



# **9-1-1 Technical Operations Committee**

## **Meeting Notice**

**Thursday  
March 17, 2016  
10:00 AM**

**MESB Office  
2099 University Ave  
St. Paul, MN**

**Mark Your Calendars**

# **Metropolitan Emergency Services Board**

## **9-1-1 Technical Operations Committee**

### **Tentative Agenda**

**March 17, 2016**

#### **1. Call to Order**

#### **2. Approval of Minutes**

#### **3. Old Business**

- a. Wireless Issues
  - i. Creation of a Wireless Routing Recommendation Work Group
- b. GIS Issues
- c. Data Issues
- d. Next Generation 9-1-1
  - i. State 9-1-1 Program 9-1-1 Services RFP Update
- e. PSAP Operations Round Table Work Group
  - i. Minimum Training Standards for Telecommunicators
- f. Legislation – PSAP Manager Concerns / Needs?
- g. Metro Area 9-1-1 Strategic Planning Initiative
  - i. Issues and Needs Analysis Final Report
  - ii. MESB NG9-1-1 Transition 2016-2017 Strategic Plan

#### **4. New Business**

- a. ?

#### **5. Adjourn**

## **Metropolitan Emergency Services Board**

### **9-1-1 Technical Operations Committee**

#### **Draft Meeting Minutes**

**February 18, 2016**

#### **Committee Members**

X	Nancie Pass, Ramsey (Chair)		Kathy Hughes, Hennepin
X	Bob Dowd, Isanti (Vice-Chair)		Lisa Lovering, Isanti
X	Val Sprynczynatyk, Anoka	X	Heather Hunt, Minneapolis
	Mike Utecht, Bloomington PD		Dave Pikal, Ramsey
	Tim Walsh, Carver		Ken Dvorak, Scott
X	Jon Eckel, Chisago	X	Darlene Pankonie, Washington
X	Diane Lind, Dakota	X	Doug Anschutz, Washington
	Rose Kruchten, Dakota		

#### **Alternates**

	Susan Bowler, Carver		Kyle Blum, Anoka
	Troy Ruby, Dakota	X	Christine McPherson, Minneapolis
	Jeff Schlumpberger, Hennepin		Denise O'Leary, Ramsey
	Deb Paige, Carver		Bob Shogren, Isanti

#### **Others Attending**

Pete Eggimann, MESB  
Martha Ziese, MESB  
Gordy Chinander, MESB  
Marcia Broman, MESB  
Jill Rohret, MESB  
Scott Wosje, Northland Business  
Brian Kyllonen, PSC Alliance  
Chris Kummer, MAC

Dawn Evangelist, CenturyLink  
Matthew Hoffer, CenturyLink  
Jeff Lessard, U of M  
Lauren Petersen, MAC  
Victoria Peckman, AHEMS  
Heidi Hieserich, MAC  
Jake Jacobson, CenturyLink  
Jeff Nelson, PSC Alliance

### **1. Call to Order**

Nancie Pass called the meeting to order at 10:00

### **2. Approval of Minutes**

*Motion to approve the draft January 21, 2016 Minutes (Pankonie/Lind) Approved.*

### **3. Old Business**

#### **a. Wireless Issues – Gordy Chinander (see written report)**

A written report on the MESB activities regarding wireless was provided in the meeting packet. Gordy highlighted that he believed the wireless tower sectors in the database with “provisional” routing will be cleaned up by the end of the month. Gordy also reported that the State’s WERM wireless routing database application is now scheduled to go live at the end of April. The intent is to provide PSAP training before then. Gordy will pass on more information as it becomes available.

The committee members were asked to share if their PSAP had experienced any issues with wireless 9-1-1 calls in the past month. *(none were reported)*

#### **i. Creation of a Wireless Routing Recommendation Work Group**

Gordy led a continuation of the discussion started at last month’s meeting about the need to set up a work group to provide some guidance and consensus on the wireless routing process and the ALI record content. Another issue identified involves agreement on metro guidelines for how wireless carrier testing should be conducted. (e.g. request notice timing, testing hours, number of calls / PSAP, or /hour, or / day)

Christine asked Gordy if there was a way for the PSAP to get the ALI data the PSAP received sent back to a wireless carrier. Gordy said this could be added to the work group agenda.

#### **b. GIS Update – Marcia Broman (see written report)**

Marcia asked committee members if any of them experienced any GIS or Data issues since the last meeting that they wanted the committee to be aware of. *(none were reported)*

#### **c. Data Update – Marcia Broman (see written report)**

A written report on the MESB activities regarding ALI data was provided in the meeting packet. None of the committee members had any new data issues to discuss with the group.

#### **d. Next Generation**

##### **i. State RFP Update – Dar Pankonie**

The RFP respondents all submitted their best and final pricing. The Department of Administration is following up with two of the respondents asking for some clarification. The hope is to begin negotiations with the highest scoring respondent by the end of February.

Dar brought up the VMBL class of service (COS) that CenturyLink said could be used in MN. The idea behind using that COS would be to apply it to all 9-1-1 calls that originate on a wireless device, but use the Internet and a VPC to complete the call to the PSAP. That would be a heads up to the telecommunicator that the location information is coming from the VPC and not from the usual wireless mobile positioning equipment. MESB staff will continue to work with the State and CenturyLink to determine if all of the carriers and VPCs are willing to support that COS.

#### **e. PSAP Operations Roundtable - Pete Eggimann**

A smaller work group has been formed to work on identifying curriculum content that could be incorporated into a minimum training standard for entry level TCs. The first meeting of the small group was held on 02/16, with a follow-up call on 02/25. The group is comparing their individual agency training curriculum with the APCO / NENA training criteria which was recently released.

##### **i. Ramsey Co. Mental Health Referral SOP Draft – Nancie Pass**

Nancie shared the draft policy with the committee. The PSAP is beginning to send more 9-1-1 mental health calls to the Ramsey Co. Mental Health Hot Line. The intent is to implement the policy on March 1. Both the Pioneer Press and Minneapolis Star Tribune have expressed interest in the policy and how it will work.

#### **f. Legislation – Jill Rohret**

Jill told the committee that the legislative session will formally begin on March 8. There are still no specific bills dealing with 9-1-1 or the ARMER system. The sales tax exemption for joint powers organizations bill is still being considered, and the MESB lobbyist is actively working in support of that bill.

#### **g. Metro Area 9-1-1 Strategic Planning Initiative – Brian Kyllonen**

##### **i. Issues and Needs Analysis Report**

Jeff Nelson and Brian Kyllonen from PSC Alliance have been facilitating meetings and surveying the metro area PSAPs to identify common issues and needs that the MESB could assist them with. The draft report was distributed with the meeting packet material so the committee could review it prior to the meeting. Brian asked for continued input, correction

of any errors, and any questions the committee members may have before February 26, so that the report can be finalized before next month's meeting.

## **ii. NENA ESInet Design – Pete Eggimann**

Pete explained to the committee members that NENA was close to approving an ESInet Network Design document. In reviewing that document, the design proposed is significantly different than the current ESInet. The new design calls for the use of multiple network service providers, multiple network transport mediums (e.g. fiber, cable, wireless), multiple network protocols (e.g. MPLS, Ethernet, Internet VPN), and multiple paths that are physically diverse. Pete expressed some concern about migrating to that type of ESInet without conducting some trials first that didn't involve live 9-1-1 call traffic. The idea of setting up a pilot project involving at least two PSAPs by connecting those PSAPs to a commercial data center using some of the new ESInet connectivity was suggested. Pete thought that setting up mirrored CAD servers at the data center would provide some redundancy and continuity of operations options, while permitting the network traffic between the data centers and the PSAP to be monitored.

Committee members expressed concern about meeting NCIC and CJRS security standards in a commercial data center and the costs involved. Jon Eckel indicated he didn't think that any of the new ESInet recommendations coming from NENA were controversial and had been deployed in other systems successfully many times. He did not believe that a pilot project would be necessary as long as the new network options were properly engineered and installed.

Pete thanked the committee for providing good feedback, and said the MESB staff would continue to explore ESInet options that would conform with the NENA guidelines once they are published.

## **2. New Business**

### **a. Committee Member Roundtable**

(Committee members shared what was happening at each of their PSAPs that might be of interest to the group.)

*Call to adjourn (Dowd/Pankonie)*

# Technical Operations Committee

## *GIS Manager's report – 3/17/2016*

Metropolitan Emergency Services Board  
2099 University Avenue  
St. Paul, MN 55102  
Web: [www.mn-mesb.org](http://www.mn-mesb.org)

## TOPIC

### Wireless

Wireless provisionally routed database cleanup - This database project is an audit of all “Provisionally Routed” sectors in Intrados wireless database. **Completed 3/2016**

T-Mobile community name issue – a community name issue in the wireless ALI was discovered with some T-Mobile towers located in the metro area. The community name in a wireless ALI represents the community where the **Tower** is located. The towers in question have the PSAP abbreviations in place of the community name. MESB is currently reviewing the database records and submitting changes to T-Mobile. Should be completed by **4/2016**

State Wireless Emergency Routing Maintenance (WERM). The application allows you to review, change, approve, and update routing information online from anywhere. WERM registration and training and invite will be sent out prior to TOC meeting

New MESB PSAP wireless workgroup. (This is separate meeting from the WERM training) This workgroup will address wireless routing processes, wireless ALI screen info, sector description needs, PSAP concerns, PSAP needs with wireless data. Reporting wireless issues **Meeting date pending**

# Technical Operations Committee

## *9-1-1 Database Update – 03/17/2016*

*(including GIS this month)*

Metropolitan Emergency Services Board  
2099 University Avenue  
St. Paul, MN 55102  
Web: [www.mn-mesb.org](http://www.mn-mesb.org)

