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

June 18, 2020 10:00 a.m.

Webex Meeting Link

1. Call to Order

2. Approval of Agenda

3. Approval of Minutes –May 21, 2020 Meeting

4. Action Items

A. Metro 3.6.0 SMS Text-to-9-1-1 Standard Update
B. Civil Unrest Emergency Communications After Action Review Team

5. Discussion Items

A. Pandemic Response
    1. Metro PSAP Consolidation Planning
    2. PSAP Consolidation Plan System Evaluation Team
B. Winter Storm-Related Incident Coordination with State Patrol
C. Fraud / Identity Theft Procedure
D. SECB Grant Proposals
    1. 9-1-1 System Security
E. System Outage Notifications
    1. Outage Notification Process
F. Mental Health Call Processing Standard
G. Telecommunicator Reclassification and Licensing Legislation

6. Reports

A. PSAP Operations Round Table Work Group
    1. Cell Phone Location Request Process Standard
B. SECB NG9-1-1 Committee Report
C. 9-1-1 Network Report
D. 9-1-1 Data Report

7. Announcements

8. Adjourn

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
WebEx Meeting Notes
May 21, 2020

Members Present:

Laura Anderson, Sherburne
Carrie Bauer, Scott
Susan Bowler, Carver
Bob Dowd, Isanti
Jon Eckel, Chisago
Janelle Harris, Edina
Heidi Hieserich, Airport
Kathy Hughes, Minneapolis
Wade Johnson, HEMS
Chad Loeffler, Metro Transit
Tony Martin, Hennepin
Michael Melby, North Memorial
Darlene Pankonie, Washington
Nancie Pass, Ramsey
Cheryl Pritzlaff, Dakota
Jim Scanlon, Bloomington
Val Sprynczynatyk, Anoka
Victoria Vadnais, Allina
Lisa Vik, Eden Prairie

Alternates / Guests Present:

Scott Haas, Scott
Dan Klawitter, HEMS
Kari Morrissey, Anoka
Jon Rasch, Ramsey Alternate
LaVae Robinson, Minneapolis Alternate
Greg Weigel, St. Louis Park Alternate
Vic Barnett, Ramsey
Marcus Bruning, ECN
Marcia Broman, MESB
Eli Charif, M Health Fairview
Dan Craigie, ECN
Pete Eggimann, MESB
Mary Ehrsam, Solacom
Tracey Fredrick, MESB
Richard "Jake" Jacobson, CTL
Frank Jarman, Motorola
Mike Mihelich, Ramsey
Todd Moen, Carver
Jeff Nelson, PSC Alliance
Jill Rohret, MESB
Martha Ziese, MESB

1. **Call to Order:**

Heidi Hieserich, 9-1-1 TOC Chair called the meeting to order at 10:00 a.m.

2. **Approval of Agenda:**

M/S/C Tony Martin moved to approve the May 21, 2020 agenda. Nancie Pass seconded. Motion carried. (see roll call vote addendum)

3. **Approval of Minutes:**

Dar Pankonie asked that the spelling on Nancie Pass' name be corrected.

M/S/C Kathy Hughes moved to approve the minutes from April 16, 2020 Meeting. Cheryl Pritzlaff seconded. Motion carried. (see roll call vote addendum)

4. **Action Items:**
   A. **M Health Fairview (Health East) 9-1-1 Plan**

Pete Eggimann said M Health Fairview (MHF) is offering a plan to become a secondary PSAP. MHF operates a communications center that receives emergency calls and dispatches emergency EMS calls. The MHF service area is expanding in both greater MN and in the metro area. MHF has developed a plan to connect to the 9-1-1 system utilizing the Motorola Hosted VESTA solution, which will support call transfers between the primary PSAPs and the MHF communications center on the 9-1-1 network with location data for calls for service and for EMD instructions. The planned configuration utilizes physically diverse and redundant network connections between workstations at the MHF communications center and the Motorola host site datacenters.

M/S/C Carrie Bauer motioned to approve the M Health Fairview (Health East) 9-1-1 plan for becoming a secondary PSAP on the 9-1-1 system. Val Sprynczynatyk seconded. *Motion carried. (see roll call vote addendum)*

B. Pandemic Response PSAP Consolidation Plan System Evaluation Team

Eggimann said that the 9-1-1 TOC recommended a Pandemic Metro Area PSAP Consolidation Plan to the Board for approval in April. Part of that short-term plan was to implement a backup CAD system that could support operations for any of the metro PSAPs if any one or more of them had to close because of the pandemic virus infecting significant numbers of staff members.

RapidDeploy was chosen as the CAD vendor. Eggimann said that he recommends that an evaluation team be formed to test, exercise, and provide feedback on the RapidDeploy system that is being deployed to provide a short-term solution to address the potential impact on PSAP operations from the pandemic.

Susan Bowler asked what would be the size of the team?

Eggimann said that has not been determined, but he recommended the team include CAD administrators and PSAP managers to do the evaluation.

There was discussion about the evaluating team assessing the pandemic short-term plan to see if there is merit in keeping the RapidDeploy or similar cloud-based CAD system as part of a long-term or ongoing solution to address the need for a regional or statewide solution that can provide situational awareness on events that are moving or that involve multiple PSAP service areas to allow better response coordination and work load sharing between PSAPs. Consensus from members was to assess the pandemic implementation and use the assessment to guide what should be included in a long-term regional or statewide plan.

Martin volunteered a staff person from Hennepin County.

M/SC Motion made by Martin to approve the formation of a 9-1-1 evaluation team to determine if RapidDeploy is the best solution for metro wide PSAP consolidation going forward. Bowler seconded. Motion carried. (see roll call vote addendum)

5. Discussion Items:

A. Pandemic Response

1. Metro PSAP Consolidation Planning

Mike Mihelich said that work continues uploading the metro PSAP CAD data into the RapidDeploy system (e.g. users, response units, call types, etc.) Michael said that work group leaders are still needed for planning efforts for how the consolidation plan would be implemented in the event a PSAP's staff are overwhelmed with the pandemic virus including work groups on 9-1-1, ARMER, Operations Staffing, and GIS. The PSAP contacts will be provided with access credentials for the RapidDeploy system.

B. Winter Storm Related Incident Coordination with State Patrol

Tony Martin said when the Pandemic situation dies down, the work group will meet again. A draft protocol was provided for the meeting packet so the committee members can review the language and offer edits and comments.

C. Fraud and Identity Theft Procedure (no update)

D. SECB Grant Proposals

Tracey Fredrick said the GIS grant for Sherburne County was finalized. The annual SHSP and SECB grant applications are due June 30th. The CPE grants are still in the works.

