



# **METROPOLITAN EMERGENCY SERVICES BOARD 9-1-1 TECHNICAL OPERATIONS COMMITTEE AGENDA**

April 18, 2024 10:00 a.m.

1. **Call to Order & Introductions** – Susan Bowler, 2024 Committee Chair Susan Bowler
2. **Approval of Agenda** – Bowler
3. **Approval of Minutes** – February 15, 2024 Meeting – Bowler
4. **Action Items**
  - A. Regional Needs Document – Jacobson
5. **Discussion Items**
  - A. Review/Address questions: Incident Response Plan (IRP), Greg Hayes, MESB
  - B. COOP Planning: PSAP and Regional Level – Hayes, Jacobson
  - C. SECB Grant – Jacobson
  - D. Presentation: Introduction to current ESInet network in the metro area -- Jacobson
  - E. Verizon Misroutes – Tony Martin
  - F. Mental Health Call Processing Standard – Tony Martin
6. **Reports**
  - A. PSAP Operations Roundtable Workgroup – Heidi Meyer
  - B. SECB NG9-1-1 Committee Report – Janelle Harris/Brent Anderson
  - C. 9-1-1 GIS and Data Report (attached) – Marcia Broman
  - D. 9-1-1 Network Report (attached) – Jacobson
  - E. MN Sheriff's Assoc. PSAP Subcommittee Report – Bowler
  - F. IPAWS Report – Kari Morrissey
  - G. SECB NG9-1-1 Technical Operations Workgroup – Scott Petersen
  - H. SECB NG9-1-1 Operations Workgroup – Morrissey
7. **New Business - None**
8. **Announcements/Roundtable**
  - A. Next Meeting: Thursday, May 16, 2024, 10:00 am.
9. **Adjourn** – Bowler

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Meeting Minutes  
February 15, 2024**

**Committee Members Attendance:**

Airport – Sara Boucher-Jackson  
Allina EMS – **absent**  
Anoka County – Kari Morrissey  
Bloomington – Lavae Robinson  
Carver County – **absent**  
Chisago County – Mike Parker  
Dakota County – Brent Anderson  
Eden Prairie – Lisa Vik  
Edina – Janelle Harris  
Hennepin County – Tony Martin  
Hennepin EMS – Dan Klawitter  
Isanti County – Robert Shogren

M Health EMS – Elias Charif  
Metro Transit – **absent**  
Minneapolis – **absent**  
North Memorial – **absent**  
Ramsey County – Nancie Pass  
Ridgeview EMS – John Scheuch  
Scott County – Carrie Bauer  
Sherburne County - Laura Anderson  
St. Louis Park – **absent**  
U of M – **absent**  
Washington County – **absent**

**Alternates/Guests:** Jill Bondhus, *ECN*; Chris Cruse, public; Frank Jarman, *Motorola*; Dawn Kenyon, *HCSO*; Heidi Meyer, *Anoka County*; Dan Palmer, *Ramsey County*; and Lauren Petersen, *Airport*

**MESB Staff:** Marcia Broman; Greg Hayes; Jake Jacobson; Jacob Kallenbach; Pamela Oslin; and Jill Rohret

**1. Call to Order**

Laura Anderson, the 2024 9-1-1 TOC Vice Committee Chair, called the meeting to order at 10:02 a.m.

**2. Approval of Agenda**

Jake Jacobson mentioned that an additional item under new business titled “Dakota Outage: Backup Center Protocols” is to be added.

*Motion made by Tony Martin, seconded by Nancie Pass to approve the February 2024 9-1-1 TOC meeting agenda with the addition of one item. Motion carried.*

**3. Approval of Minutes**

*Motion made by Robert Shogren, seconded by Pass to approve the January 2024 9-1-1 TOC meeting minutes. Motion carried.*

**4. Action Items – None**

**5. Discussion Items**

**A. “Factors Driving EMS Incidents and their Impact on Agencies.”**

Greg Hayes of the MESB presented on the current state of EMS within the metro region.

Dan Klawitter and Pass both mentioned the need for additional MNTrac and online console training to improve response and coordination aspects with EMS.

