



METROPOLITAN EMERGENCY SERVICES BOARD RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

January 28, 2026, 1:00 p.m.

This meeting will be conducted in-person at the **MESB Board Room, 2099 University Ave W, St. Paul** and online at [WebEx Link](#). If prompted, please use meeting number 2551 111 3815 and password Radio. To call in by phone, dial 408.418.9388.

1. **Call to Order** – Committee Chair, Jake Thompson
2. **Approval of Agenda** – Thompson
3. **Approval of Minutes of December 17, 2025 Meeting (page 2)** – Thompson
4. **Action Items**
 - A. Hennepin Healthcare LMR-53 Request (page 4) – Tyler Lupkes
 - B. MRCC Talkgroup Additions (page 6) – Tracey Fredrick/Lupkes
 - C. State Patrol LSEC Talkgroup Access Request (page 7) – Chad Forystek
 - D. Bloomington Gateway Request (page 8) – Dalton Gruber
 - E. MAC Equipment Addition (page 10) – Jeff Bjorklund
 - F. Metro Standard Appendix 2 Update (page 11) – Fredrick
 - G. Discussion: Beginning of 2026-2029 Change Management Cycle
 - H. Discussion: 2026 Radio Items for Regional Needs Document (page 18)
5. **Moves, Additions, & Changes to the System**
6. **Committee Reports**
 - A. Metro Mobility Usage Update (page 34) – Chad LeVasseur
 - B. System Managers Group/Metro Administrators – Jansen
 - C. MnDOT ARMER System Update – Nick Schatz/Dave Klema
 - D. SECB Committees
 - i. Steering – Fredrick/Jill Rohret
 - ii. LMR – Mike Mihelich/Nate Timm
 - iii. WBBA – Rod Olson/Ryan Emberland
 - iv. IOC/COMU-STR Workgroup – Timm/Jansen/Dan Anderson
 - v. IPAWS – Scott Haas
 - vi. Finance/Grants Workgroup – Fredrick/Rohret
7. **Other Business**
 - A. ME TAC Permissions Update – Fredrick
8. **Adjourn**

Reminder: Next meeting scheduled for February 25, 2026.

Metropolitan Emergency Services Board

Radio Technical Operations Committee

**December 17, 2025
Draft Meeting Minutes**

Members

Airport – Jeff Bjorklund
Anoka County – Cory DeMuth
Carver County – **absent**
Chisago County – Mike Parker
Dakota County – Ron Jansen
Hennepin County – Jake Thompson
Isanti County – Bob Shogren
Metro Region EMS – **absent**

Metro Transit – Chad LeVasseur
Minneapolis – Rod Olson
Minnesota Fire Chiefs – **absent**
Ramsey County – Mike Mihelich
Scott County – Scott Haas
Sherburne County – Derek Baas
Washington County – Nate Timm
U of M – **absent**

Guests: Kristen Aronen, *Hennepin County*; Ryan Emberland, *Anoka County*; Ted Hutson, *Motorola*; Dave Klema, *MnDOT*; Merlin Koskela, *Hennepin County (online)*; Kris Massie, *Hennepin County (online)*; Kelly Ordorff, *Motorola*; Nick Schatz, *MnDOT*; and Alisha Vars, *East MRCC*.

MESB Staff: Tracey Fredrick; Jacob Kallenbach; and Jill Rohret.

1. Call to Order

The meeting was called to order at 1:01 p.m.

2. Roll Call – Not Needed

3. Approval of Agenda

Tracey Fredrick asked for agenda item “5C: WBBA Alternate” to be added to the December 2025 Radio TOC meeting agenda.

Motion made by Scott Haas, seconded by Cory DeMuth to approve the December 2025 Radio TOC meeting agenda with the mentioned additions. Motion carried.

4. Approval of Minutes of October 22, 2025 Meeting

Motion made by DeMuth, seconded by Jeff Bjorklund to approve the October 22, 2025 Radio TOC meeting minutes. Motion carried.

5. Action Items

A. COMU Recognitions/Renewals

i. Melissa Peers COML Recognition

Fredrick said that Melissa Peers is seeking an initial COML recognition. Peers currently works at Dakota 911. She has completed the task book, attended the COMMEX at Camp Ripley, and turned in all necessary paperwork and certificates. Peers has been involved with CRTF and has agency support to be recognized as a COML.

Motion made by Nate Timm, seconded by Haas to approve the COML recognition of Melissa Peers. Motion carried.

Metropolitan Emergency Services Board

ii. Brandon Buckley COMT Recognition

Fredrick said Brandon Buckley is seeking his initial COMT recognition. Buckley currently works with South Metro Fire. He completed his task book, attended the COMT course, and turned in all necessary paperwork and certificates. Buckley has agency support to be recognized as a COMT.

Motion made by Ron Jansen, seconded by Mike Mihelich to approve the COMT recognition of Brandon Buckley. Motion carried.

iii. Lindsay Stambaugh INTD/COMT Renewal

Fredrick said Lindsay Stambaugh is seeking an INTD and COMT renewal. Stambaugh currently works for the Airport ECC. She is receiving renewal points for participating in communications exercises, tabletop exercises, being a presenter at training courses, and completing other relevant training courses. Stambaugh is also currently working towards becoming an INTD trainer, is actively involved with CRTF, and has agency support to continue to be recognized as a COMT and INTD.

Motion made by Timm, seconded by Bjorklund to approve the INTD and COMT renewal of Lindsay Stambaugh. Motion carried.

B. April 2026 Meeting Date

Fredrick said there are several Radio TOC members who will be unable to make the April 22, 2026, Radio TOC meeting. April 29, 2026, is the most popular reschedule date recommended. Fredrick recommends moving the April Radio TOC meeting to April 29, 2026.

Motion made by Jansen, seconded by Timm to approve and move the April Radio TOC meeting to April 29, 2026. Motion carried.

C. WBBA Alternate

Fredrick said the Radio TOC will need to appoint a new alternate to the WBBA as Cory DeMuth will be departing from his role at Anoka County. The WBBA typically meets monthly on the 3rd Tuesday of the month, at 10 a.m. The WBBA usually only meets virtually.

Ryan Emberland of Anoka County was nominated by Cory DeMuth, and Scott Haas.

Motion made by Rod Olson, seconded by Bjorklund to appoint Ryan Emberland as the alternate to the WBBA. Motion carried.

6. Discussion Items

A. 2026 Training

Please reach out to Fredrick with ideas and recommendations for 2026 training opportunities.

B. Possible Stier Bill

Jill Rohret gave a brief update on the possible Stier Bill, which would look to transfer ARMER infrastructure away from the PSAPs to the State of Minnesota. More information will become available as/if the bill continues to move forward.

C. Regional Needs Document List

The members of the Radio TOC discussed the Regional Needs Document.

7. Adjournment

The meeting was adjourned at 2:37 p.m.



December 1, 2025

Radio Services Coordinator Tracey Fredrick
Metropolitan Emergency Services Board
2099 University Ave West
St. Paul, MN 55104

Coordinator Fredrick:

Hennepin EMS is requesting a modification to our ARMER Participation Plan to permit operations in accordance with SECB Standard LMR-53: Foreign Radio System and Non-ARMER Radio Connections.

