



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

July 18, 2019, 10:00 a.m.

1. **Call to Order** – Committee Chair, Christine McPherson
2. **Approval of Agenda** – McPherson
3. **Approval of Minutes of May 16, 2019 Meeting** – McPherson
4. **Action Items**
  - A. MN Dept. of Corrections ARMER Project Plan – Regional Recommendation - Eggimann
  - B. Dialable Routing Number Blocking – Regional 9-1-1 Call Transfer Guidelines – Eggimann
  - C. Metro-wide PSAP Backup Facility – Business Plan Development – Pass
  - D. 9-1-1 System Outage – Community Notification Guidelines - Eggimann
5. **Discussion Items**
  - A. Winter Storm-Related Incident Coordination with State Patrol – Tabled
  - B. Telecommunicator Resiliency Training / Support Grant – Eggimann
  - C. Fraud / Identity Theft Procedure – Sprynczynatyk
  - D. Real-Time Text Messaging (RTT) – Eggimann
  - E. Outgoing Text from 9-1-1 - Eggimann
  - F. New Classes of Service – Implementation - Broman
  - G. Edina's Experience – Rave Mobility
  - H. Review the Unassigned Future Issue list - Eggimann
6. **Reports**
  - A. PSAP Operations Round Table Work Group – Morrissey
  - B. SECB NG9-1-1 Committee Report – Pass/Scanlon/Pankonie
  - C. Legislation – Eggimann/Rohret
  - D. 9-1-1 Network Report – Eggimann
  - E. 9-1-1 Data Report – Broman
7. **Adjourn**

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Meeting Notes  
May 16, 2019**

**Members Present:**

Laura Anderson, Sherburne  
Carrie Bauer, Scott  
Heidi Hieserich, MAC  
Christine McPherson, Minneapolis  
Tony Martin, Edina  
Darlene Pankonie, Washington

Nancie Pass, Ramsey  
Cheryl Pritzlaff, Dakota  
Jim Scanlon, Bloomington PD  
Kevin Schwartz, Hennepin  
Marv Solberg, St. Louis Park  
Lisa Vik, Eden Prairie  
Val Sprynczynatyk, Anoka

**Guests Present:**

Tim Boyer, Minnesota State Patrol  
Susan Bowler, Carver-alternate  
Marcia Broman, MESB  
Pete Eggimann, MESB  
Scott Haas, Scott-alternate  
Matthew Hoffer, CenturyLink

Dustin Leslie, ECN  
Chad Loeffler, Metro Transit  
Lauren Petersen, MAC-alternate  
Jill Rohret, MESB  
Leslie Sticht, ECN  
Martha Ziese, MESB

**1. Call to Order:**

Cheryl Pritzlaff, 9-1-1 TOC Vice-Chair, called the meeting to order at 10:00 a.m.

**2. Approval of Agenda:**

Dar Pankonie asked to have "State Patrol 9-1-1 to text" added to the agenda as Item 5F. Nancie Pass asked to have "metro wide backup" added to agenda as Item 5G. Pankonie asked to have "public safety naming work group" added as Item 5H.

*M/S/C – Pass moved to approve the May 16, 2019 amended agenda. Tony Martin seconded.  
Motion carried.*

**3. Approval of Minutes**

*M/S/C - Pass moved to approve minutes for April 18, 2019. Val Sprynczynatyk seconded.  
Motion carried*

**4. Action Items**

**4A. New Classes of Service- Draft Survey**

Pete Eggimann advised the committee that the carriers are starting to utilize some new classes of service based on the location determination process being used. Marcia Broman provided additional background information to the committee. She noted that Comtech is treating the new classes of service differently than West which could cause inconsistency between what is displayed depending on the carrier involved and who they utilize for mobile positioning center services. Broman asked the committee to review a draft survey that included three questions related to how the individual PSAP mapping application utilized the data received in ALI to map caller location for the telecommunicators, including if a programing change needed to be made

to the map or CAD application how much lead time would the PSAPs need to prepare to ensure the new classes of service to work properly in their systems.

Broman met with Leslie Sticht at ECN to form a plan of action for implementing the new classes of service. Broman asked for the approval to send out the survey and that the responses be returned to the MESB.

The new classes of service are WDL1, WDL2, WCVL, VNOM.

*M/S/C Sprynczynatyk moved for the MESB to send out survey. Pass seconded. Motion carried.*

## **5. Discussion Items**

### **5A. Winter Storm-Related Incident Coordination with State Patrol – (remained tabled)**

### **5B. Telecommunicator Resiliency Training/Support Grant**

Eggimann said no responses to the RFP have been received yet. The RFP will remain open until May 24, 2019.

### **5C. Fraud/Identity Theft Procedure**

Sprynczynatyk said she has been unable to generate enough interest for the Anoka Co. Sheriff's Office to agree to create a consistent, county-wide plan to deal with identity theft between different jurisdictions. Dar Pankonie said she would try to talk to Richard Hodson, the MN State Sheriff's Association attorney to see if he thought this is something that association might be willing to take up.

### **5D. Wireless Dispatchable Location Testing**

Eggimann said there has been some testing done with the National Emergency Address Database (NEAD) as part of the carrier's plan to provide dispatchable location information with wireless calls. A report on the testing prepared by ATIS was included in the meeting packet. The report not only shows the test results but also explains the location determination methodology being used and how that relates to the NEAD database. The results indicate that where there were many Wi-Fi hot spot access point locations identified in the NEAD database the results were more accurate, and the reverse was true when there were fewer hot spot locations available. Committee members were encouraged to read the ATIS report.

### **5E. Review the Unassigned Future Issue list**

The committee reviewed the list which is carried from month-to-month at the end of the previous meeting minutes. There was some discussion on the variation on how different jurisdictions handled identify theft and fraud cases. Eggimann said it might be a good idea to work with the Sheriff's Association on the identity fraud issue. Martin suggested working with Hennepin County Chiefs. Pankonie is willing to reach out to the Sheriff's Association attorney who is an assistant co. attorney in Washington Co. This will remain on the agenda.

### **5F. State Patrol Text-to-9-1-1 Turn-up**

Pankonie said this issue came up at the SECB NG9-1-1 Committee meeting. The State Patrol is turning up a new VIPER system and will enable the text-to-9-1-1 capability. To do this, routing polygons for text messages need to exist. These polygons have been created as part of the initial metro area text-to-9-1-1 deployment, with text messages identified as originating from within those polygons currently being routed to the Airport. The State Patrol request is that the existing metro polygons originally created to define the State Patrol text message service areas be redirected away from the Airport PSAP and toward the State Patrol PSAP once their new

VIPER system is ready to go. Tim Boyer added that ECN conducted some testing using the existing polygons and the success rate for those calls being routed to the Airport rather than the adjacent PSAP service areas along the State Patrol polygon edges was only about 50%. The testing was conducted from the center of what was thought to be the widest, largest area of one of the State Patrol polygons in the I35E/I94 commons area in St. Paul. Heidi Hieserich said the airport get 6-12 texts per month total, so this change in routing for the State Patrol polygons in the metro area is not expected to have a significant impact on general 9-1-1 operations at any of the metro PSAPs, including the State Patrol's.

