



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

October 17, 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** – September 19, 2024 Meeting - Bowler
4. **Action Items**
 - A. 2025 9-1-1 TOC Chair & Vice Chair
 - B. Approve 2025 – 2027 IESCP
 - C. Approval of 2024 Regional SECB Grant Funding Priorities
5. **Discussion Items**
 - A. Mapped ALI Solution Offerings – Heidi Hieserich et al.
 - B. Mental Health Call Processing Standard - Tony Martin
 - C. ECN Update/Status – ECN
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. Roundtable: Each PSAP to share at least one item
 - B. Next Meeting: November 21, 2024, 10:00 am.
9. **Adjourn** – Bowler

**Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
Meeting Minutes
September 19, 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 – Heidi Hieserich
Eden Prairie – **absent**
Edina – Janelle Harris
Hennepin County – Tony Martin
Hennepin EMS – **absent**
Isanti County – Robert Shogren

M Health EMS – Elias Charif
Metro Transit – **absent**
Minneapolis – Leticia Cardenas
North Memorial – **absent**
Ramsey County – Nancie Pass & Dan Palmer
Ridgeview EMS – **absent**
Scott County – Carrie Bauer
Sherburne County - **absent**
St. Louis Park – **absent**
U of M – **absent**
Washington County – **absent**

Alternates/Guests: Bobby Adney, *Hennepin*; Marv Bachmeier, *Code4Group*; Kelley Callahan, *IES*; Troy Cordle, *RapidSOS*; Chad Gappa, *Motorola*; Scott Haas, *Scott County*; Andrew LaVenture, *Edina*; Mike Mihelich, *Ramsey County*; Angela Pavlini, *RapidSOS*; Dave Taylor, *IES*; and Kent Wilkening, *ECN*.

MESB Staff: Marcia Broman; Tracey Fredrick; Jake Jacobson; Jacob Kallenbach; and Pamela Oslin.

1. Call to Order

The meeting was called to order at 10:03 a.m.

Motion made by Robert Shogren, seconded by Janelle Harris to elect LaVae Robinson as temporary meeting Chair as Chair Susan Bower and Vice Chair Laura Anderson unable to attend. Motion carried.

2. Approval of Agenda

Motion made by Shogren, seconded by Sara Boucher-Jackson to approve the September 2024 9-1-1 TOC meeting agenda. Motion carried.

3. Approval of Minutes

Motion made by Dan Palmer, seconded by Heidi Hieserich to approve the August 2024 9-1-1 TOC meeting minutes. Motion carried.

4. Action Items – None

5. Discussion Items

A. Presentation/Discussion: SAFECOM Nationwide Survey

Devin Christensen of the Cybersecurity and Infrastructure Security Agency, CISA, spoke on the SAFECOM Nationwide Survey and garnered feedback from the 9-1-1 TOC members on various aspects related to the structure and content of the survey.

B. Mapped ALI Solution Offerings

Heidi Hieserich provided a summary on the Mapped ALI Solution offerings and the recommendations made via the MESB Mapped ALI Workgroup. The workgroup believes there is value in having PSAPs operating on the same mapped ALI platform in support of PSAP interoperability. The Rapid Deploy Radius platform is favored due to several optional products, particularly Exchange Link, which would advance the Region's top priority to support PSAP CAD data sharing. The workgroup recommends supporting and prioritizing the following products associated with the Mapped ALI offering specific to Rapid Deploy; Exchange Link, Smart 911, Rapid Lightning, Eclipse Analytics, and Video as a Service. The base, free version of RapidSOS can still be used on top of the premium Rapid Deploy service.

Robinson asked about the cost associated with the add-on services.

Hieserich responded by stating the add-on pricing could vary depending on funding and ECN decisions. It would be more efficient to see costs go into the add-ons of the Rapid Deploy solution rather than investing in a secondary mapping trial period. RapidSOS lite can still be used if the move to Rapid Deploy occurs.

Robinson stated her support for the Rapid Deploy platform, especially the Eclipse Analytics add-on.

C. Mental Health Call Processing Standard

Tony Martin stated that they are working on a presentation to provide to PSAPs and 988. The next statewide meeting has not yet been planned.

D. MESB 2022-2024 Interoperable Emergency Communications Strategic Plan

Jacobson stated that he is planning to gather feedback from the TOC for the plan in the coming month. The previous document will start as the foundation and additions/changes can be recommended. Action on this item will take place at the October 9-1-1 TOC meeting. Please reach out to Jacobson if you have any questions, additions, or changes.

E. ECN Update/Status

Kent Wilkening of ECN provided a brief update related to the ongoing position openings within the organization. The application for the Director position has been closed and is in the initial stages of the hiring process. After the Director position has been filled, the Statewide Interoperability Coordinator, SWIC, position will be open for applications.

6. Reports

A. PSAP Operations Roundtable Workgroup

The meeting minutes can be found in the September 2024 9-1-1 TOC meeting packet.

B. SECB NG9-1-1 Committee Report

The meeting minutes from Janelle Harris can be found in Jacobsons weekly 9-1-1 communication which is distributed on Friday and provided at the end of these Minutes.

C. 9-1-1 GIS and Data Report

The report can be found in the September 2024 9-1-1 TOC meeting packet.

D. 9-1-1 Network Report

The report can be found in the September 2024 9-1-1 TOC meeting packet.

E. MN Sheriff's Assoc. PSAP Subcommittee Report

There is no new report.

F. IPAWS Report

There is no new report.

G. SECB NG9-1-1 Technical Operations Workgroup

There is no new report.

H. SECB NG9-1-1 Operations Workgroup

There is no new report.

7. New Business – None

8. Announcements/Roundtable

A. Roundtable

Each PSAP present at the 9-1-1 TOC meeting shared one item with the group.

B. Next Meeting: October 17, 2024, 10:00 a.m.

9. Adjourn

The meeting was adjourned at 11:22 a.m.



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: October 17, 2024
Agenda Item: 4A. 2025 9-1-1 TOC Chair & Vice Chair
Presenter: Jacobson

RECOMMENDATION

The 9-1-1 TOC must annually nominate a Chair and Vice Chair for approval by the MESB at its January meeting.

BACKGROUND:

According to MESB bylaws, the 9-1-1 TOC must make a recommendation to the Board on the Chair and Vice-Chair of the committee.

ISSUES & CONCERNS

Nominations are open to all committee members.

FINANCIAL IMPACT

None to the MESB.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: October 17, 2024
Agenda Item: 4B. Approve 2025 – 2027 IECSP
Presenter: Jacobson

RECOMMENDATION

The MESB staff recommends that the 9-1-1 TOC approve the 9-1-1 related items in the proposed 2025-2027 Interoperable Emergency Communications Strategic Plan (IECSP).

BACKGROUND

The MESB staff reviewed the 2022-2024 IECSP to assess its relevance and effectiveness for the upcoming 2025-2027 period. Staff determined that the top six core strategic priorities remain crucial to the ongoing success of the plan. However, adjustments have been made to reflect accomplishments from 2022-2024 and emerging trends in the emergency communications field.