Hennepin EMS requests the ability to establish up to six (6) “permanent or enduring radio frequency (RF) interface[s]” between Hennepin EMS owned talkgroups and LTE devices by utilizing donor radios and radio gateways. This LMR-53 request will apply to all Hennepin EMS ARMER users as covered by our participation plan.

In accordance with LMR-53, donor radios will be on the ARMER approved radio list and comply with the LMR-53 programming requirements. Hennepin County Sheriff’s Office provides radio programming services for Hennepin EMS and will assist in meeting LMR-53 donor radio programming specifications. Donor radios will affiliate with the Hennepin East/West subsystems and no significant additional ARMER system loading is anticipated with this request. Radio Gateways utilized will be provided by JPS Interoperability Solutions. Radio gateways will have the ability to be locally or remotely disabled by approved Hennepin EMS gateway administrators.

Hennepin EMS may choose PTT applications (apps) that meet their operational requirements so long as they integrate with JPS Interoperability Solutions gateway devices. PTT application system administrators for Hennepin EMS will have the ability to enable/disable individual users as well as each user’s ability to access radio gateway channels/talkgroups via the PTT application.

Should there be any questions or concerns, please don’t hesitate to reach out.

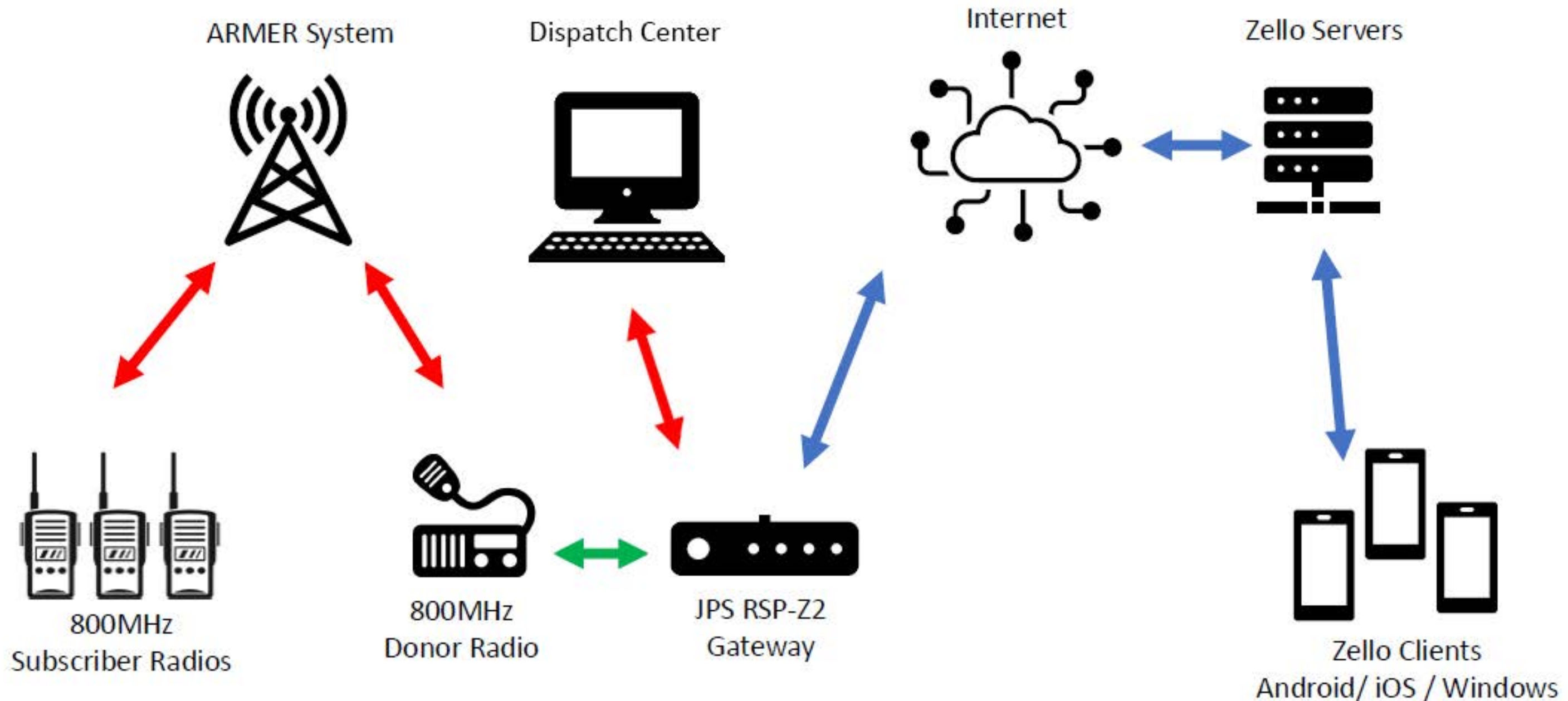
Respectfully,

Daniel Klawitter

Daniel Klawitter
Deputy Chief – Communications
Hennepin EMS
(612) 873-7522
daniel.klawitter@hcmcd.org

Encl: LMR/LTE System Diagram

Hennepin EMS LMR/LTE System Diagram





Ms. Fredrick,

Please receive this updated memorandum regarding the West Medical Resource Control Center's intention to add encrypted talkgroup capabilities for our customers.

West MRCC understands that a new encrypted talkgroup has been approved by the Metro Radio TOC and MESB, and we are very appreciative of the time by all to consider and understand the request. As we move toward implementation it has been identified that additional EMS agencies are interested in utilizing secured communications for their patient information relays. Adding these additional agencies to the same talkgroup would create an imbalance of usage across the West MRCC talkgroups, which would generate waiting times for field users. We are asking for a second encrypted talkgroup to be created for future use by these agencies.

Current West MRCC 2 users moving to encryption

- Hennepin EMS, Edina Fire, Burnsville Fire

Current West MRCC 1 users interested in future encryption

- North Memorial Ambulance, Allina Health EMS

The West MRCC utilized talkgroups would be: WMRCC1 & 2 clear (current) and WMRCC3 & 4 encrypted (new).

West MRCC is committed to a seamless transition through this project and the offering of secured patient information radio communication.

Warm regards,

Dan Klawitter – Deputy Chief of Communications/West MRCC Manager



Alcohol
and Gambling
Enforcement

Bureau of
Criminal
Apprehension

Driver
and Vehicle
Services

Emergency
Communication
Networks

Homeland
Security and
Emergency
Management

Minnesota
State Patrol

Office of
Communications

Office of
Justice Programs

Office of
Pipeline Safety

Office of
Traffic Safety

State Fire
Marshal



Minnesota State Patrol

445 Minnesota Street • Suite 130 • Saint Paul, Minnesota 55101-5130

Phone: 651.201.7100 • Fax: 651.296.5937 • TTY: 651.282.6555

msp.dps.mn.gov

To: Jake Thompson, MESB Radio Technical Operations Committee Chairperson
Ron Jansen, MESB Radio Technical Operations Committee Vice-Chairperson

From: Chad Forystek, MSP Radio Systems Coordinator

Date: 01/12/2026

Re: ME LSEC Talkgroup Access on Non-Sworn Radios

Dear Members of the Radio Technical and Operations Committee,

The Minnesota State Patrol respectfully requests a waiver to allow the ME LSEC talkgroups to be authorized on select non-sworn subscriber radios, specifically those assigned to Minnesota State Patrol Capitol Security personnel and non-sworn Commercial Vehicle Inspectors.