Brent Anderson spoke on the desire for further education on the online system regarding EMS response plans and procedures.

### **B. SECB Grant**

Jacobson stated that he is looking for specifics in how to spend the \$75,000 for resiliency training allocated by the Statewide Emergency Communications Board. The MESB staff needs direction as an RFP for the training will need to be issued.

Pass suggested that a regional, metro-wide program/peer support group would be beneficial.

Anderson agreed with Pass and stated this format would bring inter-agency coordination and help with confidentiality as it gives employees the chance to speak with someone outside of their home agency.

Jill Rohret mentioned that a facilitator could be hired to plan and program the training. A metro-wide team/group would be beneficial as employees do not want to talk to their own counties/co-workers.

Carrie Bauer mentioned a training from BluePeak that worked on situational awareness for dispatchers.

Pass suggested that the committee find an app suitable for the training, hire a professional for the training, and coordinate a regional peer support team.

TOC members should look to send recommendations for the resiliency training, whether that is an app, professional facilitator, or potential training, to Jacobson for the proposal of the RFP.

### **C. Regional Needs Document**

Jacobson stated that the group will need to submit their regional needs document no later than April 2024 and is asking for comments on the existing document and possible additions that could be made before it is sent to the SECB and Minnesota State Legislature.

Heidi Meyer stated that she supported all the items on the document and added that more talk and support on PSAP backup centers and PSAP gap assessments could be helpful.

Pass stated that the call transferring process for backup centers during unplanned outages, and the need for a regional plan/process/protocol would be beneficial. Long outages, as seen in Dakota County last week, put major stress on the PSAPs and an updated metro-wide process is needed for these events. She asked if CAD-to-CAD still needed to be on the document as the State continues to develop its own project.

Rohret stated that CAD-to-CAD is still a “need” and should stay on the document until the States project is accomplished and completed.

Tony Martin stated that planning for future regional collaboration could be added. Shared systems, regional safety centers, and other ways of collaboration could be possible in the future, and this should in some way be stated on the document.

Jacobson stated that he will start writing a draft and prepare it for passing at the next meeting in March 2024. He also stated that he will send an email/survey to the group to configure document hierarchy on which are of the most important.

#### **D. Verizon Misroutes**

Martin said there are no new updates. If you get a misroute, please create the ticket, and recover as much data and information as possible.

#### **E. Mental Health Call Processing Standard**

Martin said the group finalized the 988/9-1-1 factsheet and are waiting for the final document to disperse. The group is currently working on a 9-1-1 dictionary of terms.

### **6. Reports**

#### **A. PSAP Operations Roundtable Workgroup**

The minutes are available in the meeting packet.

#### **B. SECB NG9-1-1 Committee Report**

No new report or update.

#### **C. 9-1-1 GIS and Data Report**

The report is attached to the meeting materials.

#### **D. 9-1-1 Network Report**

The report is attached to the meeting materials.

#### **E. MN Sheriff's Assoc. PSAP Subcommittee Report**

No new report or update.

#### **F. IPAWS Report**

No new report or update.

#### **G. SECB NG9-1-1 Technical Operations Workgroup**

No new report or update. Will meet prior to the March 2024 meeting.

#### **H. SECB NG9-1-1 Operations Workgroup**

No new report or update. Will meet prior to the March 2024 meeting.

### **7. New Business**

#### **A. Dakota County Outage: Backup Center Protocols**

This topic was covered under the conversation for agenda item 5C: Regional Needs Document. A formal process/procedure/protocol is needed for the metro area as unplanned outages cause extreme stress on not only the center experiencing the outage, but also the backup county who takes the incoming call traffic. A formal procedure agreed upon by the metro counties would encourage a consistent plan for when these outages occur.

### **8. Announcements**

#### **A. Next Meeting: Thursday, March 21, 2024, 10 a.m.**

#### **B. APCO/NENA**

APCO and NENA conferences will be held during the time of the next scheduled 9-1-1 TOC meeting. Jacobson will send out an email polling for attendance. If the quorum is not met, the meeting will be cancelled, and the next one will take place in April 2024. An email update regarding this will be sent prior to the March meeting.