1. MSAG/GIS Synchronization Project work continues throughout the metro area with most PSAP areas actively involved.
  - a. Attached is a high-level summary of the data synchronization activity by PSAP that is currently underway in the metro area.
  - b. Highlights:
    - i. Carver County is working on their ALI geocoding errors.
    - ii. MESB is preparing a full Chisago County centerline-generated MSAG to ALI MSAG comparison. Results will be shared with the County for their review and investigation as necessary.
    - iii. Dakota County is finishing up their ALI geocoding errors.
    - iv. Ramsey County is reviewing addresses with ESN assignment differences (i.e. across 4 methods: MSAG-assigned ESN, centerline attribute ESN, address point ESN, and centerline geocoded (point-in-polygon) ESN).
    - v. Hennepin Co Sheriff's Office PSAP completed their initial review of ALI geocoding errors that did not geocode to HCGIS address points or centerline.
    - vi. Minnetonka will be cutting to the new Logis (Tritech) CAD system at 0600 hours on 3/30/16.
    - vii. Washington County continues their progress on street name validation errors with the help of a part-time GIS staff person from the State.
    - viii. DPS/ECN has secured statewide ALI extracts from CenturyLink/Intrado and IES for use in an overall NG9-1-1 data readiness/address validation assessment. MESB has access to this information to assist the metro County/PSAP data assessment, validation, and synchronization efforts.
    - ix. MESB is waiting for confirmation from MECC on the date for their MSAG postalization, and will then proceed with contacting and scheduling the remaining PSAPs (Bloomington, Carver Co., Edina, Scott Co., U of M, White Bear Lake).
2. On 2/29/16, DPS/MnGeo presented an initial draft of the State's NG911 GIS Road Centerline standards to the Metro Regional Collaborative GIS managers. Adam Iten is currently accepting input of suggestions and comments on the centerline standards. Adam has communicated a tentative 4/15/16 deadline for that input.
3. CenturyLink is still investigating some nuances about the handling of ANI failure conditions in the State's current 9-1-1 network configuration.
4. February 2016 ALI Audittrail reports will be distributed in the next week, once received from CenturyLink.



### Summary of MSAG/GIS Data Synchronization Activity (as of March 11, 2016)

	Phase A	Phase B	Phase C	Phase D	Phase E	Phase F	Phase G	Phase H
PSAP	ESZ Validations	Response Area Validations	Street Name Validations	Address Validations	Centerline Validations	Postalize MSAG	GIS MSAG	Integration
Airport	active	na	complete	active	not started	complete	not started	not started
Anoka	complete	active	complete	active	active	complete	active	not started
Bloomington	active	na	active	not started	not started	not started	not started	not started
Carver	complete	complete	complete	active	not started	not started	not started	not started
Chisago	active	not started	complete	complete	complete	complete	active	not started
Dakota	complete	complete	complete	active	complete	complete	not started	not started
Eden Prairie	complete	na	active	active	not started	complete	not started	not started
Edina	active	active	complete	not started	not started	not started	not started	not started
Ft Snelling/Airbase	not started	not started	na	na	not started	complete	not started	not started
Hennepin Sheriff	active	not started	complete	active	not started	complete	not started	not started
Hopkins (closed)	complete	na	complete	complete	na	na	na	na
Isanti	complete	not started	complete	active	active	complete	not started	not started
Minneapolis	active	not started	active	not started	not started	not started	not started	not started
Minnetonka	complete	complete	complete	complete	not started	complete	not started	not started
Ramsey	complete	active	complete	active	complete	complete	not started	not started
Richfield (closed)	complete	na	complete	complete	na	na	na	na
Scott	complete	active	complete	active	not started	not started	not started	not started
St Louis Park	complete	na	complete	complete	complete	complete	not started	not started
U of M	not started	not started	not started	not started	not started	not started	not started	not started
Washington	active	not started	active	not started	not started	complete	not started	not started
White Bear Lake	complete	na	complete	active	not started	not started	not started	not started



Final Report  
Issues and Needs Analysis  
of the  
Metropolitan Area  
Public Safety Answering Points (PSAPs)

**Prepared for:**

The Metropolitan Emergency Services Board (MESB)

**Prepared by:**

PSC Alliance, Inc.

Brian Kyllonen and Jeff Nelson

7900 International Drive – Suite 300

Bloomington, Minnesota 55425

February 26, 2016

## Executive Summary

PSC Alliance Inc. was engaged by the Metropolitan Emergency Services Board (MESB) to conduct a brief study of the issues and needs of the metropolitan area Public Safety Answering Points (PSAPs). A focus of the study is to determine how those issues and needs relate to the MESB's mission of PSAP support services. As the MESB begins 2016, defining the PSAPs' support expectations will assist in developing near term priorities and establishing a member-driven organizational direction to guide staff actions and board policies. This study's scope of work included face-to-face meetings with representatives from metro area PSAPs, a survey of those PSAPs, follow-up requests for information, data analyses, and preparation of this written report with the project's details and recommendations. Initial information was gathered from PSAP representatives from the primary nine counties and the City of Minneapolis. Subsequently, based on suggestions from those attending the first meeting, all of the metropolitan area PSAPs (excluding the State Patrol) received an invitation to participate in the study. While not all PSAPs responded, the issues and needs represented here are likely shared by the PSAPs across the metro area. The representatives responding to the survey and attending the meetings are described as the core workgroup in this document. The details and processes regarding meetings, information requests, information received, as well as subsequent analyses of that information is contained in this report. This Executive Summary provides a synopsis of the information gathered and the resultant recommendations made by the workgroup and presented to the full 9-1-1 Technical Operations Committee.

The PSAP representatives were provided with an eight-question survey. Representatives from the core workgroup provided responses. A follow-up request was made to the core workgroup for additional detailed information. Subsequent analysis of the information received identified four predominant themes common to the various PSAPs. They are:

- **Employees** including recruitment, staffing, and retention
- **Training** including maintaining up-to-date skills, cost containment, and standardization
- **Budget** including increasing costs, unknown future expenses, legislation and the 9-1-1 user fee
- **Technology** including text-to-9-1-1, Next Generation 9-1-1, other future technical challenges, and PSAP continuity of operations options.

There are other identified PSAP **issues and needs**, but the aforementioned are the areas where the PSAPs are making **recommendations** to the MESB requesting guidance and assistance.

**Employees:** All of the PSAPs value their competent, skilled, and decisive employees and they recognize the difficult jobs the call takers and dispatchers perform. All of the PSAPs share challenges in the recruitment, hiring, and retention of their employees and continually confront challenges with the demands of scheduling those employees. PSAPs share a concern about the turnover rate either through losing employees during the training process or, worse, losing employees after the extensive training to a neighboring PSAP or another career. Maintaining suitable staff levels is also a concern as the demands are ever-growing at the PSAPs especially with the new technologies and the anticipated future receipt of text to 9-1-1 calls, video calls, and next generation call delivery. **Recommendation:** While this item was listed as one of the top priorities of the PSAPs, there was no specific request for assistance from the MESB by the PSAPs.

There are related items following, such as training and operational standards, which the PSAPs identified as areas which may require some planning and coordinative assistance from the MESB.

**Training:** The PSAPs are concerned about call taker / dispatcher training. Today, the PSAPs act independently in undertaking similar processes of organizing and performing training for their respective employees. Each of the PSAPs bears the cost of individual training programs which may be duplicating efforts and may not be optimally efficient. Also, there are currently no regional call taker or dispatcher standards. **Recommendation:** Initially, the PSAPs requested that the MESB lead the development of call taker / dispatcher training. After core workgroup discussions, it was determined that Hennepin County and the City of Minneapolis are already in the process of developing a common training program through their respective workforce development agencies. There is also a 9-1-1 TOC roundtable group engaged in establishing potential curriculum items. This work is underway and these two groups are working on parallel paths. Therefore, the workgroup is requesting MESB staff to continue to facilitate the identification and development of draft minimum training standards for new call takers and dispatchers. This development should be undertaken with cooperation of the 9-1-1 TOC roundtable workgroup comprised of metro PSAP trainers and coordinators. As these entities progress, there may be a need to engage additional resources as appropriate. The Statewide Emergency Communications Board (SECB) Legislative Committee met on January 7, 2016 and one topic discussed was call taker / dispatcher training. The representatives indicated it was becoming more difficult to attain and retain "capable" people to operate a dispatch center. Further, the Northeast Region is undertaking the establishment of a training program for phones and ARMER radio with the ultimate goal of certifying call takers / dispatchers. The discussion included possibly making a move to go to the legislature.

**Budget:** The PSAPs see ever-increasing costs for providing services and are concerned about the uncertain future regarding budget. The State of Minnesota provides each PSAP with a payment relative to the collected 9-1-1 user fees. The current basis of the user fees includes wire lines, wireless lines, and other user-fee associated lines. However, due to technology shifts, the amounts collected and consequently available to the PSAPs, is diminishing. The structural basis of the 9-1-1 user fee depends upon the number of wireline telephone subscribers and the ability to collect the fee from telecommunications service providers. The number of wireline subscribers continues to decline. Also, the increasing adoption of telecommunication service as an application riding on broadband Internet connections in an unregulated environment puts the future stability of the current surcharge in an uncertain status. **Recommendation:** This item was cited by several agencies with a high level of importance for the PSAPs. The workgroup also indicated a reliance on the current distribution of funds from the 9-1-1 user fees. The workgroup desires that the MESB staff continue working with the Minnesota Public Safety Division of Emergency Communications Network (DECN) and monitoring the 9-1-1 user fee funding and distribution. If there are changes being made at the DECN level, the core workgroup wants the MESB staff to continue to be actively engaged in any legislative actions related to preserve and ideally enhance the 9-1-1 user fee.

