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

February 20, 2025, 10:00 a.m.

1. **Call to Order** – Kari Morrissey, 2025 Committee Chair

2. **Approval of Agenda** – Morrissey

3. **Approval of January 16, 2025 Minutes** – Morrissey

4. **Action Items**
   A. Formation of Regional COOP Workgroup – Jill Rohret

5. **Discussion Items**
   A. 2025 9-1-1 TOC Meeting Schedule – Rohret
   B. Indoor School Mapping – Rohret
   C. 2025 Regional Needs Document – Rohret
   D. Mental Health Call Processing Standard – Tony Martin
   E. NENA SBP/CIF Conference – Artificial Intelligence – Morrissey
   F. NHTSA Grants to 9-1-1/Possible Regional CAD-to-CAD Opportunities – Morrissey
   G. ECN Status Updates – ECN

6. **Reports**
   A. SECB Mapped ALI Workgroup – Heidi Hieserich
   B. PSAP Operations Roundtable Workgroup – Heidi Meyer
   C. SECB NG9-1-1 Technical Operations Workgroup – Scott Peterson
   D. SECB NG9-1-1 Operations Workgroup – Morrissey/LaVae Robinson
   E. SECB NG9-1-1 Committee – Janelle Harris/Brent Anderson
   F. SECB IPAWS Committee – Morrissey
   G. Minn. Sheriff's Assoc. PSAP Subcommittee Report – Bowler
   H. Blue Ethos Training – Jacob Kallenbach
   I. MESB 9-1-1 Report (attached) – Rohret

7. **New Business** – None

8. **Announcements** – None

9. **Adjourn** – Morrissey

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
Meeting Minutes
January 16, 2025

Committee Member Attendance:

Airport – **absent**
Allina EMS – Victoria Vadnais
Anoka County – Heidi Meyer
Bloomington – **absent**
Carver County – Susan Bowler
Chisago County – **absent**
Eden Prairie – **absent**
Edina – Janelle Harris
Hennepin County – Dawn Kenyon
Hennepin EMS – Dan Klawitter
Isanti County – Robert Shogren
M Health EMS – **absent**
Metro Transit – Chad Ladda
Minneapolis – Leticia Cardenas
North Memorial – **absent**
Ramsey County – Dan Palmer
Ridgeview EMS – John Scheuch
Scott County – Carrie Bauer
Sherburne County – Laura Anderson
St. Louis Park – Eric Lammle
U of M – **absent**
Washington County – Darlene Pankonie

Alternates/Guests: Laura Espy, *Ramsey County;* Chad Gappa, *Motorola;* Mike Mihelich, *Ramsey County;* Leah Palmer, *ECN,* Dave Taylor, *IES;* and Kent Wilkening, *ECN.*

MESB Staff: Elizabth Clausen; Jake Jacobson; Jacob Kallenbach; and Jill Rohret.

1. Call to Order
The meeting was called to order at 10:00 a.m. by 2025 9-1-1 TOC Vice Chair, Darlene Pankonie.

2. Approval of Agenda
Heidi Hieserich requests to add a discussion item titled "5D: MSA Public Safety Telecommunicator Training."

Motion made by Susan Bowler, seconded by Eric Lammle to approve the January 2025 9-1-1 TOC agenda as amended. Motion carried.

3. Approval of Minutes
Motion made by Bob Shogren, seconded by Leticia Cardenas to approve the November 2024 9-1-1 TOC meeting minutes. Motion carried.

4. Action Items – None

5. Discussion Items
A. MESB Survey
Jill Rohret updated the committee on survey responses regarding PSAP needs and how they relate to the upcoming renewal of the MESB Joint Powers Agreement. The responses indicate a desire to focus on:

- Regional Project Management
- Cooperative Purchasing for PSAP Technology
- Regional Planning for establishing interoperable technology platforms
- Project Mgt Planning for PSAP technologies
- PSAP Leadership Training

Draft

Rohret said additionally the survey indicates a desire to conduct 9-1-1 TOC meetings quarterly instead of monthly. With Jake's impending and Marica's recent departure, survey input will help shape what supporting resources will best fit the PSAPs and MESB needs going forward.

B. Indoor School Mapping
Jake Jacobson stated that the MESB continues to look at the indoor school mapping on a regional level in coordination with the SECB and the grant process. A workgroup was formed to discuss details with various vendors to prepare and understand expectations in successfully developing and completing the project on a regional scale. The SECB GIS workgroup created a two page draft of recommendations and insight from these initial discussions. It is believed that an RFP will be constructed but there are open issues with how the SECB will provide overall governance to the seven regions.

Vic Barnett stated that the challenges are not technical but rather in project management and execution.

Pankonie asked for a summary document of workgroup activities and distribute it to the 9-1-1 TOC.

Rohret stated that the GIS workgroup will inform the SECB and ECN in terms of grant decision-making. Given the amount of the grant, ECN has stated the grant will be a competitive grant and will not follow a formulaic distribution, such as allocation based on the number of schools in a region. It is not yet known when the grant will be available for application.

C. Mental Health Call Processing Standard
No update.

D. MSA Public Safety Telecommunicator Survey
Hieserich stated that the Minnesota Sheriffs Association (MSA) (Brian Johnson) is in the beginning stages of providing training for public safety telecommunicators (PST). She was unsure what differences there are between what the MSA is offering as compared to NENA's training. While this is a training offering, Hieserich prefers pursuing a statewide goal of PST certification. She intends to provide feedback to the MSA's survey on the need for certification and standards.

Pankonie stated she agrees with developing PST certification paths and looking for training courses to support the effort, instead of a focus on providing additional training courses. She suggests other PSAP members provide similar feedback in their survey responses.

6. Reports
A. ECN Update/Status
Leah Palmer, the new Director of ECN, gave a brief introduction. Kent Wilkening stated that the one-time funding must be spent by June 30, 2025; reach out to him with any questions.

B. SECB Workgroup Mapped ALI Update
Hieserich said ECN sent out an "opt-in" survey in early December to PSAPs on this project; phase 1 responses are due by March 31, 2025. Phase 2 work is yet to start. The SECB NG9-1-1 committee will expand its workgroup beyond one representative per region to get more participation and feedback. She said funding is still unclear, as well as whether secondary PSAPs may participate.

Draft

The consensus of the 9-1-1 TOC members is to strongly recommend that the secondary EMS PSAPs be eligible given their obvious importance and involvement in many 9-1-1 calls.

Pankonie suggested that the MESB track county mapped ALI platform choices.

C. PSAP Operations Roundtable Workgroup
Heidi Meyer said the meeting notes were included in the packet. There will be an APCO supervisor training in March located at Carver County.

D. SECB NG9-1-1 Committee Report
Janelle Harris said the NG9-1-1 Committee discussed best practices for NG9-1-1 and GIS.

E. 9-1-1 MESB Report
Jacobson said the report was included in the meeting packet.

F. MN Sheriffs Association PSAP Subcommittee Report
No update.

G. IPAWS Report
No update.

H. SECB NG9-1-1 Technical Operations Workgroup
No update.

I. SECB NG9-1-1 Operations Workgroup
No update.

J. Status-Blue Ethos Training Scheduling
Jacob Kallenbach provided an update on Blue Ethos training. Updated availability will be emailed weekly. Please respond to him with specific dates and times to schedule employees for the training.