**9. Adjourn**

Motion Hieserich, seconded by Martin to adjourn the 9-1-1 TOC meeting. Meeting adjourned at 12:02 p.m.

Draft



## **METROPOLITAN EMERGENCY SERVICES BOARD**

**Meeting Date:** April 18, 2024  
**Agenda Item:** 4A. Approval of 2024 Regional Needs Document  
**Presenter:** Jacobson

### **RECOMMENDATION**

MESB staff suggest the 9-1-1 TOC recommend approval of the 2024 Regional Needs document.

### **BACKGROUND**

In 2023, the Statewide Emergency Communications Board's (SECB) Finance Committee requested each region to compile a list of communications-related needs, to seek potential funding from the Minnesota State Legislature.

All seven regions submitted a document by May 2023. As stated by the Finance Committee of the SECB, regions must complete this document on an annual basis and submit it by May 31<sup>st</sup> of each year.

The MESB Regional Needs Document must be approved by the Board at its May 8 meeting to meet the May 31, 2024 deadline.

### **ISSUES & CONCERNS**

Input from the 9-1-1 TOC was sought earlier this year, though cancellation of March's 9-1-1 TOC meeting due to a lack of quorum has hampered further discussion. MESB staff recommend the following three items to be included in the 2024 document:

1. Computer-Aided Dispatch (CAD)-to-CAD Interoperability Solution
2. GIS Software Services – School Mapping -- updated pricing given Dan Craigie's input.
3. Back-Up PSAP Equipment Cache

### **FINANCIAL IMPACT**

None to the MESB.

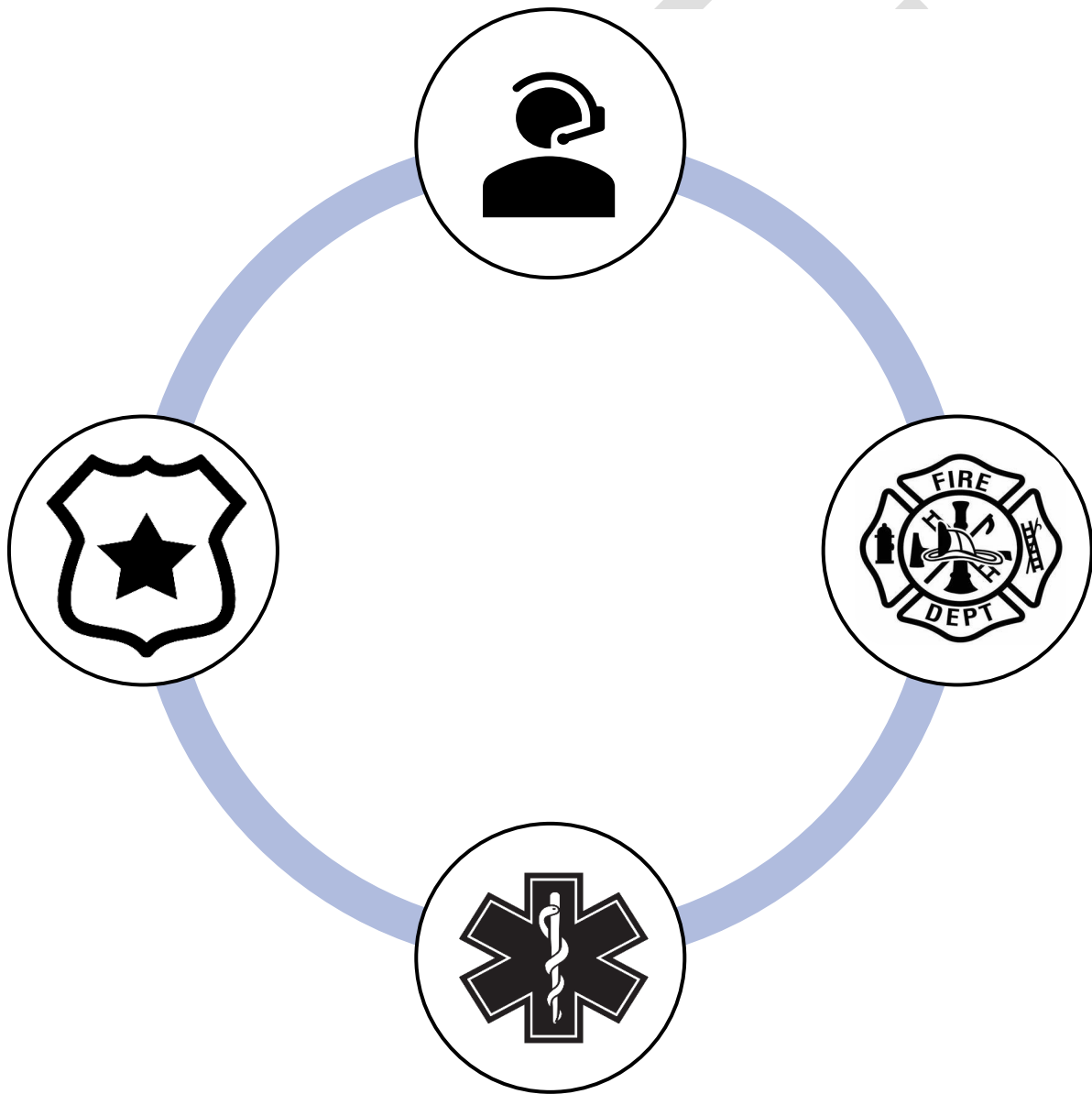
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SECONDED BY:  
MOTION:

PASS/FAIL



# Metropolitan Emergency Services Board

## 2024 Regional Needs: The Public Safety Emergency Communications Ecosystem



Approved Date: TBD

## The Metropolitan Emergency Services Board

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The Metropolitan Emergency Services Board (MESB) is one of seven regional Emergency Communications Boards (ECBs) and Emergency Services Boards (ESBs) in the state of Minnesota. The MESB was established under MSS 471.59, MSS 403.39 and MSS 403.392 to provide local governance on matters related to emergency communications (9-1-1 and ARMER), as well 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

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With approximately 94,000 active radios (MnDOT, October 2022), the statewide Allied Radio Matrix for Emergency Response (ARMER) system, 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.



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, the MnDOT completed its backbone of the ARMER system buildout. There are now 335 state-maintained and 100 locally maintained ARMER tower sites on-the-air across Minnesota that provide ARMER system radio coverage (mobile only) to 95% of the state's geographic area. Of the 100 locally maintained ARMER tower sites, 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. The Statewide Emergency Communication Board (SECB) and state agencies are currently working to develop a capital improvement plan to address this need.

In 1979, the Metropolitan 9-1-1 Telephone Board was 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, December 1, 1982, and provided the basis for the statewide buildout of E9-1-1. Today, all 108 PSAPs in the state are part of the statewide 9-1-1 network. Of the 108 PSAPs, 24 are located in the metro region. The 9-1-1 network is in process of transitioning from E9-1-1 to Next Generation 9-1-1, which will provide PSAPs additional abilities to answer texts, receive photos and videos, provide improved 9-1-1 caller location, and provide pre-determined rules for routing of 9-1-1 calls.

Today, the Department of Public Safety contracts and pays for the statewide 9-1-1 system. Local governments pay for costs associated with receiving 9-1-1 calls and dispatching public

safety responders. Local government costs include maintaining the physical PSAP; salaries/benefits for PSAP employees, including public safety telecommunicators (PSTs), administration staff, technical staff, and in some cases, dedicated GIS staff; purchase and maintenance of call handling equipment (CHE) used to answer 9-1-1 calls; purchase and maintenance of communications/radio equipment used to dispatch response to 9-1-1 calls; 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 9-1-1 systems 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 is required in a public safety field.

## Funding Considerations

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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

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Though this document covers region-wide needs only, and does not include individual needs of counties, that is not to say that these regional priorities will not benefit each of the ten metro counties individually. What follows are priorities that metro region agencies agree are a priority.

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

The 24 primary and secondary PSAPs in the metro region remain eager to obtain 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.