E. System Outage Notifications

1. Outage Notification Process

Eggimann shared a copy of a notification procedure that had been developed by the North Central Texas Emergency Communications District located on north edge of the Dallas / Ft. Worth metro area. He suggested that the procedure could be used as a model for the development of a new communications plan in our area. Eggimann also told the group that he would locate and send to the TOC members the emergency notification tabletop exercise documentation from the meetings facilitated by Angela Eastman with CenturyLink, PSAP representatives, and the MESB that were held several months ago. Martin suggested this item remain on the agendas as an action item and volunteered to get involved. Pankonie agreed and suggested a template be created. Pankonie, Hieserich, Martin, Pritzlaff, Sprynczynatyk volunteered to form a team that would develop a metro area notification system to be used if a 9-1-1 system outage is identified.

F. 9-1-1 System Security (no update)

G. Mental Health Call Processing Standard (no update)

H. Cell Phone Location Request Process Standard (no update)

Broman said Leslie Sticht had reached out to each of the wireless carriers to obtain their information for their process. That information was sent to Kari Morrissey for the PSAP Roundtable to put documentation together for each PSAP's process with the different carriers.

I. Telecommunicator Reclassification and Licensing Legislation

Pankonie said there is nothing new to report. The legislature closed on the day the bill was to be read so everything is on hold for now.

6. Reports:

A. PSAP Roundtable – (no update)

B. SECB NG9-1-1 Committee

Pankonie said that the meeting yesterday included discussion on getting GIS standards in place at a state-wide level, MDH COVID-19 recommendations, and continued discussion on the Telecommunicator CPR standard.

A Co-Chair for the NG9-1-1 Committee is still needed. Nancie Pass said she would consider serving as the committee co-chair. ECN is checking to see if Pankonie, who represents the MN Sheriff's Association on the committee but who is also from a metro area PSAP, would preclude Nancie serving as co-chair since both manage metro area PSAPs.

C. 9-1-1 Network Report – (Written Report Provided)

D. 9-1-1 Data Report – (Written Report Provided)

Pankonie asked if Comtech could be encouraged to continue their testing with the new classes of service? Broman has not heard back from Comtech or ECN yet, but said she would inquire again.

7. Announcements

The Chair announced that the committee will hold a June meeting because the annual NENA Conference has been postponed until September.

8. Adjourn

The meeting adjourned at 11:48

Roll Call Voting Tables

Approval of Agenda Roll Call

Name	County/City/Agency	Member	Yes	No
Anderson, L.	Sherburne	Member	X	
Bauer, C	Scott	Member	X	
Bowler, S	Carver	Member	X	
Dowd, B	Isanti	Member	X	
Eckel, J	Chisago	Member	X	
Harris, J	Edina	Member	X	
Hieserich, H	MAC/Airport	Member	X	
Hughes, K	Minneapolis	Member	X	
Johnson, W	Hennepin EMS	Member	X	
Loeffler, C	Metro Transit	Member	X	
Martin, T	Hennepin	Member	X	
Melby, M	North Memorial	Member	X	
Pankonie, D	Washington	Member	X	
Pass, N	Ramsey	Member	X	
Pritzlaff, C	Dakota	Member	X	
Scanlon, J	Bloomington PD	Member	X	
Sprynczynatyk, V	Anoka	Member	X	
Weigel, G.	St Louis Park	Alternate	X	
Vadnais, V	Allina	Member	X	
Vik, L	Eden Prairie	Member	X	
Total Votes Yes: 20 No: 0				

Approval of Minutes Roll Call:

Name	County/City/Agency	Member	Yes	No
Anderson, L.	Sherburne	Member	X	
Bauer, C	Scott	Member	X	
Bowler, S	Carver	Member	X	
Dowd, B	Isanti	Member	X	
Eckel, J	Chisago	Member	X	
Harris, J	Edina	Member	X	
Hieserich, H	MAC/Airport	Member	X	
Hughes, K	Minneapolis	Member	X	
Johnson, W	Hennepin EMS	Member	X	
Loeffler, C	Metro Transit	Member	X	
Martin, T	Hennepin	Member	X	
Melby, M	North Memorial	Member	X	
Pankonie, D	Washington	Member	X	
Pass, N	Ramsey	Member	X	
Pritzlaff, C	Dakota	Member	X	
Scanlon, J	Bloomington PD	Member	X	
Sprynczynatyk, V	Anoka	Member	X	
Weigel, G.	St Louis Park	Alternate	X	
Vadnais, V	Allina	Member	X	
Vik, L	Eden Prairie	Member	X	
Total Votes Yes: 20 No: 0				

Approval of MHF 9-1-1 Plan Roll Call:

Name	County/City/Agency	Member	Yes	No
Anderson, L.	Sherburne	Member	X	
Bauer, C	Scott	Member	X	
Bowler, S	Carver	Member	X	
Dowd, B	Isanti	Member	X	
Eckel, J	Chisago	Member	X	
Harris, J	Edina	Member	X	
Hieserich, H	MAC/Airport	Member	X	
Hughes, K	Minneapolis	Member	X	
Johnson, W	Hennepin EMS	Member	X	
Loeffler, C	Metro Transit	Member	X	
Martin, T	Hennepin	Member	X	
Melby, M	North Memorial	Member	X	
Pankonie, D	Washington	Member	X	
Pass, N	Ramsey	Member	X	
Pritzlaff, C	Dakota	Member	X	
Scanlon, J	Bloomington PD	Member	X	
Sprynczynatyk, V	Anoka	Member	X	
Weigel, G.	St Louis Park	Alternate	X	
Vadnais, V	Allina	Member	X	
Vik, L	Eden Prairie	Member	X	
Total Votes Yes: 20 No: 0				

Approval of PSAP Consolidation Plan System Evaluation Team Roll Call:

Name	County/City/Agency	Member	Yes	No
Anderson, L.	Sherburne	Member	X	
Bauer, C	Scott	Member	X	
Bowler, S	Carver	Member	X	
Dowd, B	Isanti	Member	X	
Eckel, J	Chisago	Member	X	
Harris, J	Edina	Member	X	
Hieserich, H	MAC/Airport	Member	X	
Hughes, K	Minneapolis	Member	X	
Johnson, W	Hennepin EMS	Member	X	
Loeffler, C	Metro Transit	Member	X	
Martin, T	Hennepin	Member	X	
Melby, M	North Memorial	Member	X	
Pankonie, D	Washington	Member	X	
Pass, N	Ramsey	Member	X	
Pritzlaff, C	Dakota	Member	X	
Scanlon, J	Bloomington PD	Member	X	
Sprynczynatyk, V	Anoka	Member	X	
Weigel, G.	St Louis Park	Alternate	X	
Vadnais, V	Allina	Member	X	
Vik, L	Eden Prairie	Member	X	
Total Votes Yes: 20 No: 0				

METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: June 18, 2020
Agenda Item: 4.A Metro 3.6.0 SMS Text-to-9-1-1 Standard Update
Presenter: Eggimann

RECOMMENDATION

The 9-1-1 Technical Operations Committee (TOC) review and consider some minor edits to the MESB SMS Text-to-9-1-1 Standard. The edits correct some grammar errors, update the TCC service provider name from West to Intrado, and add a reference to the SECB Text-to-9-1-1 Standard.