*Motion made by Pankonie to turn up routing sectors for text-to-9-1-1 for State Patrol in the metro. Martin seconded. Motion passed.*

## **5G. Metro-wide PSAP Backup Facility**

Nancie Pass said that RCECC has a backup center located in the Ramsey Co. Sheriff's sub-station in Arden Hills. The Sheriff is considering plans to vacate that location. This potentially means a standalone 9-1-1 backup facility would have to be identified or built. Pass asked if there was any interest in sharing a backup location with another county?

Pass reported that the RCECC has twenty-two consoles; thirteen of which are call taker workstations, to provide an idea of what kind of space would be needed to meet their needs in a shared facility.

McPherson said a shared facility makes sense. Minneapolis uses their data center which is cramped and noisy.

Pankonie asked how many PSAPs even have a backup center? Washington County does not, but they are looking at a new phone system and there is some thought to putting a backup center in place at the same time. She noted that while getting the technology to the facility can be a challenge, the most difficult issues seem to be political and obtaining the funding.

Pass raised the question of whether state funds are a possibility?

Kevin Schwartz said Hennepin County has been working on decommissioning the Golden Valley site and moving the backup center connectivity capabilities to a training room at the jail, but would not deploy workstations until the backup center needed to be activated. One of the things to consider is that multiple PSAPs may need to evacuate at the same time. Schwartz said he would like all to consider an on-demand facility that could accommodate multiple PSAP requirements at the same time and as needed.

Pass said RCECC has used their backup facility for trainings and six times a year for academies. RCECC is doing an exercise in October that will show what shortcomings the COOP Plan has. Scott County is testing with laptops and having a call taker take calls from home. Also, a shared hosted system is being explored.

Eggimann said that if there is interest to develop a shared backup center, a business plan should be written, including a scope of work at a regional, multi-PSAP level. Using the facility on a regular basis should be put into the proposal along with other topics like perhaps an additional surcharge, costs estimates and funding ideas.

Some potential projects that may provide an opportunity for a regional backup capability include a public safety/ fire training facility that is jointly owned by Edina, Eden Prairie, Airport, and

Bloomington. Dakota County talked about building on the Crisis Center and Washington County is building a facility in Cottage Grove and will be calling it the Hero Center.

Jill Rohret suggested looking to the Southwest Region in Texas for a governance model. Bexar County, Texas has a joint backup and training center. It is also nearing the time to come up with next year's grant ideas. SECB grants start in January. Dustin Leslie recommended planning start right away.

Scott Haas said that if a solution was created for the metro, it could be a model for the state. Our plan would be to have several locations to choose from. Scott County has eight laptops that have CAD and radios on them.

Shared backup will remain on the agenda.

#### **5H. Public Safety Agencies Naming Workgroup**

Pankonie said a workgroup is being formed to create a standardized name for each public safety response agency in the state. A representative is needed from the MESB. Heidi Hieserich, as the metro area PSAP manger representative: Marcia Broman, *MESB*; and Leslie Sticht; ECN, volunteered to participate in this workgroup.

### **6. Reports**

#### **6A. PSAP Operations Round Table Work Group**

Sprynczynatyk gave the workgroup report on behalf of Kari Morrissey. In addition to the work group meeting notes that were included in the TOC meeting packet, she noted that there will be a discussion at the July work group meeting about Roundtable membership.

#### **6B. SECB NG9-1-1 Committee report**

Pankonie said there was a presentation by the Central Region regarding a CAD-to-CAD interoperability project they are working on. The committee was reminded that the Windborne Group did a feasibility study a year ago for the metro area on this topic. The central region project funding is part of the ECN Federal 9-1-1 grant request, but the federal funds have not been awarded yet.

#### **6C. Legislation**

Rohret said that much of the legislative committee work has stalled because leadership has not agreed on budget targets. The Heart Association efforts were included in the House side of the public safety omnibus bill. The MRCC request will probably not go anywhere. We will have to wait and see what gets included in the final omnibus bills at the end of the session.

#### **6D. 9-1-1 Network Report (Written Report Attached)**

Eggimann said St. Louis Park's text-to-9-1-1 capability is scheduled for turn-up in June. North Memorial's 9-1-1 answering application upgrade might occur this summer, and Metro Transit will be scheduled to come onto the 9-1-1 system in the fall.

#### **6E. 9-1-1 Data Report (Written Report Attached)**

Broman reported the statewide centerline schema formatting standard is expected to be approved by the state on the 29<sup>th</sup> of May. Sherburne County has joined the metro regional centerline project. The MESB is working with metro GIS community on a Regional Data Viewer.

### **7. Adjourn 11:40**

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Action Sheet  
May 16, 2019**

**Agenda Number 4.A. – MN Dept. of Corrections ARMER Project Plan**

**Recommendation:**

Develop a regional recommendation to the SECB NG911 Committee on how to meet the needs and desires of the Dept. of Corrections for communications between their agents and the appropriate PSAP when they meet with clients in the communities within the 10-county metro area. This could be done by the committee as a whole, a committee member workgroup, a joint 9-1-1/Radio TOC workgroup, or request the PSAP Roundtable workgroup ask a subset of trainers from the metro PSAPs to prepare a recommendation for the committee.

**Background:**

The Dept. of Corrections (DOC) has been in contact with some of the metro area PSAPs and shared a draft operational plan regarding maintaining radio communications between the PSAP and the DOC field agents as the agents meet with clients in the community. A statewide or regional guideline that clarifies procedures and expectations would assist both the PSAPs and DOC. It is expected that the DOC will submit the final plan to the SECB for approval.

**Issues and Concerns:**

This is a potential safety issue for the DOC agents and a workable, consistent plan needs to be established that is clearly understood by both the PSAP telecommunicators and the agents.

**Financial Impact:**

PSAPs will need to develop new training material and provide that training to staff. New call handling protocols may also need to be developed.

**Motion:**

## **MN Department of Corrections | Field Services**

### **ARMER Interoperability Communications Plan**

#### **Description**

The Minnesota Department of Corrections (MN DOC), Field Services Division, will be assigning Motorola APX 1000 subscriber units (portable radios) to 59 DOC supervision agents located throughout the state. The DOC agents conduct supervisory visits to offenders whom reside in neighboring communities most any time of day. These interactions may place the agent at risk without a direct mode of communications, due to spotty cellular coverage, to support them in the event of an emergency. MN DOC Field Services is asking for support from 82 Public Safety Access Points (PSAP) to perform safety checks for DOC Agents, while visiting offenders within the PSAP's jurisdiction, to help reduce risk and improve the safety for our staff and the general public.

