



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

April 17, 2025, 10:00 a.m.

1. **Call to Order** – Kari Morrissey, 2025 Committee Chair
2. **Approval of Agenda** – Morrissey
3. **Approval of February 20, 2025 Minutes** – Morrissey
4. **Action Items**
  - A. Approval of 2025 Regional Needs Document – Jill Rohret
  - B. Appointment of Two to School Mapping RFP Evaluation Workgroup – Rohret
  - C. Reschedule the June 19, 2025 Meeting – Rohret
5. **Discussion Items**
  - A. Review/Feedback for SECB NG9-1-1 Best Practice: NG9-1-1 GIS Data Validation Match/Success Rate Guidelines – Janelle Harris
  - B. Indoor School Mapping Update – Rohret
  - C. SIP for Administrative Lines – Rohret
  - D. Text Backups - Rohret
  - E. Mental Health Call Processing Standard – Tony Martin
  - F. PHMSA Rule – PSAPs to Receive Hazmat Train Data from Railroads – Darlene Pankonie
  - G. Artificial Intelligence – Morrissey
  - H. Cardiac Arrest Awareness Training – Scott Haas
  - I. Update NHTSA Grants to 9-1-1 – Rohret
  - J. 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 – Harris/Brent Anderson
  - F. SECB IPAWS Committee – Morrissey
  - G. Minnesota Sheriff's Association PSAP Subcommittee Report – Bowler
  - H. Regional COOP Update – Rohret/Hayes
  - I. Blue Ethos Training – Jacob Kallenbach
  - J. MESB 9-1-1 Report (attached) – Rohret
7. **New Business**
8. **Announcements** – None
9. **Adjourn** – Morrissey

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Meeting Minutes  
February 20, 2025**

**Committee Members Attendance:**

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

M Health EMS – **absent**  
Metro Transit – Chad Ladda  
Minneapolis – Leticia Cardenas  
North Memorial – Nick Jost  
Ramsey County – Dan Palmer  
Ridgeview EMS – John Scheuch  
Scott County – Carrie Bauer  
Sherburne County – Laura Anderson  
St. Louis Park – **absent**  
U of M – Joe McCollow  
Washington County – Darlene Pankonie

**Alternates/Guests:** Marv Bachmeier, *Code4Group*; Jill Bondhus, *ECN*; Kelley Callahan, *Independent Emergency Services*; Dan Craigie, *GeoComm*; Laura Espy, *RCECC*; Chad Gappa, *Motorola*; Dawn Kenyon, *Hennepin County*; Mike Mihelich, *Ramsey County*; Kevin McNallan, *Anoka County*; Steve Tait, *ECN*; and Dave Taylor, *IES*.

**MESB Staff:** Elizabeth Clausen; Jacob Kallenbach; Pamela Oslin; and Jill Rohret.

**1. Call to Order**

The meeting was called to order at 10:01 a.m.

**2. Approval of Agenda**

*Motion made by Darlene Pankonie, seconded by Tony Martin to approve the February 20, 2025 9-1-1 TOC meeting agenda. Motion carried.*

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

Brent Anderson said that he and Heidi Hieserich were present at the January 9-1-1 TOC meeting but were not listed in the minutes.

*Motion made by Pankonie, seconded by Susan Bowler to approve the January 16, 2025 9-1-1 TOC meeting minutes as amended. Motion carried.*

**4. Action Items**

**A. Formation of Regional COOP Workgroup**

Jill Rohret said that the MESB is looking for members to participate in a workgroup focusing on Regional COOP planning. Members of the 9-1-1 TOC volunteered for the workgroup.

*Motion made by Martin, seconded by Pankonie to create the regional COOP planning workgroup.  
Motion carried.*

## **5. Discussion Items**

### **A. 2025 9-1-1 TOC Meeting Schedule**

Rohret said many members of the 9-1-1 TOC responded positively to moving away from the monthly 9-1-1 TOC meetings in favor of quarterly or every other month meetings. The newly formed Regional COOP workgroup would meet in March 2025, and the 9-1-1 TOC would reconvene in April on the new schedule. This would be a trial phase prior to amending the bylaws at a future date.

Martin said he would like to keep the monthly meetings reserved as a timeslot or placeholder so workgroups could meet on off months.

Bowler and other members of the 9-1-1 TOC show their support for the recommended every other month schedule.

### **B. Indoor School Mapping**

Rohret said MESB and other regions are determining the feasibility of pursuing a joint procurement of school mapping services. In 2024, the Minnesota Legislature approved allocating \$7 million from the 9-1-1 special revenue fund for this purpose. To avoid possible inequitable distribution, it was suggested that the regions should submit one joint application for the grant, conduct a joint procurement, and have one region manage the procurement and implementation of the mapping services on behalf of the entire state. ECN will allow such an application so long as it is accompanied by an executed agreement between the regions prior to submission. Positive feedback has been received from the Central and South Central regions.

Pankonie asks who would pay for the school mapping fees after the funding deadline of June 2026.

Rohret said she is uncertain. More information will be known on future funding as the process of acquiring services continues.

Kari Morrissey said it would be helpful for PSAPs to have preplanned talking points while discussing mapping with schools to ensure uniformity and to help avoid confusion.

### **C. 2025 Regional Needs Document**

Rohret gave a brief overview of the 2024 regional needs document. She said the committee should read the document and bring feedback for possible additions/modifications at the April 9-1-1 TOC meeting, as it is due to the SECB by May 30, 2025.

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

Martin said that DPS/ECN have an updated infographic for 988 available on their website. The group also discussed NENA best practices and standards.

### **E. NENA SBP/CIF Conference**

Morrissey gave a brief introduction on the elements of AI in public safety discussion which occurred at the 2025 NENA SBP/CIF conference.

### **F. NHTSA Grants to 9-1-1/Possible Regional CAD-to-CAD Opportunities**

Morrissey said there are possible grant opportunities that could help contribute towards greater regional cooperation and CAD-to-CAD opportunities. She gave a brief update on these grants.

Martin suggested the MESB and county grant specialists coordinate in identifying and targeting grants useful to the region.

Rohret said she would add this point as a discussion item and investigate deadlines prior to the April 9-1-1 TOC meeting.

### **G. ECN Status Update**

Jill Bondhus and Steve Tait said that ECN has COOP plan templates that can be provided to the newly created workgroup and/or PSAPs. They reminded the committee about the June 30, 2025, deadline for the one-time funding. Please reach out to them with any questions.

## **6. Reports**

### **A. SECB Mapped ALI Workgroup**

Anderson gave a brief update on the SECB Mapped ALI workgroup. Anyone interested in joining the workgroup please reach out to Jill Rohret or Heidi Hieserich.

### **B. PSAP Operations Roundtable Workgroup**

Rohret said the minutes from the previous meeting are in the packet.

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

Kevin McNallan said the workgroup discussed security practices and standards for PSAPs.