7. New Business – None

8. Announcements/Roundtable
A. Roundtable
Members of the 9-1-1 TOC gave brief updates regarding their PSAPs.

9. Presentation: Motorola Software Dispatch and Radio Integrations.
Motorola presentation by Briah Sheehan Solution Demonstration Specialist on Premier One CAD and Aware solutions and possibilities of integration with input streams such as video.

10. Adjourn
The meeting was adjourned at 12:42 p.m.

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METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: February 20, 2025
Agenda Item: 4A. Formation of Regional COOP Workgroup
Presenter: Rohret

RECOMMENDATION

MESB staff recommend the 9-1-1 TOC form a Regional Continuity of Operations Plan (COOP) Workgroup of ten (10) or less people to assist MESB staff in developing a Regional 9-1-1 COOP.

BACKGROUND

In 2000 or 2001, the Metropolitan 9-1-1 Board developed a communications plan to notify PSAPs of a major 9-1-1 system outage or disruption; the plan utilized the criminal justice data system messaging platform and no longer meets the PSAP notification needs, partly because it does not address automated notifications being sent to PSAPs by 9-1-1 service providers and originating telecommunications service providers. The 9-1-1 TOC recognized the need for a new plan and created a workgroup to develop it. A new 9-1-1 Crisis Communications Plan was developed by the 9-1-1 TOC and approved by the Board in July 2021.

In February 2024, Dakota 9-1-1 experienced an outage related to its call handling equipment, resulting in it sending its calls to Ramsey County Emergency Communications Center (RCECC) for answering; Dakota 9-1-1 and RCECC operated in this environment for a few hours. This event led to discussions that the region should establish a COOP to be used whenever any PSAP abandons its calls to another PSAP, containing triggers for the abandoned PSAP to send staff to the answering PSAP to help absorb the additional calls.

ISSUES & CONCERNS

In 2024, MESB staff requested PSAPs submit their individual COOP documents for review and to assist in eventual formation of a regional COOP.

Though this process was delayed in 2024, MESB staff would like to restart the process of developing a regional COOP. MESB staff would like the 9-1-1 TOC to approve the formation of a Regional COOP Workgroup, to assist in the development of a Regional COOP document.

Members of the workgroup may be PSAP managers, 9-1-1 TOC members, or any PSAP employee familiar with their employing PSAPs' COOPs. Staff would like this workgroup to be ten (10) people or less.

FINANCIAL IMPACT

None to the MESB.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL

Metropolitan Emergency Services Board
9-1-1 CRISIS COMMUNICATION PLAN

Final Draft
Revised: 6/07/2021

Table of Contents

1. Overview

The goal of MESB 9-1-1 Crisis Communication Plan (CCP) is to inform all necessary participants, both internal and external, of the area's communications-related actions during a crisis, 9-1-1 disruption or outage. Because it is impossible to identify all variables, this plan is a living document. Flexibility is necessary when reacting to a crisis, and therefore this plan was written as guidance and not as a strict process.

The CCP has six main components:

- Audience identification
- Roles and responsibilities
- Scope of disruption, severity, geographic area
- Message Creation
    - Message characteristics
    - Types of messaging: external and internal
    - Monitoring
    - Sample messages
- Message distribution
    - External distribution
    - Internal distribution
- Analysis
    - Measuring success
    - Applying lessons learned
- Attachments

2. Purpose

The purpose of the CCP is to provide a framework for releasing consistent, accurate, and appropriate messaging during a crisis to affected audiences.

3. Goals

- Identify internal and external audiences affected by a crisis
- Identify staff roles and responsibilities during a crisis
- Identify official messaging that addresses the needs of affected audiences without releasing confidential information
- Identify and use distribution tools for sharing messaging as quickly as possible
- Update audiences regularly with new developments
- Address misinformation in a timely manner to avoid the spread of rumors
- Measure effectiveness of messaging and distribution tools after the crisis is over
- Identify and apply lessons learned to the CCP for future use

4. Audience Identification

Internal

- MESB Public Safety Answering Points (PSAPs)
  - Allina Emergency Medical Services PSAP
  - Anoka County PSAP
  - Bloomington PSAP
  - Carver County PSAP
  - Chisago County PSAP
  - Dakota County PSAP
  - Eden Prairie PSAP
  - Edina PSAP
  - Ft. Snelling PSAP
  - Hennepin County PSAP
  - Hennepin Emergency Medical Services PSAP
  - Isanti County PSAP
  - M Health Fairview Emergency Medical Services PSAP
  - Metro Transit PSAP
  - Minneapolis PSAP
  - Minnesota State Patrol PSAP
  - North Memorial Emergency Medical Services PSAP
  - Ramsey County PSAP
  - Ridgeview Emergency Medical Services PSAP
  - Scott County PSAP
  - Sherburne County PSAP
  - St Louis Park PSAP
  - University of MN PSAP
  - Washington County PSAP
- MESB Public Safety Answering Points (PSAPs) Staff (Director, Managers, Supervisors, Technical Staff, Other Identified Staff)
- MESB staff members (Executive Director, Director of 9-1-1 Services, EMS Coordinator, Radio Services Coordinator)
- Partnered Police, Fire & City Departments of Partner PSAPs, Public Information Officers (PIO's)

External

- Residents/Visitors of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, and Washington Counties
- Media members
- Partners (local, state, and federal officials) outside of the MESB 9-1-1 region
- Neighboring 9-1-1 entities

Not all MESB 9-1-1 audiences will be affected in every scenario. In addition, it is possible that an audience may exist that is not currently identified in this plan. The plan will be amended as audiences are identified.

5. Initial PSAP Response to Disruption

Discovery of a 9-1-1 service disruption at a PSAP can be via an automated email notification, information that a 9-1-1 call(s) did not go through, misrouted 9-1-1 calls, or some other source.

- Upon discovery of a potential service disruption/outage, PSAP staff will test landline and cellular 9-1-1 lines to ensure they route properly and are received in the PSAP.
    - *****It is recommended that PSAPs test with multiple carriers when possible.**

- If test calls result in 9-1-1 misroute or call failure, PSAP staff will check with a surrounding PSAP to see if they are experiencing any disruptions or outages. (The PSAP contacted will confirm whether they have received any indication of a known issue and test their lines.)

    - If there are no service issues discovered with the surrounding PSAP, the initiating PSAP will continue with internal notification procedures and work with the 9-1-1 service provider's 24x7 support (e.g. 9-1-1 Repair) to identify and resolve the issue.

- If both PSAPs are experiencing a service disruption/outage, one of the PSAPs involved will check for regional issues via METCOM. Advise Metro PSAPs on METCOM of the 9-1-1 service disruption/outage and ask that they check and report status on METAC8 (or next available). If not already identified, have one PSAP be the primary contact.

- If any of the PSAPs experiencing a disruption/outage have not been informed of the outage by the 9-1-1 service provider; the PSAP with an existing service ticket entered should update 9-1-1 support with other agencies involved when possible.

- The Lumen (CenturyLink) regional/statewide conference bridge will be opened for current, up-to-date information.
    - All PSAPs in the region will be invited to the conference bridge. Intended audience:
        - Primary 9-1-1 PSAP Contacts
        - On-duty PSAP staff/supervisors
        - PSAP Technical Staff
        - ECN and MESB staff will be added to the conference bridge

- Internal PSAP Notification

6. Message Creation

MESB PSAP messaging must meet the following standards:

- Accurate
  - Accurate as possible based on available information
- Timely
  - Updated regularly to reflect new information
  - It is suggested that PSAP's provide an update at least every hour, unless new, pertinent information is available before the time of the next update.
- Clear
  - Easy to understand, avoiding the use of jargon or industry acronyms.