**Technology:** The PSAPs are concerned about two pending technologies: Text-to-9-1-1 and Next Generation 9-1-1. Additionally, unknown future technologies may impact the PSAP environment. The implementation of new technologies also adds to the PSAPs' budget concerns. With the deployment of new technologies come additional costs. Responsibility for

these costs will be an important element in the DECN selection of a Next Generation 9-1-1 network vendor. The PSAPs indicated a concern about unknown costs, the impact on current budgets, and the ability to develop suitable long-range budget forecasts to secure adequate funding. **Recommendation:** The PSAPs request that the MESB staff take a lead role in the implementation of a regional Text to 9-1-1 system including developing standards. It was noted by the core workgroup that the DECN is in the process of analyzing the proposal responses related to statewide Text to 9-1-1. The core workgroup desires that the MESB staff continue to monitor the progress of the proposal analyses and work with the DECN at the appropriate time. The PSAPs further request that the MESB take a lead role and be the spokesperson for all metro agencies regarding the deployment of NG9-1-1 enhancements in the metro area. The PSAPs further request that the MESB participate in the exploration of effective PSAP continuity of operations options, including the feasibility of a shared backup center. The PSAPs request that the MESB staff continue to assist in the support of GIS data development, maintenance, and error correction processes to support NG9-1-1 and public safety applications in the metro area, including representing PSAPs on any potential statewide GIS grant funding requests.

### **Core Workgroup Prioritized Request of the MESB**

Based on the in-person meetings and the written responses to the inquiries made to the PSAPs, the workgroup has summarized the request for MESB assistance as listed in each category above. The workgroup understands that resources are limited and were asked to establish a priority of issues. Based upon responses, the priority is listed as follows:

1. Technology (Text to 9-1-1, GIS, and NG9-1-1)
2. Training
3. Funding / Legislation
4. Operational Standards
5. Public Relations / Education

In the remainder of this report, the specific details of the information as provided by the PSAP representatives, and the analyses of the information in the determination of the PSAP recommendations are identified.

## Background

The MESB is established under a Joint Powers Agreement in the State of Minnesota and has a current membership of nine (9) member counties and the City of Minneapolis.

The Metropolitan Emergency Services Board (MESB) supports public safety for the Counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, and Washington as well as the City of Minneapolis. This support includes:

- Oversight and management of the public safety radio system (metro ARMER System);
- Oversight and management of the regional 9-1-1 call delivery system since 1982;
- Coordination of the regional EMS system.

This regional approach, to support twenty-four (24) Public Safety Answering Points (PSAPs), radio system users, and EMS providers, facilitates coordinated responses to emergencies for the Metro Region residents.

Historically, the MESB staff has taken a leadership role in providing forward thinking, proactive and timely assistance to the public safety community. The original planning and deployment of Enhanced 9-1-1 for the metropolitan area resulted from the work of the MESB's predecessor organization. Now, more than 30 years later, the MESB engaged PSC to conduct a structured, formal written poll of the PSAP membership to aid the MESB staff in planning the deployment of Next Generation 9-1-1 and other needed support services for the metro area PSAPs.

## Process

PSC's plan for developing the report was both time and scope limited. Our work plan included facilitating meetings and engaging discussion with a core core workgroup. (The invitation was expanded to include all of the metropolitan area PSAPs.) The plan included distributing survey questions regarding PSAP issues and needs, analyzing the answers received, requesting additional related information, analyzing information and combining it into this written report. The PSAPs' recommendations, reviewed by the 9-1-1 Technical Operations Committee, will be sent forward for MESB board consideration.

## Meeting 1

The first meeting was held on November 19, 2015. The meeting's objective was to broach the idea of the report and to begin to engage the representatives in discussion about the development and content of the report. Attendees for that meeting included:

- Jill Rohret and Pete Eggimann, MESB staff;
- Marcia Broman, MESB contractor;
- Kyle Blum, Anoka County;
- Tim Walsh, Carver County;
- Jon Eckel, Chisago County;
- Bob Dowd, Isanti County;
- Kathy Hughes, Hennepin County;
- Nancie Pass, Ramsey County;
- Ken Dvorak, Scott County;
- Darlene Pankonie, Washington County;
- Heather Hunt, City of Minneapolis;
- Jeff Nelson and Brian Kyllonen, PSC Alliance.

The agenda (see Exhibit B) for that meeting included introductions with detailed biographies of the attendees, the project background and objectives, as well as interactive discussion about roles and responsibilities around 9-1-1 services at each level: the PSAP, the 9-1-1 Technical Operations Committee (9-1-1 TOC), the Statewide Emergency Communications Board's NG9-1-1 Subcommittee, and the MESB. Discussion regarding the Minnesota Department of Public Safety's Division of Emergency Communication Networks (DECN) role was deferred to a later time.

An objective of the meeting was to show the representative questions related to 9-1-1 call delivery, answering, and dispatching. Eight questions were designed to initiate discussion and develop an understanding of the representatives' knowledge of the current 9-1-1 system and the future 9-1-1 system. The representatives were asked to take the questions back to their offices and prepare written answers. Subsequently, those questions were also forwarded to the other metropolitan area PSAP representatives with a request for their input as well. The written summaries and analyses of the collective responses are found in the section labeled **Summaries and Analyses of PSAP Representatives' Collective Answers.**

## Meeting 2

The second meeting was held with the core workgroup on December 17, 2015. Representatives in attendance for this meeting included:

- Pete Eggimann, MESB staff;
- Marcia Broman, MESB contractor;
- Val Sprynczynatyk, Anoka County;
- Susan Bowler, Carver County;
- Diane Lind, Dakota Communications Center;
- Jon Eckel, Chisago County;
- Nancie Pass, Ramsey County;
- Heather Hunt, City of Minneapolis;
- Brian Kyllonen, PSC Alliance.

The agenda for this meeting is attached as an Exhibit C to this report.

As a reminder to the group, the project was explained as having three components:

1. PSAPs' Issues and Needs Discovery.
2. What PSAPs Need or Expect from MESB?
3. What the Report to TOC and to MESB Board should include.

Discussion ensued and each PSAP representative was asked to discuss and elaborate on their respective survey answers. Because time was limited, and there were several core members not in attendance, it was decided that three questions listed below would be distributed to the members via e-mail.

*1. What issues, as described in the "question and answer synopsis" document (originally attached to the Dec. 15 email below) and discussed at the meeting today (Thursday,*



*Dec. 17), would you like to see addressed at the Metropolitan Regional level. Please be somewhat specific in describing your issues.*

*2. Please describe what role you envision the MESB would play in addressing these issues. (i.e. For Text to 9-1-1 , I would like the MESB to represent the Metro Region and take a lead role in developing a workable solution that will allow for a uniform, standardized regional deployment.)*

*3. Please prioritize your listed issues.*

The e-mail included a request that the members respond by December 23, 2015. A second request reminder was distributed via e-mail on December 30, 2015. The answers to each of the three questions, as received by each representative, are listed below. The representatives identified issues, expressed the roles they anticipate the MESB might play, and indicated priorities of those listed issues.

The **Airport** representative answered as follows:

Issues you would like to see addressed at the Metropolitan Regional level:

- Technology
- Personnel
- Standards
- Training
- Funding

The role the MESB should play in the aforementioned:

- Assist in planning and advocating for these issues on behalf of the PSAPs.
- Leverage the regional approach to help communicate PSAP issues and gain support for staffing/scheduling/recruitment/retention/training/etc.

Priorities:

- Operational standards
- Training requirements/standards
- Technology
- Funding

The **Allina** representative answered as follows:

Issues you would like to see addressed at the Metropolitan Regional level:

- Text to 9-1-1
- Common GIS data
- Help find/direct funding sources for technology
- Full NG9-1-1 implementation
- Direct CAD user groups

The role the MESB should play in the aforementioned:

- Represent Metro region and take a lead role in developing a workable solution for a uniform standardized regional deployment of Text to 9-1-1.
- Take a lead role in selecting and maintaining the same GIS data for all PSAPs to use.



- Take the lead role at the regional level to help direct PSAPs to find funding/grant resources as a group specifically for technology costs.
- Put together and oversee CAD user groups.
- Take the lead role in full implementation of NG9-1-1 at a regional level.

Priorities:

- Text to 9-1-1
- CAD user groups
- Common GIS data
- Funding for technology costs
- Full implementation of NG9-1-1

The **Anoka County** representative answered as follows:

Issues you would like to see addressed at the Metropolitan Regional level:

- Text to 9-1-1
- Standardized Dispatcher Training
- Supporting GIS.

The role the MESB should play in the aforementioned:

- Setting "standards" for Text to 9-1-1.
- Address the logistics around deploying a Text to 9-1-1 solution in the Metro area.
- Be a "spokesperson for all agencies regarding NG9-1-1.
- Standardized dispatcher training (to ensure basic elements of the job and handled the same, depending on agency rules and regulations).
- Help set GIS standards for quality assurance.
- Represent the PSAPs on Statewide GIS funding requests (for technology, public education, and training).

Priorities:

- The Anoka County items were not prioritized, but are listed above in order as received.

The **Carver County** representative answered as follows:

Issues you would like to see addressed at the Metropolitan Regional level:

- Creation of a base consistent training standard for dispatchers
- Continued presence and advocate at the legislature
- Coordination in uniformly implementing technological changes to 9-1-1
- Coordinate Public Relations/9-1-1 Education resources for PSAPs

The role the MESB should play in the aforementioned:

- Coordinate and motivate uniform base dispatcher training standard.
- Coordinate with the MSA to work collaboratively on training standards.
- Text to 9-1-1: include any changes that impact the public's use of 9-1-1 or how they access 9-1-1 services.
- Coordinate a group of PSAP representatives to develop a unified 9-1-1 educational message.
- Create and provide brochures or other educational resources.

- Investigate opportunities to create a Public Service Announcement for Text to 9-1-1.