The solution provides improved situational awareness for metro region PSAPs. Such a solution was found to be a need in the Metropolitan Emergency Services Board's May/June 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 will provide 9-1-1 callers with better service in extraordinary situations/events.

In 2023, the MESB initiated a Request for Proposal (RFP) for CAD Interoperability, seeking vendor proposals. However, the pricing provided by vendors exceeded the available regional funding at that time.

Estimated Metro Region cost: ~\$800,000 per year, plus one-time implementation costs of approximately \$500,000\*

\*This item is included in HF 2431/SF 2454

## BDA Requests

Several buildings in the region have been identified as having radio coverage gaps and would benefit from having bi-directional amplifiers (BDA) installed, allowing first responders with ARMER radios to communicate via the ARMER system no matter where in a building the responder is located.

Estimated Metro Region cost: ~\$3 million\* in capital costs.

\*This item included in HF 2431/SF 2454

## GIS Software Services – School Mapping

With the frequency of mass shootings/armed assailant incidents increasing nationwide, and in reviewing the response to recent school shootings, the metro region seeks to implement digital school mapping, whereby maps of schools would be available in each PSAP, which could facilitate the location of 9-1-1 callers within the building. Additionally, having these resources available could provide first responders with information that could affect emergency responses such as locations of chemistry labs, etc. which could alter responders' plans.

Estimated Metro Region cost:

One-time costs: \$3,762,109

Ongoing cost to keep data up to date: \$1,530,350

\*This item included in HF 2431/SF 2454 and HF 3805/SF 3900

## AES Encryption

The Statewide Emergency Communication Board (SECB) recommends a transition to a higher level of encryption (AES or Advanced Encryption Standard) for sensitive radio transmissions on the ARMER system. To achieve this capability, supplemental funding is necessary to replace and/or upgrade existing ARMER system equipment.

Estimated Metro Region cost: ~\$9 million

## Vendor-provided Radio Technical Training

According to SECB standard, system administrators must go through training at least once every two years. To keep current with evolving technology, administrators request to attend training provided by a contracted technical vendor to fulfill this need.

Estimated Metro Region cost: ~\$40,000 per year

## CRTF Training and Exercising

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

Estimated Metro Region cost: ~\$10,000 per year

## Back-Up PSAP Equipment Cache

Metro PSAPs seek 20 laptop consoles for back-up use around the metro area. This will be available to any partner in the MESB JPA.

An equipment cache for 9-1-1 operations will be available to all MESB JPA partners in the event their centers are not functional. For many years, the thought process was to have a physical space available for any partner needing to abandon its PSAP. This approach focuses on having equipment available and the partner can utilize any space deemed available for operations. Meant only for emergency operations, when a center has been shut down or needs to be moved. This will allow for operations to continue for any center that may be destroyed, inaccessible, etc.

Estimated Metro Region cost: ~\$200,000

## Ongoing Maintenance for Existing ARMER Infrastructure

Every five years, the State of Minnesota (specifically MnDOT) executes a service contract with Motorola for maintenance and upgrades to the ARMER system. A combination of 9-1-1 fees, state funds, and federal trunk highway funds are used to fund maintenance of state-owned radio infrastructure. Counties and the City of Minneapolis own “local enhancements” which are additional tower sites or channels interconnected with the state-owned sites to provide adequate coverage for local users. These local enhancements are shared with general users of the ARMER system. Local enhancements and backhaul to the regional network are funded by the owning agencies. Since the state-owned and local enhancements form the completed radio network, a funding source to assist in the maintenance of the local enhancement sites is needed.

Estimated Metro Region cost: ~\$500,000

## Subscriber Equipment Replacement

The subscriber radios (mobiles and portables) used to communicate on the ARMER statewide system have a finite lifespan. These radios reach end-of-life when firmware, batteries, or replacement parts become unavailable. Continuing to use outdated subscriber equipment results in distorted or incomplete communications. Equipment replacement is typically funded locally with no state or federal dollars associated; having shared funding for these shared resources would be ideal to ensure the quality and consistency of emergency communications.