For instance, while the priority to "Successfully Transition to NG Core Services" continues to be important, it now recognizes the metro-area achievement of the NG9-1-1 Location-Based Routing milestone in 2024. Additionally, the plan acknowledges new vendor solutions that support multimedia inputs such as video and images, are leapfrogging the traditional ESI-net model as well as not being incorporated into an i3 NG9-1-1 system for years to come.

Strategic Priorities
1. Expanded Interoperability Between PSAPs
2. Emergency Communications Continuity of Operations
3. Continue to Invest, Upgrade, and Expand the ARMER system
4. Secure Funding – Stable, Planned, Predictable, and Sufficient
5. Emergency Communications Staff - Recruitment, Development, and Retention
6. Successfully Transition to NG Core Services

Additionally, the two bottom priorities of 2022-2024 were removed from the 2025-2027 plan as some level of activity is conducted in those areas regardless, though diluted the priority list by retaining them.

7. Engaging in Industry Research and Standard Development
8. Educating Policy Makers

ISSUES & CONCERNS

This draft serves as an update to the 2022-2024 plan, incorporating key modifications based on insights and lessons learned from the previous cycle.



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: October 17, 2024
Agenda Item: 4B. Approve 2025 – 2027 IESCP
Presenter: Jacobson

The Radio TOC reviewed ARMER-related items and recommended approval.

FINANCIAL IMPACT

None to the MESB.

MOTION BY:
SECONDED BY:
MOTION:
PASS/FAIL



Metropolitan Emergency Services Board

2025-2027 Interoperable Emergency Communications Strategic Plan (IECSP)

Table of Contents

Section 1: MESB Background	3
Section 2: Purpose	3
Section 3: Scope	4
Section 4: Summary of Accomplishments from 2022-2024 Plan	4
Section 5: Strategic Priorities	8
Priority 1: Expanded Interoperability Between PSAPs	8
Priority 2: Emergency Communications Continuity of Operations	9
Priority 3: Continue to Invest In, Upgrade, and Expand the ARMER System	10
Priority 4: Secure Funding – Stable, Predictable, and Sufficient	11
Priority 5: Staff Recruitment, Development, and Retention	12
Priority 6: Successful Transition to NG9-1-1 Core Services	13

DRAFT

Section 1: MESB Background

The Metropolitan Emergency Services Board (MESB) is a joint powers board and one of seven regional Emergency Communications Boards (ECBs) and Emergency Services Boards (ESBs) in the state of Minnesota, established to provide local governance on matters related to emergency communications. The MESB's membership includes representatives from the following entities:

- Anoka County
- Carver County
- Chisago County
- Dakota County
- Hennepin County
- Isanti County
- Ramsey County
- Scott County
- Sherburne County
- Washington County
- City of Minneapolis (in Hennepin County)

Section 2: Purpose

The purpose of this Interoperable Emergency Communications Strategic Plan (IECSP) is to assist the MESB and regional stakeholders to identify preparedness priorities and the associated planning, organizational, equipment, training, and exercise (POETE) activities necessary to achieve them.

The IECSP is a key component of the Integrated Preparedness Cycle (Figure 1), which provides an effective mechanism to support decision making, priorities funding allocation, and measure progress toward building, sustaining, and delivering capabilities based on a jurisdiction's/organization's threats, hazards, and risks. Using this process, stakeholders gain a better understanding of the full breadth of preparedness activities which affect their jurisdictions/organizations and allows for a deliberate approach to multi-year preparedness activity planning.

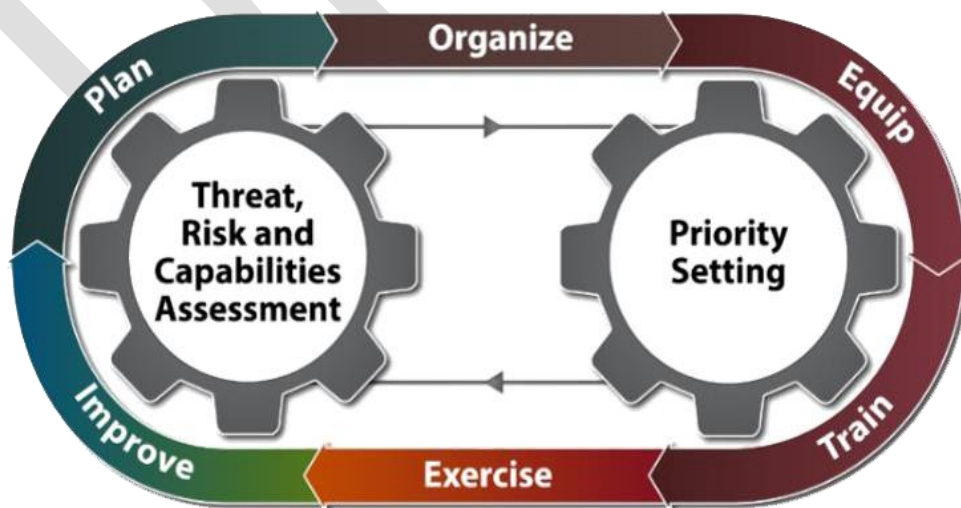


Figure 1: The Integrated Preparedness Cycle

Section 3: Scope

The scope of this plan is limited to the POETE activities necessary to improve interoperable emergency communication capabilities (9-1-1, land mobile radio (LMR), integrated public alert and warning systems (IPAWS) and wireless broadband) within the region.

The Integrated Preparedness Cycle for this plan includes the three-year period beginning January 1, 2025 and ending December 31, 2027.

Section 4: Summary of Accomplishments from 2022-2024 Plan

The 2022-2024 IECSP included eight strategic priorities:

1. Expanded interoperability between public safety answering points (PSAPs)
2. Increased continuity of operations options and capabilities
3. Continued investment, upgrade, and expansion of the Allied Radio Matrix for Emergency Response (ARMER) system
4. Secure, stable, planned, predictable, and sufficient funding
5. Recruit, develop, and retain emergency communications professionals
6. Successfully transition to Next Generation 9-1-1 (NG9-1-1) core services (NGCS)
7. Engage in industry research and standards development
8. Educate policymakers.

This section will provide an update on progress for the eight strategic priorities.

Strategic Priority 1: Expanded Interoperability Between PSAPs

After-action reviews (AARs) from the 2020 civil unrest and 2021 Operation Safety Net highlighted the need for expanded interoperability among metro region PSAPs, including workload sharing, regional situational awareness, and enhanced computer-aided dispatch (CAD)-to-CAD interoperability.

In 2021, the MESB issued and awarded a request for proposals (RFP) for consultant services to address a CAD-to-CAD interoperability and regional situational awareness solution. The MESB's 9-1-1 Technical Operations Committee (TOC) formed a workgroup to collaborate with the selected consultant to identify regional needs and develop an RFP to procure a suitable solution.

In 2023, the MESB issued an RFP for a CAD-to-CAD interoperability solution; two proposals were received. After several months of evaluating the proposals, the workgroup recommended the Board not award the RFP due to higher-than-expected costs and that the proposed solutions did not fully meet the desired technical specifications. In November 2023, the MESB voted to not award this RFP.