BACKGROUND

ISSUES & CONCERNS

FINANCIAL IMPACT

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL

Metro Region
9-1-1 Standards, Protocols, Procedures

Section 3 – Metro 3.6.0 SMS Text-to-9-1-1 Call Processing
Date Established **11-16-17**
Date Revised/Reviewed ~~1-10-18~~6-11-20

1. Purpose or Objective

To establish an operational standard for processing short message service (SMS) text-to-9-1-1 calls in the metro region. The purpose of text-to-9-1-1 is to provide a means of communication between the caller and the public safety answering point (PSAP) when it is not feasible for callers to make a traditional voice call. Callers who find themselves in a situation where they are only able to text, or individual who are hard of hearing or unable to speak may opt to utilize text-to-9-1-1. Voice communications is still the preferred medium to reach 9-1-1 and will be promoted as such throughout the region.

2. Background

Capabilities:

~~PSAPS~~ PSAPs that have a 9-1-1 answering application capable of handling text-to-9-1-1 calls and are directly connected to the statewide Emergency Services IP Network (ESInet) will be allowed to take text-to-9-1-1 calls after submission of a 9-1-1 Plan change letter through the Metropolitan Emergency Services Board (MESB) and to the Minnesota Department of Public Safety's Division of Emergency Communication Networks (ECN).

Constraints:

Text-to-9-1-1 does have limitations compared to traditional voice calls with caller location accuracy. Text-to-9-1-1 provides the geo coordinates of the center of the cell site centroid to the PSAP.

Once a text session is ended by the call taker a text session cannot be restored or initiated unless the caller messages 9-1-1 again in a new session.

Text messaging to 9-1-1 is a best effort service that utilizes the public SMS text network. As with any SMS texts, there is no guarantee on the speed of delivery, or if the SMS message will be delivered at all. SMS messages may also appear out of order. Accordingly, it may take longer for a call taker to process an SMS text to 9-1-1 request than a traditional 9-1-1 voice request, which in turn may lengthen the public safety response time.

Due to limitations with SMS messaging, messages are limited to approximately 160 characters.

When the caller's phone is in roaming mode, the text will not be delivered to the PSAP. The caller will receive a bounce back message advising them to dial 9-1-1.

If a text call is not answered in the PSAP within 30 seconds, the text control center (TCC) ~~TCC~~ will drop the call and send a message to the caller advising them to call 9-1-1. This may vary depending upon local PSAP equipment and settings.

3. **Definitions:**
Cell site centroid – Center point of a single cell sector. There are typically 3 sectors around a tower.
Emergency medical dispatch (EMD) **–** systematic program of handling medical calls in which call takers use established protocols to classify the nature of the call, dispatch responders and provide pre-arrival instructions.
ESInet – A managed Internet Protocol (IP) network that is used for emergency services communications, and which can be shared by all public safety agencies. Used for carrying voice plus large amounts of varying types of data using IP protocols and standards.
PAI - Pre-arrival instructions (PAI) are instructions the call taker provides to the caller before responders arrive on scene.
SMS – Short message service (SMS) is commonly referred to as "text message". This type of messaging service is a component of most mobile telephone systems.
TTY – A text telephone (TTY) is a device that allows the deaf, hard of hearing and speech impaired to communicate via telephone.
TCC – The text control center (TCC) routes the wireless call to the correct PSAP for handling.

4. Recommended Protocol:

A) General

1. Due to limitations with SMS messaging, the location information provided by a text message is unreliable and the call taker should not rely on the location information for dispatching text-to-9-1-1. The carriers use a different methodology for text calls than they do wireless calls. XY coordinates will be provided with the text that represent the centroid of the cell sector. The call taker can rebid the location information if necessary. Location information may or may not improve with a rebid. To rebid, the call taker must enter the command #L into the text box and send it.
    1.1 Local PSAP equipment setting may be configurable to automatically rebid.

2. Text messages are expected to be processed using the same standards for processing emergency and non-emergency voice calls for service.

3. Call takers should avoid the use of "texting" lingo, shortcuts, emoji characters and/or acronyms. All correspondence from the call taker should be in plain language.

4. If the call taker is unable to explain to the caller that they need to call 9-1-1 due to language or communication barriers, the call taker will initiate a voice call to the originating number and attempt to make contact to provide Language Line interpretation services. Language Line is not currently capable of translating text.

5. The use of preset messages is available and configurable according to agency protocol. The use of preset messages is recommended.

6. A caller should not be called back in cases where their safety, or the safety of another, is in question unless directed otherwise.

B) Text to 9-1-1 Call Processing

1. The call taker will answer 9-1-1 text messages as they do with all other 9-1-1 calls,

(i.e. 9-1-1 where is your emergency?). If the PSAP is accepting texts for other jurisdictions, a generic opening message should be used to avoid confusion versus one that identifies the agency.

2. The call taker will confirm that the caller can be reached at the same number the text is originating from and verify the address/location of the incident. The caller's location information provided to the PSAP by the carrier may not be accurate, and/or a mistyped or auto-corrected street name by the caller may provide the call taker with a wrong address, so every address/location (including city and state) must be verified.

3. The call taker will ask the caller if they are able to call in by voice (if it is safe to do so), unless it is made clear at the onset of the call.

4. If the request is of a medical nature and the caller confirms they cannot make a voice call, every effort will be made to process the request in the same way that a voice or TTY call would be processed, recognizing that typing questions and instructions is much slower than providing pre-arrival instructions on a voice call.

5. Before ending the call, the call taker will inform the caller what action will be taken. The call taker should consider keeping the session open until responders have ~~made contact with~~contacted the caller/victim. This will allow for additional texting and the ability to obtain additional information if necessary.

6. Once a call is deemed ready for dispatch, the call is to be processed and dispatched according to the procedure for the specific incident. If pertinent the responders may be advised that the call is being received by text message.

7. Prior to ending the session, a message should be sent to the caller indicating that the session will be closed. Unless the PSAP's CPE has the capability of initiating a text, a SMS Messaging session cannot be restored/initiated by the PSAP unless the caller messages 9-1-1 again in a new session. For PSAPs that do not have CPE text initiation capability, they choose to have an alternative option for initiating outbound text in situations where additional information may be needed, and the text session was terminated, such as a PSAP cellular telephone.
   7.1.1 If the call taker initiates an outbound text from a PSAP cellular phone, a general "do not reply" disclaimer should be used. (i.e. CAUTION – DO NOT REPLY TO THIS NUMBER – Please call 9-1-1 if assistance is needed. This telephone is not monitored or used to reach 9-1-1).