Recommended order for message delivery platforms:

- Press Release
- Social Media (Twitter, Facebook, etc.)
- IPAWS
- Reverse 9-1-1/Notification – Use for landlines or prebuilt targeted groups (care facilities, apartments, assisted living, etc.). IPAWS notification will be sent to cellular telephones.

Message Templates

Press Release (Initial)
9-1-1 Disruption in (your area)

9-1-1 service may be temporarily disrupted in (your area)
If you are in (your area) and are unable to reach police, fire or medical responders, please call:
(XXX) XXX-XXXX (Your 24/7 10-digit Number)

We are working with our 9-1-1 providers to get the service restored quickly. Once 9-1-1 service is restored, the press release will be updated.

If you have an emergency outside of (your area), your call will be transferred to the appropriate Emergency Center.

(Optional)
For further information about what to do if there is a disruption, you can visit (website)

Press Release (Restoral)
9-1-1 service has been restored in (your area).

Twitter (Initial)

9-1-1 service has been temporarily disrupted in (your area). If you have an emergency, please call (XXX) XXX-XXXX (Your 24/7 10-digit Number).

Twitter (Restoral)
9-1-1 service has been restored in (your area).

IPAWS/WEA Message (Initial)
It is recommended that PSAPs wait 30 minutes before an IPAWS message is sent, unless there is confirmed information that:

- The disruption duration is not known, or restoral is not timely
- Unable to route calls to alternate PSAP
- Consider the time of day when sending IPAWS (recommended not overnight, unless needed)

IPAWS Categories

- Message Status: Actual
- Source/Sender: (Your Agency)
- Scope: Public
- Message Category: Safety
- Event Name: Civil Emergency Message
- WEA Handling: Imminent Threat
- Urgency: Immediate
- Severity: Extreme/Severe
- Certainty: Observed
- Sample 90, and 360 Character Messages

  90 Character: [SOURCE]: POTENTIAL 9-1-1 DISRUPTION IN AREA. CALL [ALTERNATE PHONE NUMBER] IF UNABLE TO REACH 9-1-1.

  RAMSEY CO: POTENTIAL 9-1-1 DISRUPTION IN AREA. CALL 651-767-0640 IF UNABLE TO REACH 9-1-1.

  360 Character: [SOURCE]: POTENTIAL 9-1-1 DISRUPTION IN AREA. CALL [ALTERNATE PHONE NUMBER] IF UNABLE TO REACH 9-1-1. SEE [INSERT WEB URL] FOR MORE INFORMATION. PLEASE DO NOT ATTEMPT TEST CALLS.

  RAMSEY CO: POTENTIAL 9-1-1 DISRUPTION IN AREA. CALL 651-767-0640 IF UNABLE TO REACH 9-1-1. SEE http://www.ramseycounty.us/9-1-1 FOR MORE INFORMATION. PLEASE DO NOT ATTEMPT TEST CALLS.

7. Restoral Information

- Once word is received that 9-1-1 service is operational, PSAP staff will test landline and cellular 9-1-1 lines to ensure they route properly and are received in the PSAP.
- PSAP staff will check with a neighboring PSAP to see if they are back up and operational.

- If both PSAPs are operational, one of the PSAPs involved will advise Metro PSAPs on METCOM that they appear to be back up and operational.
- If any of the PSAPs are still experiencing a disruption/outage; the PSAPs with an existing service ticket entered should update 9-1-1 support with impacted agencies that they are still experiencing the outage.
- Those agencies that are back operational should then send a follow up/update on social media sites and/or WEA indicating that 9-1-1 is now operational.

ACKNOWLEDGEMENTS
The Metropolitan Emergency Services Board (MESB) 9-1-1 Technical Operations Committee developed this document.

9-1-1 PSAP TOC Approval Date:

MESB recognizes the following industry experts and their employers for their contributions to the development of this document.

Members	Employer
Tony Martin, Emergency Communications Director	Hennepin County Sheriff's Office
Heidi Hieserich, Emergency Communications Manager	Metropolitan Airports Commission
Jon Rasch, Emergency Communications Manager	Ramsey County Emergency Communications
Cheryl Pritzlaff, Operations Director	Dakota County Communications
Val Sprynczynatyk, Director	Anoka County Emergency Communications
Pete Eggimann, Director of 9-1-1 Services	Metropolitan Emergency Services Board

Appendix A

Definitions

- Disruption
  - Anytime one or more telecommunications service providers are experiencing partial 9-1-1 call delivery issues to the 9-1-1 system effecting some calls but not all calls, problems delivering 9-1-1 calls to some of the PSAPs but some PSAPs are receiving 9-1-1 calls normally, or some calls/texts are getting delivered normally, but not all 9-1-1 calls.
- Outage
  - This term is used when it has been confirmed that the 9-1-1 service provider cannot deliver any 9-1-1 calls or texts to PSAPs. This could also be when the major wireless carrier 9-1-1 mobile positioning center (MPC) service providers (e.g. Intrado, Comtech) cannot deliver 9-1-1 calls into the 9-1-1 system with caller location, causing complete wireless 9-1-1 call delivery failure, default route 9-1-1 calls, or misrouted 9-1-1 calls.
- Specific Telecommunications Service Provider Disruption or Outage
  - When specific telecommunications service providers are having 9-1-1 call delivery issues, but other service provider 9-1-1 calls are being delivered normally.
  - Examples:
    - AT&T
    - Sprint
    - T-Mobile
    - Verizon
    - CenturyLink (Qwest or Lumen)
    - Comcast/Xfinity
    - Onvoy
    - Vonage
    - For a full list, please see the MESB PSAP Manual
- TCC
  - The metro area 9-1-1 system uses Intrado's Text Control Center (TCC)
- MPC
  - The wireless carrier Mobile Positioning Center contains the 9-1-1 call routing information for each cell site sector
  - Which carriers are with which MPC 9-1-1 service providers?
    - Verizon uses Comtech
    - T-Mobile manages their own MPC, but uses Comtech for delivery of 9-1-1 calls into the 9-1-1 system
    - AT&T uses Intrado

For a full list of additional definitions, please see NENA's website for definitions.
https://www.nena.org/general/custom.asp?page=Glossary

Appendix B

Scenarios

Scenario Example #1

It is 9:30 PM on a Tuesday night and the Bloomington PSAP receives a non-emergency call from someone advising their 9-1-1 call did not go through. On-duty Staff make test calls from both landline and wireless phones, and both fail. (Verizon and T-Mobile were tested.)

Bloomington calls the Airport to see if they are having issues with their 9-1-1 lines. Airport tests their lines and reports similar 9-1-1 test call failure.

Bloomington calls 9-1-1 Repair while Airport volunteers to hail Metro PSAPs on METCOM to check on the scope of the disruption.

Several PSAPs in the region report similar issues. Bloomington advises 9-1-1 Repair that most PSAPs in the region are reporting service disruptions and provides list of PSAPs.

The 9-1-1 service provider initiates a conference bridge for PSAPs, MESB, and ECN to provide status updates. (Estimated 10 minutes into the disruption)

Bloomington sends an internal notification to alert key stakeholders and their PIO. (10 minutes into the disruption).