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

Morrissey said the multiline telephone document is in the process of being updated and will be added to the website once finished.

### **E. SECB NG9-1-1 Committee**

Janelle Harris said the committee discussed training opportunities and the upcoming PSAP conference.

### **F. SECB IPAWS Committee**

Morrissey said there are no updates.

### **G. Minnesota Sheriff's Association PSAP Subcommittee Report**

Bowler said the committee discussed encryption and PST certification.

### **H. Blue Ethos Training**

Jacob Kallenbach said the resiliency training in coordination with Blue Ethos has started. There are still numerous dates with spots available. Please reach out to him to register additional spots and provide feedback on the training.

Anderson said that he has received positive feedback on the training.

### **I. MESB 9-1-1 Report**

Rohret said the report is in the meeting packet.

## **7. New Business**

### **A. SECB Legislative Committee**

Rohret said she is the Chair of the SECB Legislative Committee for this session. Please reach out to her with legislation-related ideas.

**8. Announcements – None**

**9. Adjourn**

The February 2025 9-1-1 TOC meeting adjourned at 11:23 a.m.

Draft





## METROPOLITAN EMERGENCY SERVICES BOARD

**Meeting Date:**

**April 17, 2025**

**Agenda Item:**

**4A. Approval of Regional  
Needs Document**

**Presenter:**

**Rohret**

### **RECOMMENDATION**

Staff recommend the 9-1-1 TOC recommend approval of the 2025 regional needs document.

### **BACKGROUND**

In late 2022, the Southwest Emergency Communications Board (SWECB) created a document to include regional and individual county ARMER funding needs. This document was discussed at the SECB Finance Committee on February 9, 2023; the Finance Committee formally asked each region to complete a regional needs document and return it to the SECB Grants Workgroup by May 2023. Subsequently, the SECB Finance Committee requested regions annually update this document and submit it to the Committee by May 31 of each year.

### **ISSUES & CONCERNS**

Though the original communication out to regions expressly stated that only ARMER needs should be included, MESB staff felt it is important to also include some 9-1-1 needs, as the state is not funding all 9-1-1 needs and the direct appropriation to each PSAP cannot cover all 9-1-1 related needs. For the 2025 document, the SECB Finance Committee asked for 9-1-1 projects to be included, as well as all regional and individual agency projects which are known at this time.

Several items were added for regional 9-1-1 projects for 2025, as well as individual agency projects; some items were removed from the 2024 version, and cost estimates were updated for all items.

**At the time of this writing, MESB staff has not heard from all agencies to know if there are individual agency projects which should be included.** The document included in the 9-1-1 TOC packet is as complete as our current information allows. It is possible the document may be updated between when the 9-1-1 TOC packet is distributed and the 9-1-1 TOC meeting. The most current version will be displayed during the 9-1-1 TOC meeting.

The 9-1-1 items included as regional projects in this document are: PSAP mutual aid/CAD-to-CAD interoperability solution; PSAP Radio Console Replacement; Feasibility and Cost Effectiveness Study on Regional Purchase of PSAP Technology; Comprehensive PSAP Staffing and Operations Study; Geo-Diverse 9-1-1 Call Handling Equipment ESInet Connections; GIS Software Services – Web-Based Map Viewer; and Telecommunicator Resiliency Training.

MOTION BY:

SECONDED BY:

MOTION:

PASS/FAIL



## **METROPOLITAN EMERGENCY SERVICES BOARD**

**Meeting Date:**

**April 17, 2025**

**Agenda Item:**

**4A. Approval of Regional  
Needs Document**

**Presenter:**

**Rohret**

The regional Radio items included in this document are: bi-directional amplifiers (BDAs)/distributed antenna systems (DAS); AES encryption for subscriber radios and consoles; vendor-provided radio technical training; ongoing maintenance for existing ARMER infrastructure; subscriber equipment replacement; and strategic coverage enhancement equipment.

Individual agency projects included are:

Chisago County – PSAP cybersecurity equipment

Dakota County – Additional ARMER local enhancement site; CAD replacement; CHE replacement, and 9-1-1 logger replacement

Hennepin County – Additional ARMER local enhancement site

Scott County – Additional ARMER local enhancement site

Washington County – Additional ARMER local enhancement site; CHE upgrade

Bloomington – Microwave link upgrade; CAD replacement

Eden Prairie – Console replacement (2026)

St. Louis Park – Console replacement (202x); CAD replacement

Hennepin EMS – Console replacement (202x)

### **FINANCIAL IMPACT**

None to the MESB at this time.

MOTION BY:  
SECONDED BY:  
MOTION:

PASS/FAIL



## **Metropolitan Emergency Services Board**

### **2025 Regional Needs Document**

Draft: April 7, 2025

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

### The Public Safety Emergency Communications Ecosystem

The statewide Allied Radio Matrix for Emergency Response (ARMER) system, procured by the Metropolitan Radio Board, built by Motorola Solutions, and owned and operated by the Minnesota Department of Transportation (MnDOT), provides interoperable Land Mobile Radio (LMR) communication capabilities to 9-1-1 emergency communication centers (ECCs) (also known as Public Safety Answering Points or PSAPs), law enforcement, fire, Emergency Medical Services (EMS), emergency management, public works and other public safety users across Minnesota. Currently, the ARMER system has approximately 94,000 active radios.

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

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

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

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

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

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

## Funding Considerations

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

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

**Commented [JR1]:** Thoughts on whether to include language which states the total amount of 9-1-1 fund distribution from FY 24 (which could or could not include the special appropriation) for Metro PSAPs?

In FY24, \$11,322,885.60 was distributed to metro PSAPs. This does not include the one-time appropriation (which was an additional \$2,479,609.69). The same amount will be distributed in FY25.

## Regional Priorities

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

### 9-1-1 Projects

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

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

It is anticipated that the solution provides improved situational awareness for metro region PSAPs. Such a solution was found to be a need in the MESB's May/Juen 2020 Civil Unrest After Action Report/Improvement Plan. The solution allows other PSAPs to answer 9-1-1 calls intended for a PSAP which has been inundated with 9-1-1 calls; this provides 9-1-1 callers with better service in extraordinary situations/events.

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

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

#### PSAP Radio Console Replacement

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

Estimated cost: Approximately \$90,000 per console or \$XX,000,000 total

#### Feasibility and Cost Effectiveness Study on Regional Purchase of PSAP Technology

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

**Commented [JR2]:** 9-1-1 TOC: Preferred order of regional projects listed must be determined.

**Commented [JR3]:** In previous documents

**Commented [JR4]:** New

**Commented [JR5]:** Very rough order of magnitude pricing; not official!

**Commented [JR6]:** New

and cost effectiveness study is to determine if cost savings would be realized if regional technology were deployed.

