paid during the 4<sup>th</sup> Quarter are listed below. The reported expenditures are limited to those made between April 1, 2024, and June 30, 2024. All stated expenditures were paid from the Enhanced 911 Trust account. A full and complete financial report for all Fiscal Year 2024 transactions will be included in the Fiscal Year 2024 Annual Report.

<b>CoMIRS Expenditures -- FY2024, 4th Quarter</b>	
<b>MMARS Object Codes / Vendors</b>	<b>Sum of Amounts</b>
<b>EE Administrative Expenses</b>	<b>\$ 4,246.42</b>
<b>E16 Indirect Cost Recoupment</b>	<b>\$ 4,246.42</b>
Indirect Cost Recoupment	\$ 4,246.42
<b>UU Information Technology (IT) Expense</b>	<b>\$ 808,732.66</b>
<b>U05 IT Temporary Staff Augmentation Professionals</b>	<b>\$ 41,901.56</b>
MCINNIS CONSULTING SERVICES	\$ 41,901.56
<b>U07 Information Technology (IT) Equipment Purchases</b>	<b>\$ 553,624.07</b>
MOTOROLA SOLUTIONS, INC	\$ 553,624.07
<b>U11 Information Technology (IT) Contract Services</b>	<b>\$ 213,207.03</b>
MISSION CRITICAL PARTNERS LLC	\$ 114,435.28
SWBAILEY CONSULTING LLC	\$ 98,771.75
<b>Grand Total</b>	<b>\$ 812,979.08</b>

In the event there are any questions or if clarification concerning any aspect of this report would be helpful, the PMO would be pleased to assist. Inquiries may be directed to Assistant Secretary Matthew Moran at 617.626.4400 or email at [Matthew.E.Moran@mass.gov](mailto:Matthew.E.Moran@mass.gov).

Respectfully,



Matthew Moran  
Assistant Secretary of Technology Services and Security  
Chief Engagement Officer