8. The caller will receive a "Dialog has been closed by 9-1-1" message when the call taker releases the call.

9. If the PSAP does not answer the call within 30 seconds, the TCC will terminate the call and send the caller a message advising them to place a voice call and that 9-1-1 text service is unavailable at this time.
   9.1.1 Local PSAPs equipment may be configured differently and override/change this automatic disconnect message.

C) No response from caller

1. If there is no response from the caller, the call taker will attempt to contact the caller by sending a text message back. If there is still no response, the call taker will leave the text session open and allow it to expire.
   1.1.1 Indicated emergency: If the initial message indicated an emergency with an unknown location, the call taker will attempt to use other methods to locate the caller. This includes, but is not limited to, rebidding the location and may also include placing a voice call to the caller to obtain critical information; however, if the initial message indicated an emergency where a callback could compromise the safety of the caller, the call taker will exhaust other methods, in an attempt to locate the caller first.

2. If there is still no response, the call taker will follow specific agency policy for hang-up abandoned or silent calls.

3. After 30 minutes of no activity in the session, the TCC~~C~~ will close the 9-1-1 text session and send the caller a message advising that the 9-1-1 dialog has been closed.
   3.1 Local settings in the PSAPs equipment may be configured differently.

D) Tracing anonymous text

1. It is not currently possible to receive an anonymous text. Any traceable information provided should be handled as it would for voice calls. If there is no information, no action can be taken.

E) Transfers and misdirected text

1. If the PSAP receives a text or request for service in another jurisdiction, the PSAP will transfer the text using the #T command directly through the TCC to the designated text capable PSAP for the jurisdiction.
   1.1 When transferring a text call, the transferring agency will advise the caller what agency they are being transferred to and relay pertinent details to the receiving PSAP in order to insure a successful transfer.
      1.1.1 ~~Text Control Center (~~TCC~~)~~ transfers using the #T command deliver a preemptive message that identifies the transferring agency and the previous text dialog to the receiving PSAP. The receiving PSAP will also receive the caller's location and telephone number information.
      1.1.2 The PSAP should use the private chat (#P) feature PSAP to PSAP to communicate sensitive information without the caller's knowledge. This feature is only available for transfers completed through the TCC.

2. If the PSAP is not able to transfer the text, the call taker will take pertinent information and relay to the appropriate PSAP. Once the initial response information has been exchanged, the agencies involved may choose to designate a talk group for continued incident communication or use telephone to relay incident updates.

3. If PSAP equipment is configured to send a call closure message to the caller after transferring to another agency, it is recommended that the PSAP three-way conference be maintained to avoid confusing the caller that their 9-1-1 session has been terminated. As an alternative to the three-way conference, the PSAP may also choose to advise the caller that they will receive a false disconnect message.

F) Text Transcripts

1. If the PSAP is unequipped to get their own transcripts for text calls, the call taker or supervisor should create a request to the ~~West~~ Intrado TCC to get that information.

5. Management:

The MESB's 9-1-1 Technical Operations Committee ~~of the MESB~~ is responsible for oversight of the standard. PSAP management will train their personnel in accordance with this standard and ensure staff maintain a proficiency with text call processing. PSAP management will ensure personnel comply with the procedures detailed in this standard.

6. References:[1]

"Interim Texting Policy Standard Operating Procedure". National Emergency Number Association International, Alexandria, VA, 2014.
Retrieved from http://www.nena.org/?text training docs.

"Text to 9-1-1 100-015". Red River Regional Dispatch Center Standard Operating Procedures Manual, Red River Regional Dispatch Center, Fargo, ND, 2015.

"Text-to-9-1-1 Statewide Operational Standard". MN Statewide Emergency Communications Board (SECB), St. Paul, MN, 2017

[1] Disclaimer: Portions of this document contain text taken verbatim from the references listed.

METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: June 18, 2020
Agenda Item: 4.B Metro Emergency Communications After Action Review Related to the Civil Unrest Between 052520 and 060820
Presenter: Eggimann

RECOMMENDATION

The 9-1-1 Technical Operations Committee (TOC) form a work group together with the Radio Technical Operations Committee to review the 9-1-1 and ARMER system performance and use during the response to the protests and civil unrest following the alleged murder of George Floyd while in police custody on May 25th. It is further recommended that the work group prepare a summary report of their findings as well as recommendations on how the metro area emergency communications systems could be improved if a similar or other large, multi-jurisdictional event takes place in the future.

BACKGROUND

The cities of Minneapolis and St. Paul experienced significant protest, civil unrest, and rioting activity for 7-10 days following George Floyd's death, the firing, and subsequent arrest of the four Minneapolis police officers involved in Floyd's death. Large crowds were involved and over 500 businesses were damaged, looted, or destroyed during the unrest. Local and state emergency response resources were involved including the activation of the MN National Guard in response to the unrest. The 9-1-1 and ARMER radio systems were both subjected to spikes in traffic far in excess of normal operations. It is important to understand what worked well with both systems and to try to identify what could have worked better, both from an operational and a technical perspective.

ISSUES & CONCERNS

These events have become highly political. The work group should make every effort to make factual, measurable observations and recommendations without regard to political opinions or beliefs.

FINANCIAL IMPACT

(None identified)

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL

911 COMMUNICATION TABLE TOP EXERCISE AND FOCUSED CONVERSATION

APRIL 9, 2019

AGENDA

- 8:30-8:50 Introductions and Role Review
- 8:50-9:50 Discussion of terms (e.g. outage vs. disruption) and Common Language
- 9:50-10:00 Break
- 10:00-12:00 Review of August 1st event communications among stakeholders. Focus on communications, not the specific incident
- 12:00-12:45 Lunch
- 12:45–2:15 Table Top Scenario
- 2:15-2:45 Hotwash, recap of day
- 2:45 Dismiss