Estimated cost: \$200,000

#### Comprehensive PSAP Staffing and Operations Study

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

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

Estimated cost: \$250,000

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

Taking advantage of geo-diverse technology offered by new CHE platforms allows 9-1-1 calls to be delivered to two locations simultaneously, which is an attractive option for Minnesota PSAPs to provide 9-1-1 network and call delivery redundancy. Geo-diverse configurations split the A and B services typically found at one location, into two separate geo-diverse locations, which allows for additional staff at another location, or PSAP, during extraordinarily busy times or special events to answer 9-1-1 and administrative calls while the main PSAP is still active. It also allows the PSAP to abandon its primary location while the backup location is fully operational and gives the opportunity for a staged evacuation while staff is enroute to the backup location. Additionally, the main PSAP can operate on the connections that exist at its backup location if the main PSAP experiences any technical issues with its connections. To allow for full redundancy and resiliency, each PSAP utilizing geo-diverse CHE should have two Emergency Services Internet (ESInet) connections at each location to ensure the maximum number of 9-1-1 calls can be received at either location at any time, regardless of any problems occurring at the other location. Currently, ECN pays for two ESInet connections at each PSAP, which is the typical setup for legacy CHE. ECN should reconsider its position and pay for four ESInet connections for PSAPs which implement geo-diverse CHE systems. Having four ESInet connections provides improved resiliency and redundancy for a PSAP's 9-1-1 system and best serves the residents of its jurisdiction.

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

Commented [JR7]: New

Commented [JR8]: 9-1-1 TOC: Is this still desired?  
Has been in previous 2 versions

### GIS Software Services – Web-Based Map Viewer

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

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

**Commented [JR9]:** In previous version

### Telecommunicator Resiliency Training

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

Estimate cost: \$75,000

**Commented [JR10]:** New for this document

**Commented [TF11]:** Note that we applied for \$100K in grant, but were only allotted \$75K. Not sure if we could really use the additional \$25K.

## **ARMER Projects**

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

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

Estimated cost: \$40 Million in capital costs; \$xx in maintenance costs

**Commented [JR12]:** In previous versions

### AES Encryption for Subscriber Radios

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

Estimated cost: \$100 Million; \$5,000 for initial KMF cost

**Commented [JR13]:** In previous versions

**Commented [JR14]:** Focus on law users or all public safety users?

Need to keep this separate from subscriber replacement, if they are indeed different.

### AES Encryption for Consoles

As noted above, many agencies have transitioned or are considering transitioning devices to AES encryption. Many Metro Region agencies do not yet have a full fleet of consoles that also have AES encryption capabilities.

**Commented [TF15]:** For devices that have not yet been replaced/upgraded. Note separate cost for subscriber equipment below.

**Commented [JR16]:** New

Estimated cost:

#### Vendor-provided Radio Technical Training

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

Estimated cost: \$45,000 annually

#### CRTF Training and Exercises

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

Estimated cost: \$10,000 annually

#### Ongoing Maintenance for Existing ARMER Infrastructure

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

Estimated cost: \$2 Million annually

#### Subscriber Equipment Replacement

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

**Commented [JR17]:** In previous versions

**Commented [TF18R17]:** Updated amount, since many Moto classes are over \$40K now.

**Commented [JR19]:** In previous versions

**Commented [JR20]:** In previous version

**Commented [JR21]:** In previous versions

Estimated cost: \$50 Million

Commented [TF22]: Noted above in AES as well; this is for the section of devices which have do not necessarily need AES.

Strategic Coverage Enhancement Equipment

Throughout the metro region, a significant number of buildings lack adequate indoor ARMER coverage. Newly constructed structures often do not consider the need for public safety communications when built. The metro region wishes to purchase equipment that enhances coverage in these structures which can be deployed across the region on a rapid deployment basis. The desired equipment includes two mobile transceivers, a portable rack, and a JPS module. The region wishes to purchase two of the packaged units.

Commented [JR23]: New

Estimated cost: \$50,000 total cost

Agency Priorities

Commented [JR24]: Entire section is new

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

**Anoka County**

**Carver County**

**Chisago County**

9-1-1 Cybersecurity Equipment

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

Estimated cost:

**Dakota County/Dakota 911**

Additional ARMER Local Enhancement Site

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

Estimated cost:

CAD Replacement

Dakota 911 expects to replace its CAD in 2028. It is possible that this procurement could be leveraged to result in a regional CAD procurement, dependent on the results of the aforementioned Feasibility and Cost Effectiveness Study.

Estimated cost: \$3,000,000 (county only)

CHE Replacement

Dakota 911 is currently part of the statewide Motorola Software as a Service (SaaS) CHE system, with the contract terminating in 2028. The county has experienced several technical issues resulting in the CHE going down and requiring 9-1-1 calls to be alternately routed; these experiences resulted in concern regarding the viability of the state's 5<sup>th</sup> largest PSAP (by 2024 call volume) operating on this shared system.

Estimated cost:

9-1-1 Logger Replacement

Dakota 911's 9-1-1 logger is scheduled for replacement in 2030.

Estimated cost:

**Hennepin County**

Additional ARMER Local Enhancement Site

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

Estimated cost:

**Isanti County**

**Ramsey County**

**Scott County**

Additional ARMER Local Enhancement Site

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

Estimated cost:

**Sherburne County**

**Washington County**

Additional ARMER Local Enhancement Site

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

Estimated cost: \$

CHE Upgrade

Washington County Sheriff's Office must upgrade its PSAP's CHE. Its current system was installed in 20xx and will require upgrade for cybersecurity, additional functionality, and to continue to be ready for NG9-1-1.

Estimated cost: \$

**City of Bloomington**

Microwave Link Upgrade

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

Estimated cost: \$130,000

CAD Replacement

City of Bloomington anticipates a CAD replacement in 202x. It is possible that this procurement could be leveraged to result in a regional CAD procurement, dependent on the results of the aforementioned Feasibility and Cost Effectiveness Study.

Estimated cost:

Subscriber

**City of Eden Prairie**

2026 Console Replacement

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

Estimated cost: \$901,747

**City of Edina**

**City of Minneapolis**

**City of St. Louis Park**

202x Console Replacement

City of St. Louis Park is in the planning process for a new police building, which would include its PSAP. Should these plans move forward, the City will require replacement of its four current consoles as well as two additional consoles prior to the required 2029 upgrade.