In August 2023, the Minnesota Department of Public Safety, Division of Emergency Communication Networks (ECN), announced its intention to acquire technology solutions to enhance statewide PSAP system interoperability and information-sharing capabilities, including

the ability to share CAD data. A small workgroup convened twice in late 2023 to discuss operational needs and contractual requirements with ECN.

By August 2024, ECN had awarded contracts related to 9-1-1 interoperability and data-sharing to two vendors. The MESB 9-1-1 TOC is currently evaluating these solutions to determine if they align with the needs of metro region PSAPs. Additionally, the 9-1-1 TOC is closely monitoring what state funding will be available to support these interoperability solutions under the awarded contracts.

Strategic Priority 2: Increase Continuity of Operations Options and Capabilities

As a result of a metro PSAP's call handling system (CHS) outage, in February 2024 metro PSAP managers and the MESB's 9-1-1 TOC began to focus not only on individual PSAP continuity of operations plans (COOPs), but on a regional plan which can be implemented whether one PSAP's operations are disrupted or ten. The region desires a uniform process which can be regularly trained to ensure a smooth and consistent process, regardless of agencies affected.

At the time of this writing, a workgroup is beginning to work on developing the regional plan. It is hoped that the plan will be finalized by December 31, 2024.

Strategic Priority 3: Continue to Invest In, Upgrade, and Expand the ARMER System

The ARMER system continues to progress in capabilities and technology. Since 2019, many metro counties, along with their municipal law enforcement agencies, began to implement encryption for law enforcement communications. In 2021, the Federal Bureau of Investigations (FBI) required all law enforcement data be transmitted over the air with Advanced Encryption Standard (AES) encryption. This required all law enforcement agencies in the state of Minnesota to plan and prepare for transition to AES encryption.

Minnesota Statutes allow for 9-1-1 surcharge fees to support the ARMER system, however, the current administration of these statutes is limited in scope. There will be continued activities to engage with the legislature and appropriate state agencies to encourage broadening the state language to be in accordance with the federal language surrounding the appropriate use of the 9-1-1 surcharge.

As of this writing, work continues to identify and acquire dedicated, stable funding to allow for continued upgrade and expansion of the ARMER network capabilities. This remains an issue in the 2025-2027 IECSP, due to equipment replacement required by the system vendor, as projected costs exceed fiscal capacity for partner agencies. Regional partners also have expressed an intent to investigate a regional system Customer Owned and Maintained (COAM) model for equipment maintenance.

In the last several years, there has been an increased need to respond to events outside of agencies' own jurisdiction. As a result of this ongoing need, a renewed focus on interoperability training and planning is desired.

Strategic Priority 4: Secure Funding – Stable, Predictable, and Sufficient

In 2021, the Federal Communications Commission (FCC) issued a ruling restricting how 9-1-1 surcharge funds could be used, requiring FCC approval for their use on LMR systems. As a

result, ECN limited the allocation of 9-1-1 surcharge funds for the Statewide Emergency Communications Board (SECB), removing ARMER from the list of eligible expenses.

In 2024, the MESB accepted a report analyzing the cost of providing public safety communications in the metro region. While not all agencies participated, a conservative estimate of 2023 costs revealed that the metro region, excluding state expenditures, spent \$128.3 million in recurring costs, along with an additional \$30.9 million in one-time costs to support public safety communications. This financial strain on municipal and county budgets leaves little capacity for the acquisition of additional technologies, such as CAD-to-CAD interoperability, over-the-air rekeying (OTAR) for the ARMER system, and the expansion of other technologies for PSAPs and the ARMER network.

At the request of the SECB's Finance Committee, the MESB developed and submitted regional needs documents in 2023 and 2024, outlining the region's requirements for 9-1-1 and ARMER systems. It is likely that a statewide initiative will be necessary to secure additional funding. Work continues in this area for the 2025-2027 IECSP planning cycle.

Strategic Priority 5: Staff Recruitment, Development, and Retention

Staff recruitment and retention remain key priorities for public safety agencies across the metro region, which have actively participated in several initiatives to address these challenges.

Many metro region PSAPs have taken part in joint recruitment fairs at various locations throughout the region, including prominent events like the Minnesota State Fair.

In 2023 and 2024, legislative efforts were made to establish statewide training standards and a certification process for public safety telecommunicators (PSTs). Although these efforts were not immediately successful, continued persistence is expected to yield results.

In 2022, 2023, and 2024, the MESB secured grant funding to provide resiliency training for PSTs, with a different approach taken each year. This vital training initiative is expected to continue through 2025 and potentially beyond.

In 2024, at 9-1-1 TOC meetings, discussions highlighted the possibility of establishing a Technical Analyst role at each PSAP, to be responsible for mastering and synthesizing inputs from various distinct technologies to create a coherent framework for evaluating technology selection, optimizing operational workflows, and leveraging community insights. It is anticipated that this need will be further explored and addressed in the upcoming planning cycle.

Strategic Priority 6: Successful Transition to NG9-1-1

The transition to NG9-1-1 Core Services (NGCS) necessitates close coordination with ECN. In 2022, ECN released an RFP for NGCS, an egress network, and a 9-1-1 control center, which proposals due by December 31, 2022. Evaluators begin reviewing submissions in March 2023; as of September 2024, no vendor has been selected and the likelihood of an award from that procurement is uncertain. Field implementation is not expected before late 2025 or 2026 at the earliest.

In May 2022, the MESB approved an NG9-1-1 transition plan for PSAPs, developed by consultants. This plan requires revisions pending the State's RFP outcome and extended timeline. In 2023, ECN engaged a consultant to create a transition plan for PSAPs in Greater

Minnesota with a stated outcome that insights gained from that planning process will be used for legislative funding requests. Metro region PSAPs are participating in the ECN planning process, though the integration of the region's transition plan into the state plan remains uncertain.

Between 2021-2023, the metro region implemented location-based routing (LBR) of wireless 9-1-1 calls, one of the major outcomes expected from the NGCS transition. This capability was achieved in advance of that transition due to device-based hybrid location technology, the emerging capabilities of wireless carriers, and the maturing level of the geographic information system (GIS) assets and technical resources in the metro region. LBR implementation resulted in a decrease in call transfers between PSAPs. In addition, in 2024, collaboration between MESB and ECN's 9-1-1 ingress network vendor, resulted in approximately 95% of existing 9-1-1 traffic (voice over Internet protocol (VoIP) and wireless) being migrated to a new unified ingress network which will ultimately streamline transition to a chosen NG9-1-1 vendor.

Strategic Priority 7: Support and Participation in Cutting-Edge Emergency Communications Research and Standards Development

In 2024, MESB personnel served as consultants, guiding Greater Minnesota GIS teams in implementation of LBR in their jurisdictions, replicating the success achieved in the metro region. This significant enhancement in location accuracy greatly improves first responders' response times to incidents.