INTRODUCTIONS

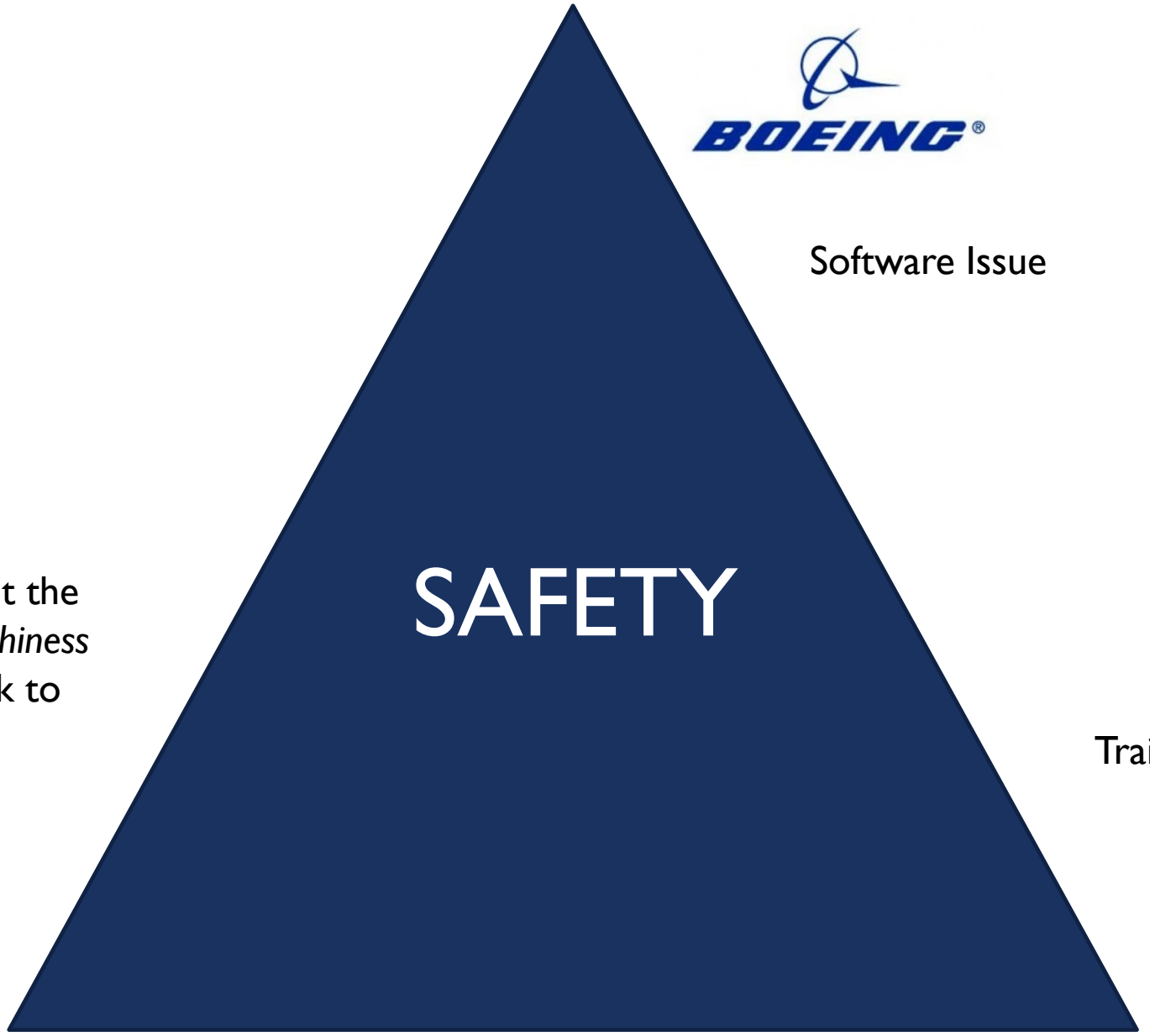
- Name
- Agency and Role
- What do you hope to get out of the day today?

WHAT ARE WE TRYING TO DO TODAY?

- Solve a problem
- Generate new options
- Understand individual's challenges and system challenges
- No right or wrong answers
- Use plain language, try to avoid acronyms
- Everyone can and should participate
- Identify gaps in training and systems

FOCUSED CONVERSATION

- Objective – Gathering the facts & external reality
- Reflective – Personal reaction to the situation
- Interpretive – Significance and implications
- Decisional – Try to find resolution



Didn't really care about the issue. Issued an *Airworthiness Directive (AD)*. Planes ok to fly.

Software Issue

Training Issue

CONSIDERATIONS

- Doesn't matter if it was human error, technology or an Act of God
- Did anyone report the problem?
- What is the "Trigger" to make a decision (keep flying or ground the planes)?
- Response by the public
- Impact to reputation (short term and long term)