Bloomington PIO releases statements for media. PSAP staff make reverse 9-1-1 notification to targeted areas of the community (long-term care facilities, etc.) (Reverse notification is made at the PSAP's discretion.)

On the conference bridge, the service provider reports that the cause of the disruption has been identified but the time to restore service is unknown. It is now 25 minutes into the service disruption and PSAPs on the conference bridge confirm the need to send an IPAWS message due to severity of the disruption (call failure versus misrouting).

County alerting authorities are given the greenlight to send an IPAWS WEA notification.

IPAWS messages are sent (35 minutes into the disruption).

At 45 minutes into the disruption the 9-1-1 service provider advises PSAPs on the bridge that service has been restored. PSAP staff test both cellular (multiple providers) and landline calls and confirm service has been restored.

County IPAWS notifications are cleared.

Bloomington alerts their PIO that service has been restored and service restoral media statements are released. Reverse 9-1-1 notifications are sent advising service has been restored.

Scenario Example #2

Hennepin PSAP receives an email and phone notification from LUMEN advising there are approximately 2000 customers in the Hanover, Hamel, Navarre, and Excelsior area that may not be able to reach 9-1-1.

Hennepin PSAP reaches out to South Lake Minnetonka Police Department and advises them of the area that is possibly affected and has them do some test calls from different areas within the area mentioned with multiple carriers (cellular telephones and landlines).

The test calls that were made did go through to the correct PSAP (Hennepin South) from all phones that officers had access to. (10-15 minutes into the notification)

> Note: Hennepin PSAP (North, South and East) are receiving other 9-1-1 calls from many different carriers during this time, knowing that the 9-1-1 system is up and working.

Hennepin PSAP contacts Lumen to inquire on the notification on a status.

Lumen advises they are still investigating the error and will notify us when they have further information. Lumen is unable to narrow down the area for which this is occurring besides what was already mentioned.

Since there is no information (besides the notification) to show there is issues with customers reaching 9-1-1, the PSAP waits for further information before making any public notification. Stakeholders (Chiefs, on-duty personnel, PIO, etc.) for that area are notified that there could be an issue, waiting on further information from Lumen.

Lumen contacts the PSAP and updates them that this issue is possibly only affecting CenturyLink landline customers and a technician is on scene. (Estimated 1 hour into the possible disruption)

Due to this only affecting a single provider's customers, a decision was made to only place a message using social media advising we are aware of technical issues with CenturyLink that may impact their customers from calling 9-1-1 from landline phones in the City of Excelsior area. No other notifications are made because the 9-1-1 system is working.

Lumen contacts the PSAP and advises them that all alarms have cleared, and service should be normal for the previously affected area. The PSAP updates the social media post that the problem was repaired. (Estimated 3 hours after the notification).

Scenario Example #3

It is 6:30 on a Wednesday evening and Dakota County learns that some of their 9-1-1 calls are being misrouted to Anoka County. Anoka also discovers at least two 9-1-1 calls have been misrouted to Hennepin County. Hennepin reports the issue to 9-1-1 Repair while Anoka hails other PSAPs on METCOM to check the scope of the issue.

After hailing regional PSAPs on METCOM, Anoka confirms that 5 PSAPs are experiencing intermittent misroute issues with some reporting that other states have received their calls. Hennepin updates 9-1-1 Repair with this information.

The 9-1-1 service provider initiates a conference bridge for PSAPs, MESB, and ECN to provide status updates. (Estimated 10 minutes into the disruption)

Dakota County decides to notify key stakeholders and their PIO of the situation. The PIO prepares media statements to alert the community of potential service impacts due to geographic scope of potential misroutes. (20 minutes into disruption)

The 9-1-1 service provider updates all PSAPs on the conference bridge that the issue should be resolved. (30 minutes into disruption)

The impacted PSAPs test both cellular (multiple providers) and landline calls and confirm service has been restored.

METROPOLITAN
EMERGENCY SERVICES BOARD

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MEMO

TO: 9-1-1 TOC Members
FR: Jill Rohret, MESB
RE: Information on MESB School Mapping Efforts
Date: February 12, 2025

At its January 16, 2025 meeting, the 9-1-1 TOC asked MESB staff to provide information on what has been done to date regarding the school mapping grant. This memo is to serve as the informational document.

MESB staff formed a workgroup to conduct a discovery phase to understand the scope of indoor school mapping, and to help establish expectations of vendors, and determine stakeholder communication needs.

The workgroup met with and had presentations from four vendors: GeoComm, Critical Response Group (CRG), CADY/911 Inform, and Datamark. Workgroup members were able to learn the approach each vendor takes and see the output of the vendor's process. Presentations did not address content ownership and maintenance of the maps beyond project implementation.

There remain many questions about the grant, the grant process, the allocation process, grant requirements, etc. At present, we do not have answers for all of the questions we collectively have.

At the February 12, 2025 MESB meeting, ECN Director Leah Palmer stated she hoped the grant would be released for application by the end of first quarter 2025.

MESB staff would like to accomplish a couple more things before it submits an application for these funds. First, MESB staff would like to draft an RFP for a school mapping solution, so that the RFP is ready to go upon grant award. This would help to provide as much time as possible to complete the project by June 30, 2026. A draft version of an RFP was created in the summer of 2024, prior to the presentations. MESB staff would like the workgroup (or a new workgroup if the 9-1-1 TOC so chooses) to review the RFP.

Second, the MESB would like to send an information letter to all school districts in the region and copy public safety leadership in each district's geographical area. This is to gauge interest in participating in the project which could help inform the MESB's grant application to determine the amount for which the MESB should apply.

The members of the workgroup were/are:

Bobby Adney, Hennepin Co. Sheriff's Office
Brent Anderson, Dakota 9-1-1
Vic Barnett, Ramsey Co. Emergency Communications Center
Heidi Hieserich, Dakota 9-1-1
Dawn Kenyon, Hennepin Co. Sheriff's Office
Tony Martin, Hennepin Co. Sheriff's Office
Kevin McNallan, Anoka Co. Emergency Communications Center
Mike Mihelich, Ramsey Co. Emergency Communications Center
Kari Morrissey, Anoka Co. Emergency Communications Center
Darlene Pankonie, Washington Co. Sheriff's Office

Board/Committee Agenda Request

Board/Committee:	SECB	
Meeting Date:	December 19, 2024	
Topic:	NG 911 Committee Feedback on Digital Geographic Information System Mapping for School Facilities Legislation	
Requesting Entity:	NG911 Committee	
Name Of Person Presenting:	Sarah Booker	
Supporting Documentation:	Yes, enclosed: ☒	No: ☐
Financial Impact?	Yes (explain below): ☐	No: ☒
Item Requested For:	Discussion/Business: ☒	Action: ☐

Background Information:

Legislation passed in the 2024 session for a one-time $7M appropriation from the 911 Special Revenue Fund for the commissioner of public safety to issue as grants to Regional Emergency Communications boards to create digital GIS maps for school facilities. (Chapter 123- MN Session Laws- 2024, sections 4 and 18). The legislative language allows for the SECB to implement further requirements at the board's discretion. At the June 27, 2024 meeting the SECB tasked the NG911 committee with researching the topic and developing recommendations around the legislation for the board's consideration. The NG911 GIS and Operations workgroup have compiled a recommendations document. In addition, committee leadership met with partners with various involvement in school safety and school mapping for input.