This request is submitted in accordance with Metro Region ARMER Standard 3.15.0, which provides for waiver consideration when non-law-enforcement personnel require access to ME LSEC talkgroups for operational purposes.

Personnel utilizing these radios are CJIS certified and operate in roles that routinely require secure, encrypted communications alongside sworn law enforcement staff during coordinated operations, planned events, and incident responses.

Incident activity at the State Capitol has increased, resulting in a greater need for secure, encrypted communications among the multiple agencies that may be involved in these responses. Non-sworn Minnesota State Patrol personnel may be directly involved in incidents alongside sworn personnel, and having ME LSEC talkgroups available will improve coordination and efficiency.

Capitol Security radios are controlled assets and are not taken home by staff. These radios remain secured at Capitol Security facilities when not in use, further ensuring appropriate oversight and compliance with ARMER and CJIS requirements

Authorizing ME LSEC talkgroups on these radios will also assist the Minnesota State Patrol in maintaining fleet conformity by reducing programming variance and simplifying fleet management.

All use of ME LSEC talkgroups will continue to comply with applicable ARMER standards, including encryption requirements and usage limitations.

Respectfully submitted,

Chad Forystek
Radio System Coordinator / Administrator
Minnesota State Patrol



Metro Radio TOC,

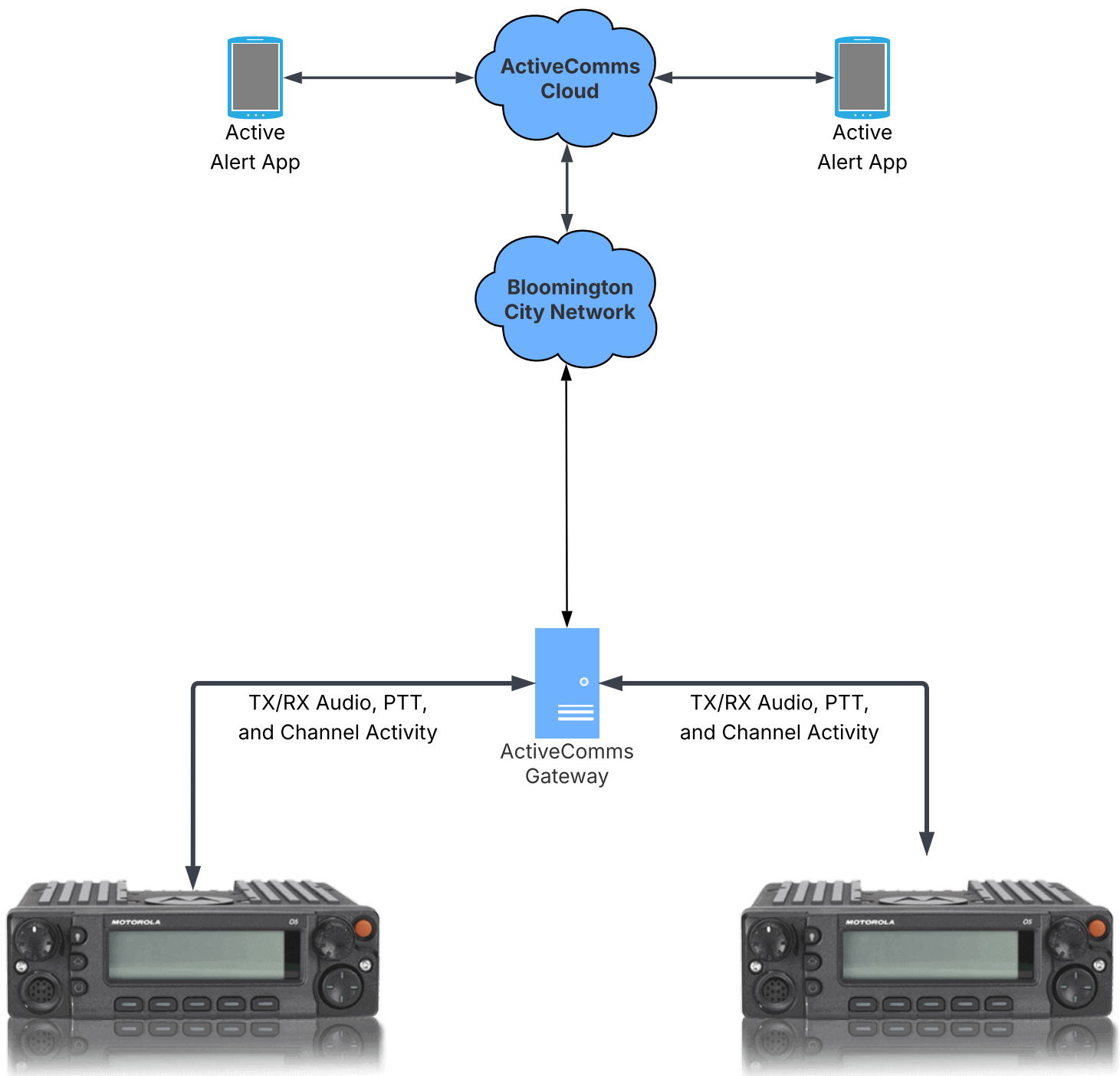
The City of Bloomington is requesting permission to install an LMR-to-LTE gateway to the Hennepin County East subsystem, per the LMR-53 standard. Two interfaces would be established between city-owned talkgroups and LTE devices. The gateway is intended to support Bloomington PD command staff and the Bloomington SIU unit as an alternative method for accessing ARMER.

The two talkgroups supported by the interface will have the capability to be console-patched, if necessary, to any interop talkgroup accessible by the Bloomington PSAP. The initial setup will utilize two APX or XTL mobile radios, and the solution being implemented is ActiveComms by Active911.

Thank you for your consideration on this request.

Dalton Gruber
Radio Communications Technician
Bloomington Police Department
1800 West Old Shakopee Road
Bloomington, MN, 55431

Bloomington ActiveComms Gateway





Metropolitan Airports Commission

6040 - 28th Avenue South, Minneapolis, MN 55450 • 612-726-8100 • metroairports.org

January 20, 2026

Chair Thompson
MESB Radio Technical Operations Committee

Chair Thompson,
The Metropolitan Airports Commission is planning to add a new Aux I/O server to the MAC's console site, Zone 2 Site 23. We are planning to utilize this server to receive CPE alarms from our Viper 911 phone system. We have purchased a new MC Edge Aux I/O server from Motorola and will have Dave Theis from On Target configure and install the server.