MN Field Services personnel will be contacting the PSAP's Approving Authority to secure an Interoperability Agreement for the purpose of sharing a PSAP owned talkgroup to conduct safety checks on. The MN DOC ARMER Administrator will draft the Interoperability Agreement which includes: a signature block approving the request, information for the point of contact, a line for the PSAP to identify the shared talkgroup alias and talkgroup ID, and a notes section for any additional direction or requirements identified by the Approving Authority regarding communications protocols.

Anticipated frequency of 3 to 4 agents reaching out on 5 to 10 home visits per agent daily check-ins to a PSAP for a which may last up to 10 seconds each for a total of 150 to 400 seconds of check-in daily and 3 to 4 agents reaching out on 5 to 10 home visits per agent daily check-outs daily to a PSAP which may last up to 7 seconds each for a total of 105 to 280 seconds of checkout for a total talk-time of 150 to 400 seconds daily in addition to any emergency contacts to PSAP bandwidth (anticipated at less than 15% of daily total time or less than an additional 60 seconds per day).

#### **MN DOC Administration**

The MN DOC ARMER Administrator will:

- be responsible for managing the MN DOC ARMER network and MN DOC subscriber units;
- act as a liaison between Field Services and jurisdictions/ PSAP's to provide agency level support;
- assign the radio alias and ID to MN DOC Field Services subscriber units from the existing agency pool;
- support preventative maintenance, programming and commissioning of subscriber units;
- support Field Services Initial User and Annual Refresher training plan.

#### **MN DOC Field Services**

The Field Services division will be responsible for designating a Communications Team Supervisor, Communications Liaison Agent/ Officer, and a Communications Electronics Technician to support their work unit whom will work with the MN DOC ARMER Administrator to support their radio program including preventative maintenance tasks, training, reporting, and enforce the standards and best practices identified in MN DOC Policy 301.067 and all SECB standards.

## **Operations**

An agent operating within a jurisdiction will contact the local PSAP and check-in upon arrival at an offender's residence. The agent will report their agency, work unit/own ID, which talkgroup you are speaking on, address of the visit, and anticipated departure time. (eg. MN DOC, CCA1234, to Benton County Dispatch, on BN ADMIN 2, arrive 789 main street, Princeton, depart thirteen-forty-five);

PSAP will document and reply affirmatively or ask for clarification;

Agent will report "clear" prior to the anticipated departure or report an extension of time;

If agent does not report an extension or "clear" within five minutes of anticipated departure time, the PSAP will conduct a safety check by attempting to contact the agent;

If the agent does not respond the PSAP will initiate a response by a local public safety unit to verify status;

An "Emergency Word" will be established to initiate a response in the event an agent is under duress;

Field Services will not be using the man-down feature;

Field Services will not be using the Emergency Mode feature;

Radio communications will not be encrypted.



ARMER Project plan provided to decision maker:

Circle one:      in person                      via email                      via mail

Approver Name: \_\_\_\_\_

Approver Email: \_\_\_\_\_

Approver Phone: \_\_\_\_\_

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Action Sheet  
May 16, 2019**

**Agenda Number 4.B. – Dialable Routing Number Blocking – Regional 9-1-1 Call Transfer Guidelines**

**Recommendation:**

Develop regional 9-1-1 call transfer guidelines for PSAPs detailing how 9-1-1 calls should be transferred between PSAPs within the metro area, as well as PSAPs in bordering jurisdictions including interstate transfers with Wisconsin PSAPs. This could be done by the committee as a whole, a committee member workgroup, or request the PSAP Roundtable workgroup ask a subset of trainers from the metro PSAPs to prepare a recommendation for the committee.

**Background:**

Dialable routing numbers associated with the 9-1-1 sessions at the metro area PSAPs have been identified as a significant security risk to 9-1-1 operations. In addition many PSAPs have received recorded sales solicitation calls on their 9-1-1 sessions that have entered the 9-1-1 system through dialable routing numbers within the 9-1-1 system and within telecommunication service provider switches. As a result CenturyLink in the role of 911 service provider has developed a password protection block to prevent unauthorized users from being able to use the routing numbers in an attack on 9-1-1 service.

In the past it was common for PSAPs to utilize the dialable routing numbers to transfer 9-1-1 calls between PSAPs to ensure the calls arrived at the destination PSAP on a 9-1-1 session, but without any ANI/ALI. When the 9-1-1 system was transitioned from analog 9-1-1 trunks to IP-based 9-1-1 sessions the number of available 9-1-1 sessions for each of the PSAPs increased. At that time most of the PSAPs reconfigured their call transfer configuration to transfer 9-1-1 calls on the 9-1-1 system ensuring that 9-1-1 calls arrive at the destination PSAP on a 9-1-1 session and include the associated ANI/ALI call data. The ability to transfer 9-1-1 calls across stateliness to border state PSAPs utilizing the 9-1-1 system transfer capabilities is not universally available along the all of the state borders. A regional 9-1-1 call transfer guideline for all of the metro area PSAPs would lead to consistent, predictable 9-1-1 call transfers including what call related data the destination PSAPs should expect.

**Issues and Concerns:**

PSAPs that have the dialable routing numbers built into their automated transfer capabilities on their 9-1-1 answering applications will experience call handling failures on attempted transfers until the applications are reconfigured.

**Financial Impact:**

Some PSAPs may need to develop new training material and provide that training to staff. New call handling protocols may also need to be developed. Some PSAPs may have to work with their neighboring jurisdictions to reconfigure the automated transfer capabilities on their 9-1-1 answering applications.

**Motion:**

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Action Sheet  
May 16, 2019**

**Agenda Number 4.C. – Metro-wide PSAP Backup Facility – Business Plan Development**

**Recommendation:**

Develop a feasibility and business plan for a regional PSAP backup facility, or backup capability that could be implemented in real time at pre-identified sites, that would be available to all the metro area PSAPs in the event they have to physically abandon their PSAP facility. The committee may want to submit a grant request to create this plan.

**Background:**

All metro area PSAPs have continuity of operations plans that include what they will do in the event they have to evacuate their facility. It is recognized that many of the PSAP operations will be severely and negatively impacted if an evacuation occurs. Some of the PSAPs that have fully equipped alternate sites now are going to lose those sites in the near future and are actively looking for alternatives.