Throughout the information gathering process, several common concerns regarding the legislation language were identitifed. Defining the actual business/operational need for both schools and the responder community was the top concern. Ongoing maintenance of the data once created is not addresed in the legislation. The regions may not have mechanisms in place for the data control and collection language. The nonpublic data classification may also cause some limitations.

Action Requested:

Review the attached feedback document and provide direction for next steps.

Proposed Motion (if any):

SECB NG911 GIS Workgroup Feedback re: "Digital Geographic Information System Mapping for School Facilities" Legislation

Background

"Digital Geographic Information System Mapping for School Facilities" legislation was passed in the 2024 Minnesota legislative session (Chapter 123: Section 4 Subdivision 5 and Section 18). This legislation includes a $7 million onetime appropriation to establish a grant program for creating "digital GIS maps for school facilities." The legislation also includes a number of other provisions including:

- Requirements for compatibility of the maps with existing public safety agency and school security software platforms
- The map data created will be classified as nonpublic.
- The funding appropriation would be distributed through DPS grants to regional emergency communications boards.
- The procurement process must be done collaboratively with schools and public safety agencies.
- The Statewide Emergency Communications Board (SECB) may implement further requirements at the board's discretion.
- The grant period closes July 1, 2026.

At its August 2024 meeting, the SECB NG911 GIS Workgroup was asked by SECB NG911 Committee leadership to provide input to the committee regarding the legislation. The workgroup had open discussion on this topic at both its August and September meetings. The following considerations capture the workgroup's input to the NG911 Committee.

Summary

The SECB NG911 GIS Workgroup provides the following input to the NG911 Committee about the new Minnesota school mapping legislation:

- **The business/operational needs of Minnesota schools and their safety officials, local public safety responders, and PSAPs should be well defined before GIS requirements are outlined.** Basically, the NG911 GIS workgroup feels that the purpose and use of the maps needs to be clearly articulated first.
- **Maintenance is vital to the ongoing usefulness of any maps created under this legislation and needs to be addressed**.
- **If interoperability and consistency with these maps is desired across the state, a common set of baseline requirements for map content, look and feel would be useful.**
- School district and PSAP/region boundaries will likely not align, resulting in **cross-boundary coordination issues that may reinforce the need for data interoperability.**
- **In most cases, the GIS work would likely not be done by existing county GIS staff.** Typically, county GIS staff members supporting the NG911 project would not be directly involved with indoor mapping, school safety, incident command, and local responders. In addition, based on previous experience with the NG911 GIS grants, the funding process is more straightforward using vendors than internal staff. GIS workgroup members also expressed concern about security and hosting responsibilities.

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- **Project management is anticipated to be a challenge in this effort**. Roles and responsibilities surrounding this will need to be **clearly defined and adequately staffed**.
- Indoor maps have the greatest utility as **part of comprehensive school safety and response plans. Including site details/plans** (not just indoor aspects) is beneficial. The maps are best positioned as one tool in plans coordinated by schools, emergency managers, first responders, and PSAPs.
- The digital maps should be **easily integrated into systems used by PSAPs** and **available in multiple formats to allow ease of use by those responding in the field**. Regardless of any mechanisms for electronic display of indoor maps, consider having vendors also make the maps available in a printable file format such as PDF.
- Given the constraints of the legislation, SECB grant funding processes, and stakeholder needs, the NG911 Committee may want to recommend that the SECB **engage a consultant with specific expertise and experience** to:
    - Create and guide a statewide vision/scope for the project.
    - Engage a steering group of statewide stakeholders (including schools and responders) to define and document baseline needs and expected deliverables.
    - Create a project framework (e.g., plan, schedule, roles, responsibilities, and management) that leverages successful experiences in other states but fits the MN-specific constraints.
    - Define ways to avoid duplication of effort and create consistency.
    - Support the regions in the tasks defined for them in the legislation.
- The NG911 Committee leadership may want to thoughtfully **consider this input when developing its overall plan and/or assessing the need for any proposed legislative wording changes[1].**

Document History

Created: 09.09.24

Approvals: SECB GIS Workgroup -

SECB NG911 Committee -

Revisions: 09.13.24 – Updated to include additional comments from 09.12.24 SECB NG911 GIS Workgroup meeting.

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[1] Note: An addendum of questions raised by workgroup members regarding the legislation has been made available to SECB NG911 Committee leadership.

Addendum of Considerations for the SECB NG911 Committee: "Digital Geographic Information System Mapping for School Facilities" Legislation

Overall Steering and Project Guidance Considerations

- ***Define overall statewide project scope.*** There appear to be many questions about the overall direction this project will take. It would be advantageous for there to be some statewide direction to answer fundamental questions regarding the project.
- ***Include schools and local responders and define needs early.*** The workgroup recognizes that schools and local responders are the primary focus of this effort and need to be involved in shaping this project. Their input, in addition to that of PSAPs and regions, needs to be obtained and included in shaping the business needs and project scope. Business needs come before GIS requirements.
- ***Engage a consultant/steering group.*** Engaging a qualified, experienced consultant at the state level to facilitate a steering group with key stakeholders to document the business needs and make key decisions on the project direction could be very beneficial in saving time, avoiding duplication of effort across the state, and creating baseline consistency. The consultant could bring expertise of how similar efforts have been successful done in other states and make specific recommendations on how to navigate Minnesota's project within the constraints of legislation, SECB grant processes, and limited resources at the regions, PSAPs, and county GIS departments. Some common overall guidance that would benefit everyone involved:
  - Define the statewide project's scope and objectives based on the business needs of the schools, public safety agency responders, and PSAPs involved in school safety.
  - Provide overall project ownership and project management structure.
  - Clarify any legal, security, and data governance issues and provide guidance for all stakeholders.
  - Provide guidance for any procurement and how commonality could be leveraged by the regions.
  - Define minimum criteria for consistency in the creation and delivery of any digital maps produced under this legislation.
  - Define ways to avoid duplication of effort.

Project-Related Considerations

- ***Business Needs/Scope:***
  - The business/operational needs of PSAPs, public safety responders, school safety officials, and school administrators need to be defined and documented first before detailed GIS input can be provided.
  - How will the input on requirements from schools and public safety responders, in addition to that of PSAPs and SECB regions, be obtained?
  - What is the intended purpose of the maps? Fire Department pre-plans? Active shooter responses? Other?
  - What schools will be mapped? Public, Private, Charter? What about facilities that include schools? (e.g. churches, district offices) Is just the school portion being mapped or the whole facility or organization?
  - Clarity is needed on whether this is voluntary or not. Have schools agreed to participate? Have responder agencies agreed? Have county boards, sheriffs, and PSAPs agreed?
  - Who is responsible for securing agreements from schools to provide the necessary data (e.g. floor plan PDFs)
  - How will procurement be done? A cooperative purchasing model with a state procurement and then regions or agencies can choose from approved vendors may have its advantages to avoid duplication of

effort of each doing their own procurement. Will each school or responder agency be able to make their own choice, or each PSAP, or will the decision be made solely at the regional level?