Also in 2024, as part of the next planning cycle, MESB staff collaborated with the Minnesota State Patrol to develop geo-fencing capabilities possible with LBR. This initiative focuses on narrow freeway and highway areas under State Patrol jurisdiction, aiming to reduce time-consuming call transfers between State Patrol and city/county PSAPs.

Throughout 2023-2024, metro region PSAPs led efforts to leverage newer 9-1-1 applications to enhance emergency response. These applications include video integration, call tracking, artificial intelligence (AI), and modern visual reporting techniques.

While MESB staff and PSAPs demonstrate leadership in implementing newer technologies and supporting National Emergency Number Association (NENA) committees, their efforts do not yet reach the level of cutting-edge research and development of standards for emerging technological innovations. MESB staff and PSAPs will continue this implementation focus but will drop this priority for the 2025-2027 planning cycle.

Strategic Priority 8: Increase Policy Maker Understanding and Support for Emergency Communications

MESB staff regularly engage with board members to educate them on issues surrounding emergency communications. MESB board member support for emergency communications is high; MESB board members also have a high level of engagement with the subject.

MESB staff regularly meet with Minnesota legislators and encourage MESB board members to do so as well, to discuss issues surrounding emergency communications. Conversations are generally well-received, though don't always lead to increased funding, due to the myriad of funding needs across the state.

Future technology updates require MESB staff to continue to educate policymakers in any way they can. Education efforts must also be made by municipal and county staff within their

respective agencies, so policymakers understand how technology changes, funding, etc. will affect their agencies.

Section 5: Strategic Priorities

This section identifies priorities to help improve the region’s interoperable emergency communication capabilities during this Integrated Preparedness Cycle:

Strategic Priorities
1. Expanded Interoperability Between PSAPs
2. Emergency Communications Continuity of Operations
3. Continue to Invest, Upgrade, and Expand the ARMER system
4. Secure Funding – Stable, Planned, Predictable, and Sufficient
5. Emergency Communications Staff - Recruitment, Development, and Retention
6. Successfully Transition to NG Core Services

Priority 1: Expanded Interoperability Between PSAPs

In response to findings from the Civil Unrest (May-June 2020) AAR, prioritizing workload sharing and regional situational awareness is crucial for metro area public safety answering points (PSAPs). Establishing CAD-to-CAD interoperability in the metro region is essential for operational efficiency, both in daily operations and during critical events.

Planning Activities

The MESB 9-1-1 TOC continues work to evaluate the “Data Sharing” option outlined in the ECN’s Mapped ALI Solution contract (see page 5, discussion of the 2022-2024 IECSP Strategic Priority 1) awarded to RapidSOS and RapidDeploy. This assessment aims to determine the feasibility of long-term bi-directional CAD data exchange, ultimately enhancing interoperability and situational awareness across the region. Additional evaluations will explore collaborative vendor solutions with the Minnesota State Patrol to align operational needs and foster synergy.

Other options, such as shared CAD systems among PSAPs nearing contract expiration, may mitigate the need for extensive interoperability efforts, allowing a unified platform approach which will provide greater interoperability between PSAPs and first responders. Moreover, emerging vendor solutions targeting situational awareness between primary and secondary medical PSAPs will be monitored for their potential to enhance interoperability in the metro area.

The planning phase will also include recommendations on governance, funding, agency participation, and system capabilities, with a draft presented to the Board for approval.

Organizational Activities

The MESB 9-1-1 TOC will identify a vendor for CAD-to-CAD interoperability. This vendor will ensure robust network connectivity and application services for seamless data exchange among participating PSAPs. Utilizing cloud platforms like Amazon AWS, Google Cloud, or Microsoft

Azure will ensure security and cost-effectiveness, while adherence to NENA standards and best practices for API development will be prioritized.

Equipment Activities

A cloud-based solution with minimal on-premise equipment is favored, necessitating a thorough assessment of cybersecurity requirements to protect sensitive data during interoperability.

Training Activities

Once the systems are operational, comprehensive policies and procedures will be developed for both individual PSAPs and inter-PSAP collaboration. These guidelines will be integrated into each PSAP's training curriculum to ensure effective utilization of the interoperability system.

Exercise Activities

Post-training, regular quarterly or semi-annual exercises will be established to maintain proficiency in utilizing the during high-profile, multi-agency events. Consistent practice will enhance readiness and coordination among telecommunicators in live scenarios.

Priority 2: Emergency Communications Continuity of Operations

Each PSAP in the ten-county metro region has its own continuity of operations plan (COOP), but some emergencies extend beyond their jurisdiction, requiring regional coordination among PSAPs.

Planning Activities

Regional COOP planning enhances the collaborative efforts already outlined in individual PSAP plans. With 75% of the region's PSAPs utilizing shared or geo-diverse 9-1-1 configurations, the potential exists for cooperative PSAPs to share facilities and process 9-1-1 calls independently and securely across two locations.

A pioneering approach, initiated by the Ramsey County Emergency Communications Center (RCECC), demonstrates how PSAPs can leverage shared facilities to reroute abandoned traffic. This model offers a scalable solution for all metro PSAPs. Despite the current absence of fully implanted i3 NG9-1-1 environment, the existing 9-1-1 direct session-initiated protocol (SIP) architecture enables seamless routing of voice and text traffic using conventional methods via the Internet protocol (IP) addressing on the private emergency services IP network (ESInet). This setup, as shown by RCECC, ensures that the abandoned PSAP's staff, when relocated to RCECC's alternate PSAP site, can handle their own 9-1-1 call traffic using dedicated call-handling equipment at that location.

This is one example of how a shared systems approach can enhance resiliency in the region. As this initiative evolves, ESInet rules must be reviewed and refined in many ways that may also enhance service continuity planning across the region.

Organizational Activities

Implementing these innovative strategies requires robust funding, IT network modifications, and governance frameworks to ensure equitable cost distribution for shared technologies and facilities.

Equipment Activities

Ongoing upgrades to the ESInet and PSAPs' call-handling systems involve dedicated project management, budget allocation, and oversight to ensure seamless operation.

Training Activities

All PSAP personnel must be thoroughly trained on the procedures and protocols necessary for business continuity, ensuring that teams can maintain operational efficiency during any transition.

Exercise Activities

To guarantee readiness, regular COOP exercises are essential. These exercises not only train new personnel, but also reinforce critical skills among current staff, ensuring effective PSAP response when continuity is needed.

Priority 3: Continue to Invest In, Upgrade, and Expand the ARMER System

The ARMER system is the primary emergency responder communication tool throughout the ten-county metro area. A consistent, predictable maintenance and enhancement plan must be established that includes adequate sustainable funding. ARMER expansion capabilities should include a focus on cybersecurity, encryption capabilities, and making plans for Integrated Voice and Data (IV&D) and Key Management Facility (KMF). IV&D adds Project 25 (P25) data to the ARMER system allowing data features such as GPS location, Over the Air Rekeying (OTAR), and Over the Air Programming (OTAP). KMF is a server that manages and deploys encryption keys for subscriber units. The system may need to transition to support P25 Phase 2 Time-Division Multiple Access (TDMA)-based voice and data traffic to increase system capacity as well as Long-Term Evolution (LTE) push-to-talk capabilities if ARMER system loading increases, and additional frequencies are not available for further channel expansion. The metro area should also agree to make considerations to standardize on Advanced Encryption Standard (AES), which would allow system owners and users to plan accordingly to have the equipment necessary in place.