Estimated cost: \$540,000

2026 CAD Replacement

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

Estimated cost: \$450,000 (if share with Edina) - \$950,000

**MSP Airport 9-1-1**

**University of Minnesota**

**Allina Health EMS**

**Hennepin EMS**

202x Console Replacement

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

Estimated cost: \$1,080,000

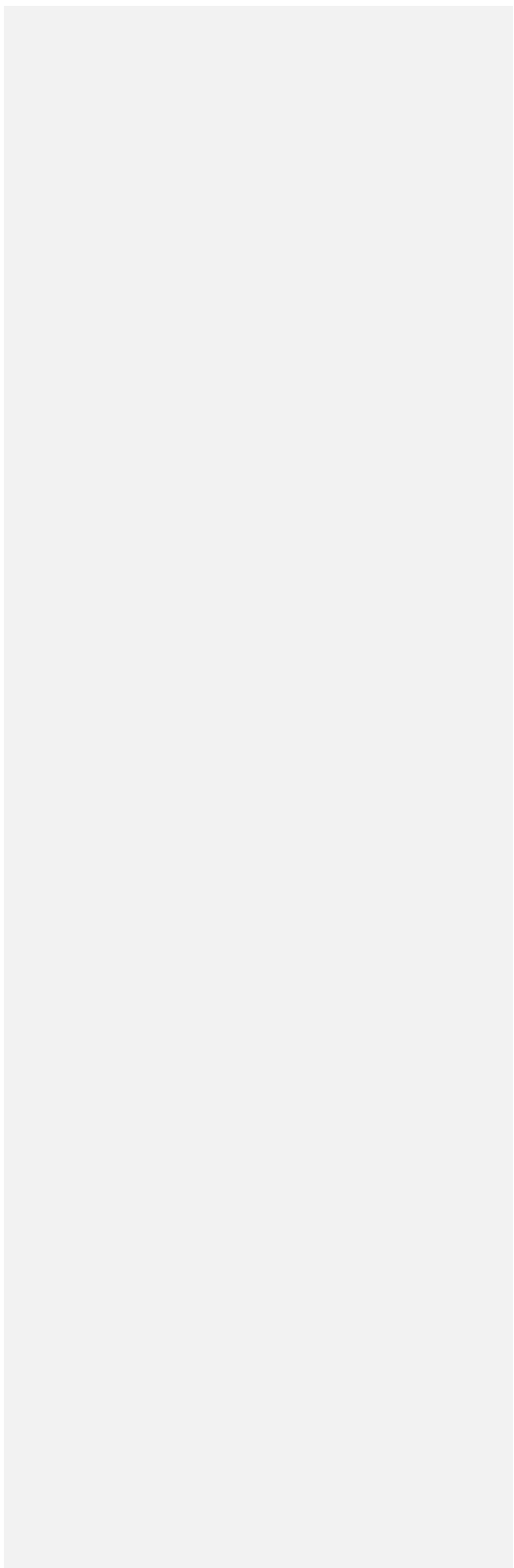
**M Health Fairview EMS**

**Metro Transit**

**North Memorial Ambulance**

**Ridgeview EMS**

DRAFT







## **METROPOLITAN EMERGENCY SERVICES BOARD**

**Meeting Date:** April 17, 2025  
**Agenda Item:** 4B. Appointment of 2 People to Serve on School Mapping RFP Evaluation Workgroup  
**Presenter:** Rohret

### **RECOMMENDATION**

Staff recommend the 9-1-1 TOC appoint two people to serve as metro region representatives on the School Mapping RFP Evaluation Workgroup.

### **BACKGROUND**

The Minnesota Legislature allocated \$7 million in one-time funding from the 9-1-1 Special Revenue Fund to provide grants to regional emergency communications/services boards to digitally map schools across the state. ECN released its RFP for regions to apply for funds on April 4; grant applications are due May 16.

### **ISSUES & CONCERNS**

MESB is working collaboratively with three other regions at the time of this writing, Central, Northwest, and South Central; the Southeast region makes its determination on April 14.

Due to the high dollar figure attached to this grant, MESB will issue a request for proposals for digital mapping services.

In the cooperative agreement between regions working together on this project, two representatives will be appointed to represent each region on the School Mapping RFP Evaluation Workgroup. MESB staff will administer the workgroup but will not score.

### **FINANCIAL IMPACT**

None to the MESB at this time.

MOTION BY:  
SECONDED BY:  
MOTION:

PASS/FAIL





## **METROPOLITAN EMERGENCY SERVICES BOARD**

**Meeting Date:** April 17, 2025  
**Agenda Item:** 4C. Approval of Change to June Meeting Date  
**Presenter:** Rohret

### **RECOMMENDATION**

Staff recommend the 9-1-1 TOC change its June 2025 meeting date, as its regular meeting date falls on the Juneteenth holiday.

### **BACKGROUND**

The 9-1-1 TOC's regular meeting date is the third Thursday of the month. At the March 2025 meeting, the group decided to try meeting every other month in the even-numbered months.

### **ISSUES & CONCERNS**

The regular meeting date of the 9-1-1 TOC in June is June 19, which is the Juneteenth federal holiday.

The TOC has options for rescheduling the meeting. One option is to meet in May and cancel the June meeting (with the next meeting in August 2025). Another option is to move it to Friday, June 20 (same time). Another option is to cancel the June meeting and hold the meeting in July on its regularly scheduled meeting date of July 17, 2025.

The following week is NENA making moving it to the fourth Thursday difficult.

### **FINANCIAL IMPACT**

None to the MESB.

MOTION BY:  
SECONDED BY:  
MOTION:

PASS/FAIL

**From:** [MN\\_DPS\\_SECB](#)  
**To:** [Tony.Martin@hennepin.us](mailto:Tony.Martin@hennepin.us); [Boyer, Timothy \(DPS\)](#); [Stevens, Sheri \(DPS\)](#); [Reiter, David T., EMD](#); [Jenifer LaValla](#); [Burns, Melissa](#); [Sarah Booker](#); [tome@co.douglas.mn.us](mailto:tome@co.douglas.mn.us); [ascholten](#); [JT.Schacherer@Chippewa.MN](mailto:JT.Schacherer@Chippewa.MN); [Tim Peterson](#); [Nelson, Melanie](#); [nancy.shafer](mailto:nancy.shafer); [jill\\_o@co.lake-of-the-woods.mn.us](mailto:jill_o@co.lake-of-the-woods.mn.us); [matthiasj@stlouiscountymn.gov](mailto:matthiasj@stlouiscountymn.gov); [banderson@dakota911mn.gov](mailto:banderson@dakota911mn.gov); [Janelle Harris](#); [Barnett, Vic](#); [Dylan.Bridges@co.carlton.mn.us](mailto:Dylan.Bridges@co.carlton.mn.us); [Christy Christensen](#); [Boucher-Jackson, Sara](#); [Robinson, LaVae](#)  
**Cc:** [Wilkening, Kent \(DPS\)](#); [Bondhus, Jill \(DPS\)](#); [Lallak, Mark \(DPS\)](#); [Fick, Joe \(He/Him/His\) \(MNIT\)](#); [Norman, Cordell \(He/Him/His\) \(MNIT\)](#); [Thomas, Claire \(DPS\)](#); [Klecker, Dawn \(DPS\)](#); [Denton, David \(DPS\)](#); [Lebold, Billie \(DPS\)](#); [Thue, Josh \(MNIT\)](#); [Tait, Steven \(DPS\)](#); [MN\\_DPS COORDINATOR](#); [Palmer, Leah \(She/Her/Hers\) \(DPS\)](#); [dolson@penningtonsheriff.org](mailto:dolson@penningtonsheriff.org); [blawrence@co.pennington.mn.us](mailto:blawrence@co.pennington.mn.us); [OlsonH@StLouisCountyMN.gov](mailto:OlsonH@StLouisCountyMN.gov); [marv.bodie@co.carlton.mn.us](mailto:marv.bodie@co.carlton.mn.us); [warnygorae@stlouiscountymn.gov](mailto:warnygorae@stlouiscountymn.gov); [Shari.Gieseke@ci.stcloud.mn.us](mailto:Shari.Gieseke@ci.stcloud.mn.us); [Micah Myers](#); [Jill Rohret](#); [Darlene Pankonie](#); [kari.morrissey@anokacountymn.gov](mailto:kari.morrissey@anokacountymn.gov); [judy.indrelie@olmstedcounty.gov](mailto:judy.indrelie@olmstedcounty.gov); [Dave Pike](#); [jstarconsulting401](mailto:jstarconsulting401); [ericwallen](#); [bill.flaten@co.ym.mn.gov](mailto:bill.flaten@co.ym.mn.gov); [ron.antony@co.ym.mn.gov](mailto:ron.antony@co.ym.mn.gov); [ascholten](#); [JT.Schacherer@Chippewa.MN](mailto:JT.Schacherer@Chippewa.MN); [Joseph.Flavin@blueearthcountymn.gov](mailto:Joseph.Flavin@blueearthcountymn.gov); [Brenda.Olmscheid@blueearthcountymn.gov](mailto:Brenda.Olmscheid@blueearthcountymn.gov); [eric.weller@blueearthcountymn.gov](mailto:eric.weller@blueearthcountymn.gov); [mark.slater@watonwancountymn.gov](mailto:mark.slater@watonwancountymn.gov); [Fonnest, Shayna \(DPS\)](#)  
**Subject:** Follow up to 02.19.25 SECB NG911 Committee Meeting - GIS Best Practice Available for Regional Review  
**Date:** Thursday, February 20, 2025 3:24:16 PM  
**Attachments:** [NG911 GIS WG Best Practice Match Rates - 02.19.25.pdf](#)

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SECB NG911 Committee members –

At the 02.19.25 SECB NG911 Committee meeting, the committee took action to send the attached DRAFT “Best Practice” document regarding **NG911 GIS Data Validation Match/Success Rate Guidelines** to the ECB/ESB regions for stakeholder review and feedback.

***ACTION ITEM:*** Please ensure that this document is reviewed at your upcoming March/April regional meetings and be prepared to offer your feedback to the committee at the 04.16.24 meeting.

Please contact Sarah Booker @ [sarah.booker@co.todd.mn.us](mailto:sarah.booker@co.todd.mn.us) or Melissa Burns @ [mjburns@rochestertermn.gov](mailto:mjburns@rochestertermn.gov) if you have any questions.

Thank you!

## Best Practice:

# NG911 GIS Data Validation Match/Success Rate Guidelines

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### Summary

It is best practice for NG911 GIS Data Suppliers (Suppliers), in consultation with their Public Safety Answering Point (PSAP) manager(s), to meet match/success rates on key NG911 data validations after consideration of valid exceptions.

### Background

NG911 depends on GIS data to identify the location of calls, route calls to the appropriate PSAP, and dispatch emergency responders. As a result, many quality factors – such as accuracy, completeness, and currency – are important when preparing and maintaining GIS data used for public safety applications such as NG911.

There are, however, varying perspectives on the applicability of NG911 data validation match and/or success rates when submitting data to the MN NG911 Enterprise Aggregate GIS Database (Aggregate Database). This document attempts to clarify concepts and suggest generally accepted practices for NG911 data readiness that Suppliers and their PSAP manager(s) may wish to consider when making decisions regarding their own GIS data workflows.

Overall, a 100% match rate is not required on all NG911 data validations for several reasons:

- Some data validations may have real-world exceptions. See the exception handling guide for more details: [1DG User Guide: Exception Handling | Minnesota NG9-1-1 GIS Hub](#)
- NG911 Core Services (NGCS) vendors do not require 100% match and/or success rates on all the possible NG911 data validations.
- Not all NG911 data validations may be critical for NGCS or even PSAP Computer Aided Dispatch (CAD) operations.

For illustrative purposes in this document, Minnesota's current NG911 data validations have been grouped based on a general criticality ranking to convey their importance for NG911 data readiness. The criticality levels are:

- **Category 1: Critical validations** – Expected to be validations **required** by NGCS for ECRF/LVF use; *100% success rate needed with no exceptions allowed.*
- **Category 2: Essential validations** – Highly Recommended and **required** by the current Aggregate Database submission process; *100% success rate needed with no exceptions allowed.*
- **Category 3: Necessary validations** – Important for NG911 data completeness and accuracy but not vital for data to be submitted; *100% success rate **recommended** after appropriate exceptions.*
- **Category 4: Desirable validations** – Less important for NG911 data fitness; *no specific success rate benchmark defined; exceptions allowed.*
- **Category 5: Optional validations** – May be good for general GIS fitness beyond NG911; *no specific success rate benchmark defined; exceptions allowed.*

**A matrix of the current MN NG911 data validations and their suggested criticality is provided at the end of this document.**

The following are suggested best practices that Suppliers, also known as Data Producers, can use when assessing their GIS data for NG911 data readiness and use. **These are recommendations only**<sup>1</sup>. Currently, no specific benchmarks are required to submit data to the Aggregate Database except for those explicitly noted below.

## **Best Practice for NG911 GIS Data Validation Match/Success Rate Guidelines**

Suppliers and their PSAP manager(s) should discuss and agree on the GIS data quality level appropriate for the NG911 implementation in their jurisdiction. This forms the foundation of activities surrounding NG911 data validations and resulting resolution of errors.