Respectfully,

Jeff Bjorklund
Supervisor – Communications Infrastructure
Metropolitan Airports Commission

APPENDIX 2 – DEFINITIONS & ACRONYMS

METRO REGION 800 MHz Trunked Regional Public Safety Radio System Standards, Protocols, Procedures

Document Section:	Appendices	Radio TOC Recommendation:
Sub-Section:	METRO Appendix 2	Date: 5/24/01
Procedure Title:	DEFINITIONS & ACRONYMS	
Date Established:	12/17/00	MESB Approval - Signature:
Replaces Document Dated:	5/24/01	
Date Revised:	2/25/09	Date:

1. Purpose or Objective

To clarify terms used throughout the standards, protocols and procedures manual. All definitions will be found in this section and will also be footnoted on the first page in which they appear within the section in which they are used.

2. Management

Should there be additions, deletions, or changes to these procedures the Metropolitan Emergency Services Board staff are responsible for revising this section.

3. DEFINITIONS (in alphabetical order)

“Common”, “Pool” or “TACTical” Talk Groups

Common/ pooled talk groups (TG) are those that are set-aside for communicating across multiple agencies. Agency radio users in appropriate service areas who need to talk to one another for day to day business or for mutual aid will all put the appropriate common or pool talk group in their radios to be available in time of need. Example: Fire Departments will all have the common Statewide Fire Mutual Aid TG in their radios. “Pool” is distinguished from “common” in that pool implies more than one, such as RTAC 1- 4 is a *pool of common* regional tactical TGs for law enforcement.

Backbone System

A statewide public safety radio communication system that consists of a shared infrastructure, the elements of which are identified in the STATE PUBLIC SAFETY RADIO COMMUNICATIONS PLAN.

APPENDIX 2 – DEFINITIONS & ACRONYMS

Control Station (Consolette)

A fixed radio station that may or may not interact with radios, remotes or desktops.

Critical Operations

-Agency Critical Operations

Those governmental, quasi-governmental and non-governmental operations by authorized users which are reliant upon a functioning two-way radio communications system which unavailability, degradation, delay or failure, partial or complete, would significantly impact or impair the successful operation of the Agency.

- Does not meet the definition of Mission Critical criteria above.
- Significantly impacts or impairs the Department / Agencies ability to operate in an effective and efficient manner to provide continuous, accurate and reliable services to its clients.
- Significant internal disruption to the agency.
- Public convenience.
- Significant disruption to ongoing operational budget.

-Mission Critical Operations

Those governmental, quasi-governmental and non-governmental operations carried out by Authorized Users which are reliant upon a functioning two-way radio communications system which unavailability, degradation, delay or failure, partial or complete, would significantly impact and/or impair the successful delivery of a vital service or mission. Operations would include, but are not limited to the categories below:

Public Safety

Those functions of government that exist to protect the physical well being of the public as a whole from physical danger - continuous delivery of essential public services.

Public Health

Those functions of the government that exist to protect longevity of life and quality of life for the public as a whole - continuous delivery of essential public health services.

Law & Justice

Those functions of government that exist to prevent violations of the laws and rules of society by individuals and groups.

APPENDIX 2 – DEFINITIONS & ACRONYMS

Transportation

Those functions of the government that exist to provide safe, effective and efficient multi-modal movement of the public and commodities including public roads, highways, waterways, railways, airways and public transportation systems.

Environmental Protection

Those functions of the government that exist to protect the environment from changes that are detrimental to the existence and continuance of that environment.

Human Services

Those functions of the government that exist to provide for individuals that are physically, emotionally, financially, academically, intellectually disadvantaged when compared to established social norms. Loss of these services would significantly impair individual's ability to function or operate in society.

When such operational impairments have the effect of:

- Posing significant risk to health and safety, loss of a vital service provided by an agency.
- Causing negative perceptions that have high Public Relations (P/R) impact or Media and Press impact, that would cause significant embarrassment to the agency.
- Directly affecting its command, control, dispatch and information systems and their effective and efficient functionality.
- Inflicting secondary effects upon a service's critical resources (financial, supply-chain, and response capability).
- Impeding the delivery or availability of an otherwise functioning vital system or service.

-Non-Critical Operations All other governmental, quasi-governmental and non-governmental operations, which are reliant upon a functioning two-way, radio communications that do not meet the above mission critical or department critical definitions.

Encryption

Digital encoding and decoding of audio (scrambling). If listening on a radio without encryption capabilities, no audio will be heard.

APPENDIX 2 – DEFINITIONS & ACRONYMS

Logging	Audio recording of a radio communication
Mobile Radio	Generally installed in a vehicle, intended to be used while in motion.
Patch	<p><u>Permanent (hard) Patch:</u> A patch between two or more audio resources on the system, which is fixed and cannot be controlled or edited by the dispatcher.</p> <p><u>Manual (soft) Patch:</u> A patch between two or more audio resources on the system, which is setup and controlled by the dispatcher. The dispatcher owning the patch can add & delete resources as needed.</p>
Portable Radio	A radio that is completely freestanding and may be hand-carried or worn by the radio user.
Public Safety	All Law Enforcement/Sheriff, Fire, Emergency Medical and related service areas. These include badged and/or sworn ancillary personnel such as Park Rangers, Court Security Officers, Community Corrections, and those who support public safety operations under special circumstances.
Public Service	Public Service in this context refers to general government personnel such as Public Works, Transportation, and other similar public service operations.
Regional System	In the context of these standards this term is intended to represent the metropolitan portion of the ARMER system.
Simulcast Cluster	A group of radio frequency (RF) sites that function as a single site in transmit and receive.

APPENDIX 2 – DEFINITIONS & ACRONYMS

Site	A group of individual radio tower stations in a simulcast cluster.
SOAs	Scene of Action Channels <ul style="list-style-type: none">• ASOA – available for All users• FSOA – available for Fire users only• PSOA – available for Public Safety users only
System Management/ Administrative Positions	<ul style="list-style-type: none">▪ <u>System Manager</u> - individual in charge of the radio system of a participating agency▪ <u>System Administrators</u> – individual who is responsible for the day to day radio system operations of a participating agency▪ <u>Sub-System Administrators</u> - individual who is responsible for the day to day radio sub-system operations of a participating agency
Variance	An allowed divergence from full adherence of an adopted standard, protocol or procedure
Waiver	A complete release from an adopted standard, protocol or procedure

4. ACRONYMS (in alphabetical order)

ALS	Advanced Life Support
ARMER	Allied Radio Matrix for Emergency Response
ATAC	Regional All (user) Tactical talkgroup
AVL	Automatic Vehicle Locator
APCO	Associated Public Safety Communications Officials
BLS	Basic Life Support
CEB	Central Electronics Bank
CPS	Customer Programming Software
CTCSS	Continuous Tone Coded Squelch System
DIU	Digital Interface Unit

APPENDIX 2 – DEFINITIONS & ACRONYMS

DTMF	Dual Tone Multiple frequency
EMH	Emergency Medical Hospital
EMS	Emergency Medical Services
ETACs	EMS Tactical talkgroups
EMRS	Emergency Medical Radio Service
FCC	Federal Communications Commission
FTACs	Fire Tactical talkgroups
ICALL	International 800 MHz Calling Channel, now called 8CALL90
ITAC	International 800 MHz Tactical Channels, now called 8TAC91-94
LESIU-TACs	Law Enforcement Encrypted Special Investigative Unit Tactical talkgroups (not allowed on consoles)
LETACs	Law Enforcement Encrypted Tactical talkgroups (allowed on consoles)
LTACs	Law Tactical talkgroups
MACs	Moves, additions and changes
MCI	Multiple Casualty Incident
MDH	MN Department of Health
MESB	Metropolitan Emergency Services Board
METCOM	Metropolitan region console to console talkgroup (not allowed in subscriber units)
METPH 1-4	Metropolitan region public health talkgroups