Planning Activities

The metro region should discuss the use of AES-based encryption and develop plans for its implementation. Interoperability between LTE push-to-talk equipment on ARMER must be defined and any limitations LTE users may experience must be clearly understood. The transition to ARMER P25 Phase 2 TDMA voice and data traffic will require coordination with the system owners and users to ensure backward compatibility while allowing new equipment onto the system. During the time frame of the strategic plan, researching options for IV&D, KMF, and TDMA would need to take precedence, so that the following strategic planning frame could build on that research.

Organizational Activities

The FCC inquiry and possible rule-making that would prohibit 9-1-1 fee diversion for narrowly defined non-9-1-1 uses may negatively impact the ARMER system funding. Currently, Minnesota Statutes allocate 9-1-1 surcharge fees to support the ARMER system. If the use of 9-1-1 fees for the ARMER system is prohibited by federal action, a new ARMER system funding stream will be needed.

Equipment Activities

Procure and implement the system software and hardware upgrades necessary to support AES encryption, IV&D, KMF, and/or P25 Phase 2 TDMA capabilities based on the plan described under the Planning Activities section above.

Training Activities

ARMER system user training will be required as new capabilities and features are introduced. Regular in-service training for all system users should be done on an annual basis but may need to be done more frequently depending on the operational changes associated with any specific upgrade or enhancement.

Exercise Activities

At a minimum, one annual large-scale, multi-agency training exercise should be conducted to include the use of Communications Unit Leader (COML) and Metro Region Communications Response Task Force (CRTF) resources.

Priority 4: Secure Funding – Stable, Predictable, and Sufficient

The emergency response continuum, from the initial 9-1-1 call to the conclusion of field operations, demands continuous system upgrades, maintenance, and hardware replacement. As technology evolves, lifecycles shorten, requiring mission-critical systems to operate 24/7, 365 days a year. This makes a stable, predictable, and sufficient funding source essential. The ability to take advantage of new tools and services capable of enhancing the metro region's strategic priorities will be directly dependent on the availability of adequate funding.

Planning Activities

While the 9-1-1 surcharge has been a consistent funding source, it has never been enough to fully cover the costs of the 9-1-1 and ARMER systems. With the increasing complexity of emergency systems – handling data far beyond conventional phone calls – new funding avenues must be pursued at the federal, state, and regional levels. Funding will need to consider the escalating volumes and complexities that come with serving a major metropolitan region.

Modern emergency communications systems are no longer stand-alone but part of integrated regional and statewide networks, necessitating coordination and interoperability. This creates new challenges for funding and procurement. Agencies now pool resources to make joint purchases of public safety applications, reducing costs while expanding capabilities beyond what individual agencies could achieve alone. Additionally, there is a shift toward Software-as-a-Service (SaaS) models for hosted, cloud-based critical applications, providing a predictable expense structure that includes procurement, upgrades, security, and maintenance.

NG9-1-1 systems require precise GIS data for point-in-polygon call routing. These datasets, which define PSAP and emergency service boundaries, must be continually updated and corrected within 24-48 hours of any detected errors. The ongoing maintenance of these mission-critical datasets is now as crucial as the Master Street Address Guide (MSAG) in Enhanced 9-1-1 (E9-1-1) systems. With the shift from E9-1-1 to NG9-1-1, this responsibility is moving from 9-1-1 service providers to GIS data creators, making it vital that these costs are included in the overall NG9-1-1 system funding. The ongoing funding of county level GIS staff to

support public safety has become mission-critical to the provision of 9-1-1 service in the metro region and must be factored into county budgeting.

Organizational Activities

Collaborative planning is necessary to fully understand the total costs associated with the procurement and operation of the emergency communications systems. Once these costs are clear, a shared funding formula should be developed, outlining the financial responsibilities for state, regional, and local entities. It is critical to recognize that grants are not a sustainable long-term funding solution and should be used only to jumpstart components. A dedicated, ongoing funding stream must be established to take over once grant funds expire. Achieving this will likely require legislative action to ensure the funding is not only adequate but also stable and protected from political shifts. Emergency communications funding should remain as non-partisan as possible to ensure the uninterrupted operation of these vital systems.

Equipment Activities

All emergency communication equipment must be part of comprehensive lifecycle replacement plan. The total cost of ownership, including maintenance and replacement, should be built into the emergency system's funding model, ensuring consistent performance and readiness over time.

Training Activities

None identified.

Exercise Activities

None identified.

Priority 5: Staff Recruitment, Development, and Retention

Finding, training, and retaining highly skilled telecommunicators and radio technicians continues to be a significant challenge for metro region agencies, a challenge that will extend into the 2025-2027 planning cycle. While the issue is complex, retaining experienced personnel is crucial for ensuring public safety agencies can effectively manage emergency responses – answering, analyzing, prioritizing, dispatching, and coordinating with public safety response agencies within their service areas.

Planning Activities

Integrating staff retention and recruitment strategies into each agency's long-term planning is essential. It is widely recognized that retaining existing staff is more cost-effective than recruiting and training new hires, despite the higher salary bands for seasoned professionals. Many PSAPs are persistently understaffed, which leads to increased stress on current employees, extended hours, and unsustainable overtime costs in the long term.

PSAPs should consider establishing a Technical Analyst staffing role to support personnel in maximizing and optimizing the use of emerging 9-1-1 technologies beyond traditional voice and text calls, including AI, multi-media, and advanced reporting tools.

On the LMR side, the metro region ARMER system administrators are considering a role for a regional ARMER technician, which can help all metro region ARMER administrators on an as-

needed basis. This may be more effective than each agency trying to hire for individual agency positions from a rapidly shrinking field.

Organizational Activities

PSAP management and policymakers must recognize telecommunicators are equal partners in the emergency response continuum. Historically, pay scales, career advancement opportunities, and funding have not reflected the critical role telecommunicators play in identifying emergencies, determining appropriate responses, and coordinating the necessary resources. A successful emergency response depends on four key partners: PSAPs, law enforcement, fire and EMS, all of which are equally vital.

In 2024, there are federal bills to upgrade the federal classification of telecommunicators from clerical workers to protective service workers in the Standard Occupational Classification (SOC) to better reflect the life-saving work they perform each day. If these efforts are unsuccessful in the 118th Congress, they will likely be made again in successive Congresses. As noted earlier, 2023-2024 Minnesota efforts to training and certification of telecommunicators were unsuccessful, but efforts will continue in the future.

Equipment Activities

Equipping alternate work locations could allow telecommunicators to continue working safely during high-volume or multi-jurisdictional events, such as natural disasters. Providing access to all mission-critical applications from alternate locations can expand available staffing to better manage surges in call volume, while also improving COOP option.