Priorities:

- Standards
- Technology coordination
- Public relations

The **DCC** representative answered as follows:

Issues you would like to see addressed at the Metropolitan Regional level:

- Technology
- Training
- Operations standards

The role the MESB should play in the aforementioned:

- Facilitate at planning/visioning session to identify the emerging technology which is or will be impacting the PSAPs.
- Be in the forefront of setting standards and working with the State to deploy Text to 9-1-1 on a regional level.
- For other emerging technologies, the MESB should assist the PSAPs in identifying the impact the technologies may have on the PSAPs.
- Create a flowchart to identify the technology, the standards for incorporation into the PSAP, training impacts, and workload impacts.
- Facilitate interaction between the 9-1-1 TOC, MSA, Minnesota Chiefs of Police and Fire Chiefs' Association to assist in educating the chief law and fire officials on the need for dispatcher standards and training.
- Take a firm public stand on the need for industry-wide standards.
- Convene a workgroup specifically to identify common training needs and develop training sessions for each topic identified.
- Identify law enforcement job fairs and reserve a table to recruit students and others.
- Work with legislators to ensure 9-1-1 funds are not further diluted.
- Prepare legislative language which would further protect 9-1-1 fees from non-related expenses.
- Use the membership of the MESB to provide lobbying efforts.

Priorities:

- Technology
- Training standards
- Funding

The **Eden Prairie** representative answered as follows:

For issues you would like to see addressed at the Metropolitan Regional level:

- Training at a regional level
- Public Education

The role the MESB should play in the aforementioned:

- Not certain of the MESB role.

- Creating and hosting training
- Design the training and provide a qualified trainer

Priorities:

- Training dispatchers
- Training the public

The **Hennepin County** representative answered as follows:

For issues you would like to see addressed at the Metropolitan Regional level:

- Shared Backup Center for MESB members
- Text to 9-1-1 Implementation

For the role the MESB should play in the aforementioned:

- Act as the main representative for all PSAPs wanting to participate in a regional backup center.
- Look into funding (the backup center should be funded by the State or a joint fee for all intended users), establish a site, develop a plan, etc.
- Provide an update on Text to 9-1-1

The Hennepin County items were identified as prioritized as listed above in order as shown.

The **Washington County** representative answered as follows:

For issues you would like to see addressed at the Metropolitan Regional level:

- None identified

The role the MESB should play in the aforementioned:

- Take a role in helping to develop dispatch standards for call answering, dispatching, and PSAP administration.
- Take a role in developing legislation/funding that would require a minimum supervisor-to-dispatcher quota.
- Help develop legislation/funding that would mandate 9-1-1 quality assurance standards.

Priorities:

- The Washington County items were not prioritized, but are listed above in order as received.

After the second meeting, Pete Eggimann summarized the individual PSAP representatives' respective answers in a format which includes Issues Identified, Strengths Identified, and Future Vision. That document appears at the end of this report as Exhibit A: **PSAP Representatives' Individual Answers Summary**.

### Meeting 3

The third meeting was held on January 21, 2016. The core workgroup and other metro area PSAP representatives were invited to attend. Representatives in attendance for this meeting included:

- Jill Rohret, Martha Ziese, and Pete Eggimann, MESB staff;
- Marcia Broman, MESB contractor;
- Val Sprynczynatyk, Anoka County;
- Susan Bowler, Carver County;
- Jon Eckel, Chisago County;
- Diane Lind, Dakota Communications Center;
- Kathy Hughes, Hennepin County;
- Bob Dowd, Isanti County;
- Heather Hunt, Minneapolis;
- Nancie Pass, Ramsey County;
- Heather Hunt, City of Minneapolis;
- Jeff Lessard, University of Minnesota;
- Jeff Nelson and Brian Kyllonen, PSC Alliance

The agenda for this meeting is attached as an Exhibit D to this report. The objective of this meeting was to get the core workgroup to agree on issues that are of concern and for which the MESB might be able to assist.

The discussion began with technical and operational standards at the PSAP level. The desire of the core workgroup is for all 9-1-1 calls to be handled “in the same way” regardless of where the metropolitan caller is located. All of the PSAPs face the same issues. And while it was agreed that technical and operational standards were interrelated, they should be addressed separately. Currently, the Ramsey County PSAP is undertaking a project for the development of operational standards for the Ramsey Emergency Communications Center. PSAPs would like assistance and leadership from the MESB in developing regional operational standards. The MESB staff should monitor Ramsey’s progress, use it as a stepping stone, and take advantage of lessons learned. The PSAP representatives suggested that the standards should be uniform across the metro area. The standards should be incorporated into any subsequent regional training program. Once standards are established in the metro region, it is possible the Statewide Emergency Communications Board (SECB) could adopt and implement them statewide.

The next issue with significant PSAP interest is employee training. Recently, the respective Hennepin County and City of Minneapolis work force development groups met to discuss call taker / dispatcher training. The initiative is a common ground training development in conjunction with a local technical college. The opportunity for a specific grant had a deadline that could not be met by the collective agencies within the time available. The agencies will continue to work on this training development initiative. Meanwhile, Pete Eggimann is working with a roundtable group to identify and draft minimum training standard curriculum items for call taker / dispatchers. Their goal is to develop minimum training standards for adoption in the metro area, as well as for consideration by the SECB NG9-1-1 committee, leading to statewide standards. The core workgroup desires the MESB staff monitor the activities of the Hennepin/Minneapolis initiative as well as continue working with the roundtable group on developing minimum training standards. As the projects progress, the other PSAP representatives and the MESB staff may be requested to participate and provide some type of assistance. At that point, the TOC may return to the MESB Board with more specific related requests.

With regard to Text to 9-1-1, the core workgroup recognizes that while implementation is forthcoming, the metro area is in a wait-and-see mode. The state of Minnesota DECN issued a Request for Proposal for Next Generation 9-1-1 and Text to 9-1-1 services and in the evaluation process of the responses. As the metro region awaits the outcome of those proposals, the core workgroup has a few requests for MESB assistance. First, the core workgroup wants to ensure a common, region-wide public service notification (educational campaign) regarding Text-to-9-1-1 is presented. While the MESB does not have a Public Information Officer, the core workgroup would like the MESB staff to work with the 9-1-1 TOC and act as liaison among the PSAPs to ensure a consistent message to the public and to the press. Second, the core workgroup wants the MESB staff to advocate on their behalf to the DECN, and monitor DECN's progress and direction with regard to Text to 9-1-1 deployment. MESB staff should advise PSAPs on the impacts of Text to 9-1-1 on individual PSAPs from both a technical perspective and an operational perspective.

The work group participants recognize that their individual continuity of operations options are currently limited. The MESB was asked to investigate additional options that might become available with the adoption of NG9-1-1 technologies. Recently, Hennepin County PSAP leadership met with Ramsey County PSAP personnel at the Ramsey County Arden Hills Backup Center location to discuss how Ramsey County configured that backup center. At the initial ten-PSAP shared Call Handling System consortium, the topic of a shared backup center was discussed without action. The future, of Hennepin County's Golden Valley Back-out Center is also in question. The topic of PSAP operational continuity is raised frequently by public safety communications officials in the metro area. The core workgroup, while recognizing a shared back-up center is a long-term project, would like the MESB staff to organize and facilitate a planning group of metro area PSAPs to research the feasibility of a shared backup center and other continuity of operations options.

For Next Generation 9-1-1, the core workgroup would like the MESB staff to continue monitoring nationwide activities, including National Emergency Number Association (NENA) standards development, as well as other related activities taken up by regions across the country.

This is the end of the meeting summaries.

## **Summaries and Analyses of PSAP Representatives' Collective Answers**

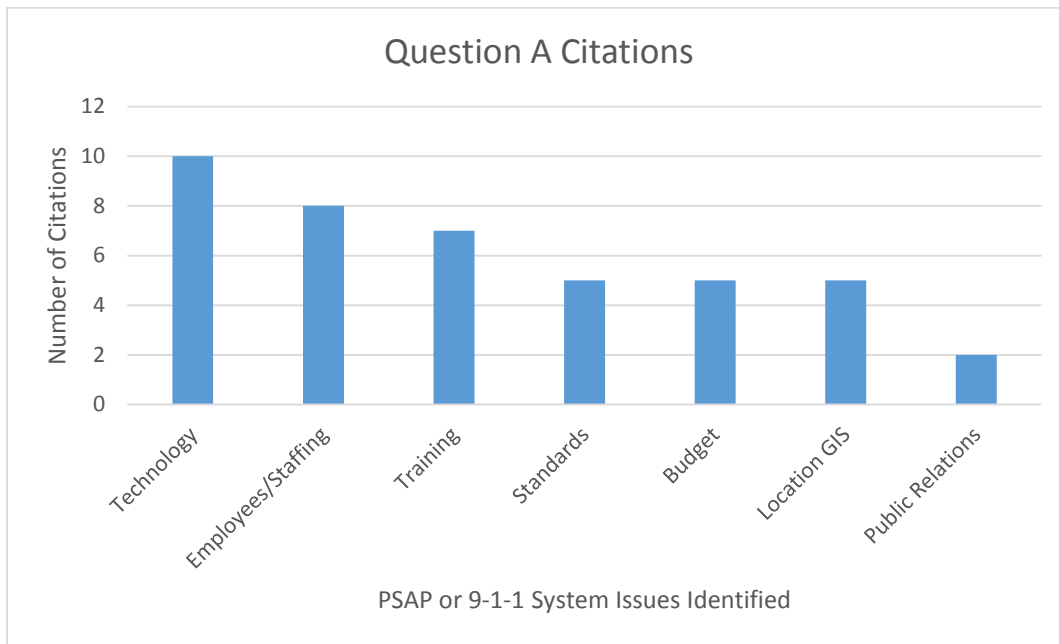
The eight survey questions (A-H) are listed following. After each question is a synopsis of answers received, and an analysis of those answers. After the eighth analysis, is a recommendation based on the aggregate synopses and analyses. Eleven of twenty-two PSAP representatives submitted answers; Airport, Anoka County, Carver County, Chisago County, Dakota Communications Center (DCC), Hennepin County, Isanti County, city of Minneapolis, Ramsey County, Scott County, and Washington County.