The transition to more shared/hosted and cloud-based applications has opened new opportunities for accessing essential public safety applications including 9-1-1, radio, and CAD from alternate locations provided there is adequate IP bandwidth available. This capability could be leveraged in a backup situation and not be necessarily tied to a single, fixed location, but may be implemented in a pre-identified location within each county or a smaller number of sites located within the metro area.

A feasibility study for a shared regional backup facility or capability that includes a funding estimate will allow for an implementation plan to be developed.

**Issues and Concerns:**

(none)

**Financial Impact:**

The committee may want to consider submitting a grant request for preparation of a study and implementation plan.

**Motion:**

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Action Sheet  
May 16, 2019**

**Agenda Number 4.D. – 9-1-1 System Outage – Community Notification Guidelines**

**Recommendation:**

Develop guidelines for PSAPs to use in determining when to send a notification to their communities regarding a 9-1-1 system outage that is affecting the PSAP operations or caller's ability to access the 9-1-1 system. This could be done by the committee as a whole at a special meeting or by a work group made up of a subset of committee members and MESB staff.

**Background:**

As the 9-1-1 system continues to transition from the original wireline only, single 9-1-1 service provider model to a fully-compliant, standards-based NG9-1-1 system that involves multiple 9-1-1 and ESInet service providers the types of 9-1-1 system service disruptions have also evolved. Today it is not uncommon for the 9-1-1 system to experience a disruption that is related to a single telecommunications service provider or even a subset of that telecommunications service provider subscribers not being able to access 9-1-1 while the 9-1-1 service itself continues to function normally. This range of potential service disruptions from a complete failure to a very limited single provider failure has complicated what messaging should be provided to our communities and who should prepare and send any messaging.

Whenever a PSAP sends a message to their community, other PSAPs' operations are also affected as the original message is passed outside the original community through social media. This can result in confusion at the neighboring PSAPs as they may not be aware of any issues impacting 9-1-1 service in their area yet begin to receive inquiries asking whether 9-1-1 is working in their area or not. A 9-1-1 service disruption message may also trigger a surge of test calls to 9-1-1 from the general public who wonder if the system is working in their area. This surge of test calls adversely impacts PSAP normal operations and the ability to handle regular 9-1-1 calls.

Regional guidelines will help metro PSAP managers in their decision process on whether to send a message to their community, and in what to say in that message. Guidelines should also provide guidance on what types of 9-1-1 service disruptions may occur and the overall impact on operations associated with the types of disruption.

**Issues and Concerns:**

(none)

**Financial Impact:**

(none)

**Motion:**

**Metropolitan Emergency Services Board  
9-1-1 Technical Operations Committee  
Network Report  
June 18, 2019**

**Agenda Number 6.D.**

**1. Text-to-9-1-1:**

The St. Louis Park PSAP successfully turned up their text messaging capabilities last month. Washington and Scott Co. will then be the only remaining primary PSAPs in the metro area that have not yet implemented text capabilities on their answering applications. Both PSAPs are planning to implement text messaging concurrent with their next 9-1-1 answering application upgrade.

**2. Firewall Implementation:**

The team working on the ESInet firewall implementation project is now focusing on turning up some of the greater MN PSAPs. It is not known at this time when the team will come back to the metro area. The MESB will pass on additional firewall implementation dates as they become available.

**3. Other PSAP Activity:**

North Memorial is expected to turn-up a new Solacom 9-1-1 answering application this summer. That application will include text-to-911 capability. Metro Transit is establishing their emergency coordination center as a PSAP on the 9-1-1 system. They expected to go live with a Solacom answering application this fall. They will take a very limited number of emergency calls from their emergency phones on station platforms but are expected to take a significant number of transferred 9-1-1 calls from the primary PSAPs. Being on the 9-1-1 system will allow the Transit PSAP to receive and rebid for caller location as well as receive the ANI of the caller, provided the primary PSAP transfers the call to the Transit PSAP on the 9-1-1 system.

**4. NG9-1-1 ESInet:**

The MESB staff continue to work with ECN and CenturyLink as the ESInet and WAN network connections are implemented to support a shared/hosted VESTA answering application system that several greater MN PSAPs have agreed to participate in. The VESTA server host sites are in a commercial datacenter in the metro area and at the Kandiyohi PSAP datacenter in Willmar. There are no metro area PSAP connections to that system at this time, but it could be an option for the metro PSAPS to consider. There are shared/hosted options under discussion for VIPER and Solacom systems as well, but no metro PSAPs have signed up for shared/hosted service on those systems at this time.

In April 2018, NENA published a new NG9-1-1 ESInet Design document that outlines new modifications to the existing ESInets in use today. The new design focuses on increasing reliability and resiliency by incorporating multiple network service providers using different network protocols (e.g. MPLS, Ethernet, cable broadband Internet, wireless carrier broadband Internet). The NG9-1-1 ESInet would support multiple public safety applications (e.g. CAD, logging, CAD-to-CAD interoperability, cloud-based applications, shared/hosted applications, etc.) in addition to supporting 9-1-1. The MESB believes the NG9-1-1 ESInet configuration will offer valuable new COOP options for our PSAPs that today's ESInet cannot support. The MESB will continue to work with ECN to develop an implementation strategy to bring the metro area ESInet configuration into compliance with the NENA design recommendations.



**Metropolitan Emergency Services Board**  
**9-1-1 Technical Operations Committee**  
**9-1-1 Data Report**  
**July 18, 2019**

**1. Statewide GIS Data Standards:**

- a. The Minnesota Geospatial Advisory Council (GAC) approved v1.0 of the statewide **Road Centerline Data Standard (RCDS)** on 5/29/19. The schema is now published on the GAC website. The standard is also an agenda topic for consideration by the Metro Regional Dataset Working Group meeting on 7/17/19.
- b. MnGeo staff continues to work on a proposed state **PSAP/Emergency Service Zone Polygon Schema Standard**. MnGeo intends to send it through the SECB standards process.
- c. The SECB NG911 Committee is creating a workgroup to develop a list of **standardized statewide response agency names** which MnGeo will then incorporate these into domains that will be needed for the PSAP/Emergency Service Zone Polygon layer standard. The work group has not yet met.
- d. MESB encourages continued **communication and planning between PSAPs and County GIS Departments** for ongoing geospatial dataset maintenance (road centerline and address points) to be used in statewide NG9-1-1 core services. In most cases, the datasets also form the foundational data used in PSAP CAD and mapping systems. PSAP managers are encouraged to assist in communicating the **vital role GIS has to their current and future PSAP operations**.