Estimated Metro Region cost: ~\$11 million

## Additional Local Enhancement for Capacity/Coverage Needs

As the population in the region continues to increase and new buildings are constructed, local subsystem owners need to add additional ARMER tower site to increase coverage and capacity to meet higher density population centers.

Estimated Metro Region cost: ~\$50 million

**Metropolitan Emergency Services Board**  
**9-1-1 Technical Operations Committee**  
**9-1-1 Data/GIS Report**  
**April 18, 2024 Meeting**

1. **Importance of GIS for 9-1-1:** PSAP managers are strongly encouraged to assist their GIS counterparts in communicating to key decisionmakers and county leadership the **vital role GIS has to their current and future PSAP operations**. Geospatial datasets provide foundational data for PSAP CAD/mapping systems and NG9-1-1 core services, as well as support many non-public safety uses important to counties and cities.
2. **Regional GIS Dataset Aggregation and Validation:** The region has a **monthly cadence** for NG9-1-1 validations and submission to statewide datasets. The next full regional NG9-1-1 data validation run was performed on **4/12/24**.
3. **Regional Data QA/QC:** MESB continues to **analyze the region's NG9-1-1 data errors** identified through MESB's internal validation tools, GeoComm's Data Hub (GDH), and 1Spatial's platform. MESB also validates "live" 9-1-1 call locations against the regional GIS to identify missing or inaccurate GIS data. When needed, MESB reaches out to county GIS contacts to make recommended data remediations. If it is determined that MSAG and/or ALI updates are needed MESB will process them on behalf of its PSAPs.
4. **Metro Regional GIS-derived MSAG transition:** All MESB PSAPs are stable with GIS-derived MSAGs. The initial transition, as well as at least one MSAG "refresh," is complete for all PSAPs. Additional methods are used by MESB for monthly GIS-derived MSAG maintenance between full "refreshes."
5. **Wireless Location Based Routing (LBR):** The three major wireless carriers have already implemented LBR in the MESB region (T-Mobile 2021, AT&T 2022, Verizon 2023.) Quarterly, MESB distributes updated PSAP boundaries to wireless carriers, MPCs, VPCs, TCCs, and other interested parties. The most recent quarterly distribution included boundary changes between the MECC and UMPD PSAPs.
6. **Interagency Agreements:**
  - a. Now that the metro region has been able to sustain a monthly regional maintenance cadence supporting NG911 datasets, the metro GIS data producers are interested in proactively starting discussions to **document the understanding county GIS departments have with PSAPs for the various GIS support activities they provide**. In most cases, that support includes NG911, CAD, and other PSAP systems/applications requiring GIS data. This effort can also serve to document the ongoing role that has evolved for MESB as it provides NG911 data/GIS support to both county GIS departments and PSAPs.
  - b. Ramsey County GIS expressed interest in collaborating with MESB and RCECC on developing draft language that would meet their needs, as well as serve as a **template** for other metro counties. **Counties could then customize the document based on their own existing GIS department and PSAP relationships**. MESB staff will participate in this effort with the goal of developing a draft document for 911 TOC review that could assist all MESB counties/PSAPs.
7. **Verizon Wireless Misrouted Calls:** MESB PSAPs have not made MESB aware of any recent Verizon out-of-state misrouted calls. PSAPs should continue to notify MESB (Jake Jacobson and Marcia Broman) of any tickets opened with Comtech on Verizon out-of-state misrouted calls.
  - a. The most expedient method to report issues with wireless calls, such as misroutes, is to **open a ticket with the applicable wireless carrier** (not through Lumen repair or 911NET).

- b. **Verizon out-of-state misrouted calls (or any other Verizon wireless issues) should be reported to the Comtech NOC 800-959-3749 or [noc@comtech.com](mailto:noc@comtech.com).**
  - i. **Email reporting** is recommended for tracking purposes.
  - ii. Comtech states call reports “must be **within the past 7 days, preferred within 3-5 days** for most accurate traces.”
  - iii. Providing a **screenshot** of the call, along with a **CDR** (if possible), and specifics about where the caller’s stated location are all immensely helpful to the investigation.
- c. MESB will monitor the ticket and trends across the region, ask additional questions of Comtech/Verizon (as needed), and share information about the call with the FCC inquiry that is currently underway.