### **NG911 Data Validation Match/Success Rates:**

- In data development:
  - It is required that Category 1 and 2 validations achieve a 100% match/success rate with no exceptions allowed (due to system requirements).
  - It is recommended Category 3 validations achieve a 100% match/success rate after appropriate exceptions.
  - It is recommended Category 4 validations achieve a 98% match/success rate after appropriate exceptions.
  - Other validation categories are left to the discretion of the Supplier and their PSAP(s).
- In data maintenance/resubmission:
  - It is required that Category 1 and 2 validations achieve a 100% match/success rate with no exceptions allowed (due to system requirements).
  - It is recommended that at least annually Category 3 validations achieve a 100% match/success rate after appropriate exceptions (aligns with data re-submission best practice).
  - Other validation categories are left to the discretion of the Supplier and their PSAP(s).
- NG911 Data Validation Exceptions:
  - Since real-world exceptions to some NG911 data validations may exist, **Suppliers and their PSAP(s), in consultation with local addressing authorities, may define exceptions to validations at their discretion after considering impacts to call routing and location validation.**
  - It is recommended that Suppliers have a record of known exceptions.
    - *Note: In the current Minnesota NG911 validation process, exceptions are stored in the Aggregate Database. It is worthwhile for Suppliers to also keep their own record of exceptions.*

## **Document History**

Created: 01.06.25

Approvals: SECB GIS Workgroup – 01.09.25  
SECB –

SECB NG911 Committee –

Revisions:

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<sup>1</sup> *These NG911 data validation match/success rate recommendations are intended to provide helpful guidelines for Suppliers. It is based on general knowledge available in the industry at the present time. When a NGCS vendor is selected, it is possible that the vendor will have specific data requirements for operating the NG911 system in a live environment that are not currently known. This may necessitate revisiting this best practice at a future date. A change to a new NG911 data validation environment for Minnesota or an update to the NENA Data Model standard may also change the requirements and impact the criticality matrix.*

## NG911 Data Validation Criticality Matrix

NG911 Data Validation Criticality Matrix						
MN DPS ECN NG911 Data Validation Check	1. Critical <i>no exceptions</i>	2. Essential <i>no exceptions</i>	3. Necessary <i>exceptions allowed</i>	4. Desirable <i>exceptions allowed</i>	5. Optional <i>exceptions allowed</i>	Notes
<b>0a - Essential Geometry - Road Centerlines</b>						
Check Features are Valid	X					This check uses OGS (Open Geospatial Consortium rules)
Check Features are Simple		X				This check uses OGS (Open Geospatial Consortium rules)
Check for Multipart Geometries		X				Multipart Linear features do not load properly in the S2E step.
Check for Self-intersections			X			May load into enterprise Db but will cause Topology validation errors in Location data to Polygon data validations
Check for Overlaps			X			geometric overlaps
Check for Spikes			X			
Check for Kickbacks			X			
Check for Duplicate Vertices		X				These throw topology errors during the Submission to Enterprise process.
Check for Duplicate Features					X	Geometrically stacked Road Centerline features are permitted.
<b>0a - Essential Geometry - Address Points</b>						
Check Features are Valid	X					This check uses OGS (Open Geospatial Consortium rules)
Check Features are Simple		X				
Check for Multipart Geometries		X				
Check for Self-intersections	N/A				N/A	
Check for Overlaps	N/A				N/A	
Check for Spikes	N/A				N/A	
Check for Kickbacks	N/A				N/A	
Check for Duplicate Vertices	N/A				N/A	These throw topology errors during the submission to enterprise process
Check for Duplicate Features					X	Geometrically stacked Address Points are permitted.
<b>0a - Essential Geometry - Emergency Service Boundaries (ESZ, PSAP, Law, Fire, EMS)</b>						
Check Features are Valid	X					This check uses OGS (Open Geospatial Consortium rules)
Check Features are Simple			X			This check uses OGS (Open Geospatial Consortium rules); however, may cause validation errors.
Check for Multipart Geometries					X	Multipart polygon features are permitted.
Check for Self-intersections			X			May load into enterprise Db but will cause topology validation errors in the Location Data to Polygon Data Validation step.
Check for Overlaps			X			Overlaps are stacked geometry where start and end nodes are not coincident. It is not currently known if this is a problem with polygon data or not.
Check for Spikes			X			Not known if critical for Emergency Service Boundaries
Check for Kickbacks			X			
Check for Duplicate Vertices		X				These throw topology errors during the S2E process
Check for Duplicate Features	X					Geometrically duplicate polygon features in the same layer should not be provisioned.
<b>0b - Essential Network</b>						
Check for Short Lines					X	
Check for Floating Lines					X	
Check for Over-Under Shoots					X	
Check for Touch Intersection					X	
<b>1 - Community Name Validation</b>						
Check Road Centerline MSAG_Community_Name values have a match in MSAG table			X			
Check Address Point MSAG_Community_Name values have a match in MSAG table			X			Reference: NENA 71-501, Version 1. The document uses the term "synchronization" to describe the comparison logic.
Check MSAG Community Values have a match in Road Centerlines			X			
Check MSAG Community Values have a match in Address Points			X			
Check RCL CTU_Name is in CTU_Name Domain Table	X					If a CTU Name is not in the supplier's domain translation table, the Submission to Enterprise process will not complete.
Check ADP CTU_Name is in CTU_Name Domain Table	X					

**NG911 Data Validation Criticality Matrix**

MN DPS ECN NG911 Data Validation Check	1. Critical <i>no exceptions</i>	2. Essential <i>no exceptions</i>	3. Necessary <i>exceptions allowed</i>	4. Desirable <i>exceptions allowed</i>	5. Optional <i>exceptions allowed</i>	Notes
<b>2 - ESN Validation</b>						
Check Road Centerlines ESN Values have a match in MSAG Table			X			
Address Points ESN Values have a match in MSAG Table			X			
Check ESN Values from MSAG Table have a match in Address Points			X			
Check ESN Values from MSAG Table have a match in Road Centerlines			X			
<b>3 - Street Name Validation</b>						
Check Street Name + MSAG Community Name + ESN Concatenation from the MSAG has a match in Road Centerlines			X			Reference: NENA 71-501, Version 1. This is the essence of the Legacy to GIS data comparison.
<b>4 - Address Validation</b>						
Check ALI record has match in ADP <b>or</b> RCL			X			ALI address records should match to either an Address Point feature or a Road Centerline feature. It is not a requirement that they match to both.
Check ALI record has match in ADP <b>and</b> RCL				X		
Validate RCL Address Range Left and RCL Parity Left values			X			Parity is used along with address range values to determine address number placement along a road centerline feature.
Validate RCL Address Range Right and RCL Parity Right values			X			
Check RCL Address Ranges do not Overlap	X					
Check for Overlapping Address Ranges within a single Road Centerline feature	X					
Check for Duplicate Address Point Attribution	X					
<b>5 - MSAG Validation</b>						
RCL Left Address Ranges are synchronized with MSAG - ignore OOI				X		
RCL Right Address Ranges are synchronized with MSAG - ignore OOI				X		NENA INF-028.2 Section 5.5.2.1
<b>6a - Polygon Gaps &amp; Overlaps Validation</b>						
Check for Overlaps			X			Permissible threshold may be defined by CSP. NENA Documentation references "unintentional" gaps and overlaps.
Check for Gaps			X			
<b>6b - Location Data to ESZ Validation</b>						
Spatial-only check that ADP is contained by exactly 1 ESZ feature.			X			
Check ESN values of ADP features within a single ESZ polygon.			X			Important due to most PSAP ESZs being used to derive separate PSAP, Fire, Law, and EMS boundaries; ESZs may also be used for 9-1-1 response external to NG9-1-1
Spatial-only check that RCLs are contained by exactly 1 ESZ Boundary feature.				X		
Check ESN values of RCL features outside the buffer of the ESZ boundary.				X		
Check ESN values of RCL features wholly within the buffer of the ESZ boundary.				X		
<b>7a - NENA Attribute Validations Address Data Points</b>						
Submitted Data has Unique NGUIDs	X					
NENA Conditional Attribute Checks for Address Points	X					If the conditional value is present, it must meet the field requirements
NENA Mandatory Attribute Checks for Address Points	X					
NENA Optional Attribute Checks for Address Points	X					If the optional value is present, it must meet the field requirements
<b>7b - NENA Attribute Validations Road Centerlines</b>						
Submitted Data has Unique NGUIDs	X					
NENA Conditional Attribute Checks for Address Points	X					If the conditional value is present, it must meet the field requirements
NENA Mandatory Attribute Checks for Address Points	X					
NENA Optional Attribute Checks for Address Points	X					If the optional value is present, it must meet the field requirements
<b>7c-f - NENA Attribute Validations Emergency Service Boundaries</b>						
Submitted Data has Unique NGUIDs	X					Validations are not run on ESZ data even though the ESZ layer is used to derive the PSAP, Law, Fire and EMS data layers. "Safety Gate Validations" are run on the separate PSAP, Law, Fire and EMS data layers during the S2E Process for ESZ's.
NENA Mandatory Attribute Checks for ESBs	X					
NENA Optional Attribute Checks for ESB's	X					