**2. Regional GIS Data Aggregation:**

- a. **Centerline:** The MetroGIS/Met Council continues to process updates of the MRCC nightly to the MN Geospatial Commons website. Each metro county's most recent centerline data that has been uploaded to the portal and passed validations is included in the regional dataset. All ten metro counties are using this process for MRCC updates.
- b. **Address Points:** The MetroGIS/Met Council continues to process updates of the Regional Address Point dataset (in the statewide schema) nightly to the MN Geospatial Commons website. Each metro county's most recent address points that have been uploaded to the portal and passed validations are included in the regional dataset. Nine of the ten metro counties are using this process for submitting address point dataset updates. Sherburne County is working with the schema validation tool used by the metro area and will submit its dataset for regional aggregation when it is ready.
- c. MESB, MetroGIS, Met Council, and metro area Geospatial Data Producers are in preliminary discussions on a MetroGIS project proposal that would begin a dive into **ongoing address and geospatial data/work flows and processes**, including how 9-1-1 is integrated into them. More to come as discussions on a project proposal evolve.

**3. Regional PSAP/ESZ Boundaries:**

- a. **Recent changes to regional PSAP/ESZ boundary polygons:** Boundary adjustments were made for annexations in Chisago, Isanti, and Scott Counties.
- b. A map of current **MN State Patrol text-to-911 coverage polygons** for the metro area was distributed to PSAP managers on 5/23/19.
- c. **Text-to-911 PSAP boundaries** were updated to reflect St. Louis Park PSAP taking their own text messages effective 6/17/19.

#### 4. Regional 911/GIS Data Synchronization:

- a. MESB completed updated geocoding validations on the metro regional data. Results statistics were shared with PSAPs and county GIS departments.
- b. Overall, percent of 9-1-1 addresses not matching either address points or centerline for the 9-county metro area was .21% (excluding Sherburne), 2.0% for the 10-counties. Similar percentages calculated on telephone number records were .33% and .76% respectively.
- c. MnGeo/ECN have published a statewide NG9-1-1 GIS project newsletter (attached to this month's TOC packet) including new statewide project timelines, specifically:
  - i. **Address validation** 9/27/2019
  - ii. **Geospatial validation** 12/31/2019
  - iii. **Edgematching** 3/2/2020
  - iv. **ESZ validation** 6/1/2020
  - v. **Statewide GIS data ready** September 2020
  - vi. **Migration to statewide NG9-1-1 LVF/ECRF platforms** June 2021

#### 5. Regional Data Viewer:

- a. MESB and MetroGIS continue to work together on an early prototype of the **Regional Data Viewer** designed to facilitate communications and data content QA/QC associated with the regional geospatial datasets central to the business needs of E9-1-1 and NG9-1-1. The viewer will be helpful as a reference for PSAP Data Coordinators in MSAG maintenance work and for telecom service provider staff seeking to validate 9-1-1 addresses. The map can also display data of interest to users in the broader public safety community. When a refined prototype is ready, content overviews, demonstrations, and user testing/training are planned.

#### 6. Wireless Cell Sector/Routing Data:

- a. **SPPCS VoLTE deployment** is active in the 10-county metro area.
- b. MESB has been actively working with T-Mobile on the **cleanup of wireless ALI data screen content and creation of a cell site geospatial dataset** for their wireless data. Previously, MESB had performed similar work with the cleanup of Verizon, AT&T Mobility, and Sprint data.
- c. **Wireless routing updates** for all carriers are being handled between Comtech (VZW), West Mobility (ATTMO, SPPCS), T-Mobile and the MESB (on behalf of all metro PSAPs) using routing spreadsheets exchanged via email. MESB is sending routing directly back, rather than sending it through the PSAP for final review. MESB PSAPs can always email ***mesbgis@mn-mesb.org*** and request that MESB review the routing for a specific sector or call.

#### 7. New Class of Service Codes (WDL2, WDL1, WCV, and VNOM) are ready in the CenturyLink/West ALI system to be activated in Minnesota. The SECB NG9-1-1 Committee will determine activation timing per ECN. Based on our PSAP survey, MESB staff has communicated to CenturyLink and ECN that the metro PSAPs need a minimum of 60-days notice prior to activation of the new codes so that those PSAPs needing to update their CAD/mapping system can do so.

#### 8. 3<sup>rd</sup> Quarter MSAGs have been distributed to PSAP Data Coordinators and County GIS contacts.



## In This Issue:

- 2019-2021 Strategic Plan
- NG9-1-1 GIS Standards - Update
- Data Preparation - Update
- Upcoming Events
- Neighboring States

## Useful Links:

### DPS-ECN

*Minnesota Department of Public  
Safety – Emergency Communication  
Networks GIS Information*

### MnGeo

*Minnesota Geospatial Information  
Office*

### SECB

*Statewide Emergency  
Communications Board*

### NENA

*National Emergency Number  
Association*

## Contact Us:

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#### NG9-1-1 Project Manager

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or 651-201-2483

## 2019-2021 Strategic Plan

The Minnesota Department of Public Safety Emergency Communication Networks division (DPS-ECN) and the Minnesota Geospatial Information Office (MnGeo) have finalized an updated strategic plan for the NG9-1-1 project.

The state has set a goal to complete the GIS data preparation phases for NG9-1-1 by September 2020. Once the NG9-1-1 data is collected, standardized, and aggregated, DPS-ECN and MnGeo will be working with the NG9-1-1 vendor to migrate to the Location Validation Function (LVF) and Emergency Call Routing Function (ECRF). The target date for the LVF/ECRF migration is December 2021.

In order to successfully meet these new target dates, our counties must continue to drive forward with their GIS data preparation. It is highly recommended that counties continue to progress through the GIS data preparation phases in the following order: Community Name Validation, Street Name Validation, Address Validation, Geospatial Validation, Edge Matching Validation, and Emergency Service Zone Validation.

To ensure that counties have the funding to complete the NG9-1-1 data preparation phases, ECN has applied for a multimillion-dollar federal grant opportunity. More specifically, Minnesota is eligible for just over \$3.2 million along with a required 40% match (which will be funded by ECN from the 9-1-1 Special Revenue fund), totaling about \$4.5 million. The funding will be available to PSAPs/counties/GIS support vendors once the Federal review and award process is complete. The NG9-1-1 project is prioritized in the grant request that ECN submitted. Exact terms and notice of award for the grant is uncertain, but as soon as ECN receives notification, the regional contacts will reach out to data providers.

DPS-ECN and MnGeo greatly appreciate the time and effort our GIS partners and PSAPs have dedicated towards GIS data preparation. The NG9-1-1 GIS project is a large undertaking for all our GIS partners, PSAPs, and vendors. As well, thank you all for working through the Edge Matching Touch Points Reviewer and for continuing to work with the DPS-ECN and MnGeo team in moving towards the deployment of the Minnesota NG9-1-1 system. Please remain devoted to this initiative so we are able to achieve a product that is both functional and that we can be proud of.