Training Activities

Establishing minimum training standards and a solid curriculum for new telecommunicators lays the groundwork for long-term career development. Ongoing training for veteran telecommunicators is essential to maintain consistent, effective emergency response coordination. Each PSAP's training program must also include resiliency training, peer support, and access to professional counseling services to help telecommunicators cope with the stress and emotional impact of repeated exposure to traumatic incidents.

Exercise Activities

None identified.

Priority 6: Successful Transition to NG9-1-1 Core Services

NGCS are designed specifically to support mobile and nomadic telecommunications services by utilizing the location of the calling device at the time of the emergency call as the basis for routing to the PSAP responsible for serving the caller's location. In addition, NGCS support multi-media communications that enable 9-1-1 callers to make voice, text, or streaming video calls, as well as being able to send images or video to the 9-1-1 system.

The priority and high-level associated activities haven't changed from the 2022-2024 planning cycle, though the major NG9-1-1 milestone of LBR was achieved in 2024. A major difference expected in this planning cycle is examining and pursuing the option of other technologies and vendors involved in supporting the transmission of video, images and other potential multimedia inputs that wasn't envisioned in 2022, when a more conventional approach of using existing 9-1-1 nationwide telecommunications providers.

Planning Activities

NG9-1-1 systems offer many options for 9-1-1 callers which require more complexity within the system itself and in the management of the system. The transition from the current E9-1-1 system to NGCS will be made in multiple steps over an extended timeframe, all done while continuing to take emergency calls 24x7, 365 days per year. Each step requires advance planning, testing, and implementation.

NGCS involve coordination with multiple 9-1-1 service providers including ESInet, system security, ingress aggregation and conversion, call routing, as well as ongoing system monitoring and management services.

Organizational Activities

The transition from E9-1-1 will require a cooperative effort from individual PSAPs, the regional emergency services boards, ECN, and the SECB. The transition plans and processes will not be a one-size-fits-all solution. Some components of the NGCS may be implemented in stages at the regional level as the underlying GIS data and answering applications become able to support NG9-1-1 call delivery and routing. NG9-1-1 GIS data creation, maintenance, and error correction processes need to be developed and tested, which will reduce the risk of depending on end-of-life legacy infrastructure.

Equipment Activities

PSAP answering applications must support 9-1-1 call delivery from NGCS utilizing SIP with caller location information delivered at the time of the call using the Presence Information Data Format-Location Object (PIDF-LO) protocol. PSAP logging equipment must be able to support call metric and content capture in an NG9-1-1 standard compliant environment.

Training Activities

Telecommunicators must be trained as each stage in the transition is implemented, including training on the answering application used to answer the calls. It will also include training in the interpretation and use of the additional information data that will become available to telecommunicators in the NG9-1-1 environment.

Exercise Activities

None identified.



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: October 17, 2024
Agenda Item: 4C. Approval of 2024 Regional
SECB Grant Funding Priorities
Presenter: Jacobson

RECOMMENDATION

MESB staff recommend the 9-1-1 TOC include the following items as regional funding priorities for grants available in 2025 (in priority order):

- Indoor Mapping (colleges, large venues, industrial facilities)
- Emergency Communications Center Staff Recruitment/Retention Workload Study
- Regional Communications Interoperability Planning
- Regional Smart 911 Rollout
- Exchange Link Pilot
- MnDOT Camera integration pilot

BACKGROUND

Emergency Communication Networks (ECN) Division and the Statewide Emergency Communications Board (SECB) require regions to annually approve regional funding priorities. These priorities are to include projects/items/concepts for which regions can apply for grant funds through the SECB process. In the past, grants were only open to radio projects.

ISSUES & CONCERNS

9-1-1 and some land mobile radio projects are eligible for grant funding. As a result, both the 9-1-1 and Radio TOCs develop lists of regional funding priorities. Since grants are structured to cover both 9-1-1 and radio projects under the same competitive process, these priorities ensure the region is well-positioned to secure funds.

Though the MESB prioritizes its funding needs, the grant may have differing priorities for funding based on state grant objectives and the Statewide Emergency Communications Board (SECB) funding hierarchy. MESB staff focus on submitting applications for the highest-priority projects from each area.

Currently, the only available grant is the SECB grant, covering projects eligible from July 1, 2025, to June 30, 2026. However, should any new grant opportunities arise that are not earmarked for a specific purpose (e.g., TCPR training), having a prepared list of regional needs allows for timely and competitive applications.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: October 17, 2024
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SECB Grant Funding Priorities
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FINANCIAL IMPACT

None to the MESB other than staff time to apply for and process grants. Equipment likely requires a 50% match from the awarded agency.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL

SECB NG911 Meeting September 18, 2024

Announcements

- Please continue to reference emails sent by Steve Tait that highlight PST Training and Education opportunities in the state.

Action Items

- Periodic NG911 GIS Data Re-submission, a best practice document, is attached to this report. This document will be moving to the SECB Executive Committee for final approval.

New Business

- Discussion took place on whether to amend the official NG911 Committee roster to include leadership names and contact information of our various workgroups.

Old Business

- Best practice document, “MSAG and ALI TN Changes to Support NG911 Data Preparation” is attached to this report for regional review and feedback. The NG911 Committee would like to put this document up for approval at our October meeting.
- The Mapped ALI Solutions Committee (a workgroup comprised of regional representatives) have just concluded a portion of the demos from vendors and are drafting their recommendations. These recommendations will be presented at the October SECB meetings. Leadership from ECN and SECB will determine if/how the committee’s recommendations will be adopted. The Phase 1 priority of this committee is to review the mapped solutions. Phase 2 will be review of the additional applications each vendor provides. PSAP input will be sought.
- Kent Wilkening reminds that the FY 2024-2025 one-time NG911 appropriation (\$7 million) must be spent by June 30, 2025. If any PSAP has questions regarding what this money can be used to purchase, contact Kent ASAP.
- ECN Grant Programs: GIS Mapping for School Facilities will remain on the next few NG911 agendas with the discussion guided by Rebecca Roberts (ECN Grant Coordinator).
- Location Based Routing (LBR): Greater MN PSAPs are working with Verizon (the last of the three major carriers to turn this up in greater MN) to submit their boundaries as it relates to LBR. No needs currently from Metro PSAPs as the MESB already has the necessary information available in the GeoComm. Carriers have been directed to Marcia Broman if they have any questions.
- SECB Standards/Best Practice Development
 - Multi-line Telephone System Guidance Documents: Sara Boucher-Jackson is leading a workgroup developing a one-sheet guidance for multi-line telephone systems. This draft document is currently under review by the NG911 Technical and Operation workgroups. With their feedback, the draft will be brought to the October NG911 meeting for discussion before being sent to the regions for review. Staying on schedule, this one-sheet should be available for distribution in January 2025.
 - Recommendations re: 911 Network/Service Disruptions (Response, Reporting, & Tracking): Jill Bondhus is leading a workgroup currently establishing the groups priorities around how to best inform PSAPs on procedures when experiencing a 911 network or service disruption. Likely the group will be initially designing a reporting

form before working on a guidance document as they would like the capture data on issues PSAPs are currently experiencing.