APPENDIX 2 – DEFINITIONS & ACRONYMS

METTAC-A	Metropolitan Tactical – All. A series of VHF conventional to 800 Tactical talk groups/ channels that can be used by all users.
METTAC-P	Metropolitan Tactical – Public Safety. A series of VHF conventional to 800 Tactical talk groups/ channels that can be used only by public safety radio users.
MIMS	Major Incident Management System
MINSEF	Minnesota State Emergency Frequency, now called VLAW31
MRCC	Medical Resource Control Center
MHz	Megahertz
NAEMSD	National Assn. of State EMS Directors
NPSPAC	National Public Safety Planning Advisory Committee
PSAP	Public Safety Answering Point
PTAC	Regional Public Safety Tactical talkgroup
PTT	Push to talk, i.e., talk button
RF	Radio Frequency
RSS	Radio Service Software
SEMTAC	Statewide Emergency Management Tactical talkgroup
SOA	Scene of Action - channels that are isolated from the central system
STACs	Statewide (All Users) Tactical talkgroups
TOC	Technical Operations Committee
UHF	Ultra High Frequency
VHF	Very High Frequency



Metropolitan Emergency Services Board

2025 Regional Needs Document

Approved: May 14, 2025

The Metropolitan Emergency Services Board (MESB) is one of seven regional Emergency Communications Boards and Emergency Services Boards in the state of Minnesota. Formed in 1979 under MSS 471.59, and later amended in conformance with MS 403.39, and 403.392, the MESB provides local governance on matters related to emergency communications (9-1-1 and ARMER), as well as serving as the regional EMS system for the metro region. The MESB is a joint powers board composed of the following entities: Anoka County; Carver County; Chisago County; Dakota County; Hennepin County; Isanti County; Ramsey County; Scott County; Sherburne County; Washington County; and the City of Minneapolis.

The Public Safety Emergency Communications Ecosystem

The statewide Allied Radio Matrix for Emergency Response (ARMER) system, procured by the Metropolitan Radio Board, built by Motorola Solutions, and owned and operated by the Minnesota Department of Transportation (MnDOT), provides interoperable Land Mobile Radio (LMR) communication capabilities to 9-1-1 emergency communication centers (ECCs) (also known as Public Safety Answering Points or PSAPs), law enforcement, fire, Emergency Medical Services (EMS), emergency management, public works and other public safety users across Minnesota. Currently, the ARMER system has approximately 125,000 active radios.

Construction of the ARMER system in the Twin Cities metropolitan region began in the late 1990s and expanded to include Greater Minnesota in the mid-2000s. In late 2020, MnDOT completed its backbone of the ARMER system. There are 335 state-maintained and 100 locally maintained ARMER tower sites on the air across Minnesota. The system provides 95% coverage for mobile radios across the state. Of the 100 local ARMER towers, 54 are in the metro region.

As the ARMER system matures, there is a need to maintain and replace or upgrade aging infrastructure, equipment, and technology. Currently, the Statewide Emergency Communications Board (SECB), MnDOT, the Minnesota Department of Public Safety (DPS), and ARMER stakeholders endeavor to develop a capital improvement and funding plan to address this need.

In 1979, the Metropolitan 9-1-1 Telephone Board formed as a joint powers board of the seven metropolitan counties to plan, design, and implement the first multi-jurisdictional Enhanced 9-1-1 (E9-1-1) system in the United States. This system went live at midnight on December 1, 1982, and provided the basis for the statewide buildout of E9-1-1. Today, all 103 PSAPs in the state are part of the network. Of the 103 PSAPs in the state, 24 reside in the metro region. In 2024, the metro region answered 70% of all 9-1-1 calls in the state.

Planning for the 9-1-1 network to transition from E9-1-1 to Next Generation 9-1-1 (NG9-1-1) is underway. NG9-1-1 will provide PSAPs with additional capabilities to answer texts, receive photos and videos, provide improved 9-1-1 caller location, and provide pre-determined rules for routing 9-1-1 calls.

Today, DPS' Emergency Communication Networks (ECN) division contracts and pays for the statewide 9-1-1 network. Local governments pay for costs for a 9-1-1 system associated with receiving 9-1-1 calls and dispatching public safety responders. Local government costs (this is not an exhaustive list) include maintenance of the physical PSAP; salaries/benefits for PSAP employees, including public safety telecommunicators (PSTs), administrative and technical staff, and in some cases, dedicated GIS staff; employee training; purchase and maintenance of call handling equipment (CHE), including software, used to answer 9-1-1 calls; procure and maintain communications/radio equipment used to dispatch response to 9-1-1 calls; software or subscription services for training, quality assurance/quality control, CTO, and location mapping; software or subscription services to maintain the PSAP's 9-1-1 data and services, including GIS data; and software or subscription services to provide integrated public alert and warning systems (IPAWS) alerts to the public. Much like the ARMER system, as the 9-1-1 network and associated equipment continue to evolve, there is a need to maintain, upgrade, or replace aging equipment to allow for new technology to meet the expectations of the public, which would like to communicate with 9-1-1 in the way the public communicates with one another.

Much like hardships of recruitment and retention of staff across public safety disciplines, PSAPs today face difficulty in maintaining a full complement of PSTs which are needed to answer a PSAP's specific volume of 9-1-1 and administrative calls. PSAPs also face difficulty in recruiting new people to serve as PSTs, as many people do not wish to work in a high-stress environment or work nights, weekends, and/or holidays, which are required in a public safety field, without additional benefits similar to those received by other first responders.

Funding Considerations

The State of Minnesota's portion of the costs associated with operating the ARMER system is funded through a combination of trunk highway funds, 9-1-1 special revenue funds, and radio tower lease receipts.

Except for PSAP equipment and a limited portion of local infrastructure expenses which can be funded via the 9-1-1 special revenue fund, local costs (including tower site leases, utilities, and system and equipment maintenance) associated with the ARMER system are typically funded via local property tax revenues or per radio charges to ARMER system users in a county. Due to these constraints, public safety agencies across Minnesota face significant funding challenges related to the escalating costs of maintenance of ARMER system infrastructure, equipment, and technology. Without access to stable, adequate supplemental funding sources, it will be increasingly difficult for local entities to support their ongoing ARMER system maintenance and sustainment needs.

Regional Priorities

The following are priorities for regional projects. 9-1-1 projects are listed in priority order, followed by ARMER projects in priority order.

9-1-1 Projects

Comprehensive PSAP Staffing and Operations Study

MESB recognizes a critical need to conduct a comprehensive PSAP Staffing and Operations Study to address existing inconsistencies and establish best-practice guidelines across the region. The study will develop standardized staffing models and operational guidelines, including recommendations on minimum staffing levels relative to call volume, requirements for dedicated Quality Assurance personnel, and mandatory separation of duties for personnel managing law enforcement talk groups and call answering functions. Additionally, it should establish minimum training standards and recommendations for training coordinator positions within each PSAP. This strategic initiative aims to enhance efficiency, operational consistency, and overall service quality in emergency communications in the metro region.