- Decision making authority needs to be clearly defined. Who is currently responsible for management of school safety response tasks, including any maps or response plans, today? Will they become the primary responsible party for the digital maps?
- The details surrounding data access, availability, and security related to the legislation should go through a legal review and be clearly documented for all parties involved. There may be concerns about the security and responsibility for hosting this data locally. Would it be better to have the maps hosted securely by a vendor and not co-mingled with other county GIS data layers?
- Is there a draft contract or MOU that regions or PSAPs need to have signed by the schools or school district? Will these contracts or MOUs need approval of school Boards or individual school principals?
- What does it mean to regional boards that they will own these mapping assets? Their responsibilities should be clearly documented by the SECB/DPS.
- Does the funding available constrain the requirements of the initial build out? Will there be enough funding for every school that wants to participate?
- How will the grant money be divided? Total number of all schools in the state? Other methods?
- The size of the school would have a direct correlation to the amount of work to create the school map. How will that be factored into any distribution of funding?
- Will there be administrative costs at the state, SECB, regions, or locally that need to be factored into any distribution of funding?
- Can state agencies, regions, PSAPs, responders, and/or schools talk to vendors prior to issuing a procurement to become more knowledgeable?
- There may be advantages to start "simple" rather than get too complex in the initial rollout.
- Who does the work? Will some counties or PSAPs choose to use grant dollars to do the work internally? In many cases, this effort, although GIS related, may not be something where county data producers will be involved. It may be out of scope for many of those maintaining the NG911 GIS data. Procuring skilled, experienced vendors may be the best alternative.

- ***Project Management:***
  - Project management will be a huge part of this effort. It will be time consuming and not something local GIS data producers, PSAPs, or even regions could take on. This needs to be planned for as a part of any procurement.
  - Who is the project owner? Will there be any statewide coordination of this effort? Consider trying to avoid duplication of effort by staff that are already very busy.
  - Who will perform day-to-day project management to ensure the deliverables are completed and meet any requirements?
  - How long will this effort take? Where does it fit in the other NG911 priorities?
  - Who approves the work? The school? The responders? The PSAP? The regional board? All the above?
  - What timeline will be given to provide the data (e.g. blueprints, etc.)? What if it is not provided?

Map-Related Considerations

- ***Map Interoperability and General Content:***
  - Is interoperability or commonality desired in the content and "look & feel" of the indoor maps created throughout the state? If it is, for example, then minimum data attributes/schema and consistent symbology should be defined.

- What level of detail is needed on the maps? Consider basic requirements because there are a lot of details that could be added that would drive up the time, effort, and cost. It is important to define the expectations of how the end-product is to be used (business needs) before setting up the schema.
- Will address points also be created for governing locations? Or just visual map display?
- For schools with more than one level, will the maps need to handle the vertical/3D component? In any particular way? (e.g. floor-aware 2-D maps with a level picker? True 3D maps?)
- Not all schools will have the necessary blueprints/floor plans/digital files available. There needs to be a plan for how to deal with these.
- On-site verification of the maps would be a good idea to verify and sign off on the accuracy of the map.
- Some indoor maps include non-structural elements like fire extinguishers and AEDs. Who decides if we want to include this information? Do dispatchers need this info or just responders and school personnel? How can clutter be avoided in the map?
- Will maps be overlayed on aerial imagery and oriented for true north?
- What about features outside (e.g. playgrounds, parking areas, sports facilities)? Are these to be included?

- ***Data Schema and Content Details:***
  - What is the minimum set of features to be contained in the maps (e.g. rooms, doors, hallways, stairwells, utility locations, hazards, key boxes, trauma kits, AEDs, etc.)?
  - Is there a standard for display of features and layers both symbology and labeling? (e.g. what symbol is used for certain features? Are all classrooms or staff lounges shaded a particular color? How are labels handled?)
  - Consider use of an appropriate standard that already exists rather than inventing something new. Reference was made to possibly using portions of the National Alliance for Public Safety GIS Foundation (NAPSG) best practice guide for indoor mapping, such as the symbology quoted from NAPSG if it is useful.
  - What are the attributes, e.g. Room Type, Room Number?
  - What is the level to which features are mapped? (e.g. all doors even to closets? All windows or just exterior facing?)
  - Is there a standardized data schema with domains? Consider using a basic schema and not creating a huge one with only null values if the data is not being collected.
  - What about metadata?
- ***Data Delivery and Viewing:***
  - Would PDF maps be adequate or better way to deliver the maps?
  - What is the vision of how these maps will be delivered to PSAPs? Through a hosted ESRI map service containing the content? Through specific applications like RapidDeploy and RapidSOS? Through CAD applications? Which ones?
  - What is the vision of how these maps will be delivered to schools? Are there going to be certain acceptable methods for delivering these maps to them? Do they all have software applications that can use hosted map services? Can some only handle pdfs? What security software platforms would the map delivery methods need to be compatible with?
  - What is the vision of how these maps will be delivered to responders? Are there going to be certain acceptable methods for delivering these maps to them? Do they all have software applications that can use hosted map services? Can some only handle pdfs? What software platforms would the map delivery methods need to be compatible with?
  - Will any process associated with delivery of these maps be connected to the existing statewide NG911 GIS project or is it a standalone project/effort?

- Legislation requires use without added investment on the part of schools or public safety. How will that be accommodated?
- Can grant funding cover cost of adding these maps to CAD?
- What is the cost of private companies hosting the data versus government agencies?

- ***Data Maintenance:***
  - Maintenance is a vital piece that was not addressed by the legislation. There needs to be a plan and funding allocated for maintenance.
  - Who is responsible for identifying the need for edits? Who is responsible for actually making the edits? How would notifications occur? At a minimum, a method where schools are provided the tools so they can directly submit updates would be desirable.
  - Will there be an annual audit conducted?