Best wishes for continued success,

Dana Wahlberg, Director, DPS-ECN

# NG9-1-1 GIS Standards – Update

## Road Centerline Data Standard

The Standards Committee of the Minnesota Geospatial Advisory Council (MGAC) has approved the Road Centerline Data Standard (RCDS). The RCDS has been thoroughly vetted by the GIS partners, NG9-1-1 Standards Workgroup, Metropolitan Emergency Services Board (MESB), and MnGeo. The multi-use RCDS has undergone two public review periods and has received significant feedback from the GIS community.

The first review period (60-day) was open to the public from April 9<sup>th</sup> to June 8<sup>th</sup>, 2018. All public review questions were reviewed by the MGAC Standards Committee on July 18<sup>th</sup> and October 25<sup>th</sup> of 2018. The second review period (45-day) was available to the public from January 28<sup>th</sup> to March 13<sup>th</sup>, 2019.

The RCDS is very important to the NG9-1-1 GIS project as well as the GIS community as it will be served as a multi-use standard. Maintaining the road centerline (RCL) data layer to align with the new RCDS is required for the NG9-1-1 system.

For more information on the proposed Road Centerline Data Standard, including the Road Centerline Data Standard Version 1.0, proposed schema, along with a sample road centerline dataset and frequently asked questions, see: <http://www.mngeo.state.mn.us/committee/standards/roadcenterline/index.html>.

## Emergency Service Zone (ESZ), Public Safety Answering Point (PSAP), and Data Maintenance Boundary Standard

The ESZ/PSAP/Data Maintenance Boundary Standard, commonly referred to as the NG9-1-1 Polygon Standard, focuses on providing a single set of attribute specifications (field name, type, length and order) for transferring and aggregating NG9-1-1 polygonal spatial data. Understandably, many counties have their own methods or criteria for capturing and storing NG9-1-1 data to satisfy their own business requirements. This standard will seek to establish commonly accepted attribute specifications for data exchange purposes. The NG9-1-1 data specifications for this standard are derived from the National Emergency Number Association (NENA).

The three NG9-1-1 polygonal spatial datasets are:

- 1) *Emergency Service Zone Boundary*: The ESZ layer defines the geographic area for the primary providers of response services. Each of these layers is used by the ECRF to perform a geographic query to determine which Emergency Service Providers are responsible for response. The set of Emergency Service Zone Boundaries must include law enforcement, fire, and emergency medical services (at a minimum).
- 2) *Public Safety Answering Point (PSAP) Boundary*: The PSAP layer routes calls and emergency requests for NG9-1-1. This layer is used by the ECRF to perform a geographic query to determine the PSAP that has primary responsibilities for an emergency request.
- 3) *Data Maintenance Boundary*: This layer defines the area of GIS data provisioning responsibility. This Data Maintenance/Provisioning Boundary must be agreed to by all adjoining data providers.

The ESZ/PSAP/Data Maintenance Boundary Standard's timeline will potentially be shorter than the Minnesota Address Point and Road Centerline Data Standard since it will not be used for multi-use purposes and will be NG9-1-1 specific. This next standard will go through the Statewide Emergency Communications Board (SECB) standard approval process, which is projected to be completed by fourth quarter of 2019.

# Data Preparation – Update

## Regional Meetings

By the end of July 2019, DPS-ECN and MnGeo will be meeting with each region to strengthen relationships and discuss NG9-1-1 project status, objectives, challenges, and funding opportunities. DPS-ECN is requiring attendance of primary GIS staff from each county, as well as the county PSAP manager for your county to be eligible for future grant funds related to NG9-1-1 work. DPS-ECN and MnGeo conducted regional meetings in the following regions: NE (3/26), SW (5/22), SC (5/23), Central (5/30), and SE (6/6). We look forward to meeting with the NW region soon.

## New Data Preparation Target Dates

The new strategic plan is targeting September 2020 for all counties to complete their NG9-1-1 data. It is very important that we collectively continue to prioritize our time and resources towards the development of our statewide geospatial dataset for 9-1-1. GIS is the foundation of NG9-1-1 and we need to continue to push forward so we can finish by the new target date.

Understandably, many of our counties have limited resources to work on the NG9-1-1 GIS project. For our counties with available resources, it is recommended that our GIS partners and PSAPs consider the following target dates:

- Community Name Validation: Q1 2019
- Street Name Validation: Q2 2019
- Address Validation: Q3 2019
- Geospatial Validation: Q4 2019
- Edge Matching Validation: Q1 2020
- Emergency Service Zone Validation: Q2 2020

MnGeo has developed a Street Name Report, Address Range Report, and Geospatial Validation Report which are designed to help counties understand where the discrepancies are in their GIS-related data. In addition, MnGeo launched the Touch Points Reviewer for Edge Matching Validation to help counties align boundaries with their adjoining counties.