### **Question A - PSAP Issues of Concern**

*What are the issues that concern you with regard to your PSAP or with the 9-1-1 system?*

#### **Synopsis**

While each of the eleven respondents listed several concerns, *technology* was cited by ten respondents. Of those ten, four specifically referred to *Text to 9-1-1* as a concern and Hennepin County cited the need for a *regional backup center*. Two other areas of concern were also listed by a majority of respondents: *employees/staffing* (cited eight times) and *training* (cited seven times). Several other general headings were listed by the respondents: *operational standards*, *budget*, and *location/GIS* were each cited five times. Two of the larger PSAPs (Ramsey County and Minneapolis) cited *public relations/expectations* as issues of concern. Below is a graph representing the distribution of citations relative to the issues raised.



### Analysis

The representatives are very concerned about how technology will impact their respective centers and personnel. From general technologies to specific (Text to 9-1-1), representatives indicate concern related to system upgrades, usage, and cost impacts. Also, there is a concern about preserving PSAP continuity of operations during system outage conditions.

Closely tied in with *technology* are both *employees/staffing* as well as *training*. Concerns about employees and staffing go beyond the technology-related issues. The PSAP representatives indicated concerns about qualifications, recruitment and retention of their respective PSAP staffs.

Along with the new technologies come issues of how the employees will learn how to utilize the system. *Training* is an area that had many related concerns of many PSAP representatives. Who provides the training? Are there any regional or statewide standards? How do the PSAPs pay for the training? There is a concern of the logistics of proper training as well as how the PSAP manager will be able to forecast the adequate staff complement to properly handle the new technologies.

*Standards* are important to the PSAP representatives. Many indicate a desire for regional standards which could apply to all call takers and dispatchers, respectively, across the metropolitan area.

*Budget* issues are also a concern. However, with the ongoing technology impact on requirements for both new equipment and systems as well as increased staffing and increased training, there will be additional pressures on the PSAPs budget for the foreseeable future.

*Location/GIS* needs to be improved as now a vast majority of 9-1-1 calls are initiated with wireless devices.

*Public relations/expectations* need to be managed at both the local level as well as the regional level.

### **Question B - Handling Issues of Concern**

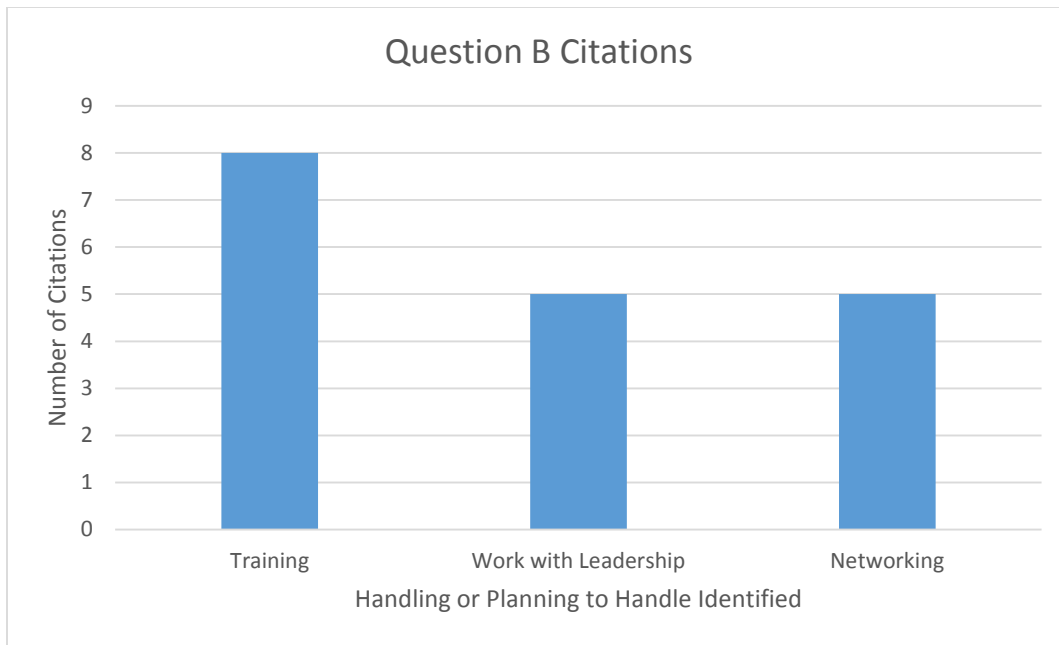
*How are you handling or how are you planning to handle these issues?*

#### **Synopsis**

While the eleven respondents are handling or planning to handle their respective issues in differing fashions, there are some common strategies. First, eight respondents indicated a plan to address issues through increased, improved or new training. Also, PSAPs are looking at ways of funding the required training, such as grants.

Another way of handling their issues was identified as working with management or leadership of the respective organizations (five citations). Educating people outside of the PSAP was also a way of handling anticipated issues.

While some were specific, others implied a need to network with peers (also five citations). Each PSAP, while having their own issues, also share common issues with other PSAPs. The representatives indicated a benefit in sharing thoughts and ideas on a peer to peer basis.



### Analysis

The PSAP representatives envision a need for training, working more closely with their respective leadership, and continued networking with other PSAPs in the region as well as across the state.

### Question C - PSAP Strengths

*What do you see as the strengths of your PSAP?*

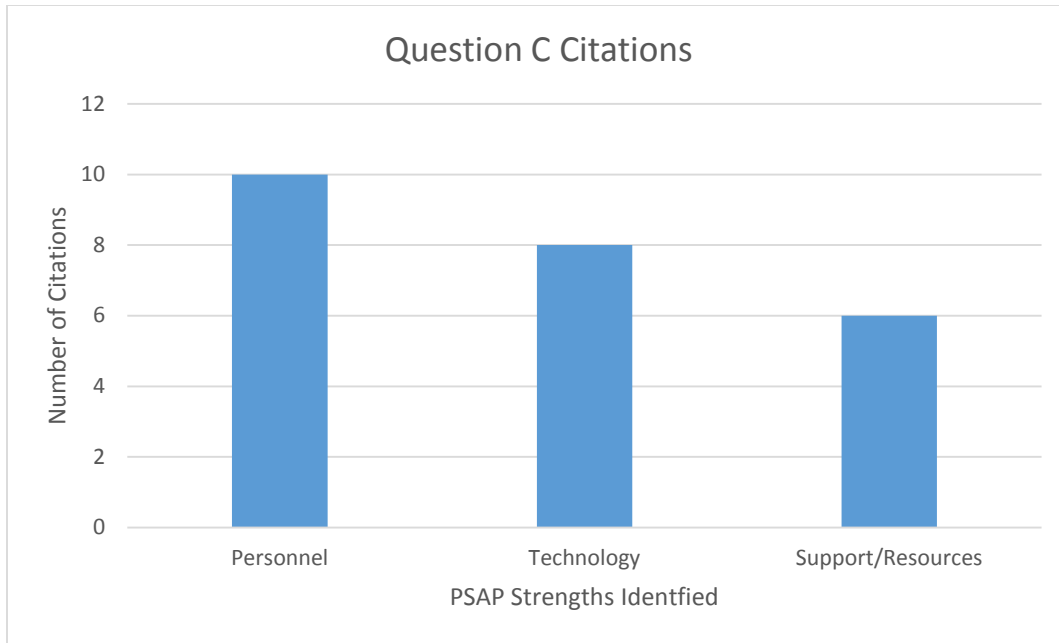
### Synopsis

Almost all of the respondents indicated that employees or staff were the primary strength of their respective PSAPs (ten citations).

Technology at the PSAP was also a strength most respondents identified (eight citations).

Also highly recognized as a strength of the PSAPs was support/resources (six citations).





### Analysis

The PSAP representatives already view their respective staffs as their most valuable assets. Continued investments in staff from training to retention is paramount.

In order to meet future demands of the public, the PSAPs will be required to continue investments in state-of-the-art answering equipment and other adjunct PSAP equipment.

The PSAP representatives indicated a collaboration with internal support of their respective county/city organizations. Primarily, there is a growing requirement for IT support and partnerships at the PSAPs.

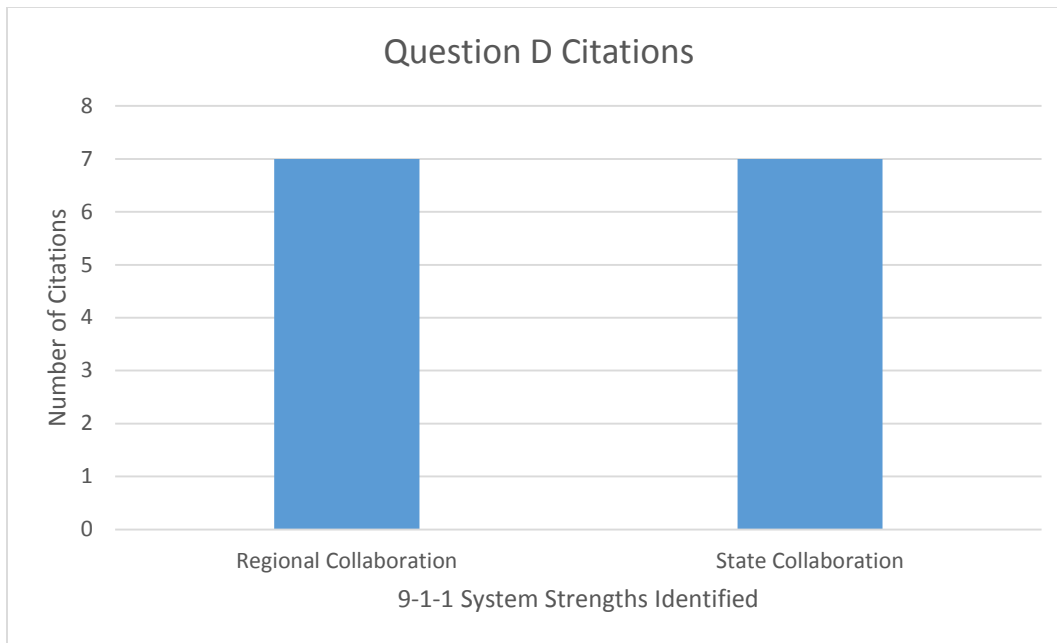
### Question D - 9-1-1 System Strengths

*What do you see as the strengths of the 9-1-1 system?*

### Synopsis

The overwhelming strength of the 9-1-1 system was identified as collaboration. The respondents equally responded with regional collaboration and state collaboration (seven citations each).