Possible Map Requirements

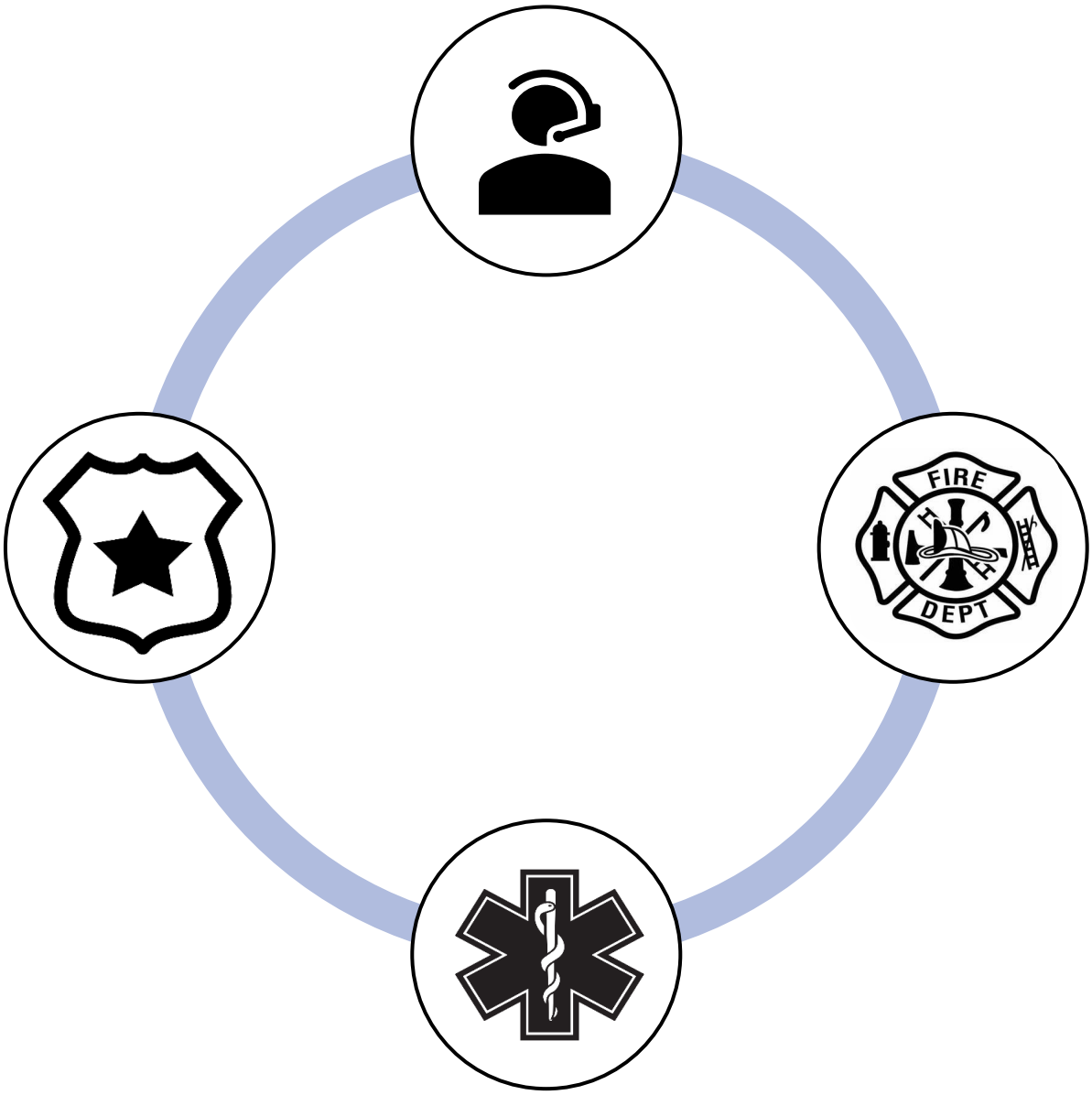
- ***Are these requirements, that are under discussion at NENA, URISA, NSGIC and NAPSG, appropriate and what are needed operationally:***
  - User experience should include the ability to dynamically zoom, search, and add content as needed by the building owner and/or public safety users.
  - The data shall allow attribution such as room use type, notes, labels, and any other piece information deemed critical by the building owner and/or public safety users.
  - The map data should have the ability to provide near-real time updates by building owners where changes are automatically disseminated to emergency responders and 9-1-1 mapping applications using existing data standards to ensure the most up-to-date information.
  - The data must be compatible with the National Emergency Number Association's latest Civic Location Data Exchange Format (CLDXF) standard to ensure interoperability with 9-1-1 and other public safety applications.
  - Symbology should adhere to the National Association of Public Safety GIS (NAPSG) guidelines to ensure consistency across the emergency communications ecosystem. This provides extended value and allows the data to become the single source of truth for all stakeholders.
  - Ownership of the data is retained by the building owner with full rights to copy, display, distribute, transmit and adapt for all lawful purposes including sharing with government and/or private entities that are providing or supporting emergency services; sharing of the data should be done via a secured and authenticated application programming interface (API) and go through an approval process to alleviate any data or privacy concerns.
  - Creation of Indoor Maps for K-12 schools, that contain school specific layouts and GIS data must be created, produced, edited, and securely stored in their entirety in the United States of America.

Legislative-Related Considerations

- ***Legislative Changes:***
  - What are the changes to the legislation recommended by the stakeholders? (e.g. Department of Education, DPS, SECB, regions, PSAPs, public safety response agencies, school boards, school administrators, school safety officials)
  - Will the SECB Legislative Committee pursue updating the legislation? Can anything be changed in the next legislative session?
  - Will future legislation be pursued to fund maintenance of the maps?
  - Will future legislation be required to secure additional funding to create the maps?
  - What will happen if not all the initial grant funds are spent prior to June 30, 2026?

Metropolitan Emergency Services Board

2024 Regional Needs: The Public Safety Emergency Communications Ecosystem



The Metropolitan Emergency Services Board

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

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

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

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

Strategic Coverage Enhancement Equipment

Throughout the Metro region a significant number of existing buildings lack adequate in-building ARMER coverage. Many new structures being constructed have not considered the need for public safety communications in an emergency. The region would like to create a set of transportable equipment to enhance coverage in these types of structures on a rapid deployment basis. This equipment cache would consist of two mobile radio transceivers installed into a portable rack configuration with a JPS module connecting the two units.

Estimated Metro Region cost: ~$21,000 per unit

From: Heidi Hieserich
To: Jill Rohret
Subject: Fw: Mapped ALI Phase 2 additional members needed
Date: Tuesday, February 11, 2025 9:16:58 AM

Good morning Jill,

Would you be okay with sending this out to our region to see if anyone is interested in joining me for this phase 2 work of mapped ALI? Details haven't really been discussed with the workgroup yet, but I'd plan on a handful of virtual meetings over a couple months time for starters.

Let me know if you have another suggestion for how to handle this. Thanks!

Heidi Hieserich, Executive Director
Dakota 911

From: Sarah Booker
Sent: Monday, February 10, 2025 11:20 AM
To: Dylan Bridges; Chad Steffen; Heidi Hieserich; Carolyn Visser; Melanie Nelson
Subject: Mapped ALI Phase 2 additional members needed

Good Morning All,

We have made this announcement multiple times looking for additional workgroup members for the Phase 2 surveys with few results. Can you all please help share with your regional members/regional leadership and see if we can't add a few more? We are looking for additional members to assist on a workgroup who will be assessing the Phase 2 surveys with the intent to make a recommendation as to which of the additional items should be a state funded solution. This should be a short term commitment but we want to make sure that every region is adequately represented.

Thanks all!!
Sarah

Sarah Booker
Emergency Communications Center Supervisor/TAC
Todd County Sheriff's Office
Phone: 320-732-2157

Meeting Agenda: MESB PSAP Roundtable

Date & Time: Tuesday, January 7th, 2025 1000-1200

Location: Hennepin County Sheriff's Emergency Communications Facility
1245 Shenandoah Lane
Plymouth, MN 55448
-or-
Microsoft Teams Meeting

Host contact: Matthew Bozovsky – Henn Co TC Training Sgt

Committee Chair: Heidi Meyer

Agenda Items:

1. Introductions
   Candy Capra - Allina
   Andy School – Dakota Co
   Tara Shoemaker – Dakota Co
   Jennifer Wallace – Carver Co
   Lindsay Stambaugh - Airport
   Lauren Petersen - Airport
   Phil Ozum - Airport
   Dawn Kenyon – Hennepin Co
   Matt Bozovsky – Hennepin Co
2. Additions, changes to the agenda - None
3. Training (new employee and continuing ed.)
   1. Current in-service opportunities – Carver hosting APCO Supervisor class end of March. They will send out flier to everyone with dates and information.
   2. CTO training / Roundtable
   3. General training questions, updates, etc. - None
4. Events and exercises (plans, meetings, 205's, impact on operations) - None
5. PSAP technical updates and info (CAD, radio, phone, and other systems) –
   - Hennepin implemented Automatic Abandon Callback in October. Working very well so far and no complaints or issues.
   - Allina moving to mobile UX in near future. Working on testing now and hopeful for roll out beginning of February. Possible CAD upgrade this summer.
6. QA/QI – general updates, questions, etc. - None