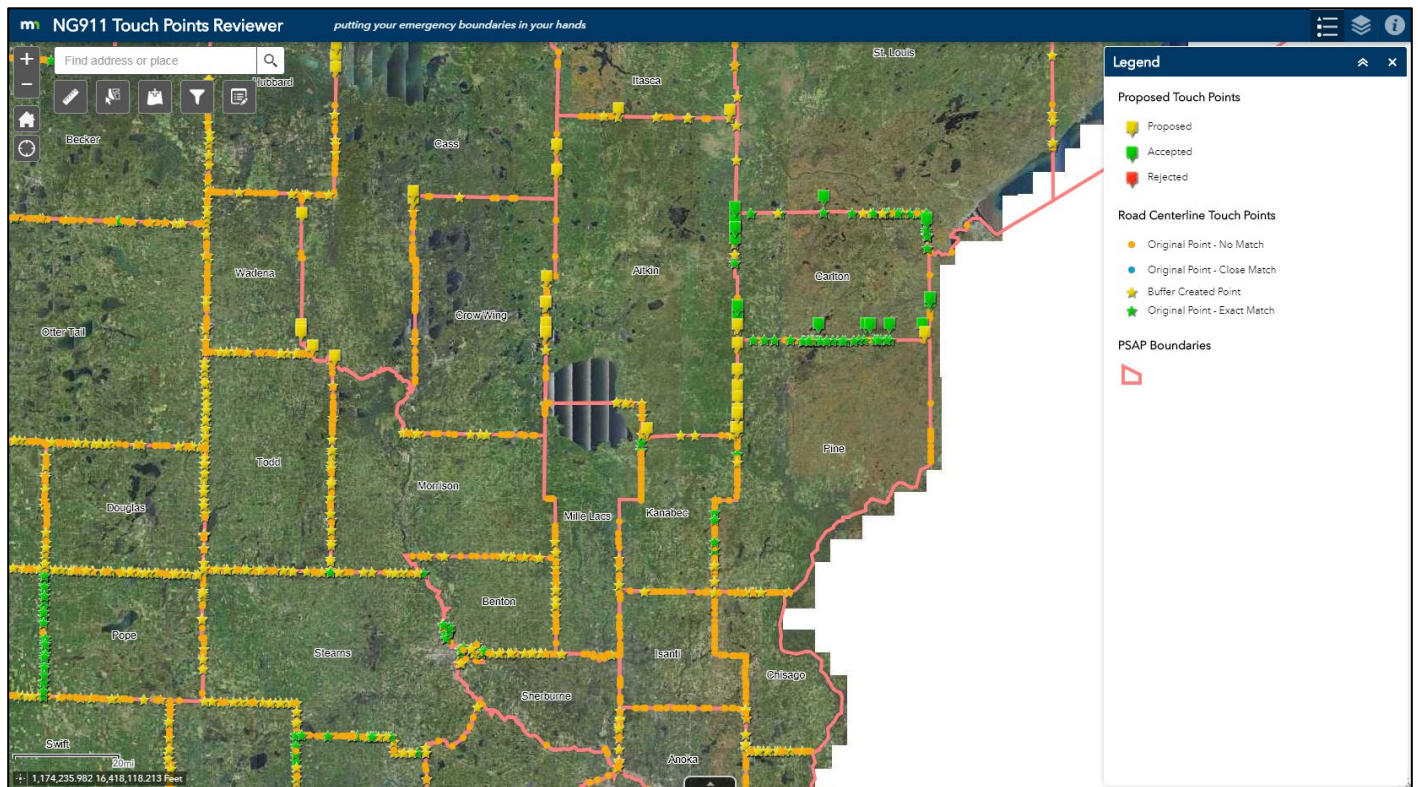
## Edge Matching/Touch Points Reviewer

This application provides a method for data providers to propose touch points at which they will align their NG9-1-1 datasets to, facilitating the creation of an aggregated statewide dataset. Currently, the state-accepted Public Safety Answering Point (PSAP) boundaries serve as the alignment boundaries. If data providers disagree with having to align their data to the current PSAP boundary, or if they'd like to specify a location along the PSAP boundary for road centerline (RCL) snapping, they may propose alternative points at which to align their data. The pre-populated points displayed along these boundaries are derived from each county's RCL endpoints. The RCL points may serve as possible locations for these proposed points, or a data-provider may use other sources to inform the placement of proposed points.

If there are major changes being proposed, it is highly recommended that the PSAP manager be informed. Data providers can overlay their own reference data in the application to use as a guide. Also, it is recommended that data providers use the state standard projection (NAD 1983 UTM Zone 15N) if they are exploring this route. For proposed

changes to be incorporated into the state PSAP boundary layer, the suggested touch point must be accepted by the adjacent PSAP.

The final Touch Points Reviewer WebEx meeting was conducted on April 26<sup>th</sup>, 2019. Thank you all for your attendance!

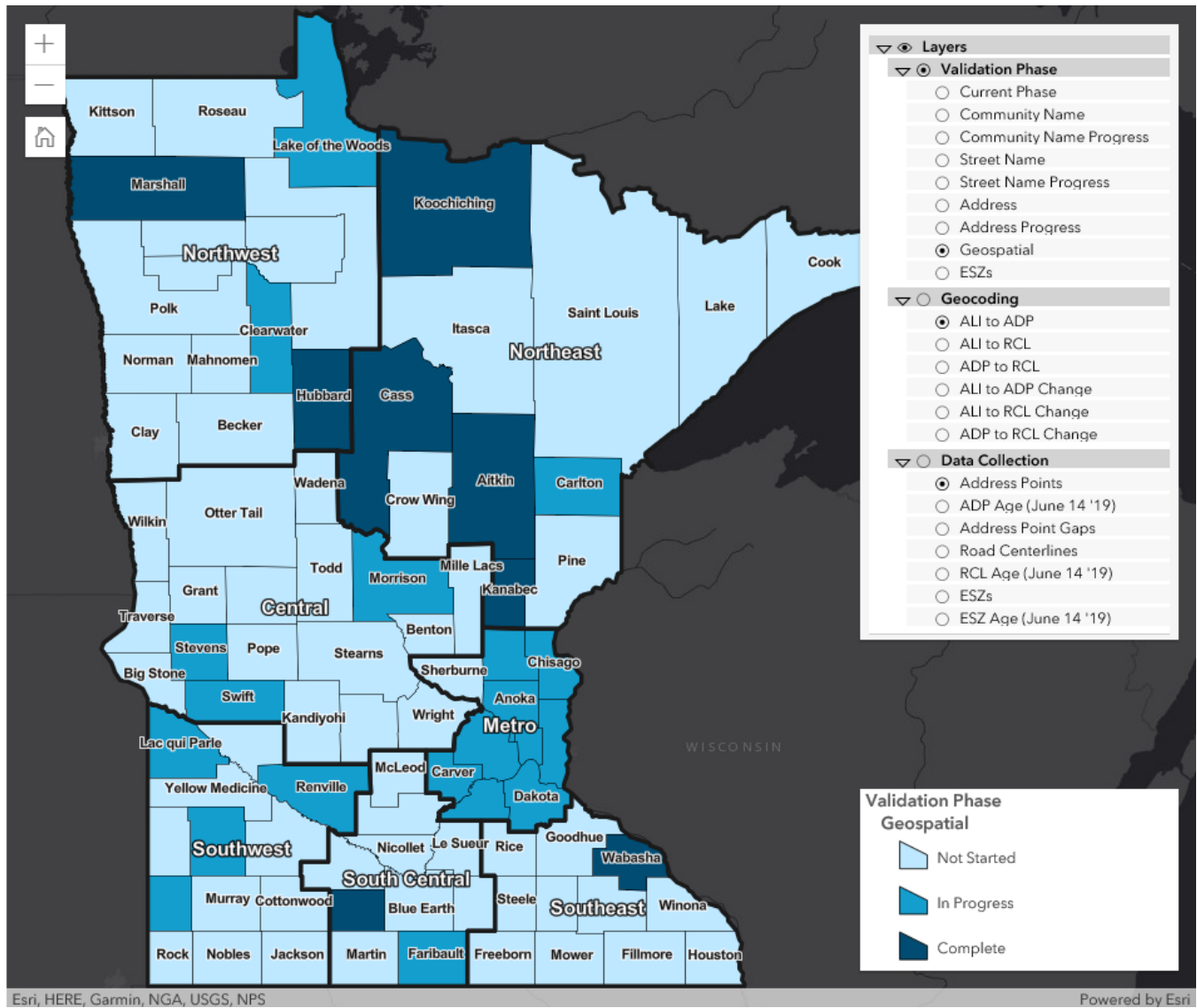


**Figure 1:** Touch Points Reviewer shows proposed touch points in the NE region. Please note the status of the touch points will change as counties work along their PSAP boundary.