Estimated cost: \$250,000

PSAP Continuity of Operations Study

Metro region PSAPs have varying capabilities for continuity of operations. Some PSAPs maintain dedicated backup call centers that can serve both their own operational needs and potentially assist neighboring PSAPs. One PSAP implemented an external agency 9-1-1 call queue, featuring a distinctive ring pattern, allowing for independent call answering separate from their primary lines. Other PSAPs plan to leverage local library facilities during disruptions due to essential services, such as CHE, being cloud-based applications. Other PSAPs have no alternative facility.

The MESB seeks funding for a comprehensive study to evaluate comprehensive PSAP staffing, operations, and current PSAP continuity capabilities and proposals for improvements tailored to regional demographics, call volumes, and operational needs. The study will assess the practicality and benefits of establishing a dedicated regional backup PSAP facility, including recommendations on how regular utilization could ensure operational familiarity and seamless transitions during PSAP relocations.

Estimated cost: \$250,000

Computer-Aided Dispatch (CAD)-to-CAD Interoperability Solution

The 24 primary and secondary PSAPs in the metro region desire procurement of a CAD-to-CAD integration solution designed to connect disparate CAD systems for the purpose of expediting emergency response which may cross jurisdictional and PSAP boundaries.

It is anticipated that the solution provides improved situational awareness for metro region PSAPs. Such a solution was found to be a need in the MESB's May/Juen 2020

Civil Unrest After Action Report/Improvement Plan. The solution allows other PSAPs to answer 9-1-1 calls intended for a PSAP which has been inundated with 9-1-1 calls; this provides 9-1-1 callers with better service in extraordinary situations/events.

MESB expects that implementing CAD-to-CAD integration will significantly enhance daily response times for cross-jurisdictional incidents. Currently incident relaying between PSAPs occurs manually, creating delays and increasing the potential for address errors. Automating this process through CAD-to-CAD communication will reduce response times, enhance accuracy, and improve overall operational efficiency.

Estimated cost: \$2.7 million - \$3.5 million

PSAP Radio Console Replacement

A large majority of ARMER users utilize Motorola MCC 7500 consoles to dispatch public safety resources in response to 9-1-1 calls. Motorola has announced end-of-life of this product and stated that the consoles must be replaced by early 2029 to maintain cybersecurity resilience. In 2024, Motorola stated that if there is one statewide contract to replace all consoles (736 stated in 2024), the cost would approximately be \$55,880,000 - \$56,500,000. If contract replacement is done via individual agency contracts, the cost was estimated to be \$80,000,000 - \$92,000,000. The metro region wishes to pursue a joint contract to replace all dispatch consoles in the region. This item includes all consoles except for those explicitly stated in individual agency projects below.

Estimated cost: Approximately \$100,000 per console or \$36,800,000 total, including encryption

Feasibility and Cost Effectiveness Study on Regional Purchase of PSAP Technology

A cost study initiated by the MESB analyzed 2023 costs of providing public safety communications in the metro region. The study demonstrated the possibility that local units of governments operating PSAP could save significant money if regional technology, such as CAD, logging, and CHE, were deployed. The aim of the feasibility and cost effectiveness study is to determine if cost savings would be realized if regional technology were deployed.

Estimated cost: \$200,000

Geo-Diverse 9-1-1 Call Handling Equipment (CHE) ESInet Connections

Taking advantage of geo-diverse technology offered by new CHE platforms allows 9-1-1 calls to be delivered to two locations simultaneously, which is an attractive option for Minnesota PSAPs to provide 9-1-1 network and call delivery redundancy. Geo-diverse configurations split the A and B services typically found at one location, into two separate geo-diverse locations, which allows for additional staff at another location, or PSAP, during extraordinarily busy times or special events to answer 9-1-1 and administrative calls while the main PSAP is still active. It also allows the PSAP to abandon its primary location while the backup- location is fully operational and gives

the opportunity for a staged evacuation while staff is enroute to the backup location. Additionally, the main PSAP can operate on the connections that exist at its backup location if the main PSAP experiences any technical issues with its connections. To allow for full redundancy and resiliency, each PSAP utilizing geo-diverse CHE should have two Emergency Services Internet (ESInet) connections at each location to ensure the maximum number of 9-1-1 calls can be received at either location at any time, regardless of any problems occurring at the other location. Currently, ECN pays for two ESInet connections at each PSAP, which is the typical setup for legacy CHE. ECN should reconsider its position and pay for four ESInet connections for PSAPs which implement geo-diverse CHE systems. Having four ESInet connections provides improved resiliency and redundancy for PSAP's 9-1-1 system and best serves the residents of its jurisdiction.

Estimated cost: \$216,000 annually, in addition to ECN's current costs

GIS Software Services – Web-Based Map Viewer

GIS software services are needed to support the creation, conversion, and maintenance of GIS-derived Master Street Address Guides (MSAGs) for PSAPs in the ten-county metro region. The web-based map viewer allows all metro region PSAPs and GIS partners to have visibility to the region's current NG9-1-1 and related geospatial datasets in a secure, shared environment, allowing for seamless data sharing, greater collaboration, and improved data integrity.

Estimated cost: \$353,000 for five years, including implementation costs

Telecommunicator Resiliency Training

Over the last six years, the MESB received grant funds for resiliency training for metro public safety telecommunicators in an effort to maintain their emotional well-being, but also to assist in their retention as employees. In 2025, MESB contracted with Blue Ethos for this training, and it has been very well received. The training given was a shortened version, and there is a desire to provide additional training in the future.

Estimate cost: \$100,000

ARMER Projects

Bi-Directional Amplifiers (BDAs) in Schools and Government Buildings

Many government facilities and schools in the region have ARMER coverage gaps and would benefit from having BDAs installed, allowing first responders with ARMER radios to communicate via the ARMER system no matter where in a building the responder is located.

Estimated cost: \$40 million in capital costs; \$4 million in annual maintenance costs

AES Encryption for Subscriber Radios

The SECB recommends ARMER users transition to Advanced Encryption Standard (AES) encryption for transmitting criminal justice information or sensitive radio transmissions on the ARMER system. To achieve this, supplemental funding is necessary to replace or upgrade existing ARMER subscriber equipment for public safety agencies. It is recommended to most agencies that, as devices are upgraded, purchase AES encryption-capable devices. The Metro Region also desires to procure a key management facility (KMF) device for use across the region.

Estimated cost: \$100 million plus \$5,000 for initial KMF cost

Vendor-provided Radio Technical Training

According to SECB standards, system administrators are required to complete technical training once every two years. To keep current with evolving technology, vendor technical training must be provided.

Estimated cost: \$45,000 annually

CRTF Training and Exercises

The Metro Communications Response Task Force (CRTF) holds quarterly training/exercises for deployable personnel to remain current with local, state, and national training standards. These deployable personnel typically assist in the field, the command post, emergency operations centers (EOCs), and PSAPs during planned and emergency events.