**ONGOING ACTIVITIES**

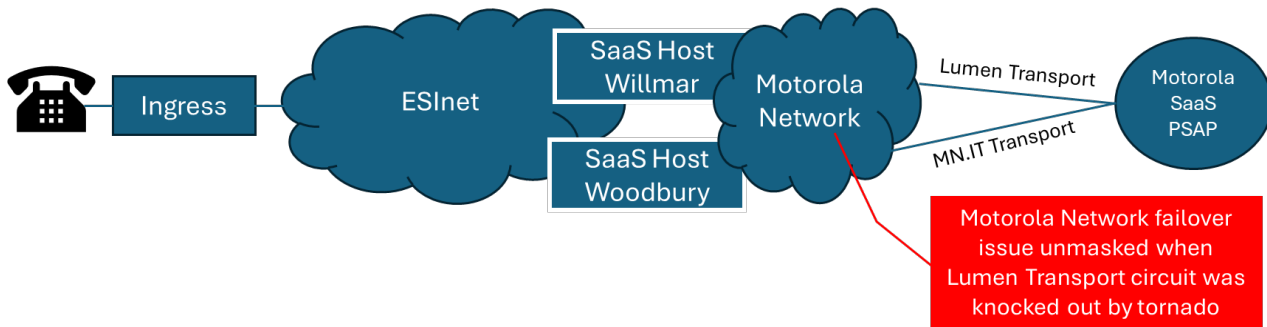
- 8. **GIS supporting RapidDeploy Radius ALI Mapping:** MESB continues regular monthly “refreshes” of the metro GIS datasets used for ESRI map and geocoding services supporting RapidDeploy Radius mapping.
- 9. **Integration with State NG9-1-1 GIS Activities:** All MESB regional NG9-1-1 required datasets are included in the statewide enterprise database. These datasets include: the metro regional supplier boundary, road centerlines, address points, and Emergency Services Zones (resulting in PSAP, law enforcement, fire, and EMS boundaries.)
- 10. **SECB NG9-1-1 GIS Workgroup:** This **SECB workgroup focused on NG9-1-1 GIS topics** meets monthly (virtually 2<sup>nd</sup> Thursday of each month 9:00-10:00 am.) MESB is participating on behalf of the region. Metro county GIS data producers are also encouraged to participate as their availability allows.
- 11. **Regional GIS Data Aggregation:**
  - a. **Road Centerline and Address Points:** The MetroGIS/Met Council processes regional road centerline and address point dataset updates nightly to the MN Geospatial Commons website. Each metro county’s most recent centerline and address point data that has been uploaded to the portal and passed validations is included in the regional datasets. The regional road centerline and address point datasets comply with the current MN Geospatial Advisory Council (GAC) data standards.
  - b. **Boundary Polygons:** MESB maintains the regional PSAP, ESZ, MSAG community, law, fire, and EMS boundary polygon layers in coordination with the PSAPs. These datasets are updated as boundaries change or at least quarterly. Mobile Positioning Center, Text Control Center, and VoIP Positioning Center vendors are directed to the MN Geospatial Commons for downloads of metro’s PSAP boundary polygons.
- 12. **Regional Data Viewer:** PSAPs are encouraged to use the [regional 9-1-1 dataviewer](https://www.metrogis.org/projects/9-1-1-Data-Viewer.aspx) developed by MetroGIS/Met Council to view the geospatial data county GIS departments consider valid and current for regional 9-1-1 use. This is the authoritative source of NG9-1-1 GIS data for the 10-county MESB region. (<https://www.metrogis.org/projects/9-1-1-Data-Viewer.aspx>.)
- 13. **Wireless Cell Sector/Routing Data:** MESB continues to process wireless cell sector routing updates for all four wireless carriers on behalf of the metro PSAPs. Should PSAPs want the routing for a specific cell sector or 9-1-1 call reviewed, just email [mesbgis@mn-mesb.org](mailto:mesbgis@mn-mesb.org) and MESB staff will investigate.