Other adjectives used to describe the system's strengths include: reliable, effective, integrated, centralized, and stable.



### Analysis

The PSAPs should continue with their support of activities and behaviors as identified as strengths of the 9-1-1 system: regional and state collaboration. Participation in the 9-1-1 TOC and other 9-1-1-related committees and workgroups add value to the PSAP and to the region. The MESB provides support, guidance, and leadership to the PSAP community. The State provides funding and oversight. The PSAPs will continue working with the MESB and the DECN.

### Question E - Comparative Examples

*What PSAPs/Regions are you aware of that are handling NG9-1-1 issues well?*

### Synopsis

This question had the fewest answers with eight of the respondents answering with “Unknown,” “None,” “No idea,” a similar response, or left unanswered.

Of the three responses, two referenced the Metro Region. One indicated the Metro Region as having the best direction regarding the 9-1-1 network and the other as the Metro Region having handled the first phase of NG9-1-1 well. The third referenced two specific out-of-state PSAPs (Phoenix, Vancouver) and the City of Minneapolis as regions/PSAPs who are taking advantage of certain adjunct technologies, including fire dispatching, NFPA 1221 standard, and gun-shot tracking technologies, respectively.

### Analysis

This question was not interpreted clearly and its answers do not provide particularly valuable data. Additional conversations with the PSAPs and education regarding events outside of the State of Minnesota, with regard to NG9-1-1, will need to be continued.

### Question F - Future of the PSAP in the Next Decade

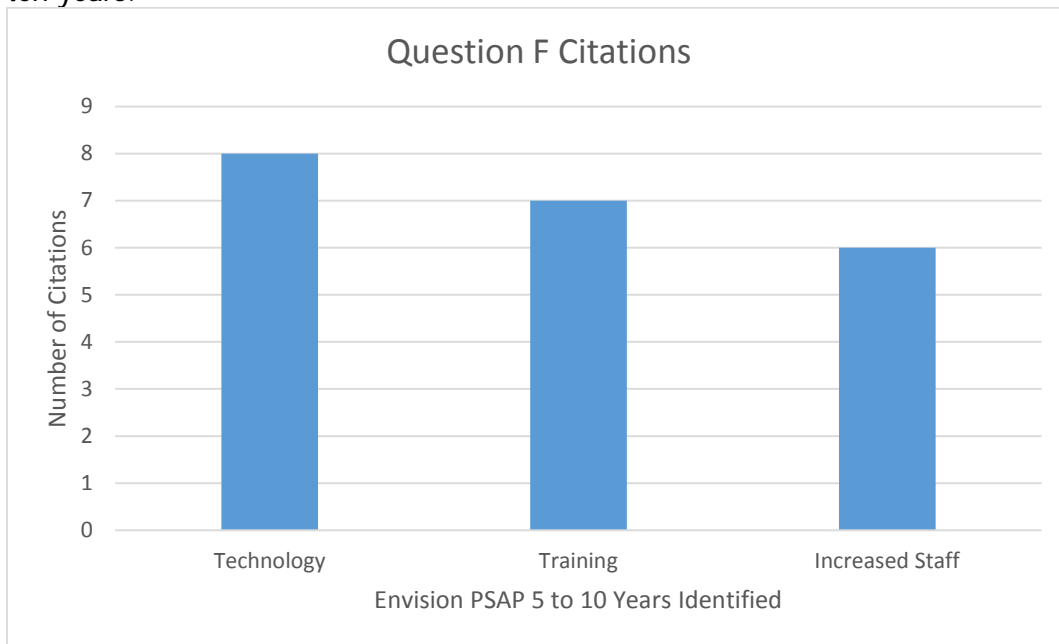
*What do you envision for your PSAP over the next five to 10 years?*

### Synopsis

Most of the PSAP representatives (eight of eleven) indicated that technology is an important part of the next five to ten years at the PSAP level.

Again, most PSAP representatives (seven of eleven), saw training as paramount in the future five to ten years at the PSAP level.

Six of the eleven respondents envision a requirement for additional staff over the next five to ten years.



### Analysis

The PSAP respondents see technology, training, and increased staff requirements as most important at their PSAPs over the next five to ten years.

Some other issues identified include: more shared applications, further collaborations, interoperability and improved service levels.

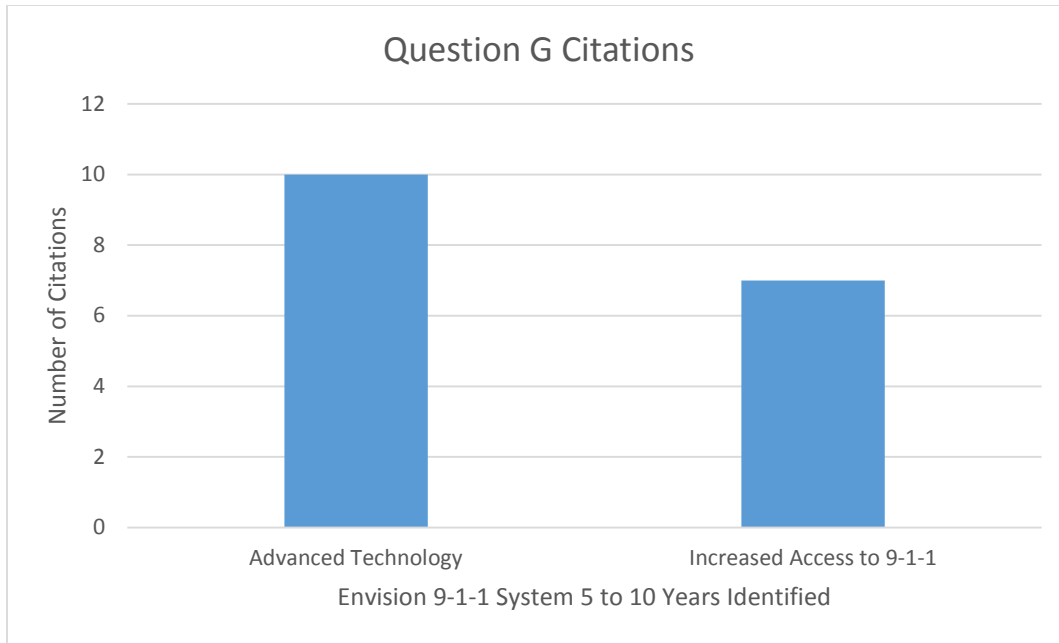
### Question G 9-1-1 in the Next Decade

*What do you envision for the 9-1-1 system over the next five to 10 years?*

### Synopsis

Ten of the eleven respondents indicated there will be advanced technology over the next five to ten years at the 9-1-1 system level.

Increased access to 9-1-1 centers, through the 9-1-1 system, is also anticipated by seven of the respondents.



### Analysis

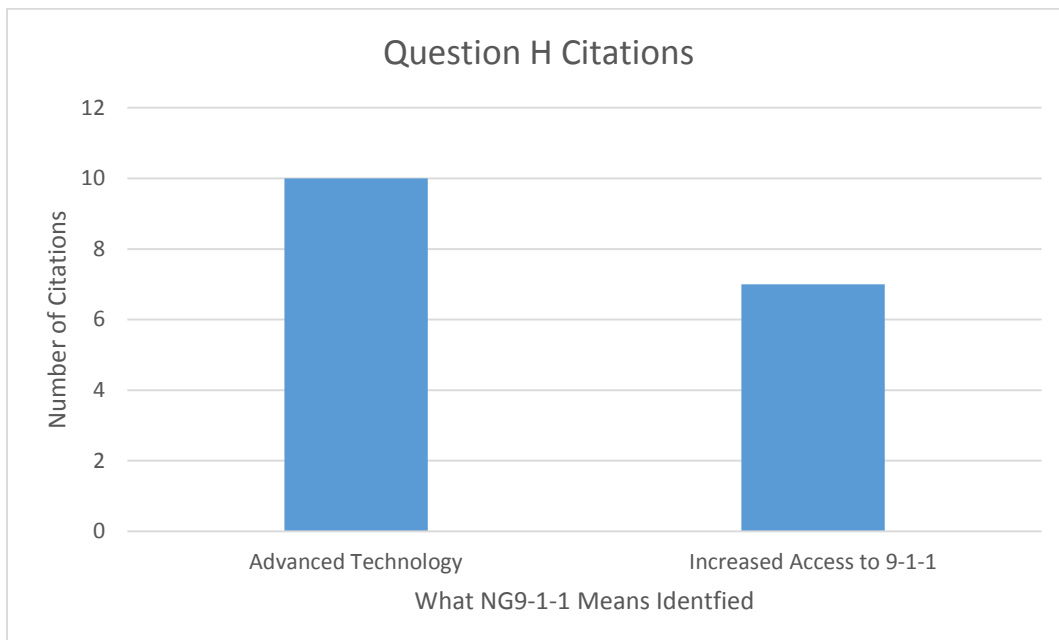
The PSAPs will be required to keep up with technology in their PSAPs to maintain continuity with the 9-1-1 network as it advances. The PSAPs, cannot act in a “silo” as the lines of demarcation between the PSAPs and the Network are getting grayer.