Estimated cost: \$10,000 annually

Ongoing Maintenance for Existing ARMER Infrastructure

Every five years, MnDOT executes a service contract with Motorola for maintenance of and upgrades to the ARMER system. A combination of 9-1-1 fees, state funds, and state trunked highway funds pay for maintenance of state-owned infrastructure. Counties and the City of Minneapolis own local enhancements, which are additional tower sites and/or channels which interconnect to state-owned sites to provide additional coverage and capacity for local users. Though local enhancements are shared with general users of the ARMER system, funding for the enhancements and related backhaul network is provided by the local agency which owns the enhancement. Since the state-owned and locally owned infrastructure form the completed radio network, a funding source to assist in paying for maintenance of all sites must be determined. With a higher-than-expected price increase for the 2026-2030 maintenance agreement, paired with increases in operating costs and the need to replace aging infrastructure, the financial burden on local agencies can no longer be borne without a significant increase to the tax levy.

Estimated cost: \$4 million annually

Subscriber Equipment Replacement

Subscriber radios (mobiles and portables) used to communicate via the ARMER system have a finite lifespan. Radios reach end of life status when firmware, batteries, or replacement parts become unavailable. Public safety agencies continuing to use outdated subscriber equipment often results in distorted or incomplete communications. Regular replacement of equipment in the metro region is typically funded locally, using no state or federal funds. Having an additional shared funding source to purchase this equipment would be ideal to ensure the quality and consistency of emergency communications.

Estimated cost: \$52 million

In-Building Coverage Assessment Equipment

With discussion about school mapping, the metro region partners have discussed the difficulties in completing coverage assessments to determine where gaps in buildings occur. Furthermore, many regional partners do not have equipment sufficient to perform these assessments. The metro region wished to purchase equipment that can be shared between all regional partners to perform these assessments at any time in the future. The suggested equipment is an Anritsu LMR Site Master S412D.

Estimated cost: \$40,000 initial cost, plus \$10,000 recurring annual license

Base Station Replacement

The metro region is looking at a proactive approach to come in line with the Motorola lifecycle replacement. In the 2030 Motorola lifecycle plan, base stations will need to be replaced, at a significant cost to local agencies. The metro region also has 10 subsystem sites, which will have a higher replacement cost. This item is meant to be for awareness, as the funding will be needed beginning in State Fiscal Year 2029.

Estimated cost: \$89.68 million (\$82.5 million for 1500 base stations, \$7.18 million for subsystems)

Regional Logger

Agency Priorities

The following are local agency priorities, including both 9-1-1 and ARMER projects.

Carver County

Replacement of ARMER Tower Site

Carver County installed ARMER equipment at a tower structure located in Hollywood Township since ARMER's inception. Ownership of the tower has changed from private ownership to ownership by the local township, has been shortened from its original

design, and is halfway through its economic lifespan. With permitting, licensing, and construction timelines, the County plans to replace the tower by 20xx.

Estimated cost: \$1.5 million

Additional ARMER Local Enhancement Site

Since Carver County built its local enhancement subsystem in the early 2000s, it has identified the need for an additional site. The County wishes to add this site to provide better ARMER coverage for public safety response to emergencies in the Waconia area of the county.

Estimated cost: \$1.5 million

CAD Replacement

Carver County 9-1-1 expects to replace its CAD in 2027-2028. This purchase would be made with the potential to interface or integrate with a regional CAD-to-CAD solution.

Estimated cost: \$1 million

CHE Upgrade/Replacement

Carver County Sheriff's Office must upgrade its PSAP's CHE. The current system was purchased in 2014 and has had a complete hardware refresh. The current contract expires in May 2027. This system is a shared/hosted system with Ridgeview Medical Center known as CHS-2. The upgrade/replacement CHE will meet NG9-1-1 standards.

Estimated cost: \$650,000

9-1-1 Logger Replacement

Carver County's 9-1-1 logger is scheduled for replacement in 2026.

Estimated cost: \$400,000

Chisago County

9-1-1 Cybersecurity Equipment

In 2025, Chisago County is undergoing a security audit of its CHE. The county expects to require additional equipment in 2026 to meet cybersecurity requirements of both the county and an NG9-1-1 network.

Estimated cost: \$100,000

Replacement of Fire Simulcast Paging System

Chisago County requires replacement of its simulcast fire paging system in 2029.

Estimated cost: \$300,000

CHE Replacement

Chisago County requires replacement of its CHE to maintain compatibility with i3 requirements. Replacement timeline may depend on Minnesota's migration to NG9-1-1.

Estimated cost: \$500,000

2027-2028 HVAC Replacement at ARMER Tower Sites

HVAC units at Chisago County-owned ARMER sites require replacement, as tower sites are aging and equipment is nearing the end of expected life.

Estimated cost: \$275,000

Back-up Battery Replacement at ARMER Tower Sites

Chisago County plans to replace -48-volt power plant and backup batteries at county-owned ARMER sites in 2027-2028. Equipment at the tower sites is powered by -48 volt DC power, the rectifier power plants convert the AC power from the power company and on-site generator into DC power. The backup batteries power the equipment during power outages until the on-site generator starts up and can produce power for the equipment.

Estimated cost: \$175,000

Tower Site Replacement/Repair Needs

The tower sites in Chisago County have significant replacement and repair needs in current year and over the decade. These replacement and repair needs include, but are not limited to, service contracts, tower rent and utilities, exterior site maintenance, and antenna maintenance.

Estimated cost: \$1,849,050, with approximately \$164,000 needed in 2026.

Subscriber and Console Replacement Needs

Estimated cost: \$2,356,100 in future (after 2026) need.

Dakota County/Dakota 9-1-1

Additional ARMER Local Enhancement Site

Since Dakota County built its local enhancement subsystem, the need for an additional 11th site was identified. The County wishes to add this site to provide better ARMER coverage for public safety response to emergencies in the Castle Rock area of the county.

Estimated cost: \$1.5 million

CAD Replacement

Dakota 9-1-1 expects to replace its CAD in 2028. It is possible that this procurement could be leveraged to result in a regional CAD procurement, dependent on the results of the aforementioned Feasibility and Cost Effectiveness Study.

Estimated cost: \$3 million (county only)

CHE Replacement

Dakota 9-1-1 is currently part of the statewide Motorola Software as a Service (SaaS) CHE system, with the contract terminating in 2028. The county has experienced several technical issues resulting in the CHE going down and requiring 9-1-1 calls to be alternately routed; these experiences resulted in concern regarding the viability of the state's fifth largest PSAP (by 2024 call volume) operating on this shared system.

Estimated cost: \$825,000 over five years, plus non-recurring charges

9-1-1 Logger Replacement

Dakota 9-1-1's 9-1-1 logger is scheduled for replacement in 2030.

Estimated cost: \$266,000

Tower Site Replacement/Repair Needs

The 10 tower sites in Dakota County have significant replacement and repair needs in current year. These replacement and repair needs include service contracts, door access and alarms, and combiners for the 2026 fiscal year.

Estimated cost: \$139,000

Hennepin County

Additional ARMER Local Enhancement Site

Hennepin County identified a need to add (an) additional ARMER tower site to its Hennepin East local enhancement subsystem to provide better ARMER coverage for public safety response in the Edina area(s) of the county.