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
9-1-1 Network Report  
April 18, 2024 Meeting**

**Interim Lumen Service Manager to be announced.**

At the time of writing (Thursday April 11), current Lumen Service Manager Vicki Hyett is retiring effective 4/12. By the time of the TOC meeting, Lumen will have announced who will take on the position, believing that it will be an interim placement.

**Dakota911 Motorola SaaS incident 2/8.**



On 2/8, at 5:40 PM, a tornado in Wisconsin knocked down one of the two WAN circuits that connect Motorola host sites with the Dakota911 PSAP as well as three other SaaS PSAPs in greater Minnesota. With the Lumen circuit down, traffic was expected to failover to the MN.IT circuit but the task failed to execute. Dakota contacted Lumen to have its traffic abandoned to RCECC, which RCECC began receiving at approximately 6:25 PM. In addition, concurrently with this event, Dakota911 administrative lines ceased functioning given a dependency on the SaaS hosts which was no longer accessible. Both 9-1-1 and administrative line traffic was restored to Dakota 911 at 8:25 PM.

From its Root Cause Analysis (RCA), Motorola determined router updates were needed at its host sites, not only to address Dakota911 and the other three PSAPs, but also to prevent such scenarios occurring with all its MN PSAPs should there be a need to execute network failover. In the implementing of these router updates, there was at least one occurrence of all SaaS positions logging off the system unexpectedly (includes Scott County), with Dakota experiencing such an incident multiple times, though unknown if it were a result of the needed updates.

Discussions with both Motorola and Lumen continue about the 2/8 episode and subsequent incidents occurring in March. At the time of drafting this report, on behalf of its PSAPs, MESB is looking for the following:

For Lumen:

- Wanting more assurance of an adequate staffed NOC that can take quicker action when a high volume PSAP needs its traffic abandoned.
- An analysis of whether its transport circuit can be redesigned to reduce vulnerabilities even though it is expected that Motorola will successfully execute network failover.

For Motorola:

- Further assurance that such updates successfully address network failover needs.

- RCA of the auto-logging-off of positions during updates deemed to not impact production.
- Review of options to have administrative lines remain working should there be a 9-1-1 service disruption.

**Pursuing the adding of “z” coordinate to ALI format when Anoka and Sherburne implement their new geo-diverse system later this year.**

Started with Isanti, then Ramsey, and now for Anoka and Sherburne – using CHE upgrades as an opportunity to obtain the “z” coordinate in the wireless ALI feed from Lumen/Intrado.

Z coordinates provide height, which wireless carriers are providing now as well as the x and y coordinates.

**Continue Monitoring: Reviewing for potential – interoperability with Wisconsin PSAPs – Pierce, and Butler counties.**

- Wisconsin PSAPs joining a WI ESInet that would have capabilities of transferring voice 9-1-1 calls to MN PSAPs.
- ECN and MESB giving Lumen the green light to pursue, expect follow up meetings with details forthcoming.
- No update from Lumen since the last TOC but the item is on Lumens action list.

**2024 1<sup>st</sup> Quarter Total # of 911 Calls Stats (MESB area includes State Patrol Metro)**

Year	Jan	Feb	Mar	1st Qtr.
2024	149,188	142,523	155,294	447,005
2023	161,789	145,139	162,589	469,517
% difference	-7.8%	-1.8%	-4.5%	-4.8%
Feb 2024 - Leap Year				

**Ingress project issue**

Ingress migration to Sinch has been completed for Wireless and VoIP carriers; work is underway to migrate wireline Central Offices, which is the final leg of transitioning all phone providers to the Sinch Ingress system.

For the metro area, Lumen/CenturyLink Central Offices have begun the migration starting with central offices located in Anoka County. In this initial wireline migration, somehow in the conversion of the SS7 data to the IP network, the privacy setting is obscuring the phone number. **This issue has been corrected.** Lumen, in its work with Sinch, will resume the migration of its wireline central offices which is about all the remaining traffic on the legacy Minneapolis and St. Paul Selective Routers. The MESB is encouraging Lumen to complete this migration effort which will reduce potential errors arising from the legacy selective routers while streamlining the input to the core service routing.