### Question H - Implications of Next Generation 9-1-1

*What does Next Generation 9-1-1 mean to you at the PSAP, Metropolitan, and State levels?*

### Synopsis

Advanced technology was cited by ten of the eleven respondents as a definition of NG9-1-1.



## Analysis

While the responses did not indicate a vast technical knowledge of Next Generation 9-1-1, the responses indicated how NG9-1-1 would impact them at their PSAPs.

Also, based on ten of the eleven respondents identifying a concern with advanced technology, it is even more important for them to have a resource for collaboration and a medium to share common concerns.

The PSAPs recognize that the addition of more advanced technologies in the system will in turn require more capabilities at the PSAPs.

## Overall Core Workgroup Recommendations

This section represents information gathered from all meetings and other written correspondences and is also found in the Executive Summary.

**Employees:** While this item was listed as one of the top priorities of the PSAPs, there was no specific request for assistance from the MESB by the PSAPs. There are related items following, such as training and operational standards, which the PSAPs identified as areas which may require some planning and coordinative assistance from the MESB.

**Training:** Initially, the PSAPs requested that the MESB lead the development of call taker / dispatcher training. After core workgroup discussions, it was determined that Hennepin County and the City of Minneapolis are already in the process of developing a common training program through their respective workforce development agencies. There is also a 9-1-1 TOC roundtable group engaged in establishing potential curriculum items. This work is underway and these two groups are working on parallel paths. Therefore, the workgroup is requesting MESB staff to continue to facilitate the identification and development of draft minimum training standards for new call takers and dispatchers. This development should be undertaken with cooperation of the 9-1-1 TOC roundtable workgroup comprised of metro PSAP trainers and coordinators. As these entities progress, there may be a need to engage additional resources as appropriate. The Statewide Emergency Communications Board (SECB) Legislative Committee met on January 7, 2016 and one topic discussed was call taker / dispatcher training. The representatives indicated it was becoming more difficult to attain and retain "capable" people to operate a dispatch center. Further, the Northeast Region is undertaking the establishment of a training program for phones and ARMER radio with the ultimate goal of certifying call takers / dispatchers. The discussion included possibly making a move to go to the legislature.

**Budget:** This item was cited by several agencies with a high level of importance for the PSAPs. The workgroup also indicated a reliance on the current distribution of funds from the 9-1-1 user fees. The workgroup desires that the MESB staff continue working with the Minnesota Public Safety Division of Emergency Communications Network (DECN) and monitoring the 9-1-1 user fee funding and distribution. If there are changes being made at the DECN level, the core workgroup wants the MESB staff to continue to be actively engaged in any legislative actions related to preserve and ideally enhance the 9-1-1 user fee.

**Technology:** The PSAPs request that the MESB staff take a lead role in the implementation of a regional Text to 9-1-1 system including developing standards. It was noted by the core

workgroup that the DECN is in the process of analyzing the proposal responses related to statewide Text to 9-1-1. The core workgroup desires that the MESB staff continue to monitor the progress of the proposal analyses and work with the DECN at the appropriate time. The PSAPs further request that the MESB take a lead role and be the spokesperson for all metro agencies regarding the deployment of NG9-1-1 enhancements in the metro area. The PSAPs further request that the MESB participate in the exploration of effective PSAP continuity of operations options, including the feasibility of a shared backup center. The PSAPs request that the MESB staff continue to assist in the support of GIS data development, maintenance, and error correction processes to support NG9-1-1 and public safety applications in the metro area, including representing PSAPs on any potential statewide GIS grant funding requests.

## Exhibit A: PSAP Representatives' Individual Answers Summary

### PSAP Representatives' Individual Answers Summary

PSAP Agency	Answers Provided By:
Airport	Chris Kummer
Anoka	Valerie Sprynczynatyk
Carver	Tim Walsh
Chisago	Jon Eckel
Dakota (DCC)	Diane Lind
Hennepin	Kathy Hughes
Isanti	Bob Dowd
Minneapolis	Heather Hunt
Ramsey	Nancie Pass
Scott	Ken Dvorak
Washington	Darlene Pankonie

#### Airport:

##### Issues Identified:

- Statewide telecommunicator training / standards
- Increased training resources
- Maintaining sufficient staff
- Maintaining accurate and current GIS information / resources
- Maintain sufficient funding
- Educating policy makers about NG911 impacts
- Maintaining sufficient / capable IT support

##### Strengths Identified:

- Well trained staff
- Up-to-date technology
- IT support that understands the mission critical environment
- State / Regional coordination, communication, and cooperation

##### Future Vision:

- Increased dependence on GIS data
- Increased workload without increased staff
- Need for increased funding
- More integrated systems (e.g. 911, CAD, radio, etc.)

#### Anoka:

##### Issues Identified:

- Proportionately more wireless phones
- Lack of accurate location data with wireless phones
- Too many unknowns related to how Text-to-911 will work

##### Strengths Identified:

- Good staff (teamwork, polite, professional)

- 911 system can handle large volume of calls, good call routing, accurate location information on wireline calls

**Future Vision:**

- Need more training (e.g. how to handle text, videos, etc. coming in on 911)
- Increased staffing
- Location information on wireless calls improving

**Carver:**

**Issues Identified:**

- Need for statewide telecommunicator training / standards
- Training staff on changes and new technologies
- Sufficient funding for NG 911 upgrades / conversions
- Update legislation to reflect technical / operational changes
- Dealing with new smartphone apps

**Strengths Identified:**

- Strong staff
- Working cooperatively with other PSAPs on common issues within the metro 911 system
- Willingness to embrace new technology / beta test site

**Future Vision:**

- More shared applications (e.g. logger / recorder, CAD, mapping, etc.)
- Text / Video / Crash telemetry information coming delivered through 911
- More devices being able to connect to 911
- Better location of the caller's device

**Chisago:**

**Issues Identified:**

- ESInet needs to be re-designed as a mission critical IP network utilizing IT standards
- Establish statewide ESInet standards
- Educate policy makers about NG911 impacts
- Maintaining accurate and current GIS information / resources

**Strengths Identified:**

- Good staff capabilities, relationships, and trust
- State / Regional coordination and cooperation

**Future Vision:**

- Implementing a fully integrated, regional public safety system capable of sharing and transferring data between PSAPs
- Responses determined by what is best for the caller, not jurisdictional boundaries

**Dakota Communications Center:**

**Issues Identified:**

- Maintaining adequate staffing / training
- Managing new technology (within the PSAP, used by responders, telecommunications)



- Maintaining adequate funding for the 911 system

**Strengths Identified:**

- Good staff (decisive, professional, caring)
- Ability to exchange information with other PSAPs
- Reliable / redundant 911 system

**Future Vision:**

- More staff to handle additional workload from emerging technologies
- Interaction with more applications / databases (e.g. Smart 911, AED locations, security cameras, tracking devices, more accurate AVL and response personnel tracking devices)
- Text / video / photos received and transferred on the 911 system or ESInet
- Sharing equipment / applications between PSAPs
- PSAP specialization (e.g. unique skills / equipment at one PSAP that can support multiple PSAP and/or specialization within the PSAP for a sub-set of dispatchers)
- Increased system security
- Working together to ensure all of the metro PSAPs can take advantage of new technology

**Hennepin County:**

**Issues Identified:**

- The unexpected around the Text-to-911 implementation
- Finding / keeping adequate staff levels
- Inaccurate caller location on VoIP and wireless 911 calls
- Being able to adequately train the staff
- The need for a regional backup center to support all of the metro PSAPs

**Strengths Identified:**

- Current technology is systems and applications
- Capable staff
- PSAPs working together
- PSAPs sharing technology / applications

**Future Vision:**

- Continued technology changes / evolution
- More demand on telecommunicators to multi-task
- More PSAPs sharing systems and applications
- More PSAP consolidation
- More staffing challenges
- More civilianization of supervisory positions
- The 911 system will be more robust
- The 911 system will be more complex

**Isanti County:**

**Issues Identified:**

- Maintaining sufficient staff
- Keeping up with changes in technology

- Lack of accurate caller location with wireless
- Maintaining sufficient funding

**Strengths Identified:**

- Staff's ability to deal with change
- Working cooperatively together with the State and other PSAPs
- MESB's assistance

**Future Vision:**

- Text and video to 911
- The state / metro 911 system may struggle to keep up with technology changes

**Minneapolis, City of:**

**Issues Identified:**

- Maintaining adequate staffing
- Adequate funding for staff training
- Adequate funding for technology refreshes, upgrades, etc.
- Being able to manage increased expectations from both callers and responders

**Strengths Identified:**

- Strong stakeholder support
- Good IT support
- Ability to continue to be involved with the 911 and public safety communications professional and standards development organizations
- Statewide coordination of the 911 system
- Adequate funding – currently

**Future Vision:**

- Continued implementation of NG911 capabilities (text, video, etc.)
- More capabilities / continued improvement in service
- Enhance interoperability
- More 911 system diversity / capacity
- Improved cell phone caller location accuracy
- Improved capabilities to identify and locate accidental and malicious 911 calls

**Ramsey County:**

**Issues Identified:**

- Need for a clear transition roadmap to NG 911
- Need for a regional 911 spokesperson on 911 issues
- Better backup facilities
- Public education regarding the interim SMS Text-to-911 implementation
- Hiring / Training / Retention of sufficient staffing levels

**Strengths Identified:**

- Current technology
- Staff accountability
- Excellent relationships with responders and neighboring PSAPs
- Reliable / Redundant 911 system

**Future Vision:**

- Training and implementing Text-to-911
- Sharing best practices between PSAPs
- Exploring new technology that meets the PSAP needs
- Need to mentor future leaders
- Increased cooperation and unity by the PSAPs