THE 911
Communication
System

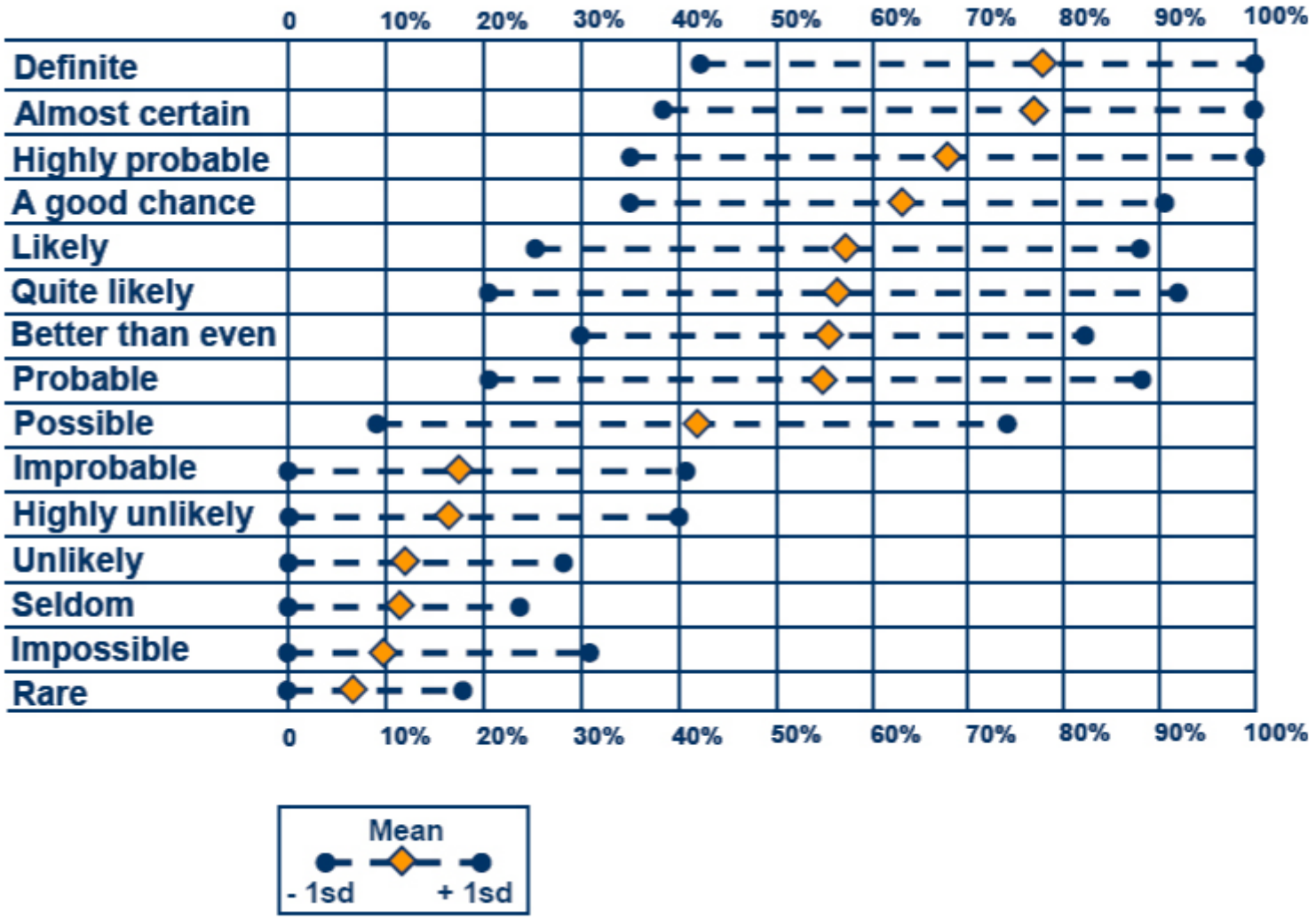
ON A BAD DAY WE ALL NEED TO SPEAK THE SAME LANGUAGE

- Can a response be standardized using common language?
- Can communications be made more clear between partners?
- What challenges do you face in your discipline that others might not be aware of?

REAL WORLD EXAMPLES – NOTIFICATION & SPEAKING THE SAME LANGUAGE

- Level 1: NUE – Notification of an unusual event (lowest level)
- Level 2: Alert – Low level, no threat inside the plant
- Level 3: SAE - Site Area Emergency, full activation, radiation release
- Level 4 – GE - General Emergency – threatening public safety, may exceed site protection actions (highest level)

- NOTIFICATION - No Response Needed
- STAND BY - Information Only
- RESPOND - Response Needed


0
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Definite
Almost certain
Highly probable
A good chance
Likely
Quite likely
Better than even
Probable
Possible
Improbable
Highly unlikely
Unlikely
Seldom
Impossible
Rare
Mean
- 1sd
+ 1sd

Terms of Likelihood	Almost No Chance	Very Unlikely	Unlikely	Roughly Even Chance	Likely	Very Likely	Almost Certain(ly)
Terms of Probability	Remote	Highly Improbable	Improbable (Improbably)	Roughly Even Odds	Probable (Probably)	Highly Probable	Nearly Certain
	1-5%	5-20%	20-45%	45-55%	55-80%	80-95%	95-99%

Term	Likelihood of outcome
Virtually certain	>99% probability
Extremely likely	>95% probability
Very likely	>90% probability
Likely	>66% probability
More likely than not	>50% probability
About as likely as not	33 to 66% probability
Unlikely	<33% probability
Very unlikely	<10%probability
Extremely unlikely	<5% probability
Exceptionally unlikely	<1% probability

DISCUSSION – WHAT IS THE LANGUAGE WE USE NOW?

- ECN
- CenturyLink
- Local PSAPs


Break
TIME

FOCUSED CONVERSATION

- Objective – Gathering the facts & external reality
- Reflective – Personal reaction to the situation
- Interpretive – Significance and implications
- Decisional – Try to find resolution

OBJECTIVE QUESTIONS – THINKING ABOUT AUGUST 1ST, 2018 (5 MINS)

- What occurred on August 1, 2018?
- Do we have any additional information about the outage?
- Can we all agree on what happened?

ACTIVITY

- Have a discussion with your colleagues from your discipline and answer the following questions
- Take 15-20 minutes per question
- Prepare to have someone report back to the group
- In 5 words or less answer the question on the neon paper and place it on the sticky wall

REFLECTIVE QUESTIONS – THINKING ABOUT HOW THE OUTAGE AFFECTED YOU PERSONALLY (20 MINS)

- What has been the most frustrating part of this?
- How did this affect you personally?
- How has it affected all of our work?
- If there is one thing you would have done differently, what would it be?

INTERPRETIVE QUESTIONS – LOOKING FORWARD (20 MINS)

- If this issue remains unsolved , what are possible effects to your organization or the public?
- What are other implications?
- What are some of the root causes of the issue?
- Are there underlying issues to this problem?

DECISIONAL QUESTION – CAN IT BE FIXED? (20 MINS)

- What are some things we can do to solve this problem?
- Can technology be improved?
- Is additional training needed?
- What are the next steps that are needed for success?

REPORT OUT (20 MINS OR UNTIL LUNCH IS SERVED)

- Each group can take a few minutes to report what they learned from all 3 questions.
- No need to repeat if someone already said the same thing


Break
TIME

TABLE TOP EXERCISE SCENARIO

- Low stress, no fault learning environment
- Use current knowledge and abilities
- Discuss options and possible solutions
- Problem solving efforts are the focus

- Capabilities, plans, systems and processes are being tested
- All players get the same information at the same time
- No hidden agenda
- Success is determined by feedback and interaction of participants

QUESTIONS BEFORE WE BEGIN?

The Blaine Central Office supporting ~60,000 lines spanning Anoka and Ramsey counties is experiencing issues of unknown scope and scale, though creating auto-communication (VM and email) to the Anoka County and RCECC PSAPs that it serves.

15 minutes after the auto communication is sent, it is discovered that the ES Trunks are all down from the Blaine CO to the Minneapolis and St. Paul Legacy Selective Routers (LSRs). The process begins to execute the first option of Condition 4 – send 911 calls on an administrative line to Anoka County (nothing to Ramsey). 45 minutes after enabled, the administrative line ceased functioning and the Blaine CO was now considered to be totally isolated.


Anoka
County
Ramsey
County

During this chaotic situation, an airplane missed the Blaine Airport and crashed into a nearby neighborhood where it was eventually learned that ***the airplane actually crashed into the Blaine CO.***

The Ginormoz Central Office (CO) supporting ~90,000 lines spanning three counties is experiencing issues of unknown scope and scale, though creating auto-communication (VM and email) to the one small (PSAP A) and two large PSAPs (PSAPs B and C) it serves.

PSAP A supports 20,000 lines, PSAP B supports 67,000 lines and PSAP C supports 3,000 lines that include a nuclear power plant and a university.

15 minutes after the auto communication is sent, it’s discovered that ES Trunks are all down from the Ginormoz CO to the Legacy Selective Router (LSR).

DATA INJECT #1

- The Ginormoz CO is now determined to be totally isolated. (Condition 4 use of routing via admin lines in no longer workable).

DATA INJECT #2

- Reports developing that an airplane crashed nearby the CO turning out that the airplane had actually crashed ***into*** the CO. (could be extraneous when thinking of 911 communication, but now extends the MTTR to indefinite for those supported by the CO)

DATA INJECT #3

- Coincidentally, calls from a major wireless carrier no longer are getting processed at an LSR. The LSR is different from the one used by the Ginormoz CO. (Different area which may complicate the communication)

DATA INJECT #4

- Becomes known that more than one wireless carrier is no longer getting processed at the LSR (which redirects the troubleshooting as well as communication)

REPORT OUT FROM EACH GROUP

- AHA Moments?
- What gaps were identified?
- Training issues identified?
- Technology issues identified?