**NG911 Data Validation Criticality Matrix**

MN DPS ECN NG911 Data Validation Check	1. Critical <i>no exceptions</i>	2. Essential <i>no exceptions</i>	3. Necessary <i>exceptions allowed</i>	4. Desirable <i>exceptions allowed</i>	5. Optional <i>exceptions allowed</i>	Notes
<b>8a - Submission to Enterprise Process - Supplier Boundary</b>						
Supplier boundary may not overlap other supplier boundaries (within tolerance - see note*)	X					Tolerances permit overlaps of 13.89 feet or less. The intent is that the small overlaps will be identified during statewide validations.
Submitted data within WGS84 Bounds	X					Checks to confirm that all vertices are within the State of Minnesota Boundary in WGS84 Projection.
Change Detection Updated Features Threshold test					N/A	No more than 50% of the features can be deleted or added -present for awareness but not required to pass; purpose is to prevent unintentional data loss by uploading a partial or incomplete dataset.
<b>8b - Submission to Enterprise Process - Address Points</b>						
Check that Supplier Matches Provisioning Boundary	X					Checks to ensure a Supplier Boundary exists - this boundary is used to filter out any data features that fall outside.
Submitted data within WGS84 Bounds	X					Checks to confirm that all vertices are within the State of Minnesota Boundary in WGS84 Projection.
Submitted Data has Unique NGUIDs	X					
Submitted Data Conditional NENA Attribute Checks	X					If the conditional value is present, it must meet the field requirements
Submitted Data Mandatory NENA Attribute Checks	X					
Submitted Data Optional NENA Attribute Checks	X					If the optional value is present, it must meet the field requirements
Change Detection Updated features threshold test	X					No more than 20% of the features can be deleted or added - this is to prevent unintentional data loss by uploading a partial or incomplete dataset.
<b>8c - Submission to Enterprise Process - Road Centerlines</b>						
Submitted data within WGS84 Bounds	X					Checks to confirm that all vertices are within the State of Minnesota Boundary in WGS84 Projection.
Check that Supplier Matches Provisioning Boundary	X					Checks to ensure a Supplier Boundary exists - this boundary is used to filter out any data features that fall outside of it
Submitted Data has Unique NGUIDs	X					
NENA Conditional Attribute Checks for Road Centerlines - Left Side Elements only	X					
NENA Conditional Attribute Checks for Road Centerlines - Right Side Elements only	X					If the conditional value is present, it must meet the field requirements
NENA Conditional Attribute Checks for Road Centerlines - elements for both sides of RCL	X					
NENA Mandatory Attribute Checks for Road Centerlines - Left Side Elements only	X					
NENA Mandatory Attribute Checks for Road Centerlines - Right Side Elements only	X					
NENA Mandatory Attribute Checks for Road Centerlines - elements for both sides of RCL	X					
NENA Optional Attribute Checks for Road Centerlines - Left Side Elements only	X					
NENA Optional Attribute Checks for Road Centerlines - Right Side Elements only	X					If the optional value is present, it must meet the field requirements
NENA Optional Attribute Checks for Road Centerlines - elements for both sides of RCL	X					
Change Detection Updated features threshold test	X					No more than 20% of the features can be deleted or added - this is to prevent unintentional data loss by uploading a partial or incomplete dataset. *Open ISpatial Support Ticket.

NG911 Data Validation Criticality Matrix

MN DPS ECN NG911 Data Validation Check	1. Critical <i>no exceptions</i>	2. Essential <i>no exceptions</i>	3. Necessary <i>exceptions allowed</i>	4. Desirable <i>exceptions allowed</i>	5. Optional <i>exceptions allowed</i>	Notes
<b>8d - Submission to Enterprise Process - Emergency Service Zones</b>						
Submitted data within WGS84 Bounds	X					Checks to confirm that all vertices are within the State of Minnesota Boundary in WGS84 Projection.
Check that Supplier Matches Provisioning Boundary	X					Checks to ensure a Supplier Boundary exists - this boundary is used to filter out any data features that fall outside of it
ESZ NGUID is valid	X					Checks to be sure that the ESZNGUID field value is not null not empty not = 0 not longer than 36 characters and has ASCII Printable characters.
Submitted Data has Unique NGUIDs	X					Checks to be sure field values are unique to that submission feature class
Submitted Data GAC element checks	X					Field values may not exceed field widths.
Change Detection Updated features threshold test					X	No more than 50% of the features can be deleted or added -present for awareness but not required to pass; purpose is to prevent unintentional data loss by uploading a partial or incomplete dataset.
(PSAP, EMS, Fire, Law) Submitted Data Mandatory NENA Attribute Checks	X					
(PSAP, EMS, Fire, Law) Submitted Data Optional NENA Attribute Checks	X					If the optional value is present, it must meet the field requirements
(PSAP, EMS, Fire, Law) Change Detection Updated features threshold test					X	No more than 50% of the features can be deleted or added -present for awareness but not required to pass; purpose is to prevent unintentional data loss by uploading a partial or incomplete dataset.
<b>8e-h - Submission to Enterprise Process - Emergency Service Boundaries (PSAP, EMS, Fire, Law)</b>						
Submitted data within WGS84 Bounds	X					Checks to confirm that all vertices are within the State of Minnesota Boundary in WGS84 Projection.
Check that Supplier Matches Provisioning Boundary	X					Checks to ensure a Supplier Boundary exists - this boundary is used to filter out any data features that fall outside of it
Submitted Data has Unique NGUIDs	X					Checks to be sure field values are unique to that submission feature class
Submitted Data Mandatory NENA Attribute Checks	X					
Submitted Data Optional NENA Attribute Checks	X					If the optional value is present, it must meet the field requirements
Change Detection Updated features threshold test					X	No more than 50% of the features can be deleted and added -present for awareness but not required to pass; purpose is to prevent unintentional data loss by uploading a partial or incomplete dataset.