Standing Work Group Reports

- Mental Health Crisis Response
 - Tony Martin advised his group is developing education materials that can be used for elected officials. Next meeting is TBD.
- Operations
 - The bulk of the meeting was discussion on the GIS school mapping grant.
- Technical
 - Attended a presentation from DHS/CISA on offerings from their department to PSAPs at no cost. There are opportunities for PSAPs to participate in vulnerability scanning and cyber fitness assessments if they are interested.
- GIS
 - The GIS workgroup has made great progress in multiple areas of the validation process.

Special Reports

- NG911 Transition
 - Joe Fick updated the group on the progress surrounding PSAP packet submission.
- GIS Data Collection and Validation
 - 73% of the state has moved through the validation phase with 59% uploading to the aggregate database. Mark Lallak and Jill Bondhus are happy to help with any meetings as needed.
- Cybersecurity
 - ECN contracted with the firm GTel Advisors to work with PSAPs on identifying PSAP Cybersecurity vulnerabilities. PSAP engagement is now between the vendor and the PSAP meaning ECN will not get any details about how the responses are going and the percentage of participation (which is by design). Interested PSAPs should look for a message this week from GTel Advisors.

Next meeting of the NG911 Committee is Wednesday, October 16, 2024, at 1pm.

MINNESOTA STATEWIDE EMERGENCY COMMUNICATIONS BOARD

Best Practice: Periodic NG911 GIS Data Re-submission

Summary

It is best practice for Next Generation 911 (NG911) Geographic Information System (GIS) Data Suppliers to re-submit NG911 GIS data to the MN NG911 Enterprise Aggregate GIS Database (Aggregate Database) quarterly, with a minimum frequency of at least annually¹.

Background

With the ever-rising number of Minnesota counties successfully completing the NG911 data validation and submission process, there is a growing need to maintain that data going forward. While a NG911 Core Services vendor has not yet been identified, the GIS data already submitted is being utilized for related operations, so continuing to maintain the data after the initial submission will benefit the participants who do so.

The following are suggested best practices that NG911 GIS Data Suppliers (Suppliers), also known as Data Producers, can use for maintaining and updating their NG911 related data after it has been submitted to the Aggregate Database. These are recommendations only. No Suppliers are required at this point to maintain data that has already been submitted to the Aggregate Database.

Best Practice for Periodic NG911 Data Submission by Data Suppliers/Producers

- **NG911 Data Submission Time Frame:** It is recommended that the full NG911 dataset (Address Points, Road Centerlines, emergency service polygon layers) be re-submitted at least **annually** at a minimum, though **quarterly** would be a more desired timeframe.
 - If a Supplier has frequent modifications to the NG911 dataset, it is recommended that Suppliers and PSAPs discuss if more frequent re-submissions are needed for local operations.
 - Examples of possible reasons for more frequent re-submissions (not exhaustive):
 - Any geometric changes to datasets (including additions or deletions)
 - Changes to any NG911 mapped attributes (e.g., names, address numbers, Emergency Service Zones [ESZs], etc.)
 - For more frequent re-submissions, single layers could be updated instead of the full dataset.
 - Example would be if only addresses are changed, only submit addresses layer.
 - Note: Full Public Safety Answering Point (PSAP) supplier coverage should always be used when resubmitting data. Do not limit re-submissions to isolated geographical areas.
 - Suppliers are recommended to verify that changes to one layer do not impact other layers.
- **NG911 Data Validation:** It is recommended to re-run Validation Steps 4-6 before re-submitting to help minimize possible errors from being introduced into the Aggregate Database. (*Note: Steps 4-6 include Address Validation, Master Street Address Guide [MSAG] Validation, Polygon Gaps & Overlaps Validation, and Location Data to Emergency Service Zone Validation.*)

¹ This recommendation for NG911 GIS data re-submission is intended to be helpful guidelines for Suppliers until a Core Services vendor is selected and the NG911 system is in a live environment.

Document History

Created: 06.13.24

Approvals: SECB GIS Workgroup - 06.13.24

SECB NG911 Committee - 07.17.24 (Disseminated for Regional Review)

SECB NG911 Committee -

Revisions:

Best Practice: MSAG and ALI TN Changes to Support NG911 Data Preparation

Summary

It is best practice for Next Generation 911 (NG911) Geographic Information System (GIS) Data Suppliers (Suppliers), in coordination with their Public Safety Answering Point (PSAP), to submit Master Street Address Guide (MSAG) and Automatic Location Identification (ALI) telephone number (TN) record change requests to their current 911 service provider to correct known MSAG and ALI TN data errors detected during the NG911 GIS data preparation process¹.

Background

Preparation of NG911 GIS data involves performing various data quality validation checks to identify anomalies, such as data inaccuracies or inconsistencies between geospatial data and the legacy 911 data used in a PSAP's current 911 system. As a result, in some instances, the validation process may identify data errors in existing MSAG and ALI TN data.

911 service providers have proprietary methods for PSAPs to submit requests to correct or change legacy MSAG and ALI TN data. Minnesota's two current 911 service providers, Lumen/Intrado and Independent Emergency Services (IES), each have their own data system for PSAPs to enter these types of change requests.

The following are suggested best practices for Suppliers, also known as Data Producers, when encountering data errors in existing MSAG and ALI TN data. **These are recommendations only.**

Best Practice for MSAG and ALI TN Changes to support NG911 Data Preparation

- It is best practice for Suppliers and/or their PSAP(s) to submit MSAG and ALI TN corrections to their current 911 service provider to correct known MSAG and ALI TN data errors detected during the NG911 GIS data preparation process.
- It is recommended that Suppliers and PSAPs who need guidance on how to submit MSAG and ALI TN data change requests on their 911 service provider's proprietary data system consult with the designated data contact at their 911 service provider for training.
- Suppliers or PSAPs can contact a member of the SECB NG911 GIS Workgroup leadership team if they desire additional guidance or support. Contact information for the SECB NG911 GIS Workgroup leadership team can be found at:
 - <https://dps.mn.gov/entity/secb/committees/Documents/NG911%20Committee/NG911%20Rosters/NG911-Roster-September-1.pdf>

¹ These recommendations are intended to provide helpful guidelines for Suppliers and are based on general knowledge available at the present time. Specific data requirements for operating the NG911 system, once a NGCS vendor is selected, may necessitate revisiting this best practice at a future date.

Document History

Created: 07.11.24

Approvals: SECB GIS Workgroup – 08.08.24

SECB NG911 Committee -

Revisions: 09.09.24 – Revised “Best Practice for MSAG and ALI TN Changes to support NG911 Data Preparation” section to update contact information for peer support.