Estimated cost: \$2.5 million

Isanti County

New VHF Radio Site

Ramsey County

2029-2032 ARMER Equipment Platform Replacement

In the 2029-2032 timeframe, Ramsey County will replace existing ARMER equipment which is facing manufacturer end-of-life. The equipment to be replaced includes the prime site controller and 168 base stations for Ramsey County's seven-site ARMER subsystem.

Estimated cost: \$10 million

Scott County

Additional ARMER Local Enhancement Site

Scott County identified a need to add an additional ARMER tower site to the local enhancement subsystem it owns with Carver County. The additional site would provide improved ARMER coverage for public safety response in the Shakopee area of the county.

Estimated cost: \$1.75 million

Sherburne County

Upgrade to Fire & EMS Simulcast Paging System

Sherburne County requires an upgrade to its simulcast paging system to page out fire and EMS responders.

Estimated cost: \$360,000

Washington County

Additional ARMER Local Enhancement Site

Since Washington County built its local enhancement subsystem, the need for an additional 15th site was identified. The County wishes to add this site to provide better ARMER coverage for public safety response to emergencies in the southern area of the county, primarily the City of Cottage Grove.

Estimated cost: \$1.5 million

2027 CHE Upgrade

Washington County Sheriff's Office must upgrade its PSAP's CHE. Its current system was installed in 2021 and will require an upgrade for cybersecurity, additional functionality, and to continue to be ready for NG9-1-1.

Estimated cost: \$1 million

2027 PSAP Backup Center

Washington County has purchased property on which it plans to build a back-up center for its PSAP. The County is in the planning stage for this project

Estimated cost: \$2 million

Tower Site Replacement/Repair Needs

Washington County owns nine ARMER tower sites, all of which have significant replacement and repair needs in current year and over the next two decades. These replacement and repair needs include, but are not limited to, service contracts, tower rent and utilities, exterior site maintenance, and antenna maintenance.

Estimated cost: \$2,271,400, with approximately \$485,000 needed in 2026.

City of Bloomington

Microwave Link Upgrade

The City of Bloomington has a microwave link connecting its PSAP to the ARMER system which requires an upgrade.

Estimated cost: \$130,000

CAD Replacement

The City of Bloomington anticipates a CAD replacement in 2028-2029. It is possible that this procurement could be leveraged to result in a regional CAD procurement, dependent on the results of the aforementioned Feasibility and Cost Effectiveness Study.

Estimated cost: \$1 million

City of Eden Prairie

2026 Console Replacement

The City of Eden Prairie is building a new 9-1-1 center and requires new consoles for the center. The city will purchase the new AXS dispatch consoles and will do so before the required 2029 upgrade.

Estimated cost: \$901,747

City of St. Louis Park

2027 Console Replacement

City of St. Louis Park is planning a new police building, which would include a new PSAP. Should these plans move forward, the City will require replacement of its four current consoles as well as four additional consoles in 2027, which includes two for working Supervisor/Lead Dispatcher offices.

Estimated cost: \$900,000 - \$1.5 million

Consolette Replacement

St. Louis Park has ten consolettes for varying functions in its PSAP. Three consolettes serve as back-up radios for the City's COOP plan, six are used for logging, and one is for use in the PSAP's restroom. These radios are end-of-life on June 30, 2025.

Estimated cost: \$70,000

2026 CAD/RMS Replacement

City of St. Louis Park plans to procure new CAD and RMS in June 2026. The procurement may be a stand-alone system, or it may leverage the City of Edina's CAD/RMS and share the technology. It is possible that this procurement could be leveraged to result in a regional CAD procurement, dependent on the results of the aforementioned Feasibility and Cost Effectiveness Study.

Estimated cost: \$450,000 (if shared with Edina) or \$950,000

MSP Airport 9-1-1

2026 Console Addition

MSP Airport 9-1-1 plans to add a five-console site, plus AIS, to serve as a backup to its current PSAP prior to the completion of its new PSAP.

Estimated cost: \$600,000

2027 Console Replacement

MSP Airport 9-1-1 is building a new PSAP and plans to replace its consoles before occupancy in mid-2027.

Estimated cost: \$900,000

ARMER Microwave Link Upgrade

MSP Airport needs to upgrade its ARMER microwave link connecting its PSAP to the ARMER network.

Estimated cost: \$150,000

Hennepin EMS

2027 Console Replacement

Hennepin EMS is in the planning process for a new emergency communications center, which will double its current console count to 12. This change will occur prior to the required 2029 upgrade.

Estimated cost: \$1.080 million

M Health Fairview EMS

2026-2027 Additional Console Purchase

M Health Fairview EMS plans to purchase two MCC7500e consoles in the next one to two years.

Estimated cost: \$100,000

Metro Transit

2025 Console Upgrade

Metro Transit will upgrade its consoles in 2025.

Estimated cost: \$750,000 (funding secured)

Joint Operations Center

By 2030, Metro Transit plans to build a joint operations center to combine rail, bus, and police operations in one center.

Estimated cost: \$30 million

New CHE Purchase

Metro Transit plans to purchase new CHE in the fourth quarter 2025 or first quarter 2026.

Estimated cost: \$1 million

Metro Mobility Usage (Hours:Mins:Secs) 2025

Please Note: The report from Metro Mobility will be given at the beginning of the quarter beginning

Month	City Center	Anoka (Lino Lakes)	Dakota	Norwood	Hastings	North Branch	Hennepin West
January	17:24:38	11:09:01	4:58:51	5:09:57	6:40:23		10:00:51
February	18:37:29	11:18:59	6:35:39	5:07:11	5:17:19		10:23:22
March	17:13:30	11:25:39	5:25:55	5:15:57	5:24:17		9:22:48
April	19:33:21	13:49:06	5:21:52	5:27:43	5:18:48		11:49:05
May	18:05:02	12:05:35	5:02:41	5:29:20	5:00:18		11:42:06
June	17:39:59	11:42:54	4:25:19	5:41:28	5:51:00		10:12:03
July	17:44:45	12:58:23	5:21:17	5:24:14	4:15:57		10:00:33
August	18:39:03	13:59:47	6:06:30	7:33:37	5:24:45		12:52:44
September	16:50:48	12:51:34	6:48:47	6:45:39	5:44:11		11:39:54
October	25:18:51	17:07:24	8:07:43	7:38:08	11:56:46		14:12:24
November	18:29:01	11:26:48	6:58:20	5:05:12	7:28:01		10:01:45
December	21:30:01	13:56:32	6:39:58	5:46:51	9:50:23		13:34:20

Difference since

Jan. 12 638:28:49 374:31:57 291:07:55 217:48:10 258:06:14 0:26:46 139:22:31

Target	150:00:00	75:00:00	75:00:00	75:00:00	75:00:00	0:00:00	75:00:00
---------------	-----------	----------	----------	----------	----------	---------	----------

3 in 2023

Overall
55:23:41
57:19:59
54:08:06
61:19:55
57:25:02
55:32:43
55:45:09
64:36:26
60:40:53
84:21:16
59:29:07
71:18:05

1923:24:57

525:00:00