## Interactive GIS Status Map

The interactive GIS status map has been a great tool for counties to track general progress of their GIS data preparation. The completion percentages are based on the GIS data each county submits to their MnGeo regional GIS representative. The layers are hosted on ArcGIS Online and are updated on a weekly basis.

Counties have shown significant improvement in GIS data preparation. The Street Name Validation percentages are high and Address Validation is coming along nicely. The interactive GIS status map is available on the DPS-ECN website at <https://dps.mn.gov/divisions/ecn/programs/911/Pages/interactive-gis-status-map.aspx>.



**Figure 2:** Interactive Status Map shows the Geospatial Validation phase as of June 18<sup>th</sup>, 2019. Please note that the status of counties changes frequently.

## Upcoming Events

Notable upcoming DPS-ECN and MnGeo NG9-1-1 GIS events:

- ❖ July 11<sup>th</sup>: NG9-1-1 GIS Subcommittee meeting
- ❖ July 17<sup>th</sup>: NG9-1-1 Committee meeting
- ❖ July 24<sup>th</sup>: NW Regional Meeting
- ❖ August 8<sup>th</sup>: NG9-1-1 GIS Subcommittee meeting
- ❖ August 14<sup>th</sup>: Metro Counties NG9-1-1 Collaboration meeting



## Neighboring States

For more information about NG9-1-1 efforts in the states surrounding Minnesota, visit:

- [Iowa Enhanced 9-1-1](#)
- [North Dakota ND911](#)
- [South Dakota 9-1-1](#)
- Wisconsin (*In planning phase. See [NENA status map](#).*)

If you have a NG9-1-1 newsletter topic that you would like to share in future issues, please contact:

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## WEST METRO

# Minnetonka couple latest 'swatting' victims after police called to their home over false murder claim

Police were called to a Minnetonka house on a false report of a murder.

By Paul Walsh (<http://www.startribune.com/paul-walsh/10646171/>) Star Tribune |

JULY 2, 2019 — 11:06PM

The call came in late Saturday to the Hennepin County Sheriff's Office. The man on the line said he shot his wife with an AR-15 rifle in their Minnetonka home. She was dead, and the gun was on the table.

"He said he wants to shoot the police also," the dispatcher relayed to officers.

The law enforcement response to the dead-end block of single-family houses was carried out with methodical urgency. A command post was quickly set up. Police sealed off several blocks. Officers crept toward the dark house that backs up to thick woods from all sides. Edina had an armored vehicle on the way.

Forty minutes later, law enforcement stood down. All of it — the report of a murderer in the home and a man inside wanting to shoot officers — was made up. In the home, a husband and wife slept as officers from at least six agencies were poised outside.

The nearly two dozen officers had been unwitting participants in a "swatting," the not-at-all-humorous prank of calling in a dangerous crime or situation in hopes of initiating an overwhelming police response. The baffled couple in their 60s say they have no idea why they were targeted.

"My heart was pounding, and I feared for my life," the woman said, recounting when they awoke to a phone call from police, then were told to exit the house amid the glare of high-intensity police lights and officers' weapons pointed at them.

"The fate of [Justine] Ruszczuk was present in my mind as I walked barefoot across the lawn," she said, referring to the woman shot and killed by a Minneapolis police officer two years ago.

The woman, who asked that her identity and specifics about the home's location not be published, said police told her and her husband that someone reported a killing in the house and a desire to shoot officers.

"They asked us if we knew what swatting was," the woman said. She said no — until now.

Motives for such a hoax range from the thrill of prompting a full-blown response to scaring someone inside as police show up poised to use all necessary force.

Some have pulled off the stunt while connected live with a video-game player in the targeted home, allowing the perpetrator to witness amped-up police action in real time.

"These types of pranks are a recipe for tragedy," said Andy Skoogman, executive director of the Minnesota Chiefs of Police Association. "We've seen people in other states lose their lives. ... It's a ridiculous and reckless stunt that needs to stop."

Skoogman said that any response by police to a homicide or a hostage being held makes for an "incredibly high-stress situation for cops."

"Officers are on edge," he said. "Anyone and everyone they encounter will be considered a suspect, and in many cases a potentially deadly threat. They will do whatever they can to save lives. But as we have seen, these situations can escalate quickly and have ended



"He said he wants to shoot the police also," the dispatcher relayed to officers in Minnetonka late Saturday.

tragically."

Swatting has popped up in Minnesota and all around the country in hundreds of incidents annually with consequences that range from denting agency budgets, to distracting officers from other calls, to injuries and even death.

The FBI recognized swatting as an emerging threat as early as 2008, noting it had become commonplace among gamers.

In 2015, a 19-year-old man pleaded guilty to reporting to police in southwestern Minnesota that he had shot his father, and had taken him and his brother hostage while threatening bombings and shootings at schools in Marshall. His threats, which were made from Texas, spanned several months and included locations in Ohio and Massachusetts.

Three months ago, a 26-year-old California man was sentenced to 20 years in prison for making bogus emergency calls to authorities across the U.S., including one that led police to fatally shoot a Kansas man following a dispute between two online gamers over a \$1.50 bet.

And one day after the Minnetonka hoax, police outside Baltimore went to the home of Pulitzer Prize-winning columnist Leonard G. Pitts Jr. based on a prank about a killing in his home. Pitts was ordered to his knees and handcuffed, he told the Miami Herald (<https://www.miamiherald.com/news/nation-world/national/article232127492.html>).

Minnetonka Police Chief Scott Boerboom said Monday these pranks "are a disruption in the neighborhood, create fear and are unnecessary, but we have to respond," even though his and other law enforcement agencies are increasingly aware that swatting incidents seem to be on the rise.

Boerboom offered virtually no hope of catching whoever called in the hoax Saturday to Hennepin County's nonemergency number. He said the call came from a connection through the internet on a computer, making it "almost impossible to trace. ... We have not had good luck in the past."

Police Department analysts are still trying to backtrack their way to a suspect, but in the unlikely event that they do catch one, falsely reporting a crime is only a misdemeanor unless more serious consequences grow out of the hoax.

"You would think it would be much more severe," the chief said.

Skoogman of the Police Chiefs Association said there is a legislative effort to specifically make swatting a federal crime, rather than trying to apply a more general charge such as making a deadly threat.

"That's a good step," he said. "This type of prank has to stop before more people lose their lives."

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**Paul Walsh** is a general assignment reporter at the Star Tribune. He wants your news tips, especially in and near Minnesota.

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