**From:** [Darlene Pankonie](#)  
**To:** [911\\_dir@mn-mesb.org](mailto:911_dir@mn-mesb.org); [Kari Morrissey](#)  
**Subject:** FW: New PHMSA Rule: 911 Centers to Receive Hazmat Train Data From Railroads  
**Date:** Wednesday, March 19, 2025 3:55:31 PM

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Forwarding an idea for next 911TOC agenda, not really a discussion item, more of a FYI.

Dar

**Darlene Pankonie, ENP** | Emergency Communications Response Center Manager  
Washington County Sheriff's Office  
15015 62<sup>nd</sup> Street North, Stillwater, MN 55082  
651-430-7833  
612-384-4172

---

**From:** 911.gov Updates <911.gov@public.govdelivery.com>  
**Sent:** Wednesday, March 19, 2025 8:02 AM  
**To:** Darlene Pankonie <Darlene.Pankonie@washingtoncountymn.gov>  
**Subject:** New PHMSA Rule: 911 Centers to Receive Hazmat Train Data From Railroads

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Header



## PHMSA Issues New Rule Requiring Railroads to Share Real-time Train Consist Information with 911 Centers

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) has established a new rule requiring railroads carrying hazardous materials to provide real-time train consist information to 911

centers and emergency responders starting June 24, 2025.

### What This Means for 911 Centers

- Railroads must send train consist information to a 911 center in a form it is capable of readily accessing.
- 911 centers can instruct railroads to provide the information via their preferred medium, such as email, fax or a software application.

With immediate access to real-time train consist data, 911 centers can provide faster, more informed responses to rail emergencies involving hazardous materials. This ensures emergency responders arrive on scene equipped with accurate information.

[View Full Guidance](#)

Contact PHMSA's Hazardous Materials Info Center at [infocntr@dot.gov](mailto:infocntr@dot.gov) or 1-800-467-4922 for more information.

[Sign up](#) to receive the latest news from NHTSA's National 911 Program, including webinars, newsletters and industry updates.

## Contact Us

1200 New Jersey Avenue, SE  
Washington, DC 20590  
[nhtsa.national911@dot.gov](mailto:nhtsa.national911@dot.gov)

911.gov



NHTSA



DOT



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- Washington County is in the process of changing employee email addresses from co.washington.mn.us to washingtoncountymn.gov

# Meeting Minutes: MESB PSAP Roundtable

**Date & Time:** Tuesday, April 8<sup>th</sup>, 2025 1000-1200

**Location:** Ramsey County Emergency Communications  
388 East 13<sup>th</sup> Street  
St. Paul, MN 55101

**Host contact:** Erin Quinn – Operations Supervisor, RCEC  
Dispatch: 651-484-3366 C:612-401-9213  
Erin.Quinn@co.Ramsey.MN.US

**Committee Chair:** Heidi Meyer O:763-324-4750 C:612-418-7283  
[Heidi.meyer@anokacountymn.gov](mailto:Heidi.meyer@anokacountymn.gov)

## Agenda Items:

1. Introductions
2. Additions, changes to the agenda
3. Training (new employee and continuing ed.)
  1. Current in-service opportunities
    - i. MSP will be hosting a NENA supervisor course the first week of November. More details to follow.
    - ii. Blue Ethos resiliency training feedback – Feedback has been positive, with participants finding it relevant and engaging. Suggestions include giving more time to Drew Moldenhauer’s presentation and reducing the emphasis on the officer-involved shooting example to improve flow.
  2. CTO training / Roundtable Nate Christiansen from DCC will lead the CTO Roundtable group, with the first meeting planned before July 8th. The core team will include 1-2 CTOs from each Metro PSAP, who will be added to a separate Microsoft Teams group. Updates to follow.
  3. General training questions, updates, etc.
4. Events and exercises (plans, meetings, 205’s, impact on operations)
  1. U of M – Dr Fauci to speak today (4/8/25) with plans in place for anticipated demonstrations, etc.
  2. Ramsey Co – World Hockey Junior Olympics 50<sup>th</sup> anniversary in St. Paul and surrounding areas 12/26/25 – 1/4/26 is still in the early planning stages.
5. PSAP technical updates and info (CAD, radio, phone, and other systems)
6. QA/QI – general updates, questions, etc.
7. PSAP operational updates and information (management, staffing, schedules, significant changes) – around-the-table updates from each agency

## 8. Meeting calendar 2025

January 7 <sup>th</sup>	Hennepin Co
April 8 <sup>th</sup>	Ramsey Co – NOTE LOCATION CHANGE
July 8 <sup>th</sup>	Anoka County
October 7 <sup>th</sup>	University of MN

**Metropolitan Emergency Services Board**  
**9-1-1 Technical Operations Committee**  
**MESB Report**  
**April 17, 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 of 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 **March** NG9-1-1 validation results, MESB made:
    - i. **69 referrals** related to address validation to county GIS data producers for GIS data updates
    - ii. **247 referrals** related to road centerlines to county GIS data producers
    - iii. **4 referrals** for GIS updates resulting from VoIP 9-1-1 call location validation
    - iv. **3** new ALI Telephone Number record change request (TN CR) for wireline location corrections
    - v. **6** ALI Discrepancy Reports from VoIP 9-1-1 call location validation
  - e. From the 1Spatial submissions to the State's Enterprise database, **15** "write errors" were referred to county GIS contacts in March.
  
3. **Metro Regional GIS-derived MSAG Maintenance:**
  - a. **GIS-driven MSAG Maintenance Activity:** In **March**, MESB processed **71 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 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. MESB holds any PSAP submitted MSAG CRs until the updates appear in the county's 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](mailto: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 is being reviewed by the SECB NG911 Committee.
  - b. **Informational document on data schemas for NG9-1-1:** A draft document was approved by the workgroup to send to the SECB NG9-1-1 Committee.
  - c. **Best practices resource materials development for edge-matching data:** A draft was submitted to the workgroup and is being reviewed.
  - d. **1Spatial Platform Migration:** MnGeo has been analyzing a test stage of the new validations of the 1Spatial platform. Volunteers from the GIS workgroup have met once to form 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.
  - a. MetroGIS has drafted a new Data Viewer using an industry standard background application. MESB will send an announcement of launch to PSAPs.
  - b. When the new webpage is available, the current Data Viewer will "splash" a message pointing to the new map.
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](#) 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)**.