HOTWASH – THINKING ABOUT TODAY…

- What went well?
- What could be improved?
- What gaps were identified?
- What follow up is needed?
- Did you learn something new today?
- Did this meet your expectations from this morning?

NEXT STEPS & QUESTIONS


Thank You!

911 COMMUNICATION TABLE TOP EXERCISE AND FOCUSED CONVERSATION

APRIL 9, 2019

Decisional Question – Can it Be Fixed?

- What are some things we can do to solve this problem?
- Can technology be improved?
- Is additional training needed?

- Training – ongoing, all teams
- Training – ground up, share knowledge
- Training – national training standard
- Better forum for communicating – public vs public safety
- Improved communication – internal and external
- Communication process improvement
- Technology will change – continuous evolution
- FCC Regulation – more input from PSAPs and Carriers
- Messages lead to action plan
- Three-deep for all partners
- Trouble reporting portal
- Cloud based?
- Universal Status Dashboard (green, yellow, red)
- 9-1-1 System Dashboard
- Better software notification system
- Better visibility (alarms)
- Improved alarming visibility
- Joint meetings – brainstorming
- Joint meetings – information sharing
- Working in tandem on public messaging
- Create curriculum
- More exercises
- Documented and practiced communication process

911 COMMUNICATION TABLE TOP EXERCISE AND FOCUSED CONVERSATION

APRIL 9, 2019

Interpretive Questions – Looking Forward

- If this issue remains unsolved, what are possible effects to your organization or the public?
- What are other implications?
- What are some of the root causes of the issue?
- Are there underlying issues to this problem?

- 360 Degree situational awareness
- Creating standard communications plan
- Train the public on 9-1-1 access
- More internal/partner training
- Misunderstanding of 911; always evolving
- Coordination of messaging
- Social Media
- Escalating political impacts
- Politics
- Regulatory liability concerns hamper communication
- Fines; new regulations
- Individual roles working together
- Increase number of players
- Lack of documented process/plan
- Who's responsible?
- No practiced procedure
- Strain of resources
- Complexity
- Not knowing who's doing what to what piece
- Advanced technology (complexity)
- Technology changes
- Liability
- Loss of business
- Lives lost
- Public safety

- Reputation
- Lack of trust (media)
- Diminished trust
- Lack of trust
- Lose confidence in 9-1-1
- Distrust between partners

911 COMMUNICATION TABLE TOP EXERCISE AND FOCUSED CONVERSATION

APRIL 9, 2019

Reflective Questions – Thinking about how the outage affected you personally

- What has been the most frustrating part of this?
- How did this affect you personally?
- How has it affected all of our work?

- Lack of information
- Unknown impact; establishing communication with NOC
- Consistent release of information
- Engage Corp Comm sooner
- Increased media engagement
- Lack of communication
- Communication
- No coherent message
- Higher sense of urgency
- Different media reports
- Selective communication
- Social media impact
- 24-hour ten digit numbers
- Control the message
- No “immediate” communication method
- Communication based on relationships
- Have 3-deep contacts for PSAPs
- Delay in notification
- It doesn’t matter what we think. . . it’s what we know
- Redirected workflow
- Home life
- Consuming time/focus
- Refocusing of priorities
- Increased work
- The unknown actions to take

- One number notifications
- Lack of visibility; obtaining appropriate resources
- Need scripted response
- Learning opportunity
- No process to follow
- Have a process and training
- Brought to light training needs
- Identified need for more education and outreach (PSAPs)
- Too many unknowns
- In the dark
- Disappointment
- Fear
- Loss of pride
- Helpless
- Helpless
- Hyper-sensitivity
- Support
- Can’t meet PSAP expectations
- Disruption to the “normal day”
- End of the work day
- Came back/stayed late
- Concern for being related to a malicious event
- Couldn’t handle issue remotely
- Can’t reach 9-1-1 repair
- Had definitive cause for outage (24 hours later)
- There are an increased number of players

911 COMMUNICATION TABLE TOP EXERCISE AND FOCUSED CONVERSATION

APRIL 9, 2019

Hot Wash

How was the scenario viewed?

- CTL perspective was three different, separate events. They are reviewing each individual event.
- ECN perspective was needing to tell the governor; 100K customers out of service.
- In the 'Ginormoz' office it was one event.

ECN was looking for as much information as possible. CTL wasn't putting out media releases.

Should a bridge line be opened; when/what is the trigger? Even if the information is we don't know the cause or answer, and don't share with the public, but this is what we know so far.

The terminology we use sets the stage for "OK" or "OMG." A 911 outage is significantly different that a service disruption. We need to stay on the same page to manage the media. Outage should not be in our vocabulary. We should be correcting the media if they ask about an outage and tell them certain services are impacted.

Knowing what we know now, instructions should have been, "If you don't get through, dial again."

We have to feed the media information or they will forage for information – and input fake information. Unfortunately social media is driving the story.

Outage versus service disruption gets completely lost going up the chain – the governor's office won't understand. We need to translate it better.

Should we look at using IPAWS terminology because that is used nation-wide; would that be easier to use when talking to the Governor's office. The exact terminology might not be used, but if we are translating it that way we can use minor, localized, 4 hour repair, etc.

Come up with some canned template messages so we are minimizing the outage/impact.

It's hard to education the public on this. SkyWarn trainers teach the difference between watch and warning. Tornado emergency is from the Weather Channel. A lot of training the public and helping them understand.

How do you educate the public that just picks up the phone and call to see if it's working.

Providers need to be consistent in messaging.

When we reach out to the PSAPs, every little bit of information from CTL helps us out. It could be a major "ah-ha" moment for us; it might be that missing link that links issues together. Okay this is bigger than we thought – it's a larger footprint.

Communication isn't understood by everyone the same way. Just because it makes sense to me, doesn't mean everyone understands it the same way. Need to throw acronyms out the window.

If PSAPs have to rely on one-way communication from CTL, all that communication is open to interpretation. If Matthew opens the bridge and they can call into the bridge and get an update, then they have a conversation and get clarification of what is going on. Short term, until we can get better or use a dash-board, the bridge is the way to go.

One of the most common sayings is, "Don't exchange business cards at scene of incident – it's too late at that point."

The PSAP data base has limitations. We are being pushed into a decision based on the tools we have access to. Further internal conversation is needed.

Next steps and questions:

A lot of valuable information was provided; *what's within your control?*

We can fix: training, speakers at the conference, adobe connect, Skype. We can change and not let this happen again. Let this be the beginning.

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
Network Report
June 18, 2020

Agenda Number 6.C.