7. PSAP operational updates and information (management, staffing, schedules, significant changes) – around-the-table updates from each agency
    - Hennepin staffing study is nearing completion. Got rough draft from company last week and working on reviewing and edits. Currently down 14 PSTs with 4 new PSTs starting on January 27th. Dispatch supervisors are fully staffed now and technical side is near or at staffing. Hennepin is having issues with getting low applicants for the PST position. Most recent posting have 5 taking critical test.
    - Airport cut bottom two steps for starting pay for 2025 year. New starting pay is around $38 an hour. Staff have more schedule options for 2025 working a 5-2-2-5 schedule, mostly 12-hour shifts with some other shifts mixed in. Schedule has every other weekend off for PSTs worked into it. Not seeing same issue as Hennepin with low applicants, last round had around 80 applicants apply. Staffing levels are good.
    - Dakota having issues with PTO requests. Trying to find ways to be able to approve time off requests. Hennepin guarantees 1 day and 1 night PST off a day outside of prime time and 2 days and 2 nights off a day during prime time which is June 1st – August 31st and last two weeks of December. If time off request is entered within two weeks of date requested, it is not guaranteed. Dawn will send out scheduling guidelines that Hennepin has to group.

Nothing further brought forward during the meeting, adjourned at 1030am.

8. **Meeting calendar 2025**

January 7th	Hennepin Co
April 8th	University of MN
July 8th	Anoka County
October 7th	Ramsey County

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
MESB Report
February 20, 2025, Meeting

Importance of GIS for 9-1-1: PSAP managers are strongly encouraged to assist their GIS counterparts in helping key decisionmakers and county leadership understand the **vital role GIS has for current and future PSAP operations**. Geospatial datasets provide foundational data for PSAP CAD/mapping systems and NG9-1-1 core services, as well as many non-public safety use cases important to counties and cities.

1. **Monthly Regional NG9-1-1 Regional Data Maintenance & QA/QC Cadence:**
   The MESB region maintains a **monthly cycle NG9-1-1 data provisioning and maintenance**. This includes county GIS dataset maintenance, regional GIS data aggregation and schema validation, regional validations for the NG9-1-1 use case, and ongoing GIS-derived MSAG maintenance.

2. **Regional 9-1-1 Data QA/QC:**
   a. MESB continues to **analyze the region's NG9-1-1 data errors** that are identified monthly through MESB's internal validation tools, GeoComm and 1Spatial platforms.
   b. MESB also validates each month's actual 9-1-1 call locations against regional GIS to identify missing or inaccurate GIS data.
   c. When needed, MESB reaches out to county GIS contacts to make recommended data remediations. If MSAG and/or ALI updates are needed, MESB will process the update requests on behalf of its PSAPs.
   d. From MESB's analysis of the **January** NG9-1-1 validation results, MESB made:
      i. **129 referrals** related to address validation to county GIS data producers for GIS data updates
      ii. **53 referrals** related to road centerlines to county GIS data producers
      iii. **10 referrals** for GIS updates resulting from VoIP 9-1-1 call location validation
      iv. **1** new ALI Telephone Number record change request (TN CR) for wireline location corrections
      v. **14** ALI Discrepancy Reports from VoIP 9-1-1 call location validation
   e. The **February** full regional NG9-1-1 data validation run will be conducted on **02/11/25**. Due to the timing of this report, the February results are not yet available, however, once they are, MESB will analyze them and make any necessary referrals to county GIS partners.

3. **Metro Regional GIS-derived MSAG Maintenance**:
   a. **GIS-driven MSAG Maintenance Activity**: In **January**, MESB processed **159 GIS-derived MSAG updates** to keep the live MSAG in sync with authoritative GIS data.
   b. **GIS Drives MSAG Maintenance:** The monthly regional NG9-1-1 data provisioning/maintenance cadence is the **primary method of maintaining the region's live MSAG**. Each month, MESB performs a comparison between the current live MSAG and the MSAG derived from the current month's refreshed GIS data. MESB then reviews/vets any needed MSAG updates prior to submitting them to Intrado on behalf of its PSAPs.
   c. **PSAP 911NET MSAG Change Request Activity:** Because of MESB's process, PSAPs no longer must carry primary MSAG maintenance responsibility through submitting 911NET MSAG CRs based on information obtained from cities or other sources. They may continue to do so at their discretion, but regardless of their decision, it is most important to share that information with county GIS partners (as needed) to ensure it is flowing through the county's standard road and address processes. MESB holds any PSAP submitted MSAG CRs until the updates appear in the county's GIS data. *Exception*: If substantial construction in the area becomes visible on aerial imagery and the GIS data is still missing, MSAG will process the CR temporarily and adjust the details (such as range values) later based on county GIS data.

4. **Wireless Call Routing:** MESB processes wireless routing updates for all carriers on behalf of metro area PSAPs. Should PSAPs want the routing of a specific 9-1-1 call reviewed, they can email MESBGIS@mn-mesb.org with the details. MESB staff will investigate or recommend the PSAP open a ticket with the carrier.

5. **SECB NG9-1-1 GIS Workgroup:** The GIS Workgroup continues to meet monthly to discuss topics of interest to statewide GIS stakeholders:
   a. ***Best practice on NG911 GIS Data Validation Match/Success Rate Guidelines:*** The document was recommended to be submitted to the SECB NG911 Committee.
   b. ***Informational document on data schemas for NG9-1-1:*** The focus group submitted a draft in February to the workgroup which is being revised based on feedback.
   c. ***Other GIS Workgroup Activities:*** Peer-to-peer outreach focus group is engaged with vendors who are working on behalf of counties to submit GIS data to the state enterprise database; Best practices and/or resource materials development for edge-matching data is still being developed.
   d. ***1Spatial Platform Migration:*** Update from ECN/MnGeo regarding the move from MnGeo servers to the 1Spatial platform used by 9 other states. ECN requested volunteers from the GIS workgroup to participate in the User Acceptance Testing which will be conducted in the coming months.

ONGOING ACTIVITIES

6. **Regional GIS Data Aggregation**:
   a. ***Road Centerline and Address Points:*** 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. 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. This includes the MN State Patrol PSAP boundaries in the MESB region for wireless call Location Based Routing (LBR), as well as routing of Text-to-911 messages.

7. **Regional Data Viewer**: PSAPs are encouraged to use the Metro Regional Data Viewer 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. MetroGIS is in the process of updating the background application used by Data Viewer. There is not a projected launch date yet, however. Future progress updates will be reported here.

8. **GIS supporting RapidDeploy Radius ALI Mapping:** Every third Friday, MESB "refreshes" the metro GIS datasets used for ESRI map and geocoding services supporting RapidDeploy Radius mapping system used at many metro PSAPs.

9. **Integration with State NG9-1-1 GIS Activities:**
   a. All MESB regional NG9-1-1 required datasets are included in the **MN DPS NG9-1-1 enterprise database**, including: the metro regional supplier boundary, road centerlines, address points, and emergency service boundary polygons.
   b. **Metro Regional GIS datasets are shared publicly** on the MN Geospatial Commons. (See resources under the MetroGIS and MESB organizations.) In addition, the regional data is also included as **part of the MN Road Centerline and MN Address Point datasets (Opt-In Open Data Counties).**