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
9-1-1 GIS/Data Report
October 17, 2024 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's GIS Data Hub (GDH), and 1Spatial's platform.
- 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 it is determined that 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 **September** NG9-1-1 validation results:
 - i. MESB sent 204 new referrals related to address validation to county GIS data producers for GIS data updates. (There were 6 additional GIS referrals still outstanding that were carried over from August). In most cases, these referrals dealt solely with timing issues where the address points went into the regional GIS data in advance of the road centerline segments.
 - ii. MESB made 4 referrals for GIS updates resulting from VoIP 9-1-1 call location validation.
 - iii. MESB also issued multiple ALI Telephone Number record change requests (TN CRs) for needed wireline location corrections.
- e. The past month, MESB has continued its work with county GIS partners on geometry finetuning based on validations from the 1Spatial platform.
- f. The **October** full regional NG9-1-1 data validation run will be conducted on **10/11/24**. Due to the timing of this report, the October 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 **September**, MESB processed approximately 180 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 the previously described process of GIS updates driving MSAG updates, 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. **Interagency GIS Support Agreements:** A concept under discussion is that the documentation of GIS support functions provided by county GIS departments to MESB PSAPs would be included in each MESB county's 9-1-1 plan. Those county plans will then become part of the MESB Regional 9-1-1 Plan approved by the MESB Board and filed with the State of Minnesota. Jill Rohret will have further information on this in 2025 as that effort starts to take shape.
5. **Wireless Call Routing:** MESB processes wireless routing updates for all carriers on behalf of metro area PSAPs. Should PSAPs want the routing a specific 9-1-1 call reviewed, they can email Jake Jacobson, MESB 9-1-1 Manager. MESB staff will investigate or recommend the PSAP open a ticket with the carrier. Recently, MESB has been investigating some AT&T Mobility LBR-routed misrouted calls reported by the Minnesota State Patrol. These misroutes were tied to an error made in AT&T/Intrado's provisioning of MESB's PSAP boundaries into their internal systems.
6. **School Mapping Legislation:** The metro area is in a discovery phase regarding school mapping and has begun gathering information about what is involved with an effort of this type and how best to gain the necessary stakeholder involvement. A subgroup of TOC members, involving representatives of Anoka, Dakota, Hennepin, Ramsey, and Washington County PSAPs, PSAP technical support, and county GIS met in September to start the discovery process.
7. **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 Periodic NG9-1-1 GIS Data Resubmission:** This has been accepted by the Minnesota State Emergency Communications Board (SECB).
 - b. **Best practice on MSAG and ALI TN Change to Support NG9-1-1 Data Preparation:** The SECB is discussing this best practice.
 - c. **Other GIS Workgroup Activities:** Also underway: Peer-to-peer outreach with counties that have not yet submitted data to the DPS NG9-1-1 database; Best practices and/or resource materials development for edgematching data, required match rates, and data submission schemas. In addition, the workgroup has had discussion on the National Address Database and planned changes to the EGN/MnGeo 1Spatial platform.
8. **MESB Staff Notes:**
 - a. **MESB GIS Specialist,** Elizabeth Spracher-Moore is now Elizabeth Clausen. Jake Jacobson has notified PSAPs of her new email address.
 - b. **MESB 9-1-1 Data Coordinator,** Marcia Broman, retires on October 31, 2024. She expresses her heartfelt thanks to each of the 9-1-1 TOC members, now and in the past, for their unflinching dedication to the citizens of the metro region. It has been an honor and privilege for her to serve alongside you all. As of November 1st, please contact Jake Jacobson or refer day-to-day 9-1-1 Data/GIS items to 911coord@mn-mesb.org. Marcia's future contact information will be shared with PSAP managers before she retires or is available through Jake.

ONGOING ACTIVITIES

9. 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.

10. **Regional Data Viewer:** PSAPs are encouraged to use the [Metro Regional Dataviewer](#) 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.

11. **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 system used at many metro PSAPs.

12. 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 on the Commons.) 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)**.

**Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
9-1-1 Network Report
October 2024 Meeting**

MN NG911 RFP Status – Pending

Count Volume 3rd Quarter 2024

Region	#of Calls	% of Total
MESB	559,991	69.6%
Greater MN	244,252	30.4%
Total	804243	

- More detailed breakout to follow in weekly reports and for next month’s TOC.

9/18 Sherburne County cut over to geo-diverse configuration

- Nodes at existing Elk River location and new site, Zimmerman.
- Zimmerman will be considered the PSAP prime location. Elk River becomes the backup.

No significant network disruptions in the metro area.

- 9/30/24 Service disruptions reported by Verizon and ATT nationwide. Cell phones locking into SOS mode. Issue believed to have stemmed from Hurricane Helene outcome.
- Reminder – Keep Jake informed if having network issues.
- Let Jake know if you have a Lumen network ticket or have CHE issues which need escalation.

REMINDER FY 2024-2025 NG911 Transition Funding, need to

Return spreadsheet to Kent Wilkening. Recommend by end of 2024

- This funding must be spent on projects related to the PSAP's transition to NG911.
- Expenditures related to this special appropriation must be tracked separately from the PSAP's normal 911 Special Revenue Account distributions. DPS-ECN recommends keeping detailed records regarding expenditures made with this funding.
- **Any unspent funding on June 30, 2025 must be returned to the 911 Special Revenue Account."**
- What types of projects can my PSAP use this funding for?

"The legislative appropriation specifies that this funding must be spent on projects that will help eligible PSAPs improve their NG911 capabilities. It is important to note that the allowable uses of these funds are more restrictive than the regular 911 Special Revenue Account distributions that eligible PSAPs receive on a monthly basis.

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
9-1-1 Network Report
October 2024 Meeting

DPS-ECN recommends that PSAPs prioritize their NG911 Transition funding expenditures on the following types of projects:

- GIS data collection, validation, & ongoing maintenance
- Cybersecurity measures to protect PSAP systems
- Call Handling Equipment (CHE)"
- What resources are available to help my PSAP select appropriate projects?

"The DPS-ECN PSAP Support Coordinator (Kent Wilkening) and representatives from Mission Critical Partners (MCP) are available to help PSAPs identify and prioritize projects that can be funded with this special appropriation.

- Who do I contact if I have questions?

Please contact Kent Wilkening, the DPS-ECN PSAP Support Coordinator, at 507-360-9161 or kent.wilkening@state.mn.us.

Analysis Continues with Mapped ALI vendor assessment given decisions

- While the 9-1-1 TOC informally recommended RapidDeploy as the preferred Mapped ALI vendor for all metro-area PSAPs in September, some PSAPs are still interested in reviewing RapidSOS, if nothing other than to understand the capabilities of its no-cost offering, which PSAPs are free to explore. A presentation from the CEO of RapidSOS UNITE is scheduled for late October.
- Heidi Hieserich, MESB's representative to the SECB Mapped ALI workgroup, reported that the SECB's assessment of the two awarded vendors is progressing slower than expected. This delay allows time to further evaluate RapidDeploy's offerings, which the 9-1-1 TOC prioritized in the September meeting. No decisions from the SECB are expected until mid-first quarter 2025.

Continuing Review of Network Routing Rules

- Jake continues to work through routing rules (Abandonment, alternate, etc) with each PSAP.