1. Text-to-9-1-1:
Washington and Scott Co. are 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 later this year.

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:
The MESB is working with ECN to connect the Health East communications center to the 9-1-1 system, which would enable them to receive transferred 9-1-1 calls on the 9-1-1 system with ALI. Ramsey Co. has also begun planning to make their VESTA 9-1-1 call answering application geo-diverse. This will require a change in the ESInet to serve the second application server location. Ramsey believes the change will enhance their system redundancy and provide more COOP options.

4. NG9-1-1 ESInet:
The MESB staff continue to work with ECN on NG9-1-1 RFPs covering 9-1-1 system ingress from telecommunications service providers to the NG9-1-1 core services, the core services themselves, and 9-1-1 system egress connectivity between the core services and the PSAP.

The MESB is focusing on giving our PSAPs better continuity-of-operations (COOP) options as well as enabling workload sharing for the PSAPs that are interested in working together. We want to ensure that our ESInet infrastructure can support shared/hosted and cloud-based applications and not limit the use of the ESInet to just handling 9-1-1 traffic. We are working now with ECN to consider ESInet options that would rehome our PSAP ESInet connections to redundant, diverse datacenters that can become the hubs for delivery of shared/hosted and cloud-based applications to all the metro PSAPs such as CAD, CAD-to-CAD interoperability, logging, as well as 9-1-1 answering applications.

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 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
June 18, 2020 Meeting

1. **Importance of GIS for 9-1-1:**
    a. 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. The datasets also form the foundational data used in PSAP CAD and mapping systems, as well as multiple other uses beyond public safety. PSAP managers are strongly encouraged to assist their GIS counterparts in communicating to key decisionmakers and county leadership what a **vital role GIS has to their current and future PSAP operations**.

2. **Regional GIS Data Aggregation:**
    a. **Road Centerline and Address Points:** The MetroGIS/Met Council continues to process 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. All ten metro counties are using this process.
    b. **Boundary Polygons:**
        i. MESB uploads the **regional PSAP, ESZ, MSAG community, law, fire and EMS boundary polygon layers** to the Minnesota Geospatial Commons. The datasets are updated as boundaries change or at a minimum of quarterly. Mobile Positioning Center, Text Control Center, and VoIP Positioning Center vendors are directed to the Commons for downloads of metro's PSAP boundary polygons.
        ii. All changes requested by metro PSAPs to their ESZ and EMS boundary polygon layers due to new **M Health Fairview service areas** have been completed.
    c. Regional Data Viewer: The datasets pertinent to regional 9-1-1 interests are available in the dataviewer developed by MetroGIS/Met Council. (Access link is: https://www.metrogis.org/projects/9-1-1-Data-Viewer.aspx.) PSAP MSAG coordinators are encouraged to use the dataviewer as a resource to reference the geospatial data their county GIS departments consider valid for regional 9-1-1 use.

3. **Regional GIS data support for Pandemic Response Planning/RapidDeploy Pilot:** The metro regional road centerline, address point, and boundary polygon datasets are being used for **map, feature, and geocoding services** for the RapidDeploy pilot and Pandemic Response PSAP Consolidation Plan**.** These services are being hosted by GeoComm. Rather than a custom basemap, the ESRI community basemap is being used for the RapidDeploy Nimbus environment.

4. **Regional 911/GIS Data Synchronization:** New ALI geocoding validations for the region were conducted. Results were shared with the metro county GIS managers on 6/10/20. PSAP and GIS managers will also receive detailed results via email.

5. **Regional GIS-derived MSAG activity:** Transition of the Anoka County PSAP MSAG to one derived from the county's GIS data is nearing completion. Previously, the same type of transition was completed for Chisago and Dakota Counties, as well as Eden Prairie. The GIS-derived MSAGs will be maintained manually through 911NET until future methods and processes are put in place.

6. **Statewide NG9-1-1 GIS Project:**
    a. ECN and MnGeo are continuing their review and consideration of comments submitted about the ECN **NG9-1-1 GIS implementation roadmap** document. The full set of submitted comments and ECN responses are expected soon and will be reviewed by the SECB NG911 Committee GIS workgroup.
    b. Grant contracting for Sherburne County GIS dataset development under ECN's **NG9-1-1 Federal Grant** is complete. Sherburne County will be engaging in their procurement process. A grant contract amendment from ECN is pending for the metro region pilot project on ongoing data lifecycle and GIS-derived MSAG processes under the federal grant.

7. **Statewide GIS Data Standards:**
    a. The metro regional road centerline and address point datasets conform with the **Minnesota Geospatial Advisory Council (GAC) approved data schemas**. The datasets in GAC format are publicly available on the MN Geospatial Commons. The regional road centerline version in the MRCC schema has been sunset.
    b. The GAC Standards Committee is continuing to review the concerns raised by ECN/MnGeo on the "comprehensive mappability" from **GAC to NENA and ECN's NG911 schema standards**. Recommendations for the committee are expected.
    c. The **SECB NG911 Committee GIS workgroup** has begun meeting under the leadership of Geoff Maas of Ramsey County GIS.

8. **New Class of Service Codes** (**WDL2, WDL1, WCVC, and VNOM**)**:**
    a. On 6/11/20, Comtech and Verizon successfully completed testing of the new wireless class of service codes with Washington County PSAP. Further tests will be conducted in Greater Minnesota prior to activation of the codes by Comtech for all PSAPs in the state. ECN will be coordinating the timing with Comtech and the SECB NG911 Committee. Upon activation, these new classes of service should help calltakers be aware when, on rebid, a wireless carrier supplies what they consider to be a dispatchable location (i.e. the caller's location as an address) in addition to the location coordinates and uncertainty.
    b. Additional VoIP class of service codes will likely start being used in 2020. Those new NENA VoIP codes are **VRES (residential VoIP), VBUS (business VoIP), VPAY (pay phone VoIP), VENT (enterprise VoIP-PBX/Centrex)**. Timing for use of those codes will depend on the VoIP Positioning Center and the VoIP carriers. Further discussion may occur at the State NG911 Committee.

9. **Wireless Cell Sector/Routing Data:**
    a. **MESB is processing wireless routing updates for all carriers on behalf of the metro PSAPs.** Should PSAPs want the routing for a specific cell sector or 9-1-1 call reviewed, just email ***mesbgis@mn-mesb.org*** and MESB staff will investigate.

b. The FCC has required wireless carriers to provide **vertical-axis Z-coordinate and uncertainty** information by April 2021 for wireless caller locations in the top 25 cellular market areas (which includes the 10-county metro region.) CenturyLink and Intrado have confirmed that the current 9-1-1 ALI database can deliver the Z-axis information if it is provided by the wireless carriers. It will, however, require a new ALI format to be created and implemented at PSAPs. Details of the carriers' plans and how PSAPs could make use of Z-coordinates in their existing CAD/mapping systems are undetermined at this point. This topic will continue to be monitored.