**Scott County:**

**Issues Identified:**

- Need for statewide minimum standards for telecommunicators

**Strengths Identified:**

- Staff are engaged and committed
- Regional emergency communications systems
- Ability to transition to new technology
- Professional networking with peers

**Future Vision:**

- Fully functional NG911 within 5 years (e.g. text, images, video, etc.)
- New CAD, including mobile CAD capabilities
- Standardized Training Program / Certified Trainers
- Stable workforce (90% of staff with 5 years of service or more)
- Streamlined processes for accessing telecommunications device information / location to assist Law Enforcement investigations
- Sharing resources / specialized services (e.g. handling streaming video feeds) with other PSAPs

**Washington County:**

**Issues Identified:**

- Lack of call handling standards
- Maintaining adequate training (best practices, 911 functionality, new technology)
- Maintain sufficient funding to staff adequately (allow supervisors to not have to double as telecommunicators, enough telecommunicators to cover when others are in training)
- Obtain sufficient funding to implement and staff a full-time QA program
- Need dedicated IT and GIS staff
- Obtain sufficient funding to life-cycle systems and applications
- Obtain sufficient funding to maintain PSAP furniture, systems, and applications

**Strengths Identified:**

- Currently have up-to-date systems and applications (the tools telecommunicators need)
- Metro 911 network is good
- Metro GIS work is ahead of the rest of the state

**Future Vision:**

- Technology evolution is so fast it is taking resources away from dealing with other issues in the PSAP

- Attracting and retaining high quality staff members
- The 911 system will evolve to support the latest technology
- The 911 system will be more vulnerable
- The 911 system will be more difficult to trouble shoot
- The pool of technical support staff who understand how the overall NG911 system works may not keep pace with the need

## Exhibit B: November 19, 2015 Agenda

### AGENDA

Metropolitan PSAPs Issues and Needs Meeting

November 19, 2015, 10:00 a.m. – 12:00 noon.

at MESB Offices

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**Planned Attendance:** TOC Members (Counties of Anoka, Carver, Chisago, Dakota [DCC], Hennepin, Isanti, Ramsey, Scott, Washington and the City of Minneapolis), MESB Staff and Contractors, PSC Alliance (Jeff Nelson and Brian Kyllonen)

### Agenda Details:

1. Meeting / Project Objectives and Expectations (PSC)
2. Introductions / Participant Perspectives Regarding 9-1-1 (All)
3. Project Background (PSC)
4. Roles and Responsibilities
  - A. MESB's Role in Metropolitan Area (Pete)
  - B. TOC's Role (Nancie)
  - C. Minnesota NG9-1-1 Subcommittee Role (Dar or Pete)
  - D. PSAP's Role (PSAPs)
  - E. DECN Role (PSAPs)
    - i. Current Network
    - ii. Funding
    - iii. Legislation
    - iv. NG RFP
5. Questions for Each PSAP Manager (Discussion)
  - A. What are the issues that concern you with regard to your PSAP or with the 9-1-1 system?
  - B. How are you handling or how are you planning to handle these issues?
  - C. What do you see as the strengths of your PSAP?
  - D. What do you see as the strengths of the 9-1-1 system?
  - E. What PSAPs/Regions are you aware of that are handling NG9-1-1 issues well?
  - F. What do you envision for your PSAP over the next five to 10 years?
  - G. What do you envision for the 9-1-1 system over the next five to 10 years?
  - H. What does Next Generation 9-1-1 mean to you at the PSAP, Metropolitan, and State levels?
6. Next Steps / Timeline (All)
  - A. Who should be involved in the next meetings?
  - B. Next Meetings Proposed: December 10<sup>th</sup>, January 14<sup>th</sup>, and February 4<sup>th</sup>
  - C. Delivery of Final Report before February 18<sup>th</sup>

**- End of Exhibit B -**

## Exhibit C: December 17, 2015 Agenda

### AGENDA

Metropolitan PSAPs Issues and Needs Meeting

December 17, 2015, 9:00 a.m. – 10:00 a.m.

at MESB Offices

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**Planned Attendance:** TOC PSAP Representatives, MESB Staff and Contractors, PSC Alliance (Jeff Nelson and Brian Kyllonen)

#### Agenda Details:

1. Introductions / Recap Project Objectives
2. Review First Meeting's Minutes as Collected by PSC (5 min)  
Participants: please bring emailed Meeting Minutes document.
3. Review and Discuss Received Answers to Eight Survey Questions (30 min)  
Participants: please bring emailed Questions and Answers Synopsis document.
4. MESB's Role in Supporting Needs Issues and Concerns (20 min)
  - a) How do the PSAPs want to leverage MESB's planning services?
5. Next Steps / Timeline (5 min)

- End of Exhibit C -

## **Exhibit D: January 21, 2016 Agenda**

### **AGENDA**

Metropolitan PSAPs Issues and Needs Meeting

January 21, 2015, 8:00 a.m. – 10:00 a.m.

at MESB Offices

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**Planned Attendance:** TOC PSAP Representatives, MESB Staff, PSC Alliance (Jeff Nelson and Brian Kyllonen)

#### **Agenda Details:**

##### **1. Recap Project**

- Objectives
- Logistics
- Timing

##### **2. Review Meeting Discussion Outline (Page 2 of this Agenda)**

- Issues Identified to Date
- Desired MESB Involvement (How?)
- Priorities as per Respondents

##### **3. Next Steps**

## Discussion Outline

### ***1. Issues you would like to see addressed at the Metropolitan Regional level:***

- A. Employees (Airport)
  - i. Training (Airport, Anoka, Carver, DCC, Eden Prairie)
  - ii. Operational Standards (Airport, DCC)
- B. Technology (Airport, Carver, DCC)
  - i. Text to 9-1-1 (Allina, Anoka, HCSO)
  - ii. NG9-1-1 (Allina)
  - iii. CAD User Group (Allina)
  - iv. GIS Data (Allina, Anoka)
  - v. Shared Backup Center (HCSO)
- C. Funding / Budget (Airport, Allina)
  - i. Legislation (Carver)
- D. Public Relations / Education (Carver, Eden Prairie)

### ***2. The role the MESB should play in the aforementioned: (Sampling only)***

Assist in planning and advocating for these issues.

Leverage the regional approach.

Take a lead role in developing a workable solution.

Help direct PSAPs to find funding/grant resources.

Put together and oversee CAD user groups.

Set "standards" for Text to 9-1-1.

Be a "spokesperson for all agencies regarding NG9-1-1.

Coordinate and motivate, coordinate with, coordinate with MSA, etc.

Create and provide brochures or other educational resources.

Investigate opportunities to create a PSAs for Text to 9-1-1.

Facilitate at planning/visioning sessions.

Be in the forefront of setting standards.

Assist the PSAPs in identifying the impact the technologies may have on the PSAPs.

Take a firm public stand on the need for industry-wide standards.

Convene a workgroup to identify common training needs and develop training sessions.

Prepare legislative language to further protect 9-1-1 fees from non-related expenses.

Use the membership of the MESB to provide lobbying efforts.

Not certain of the MESB role.

Creating and hosting training.

Act as the main representative for all PSAPs for shared back-up center.

Take a role in helping to develop dispatch standards.

Take a role in developing legislation/funding.

### ***3. Prioritized Issues: (By citation)***

Training (Airport, Anoka\*, DCC, Eden Prairie)

Funding (Airport, Allina, DCC, Washington\*)

Operational Standards (Airport, Carver, Washington\*)

Text to 9-1-1 (Allina, Anoka\*, HCSO)

Technology (Airport, Carver, DCC)

PR / Education (Carver, Eden Prairie)

GIS (Allina, Anoka\*)

Legislation (Washington\*)

CAD User Group (Allina)

NG9-1-1 (Allina)

\* Priorities were not provided, gleaned from related answers.

**- End of Exhibit D -**



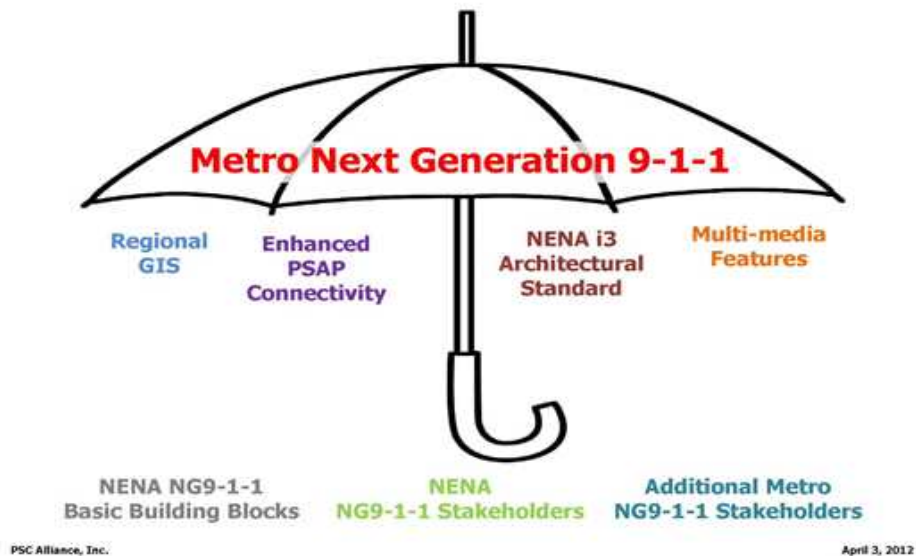


## MESB NG9-1-1 Transition 2016-2017 Strategic Plan

### Executive Summary:

MESB staff has been actively engaged for several years in transitioning the metro area 9-1-1 system from the analog-based Enhanced 9-1-1 (E9-1-1) system, which has served the metro area since 1982, toward a fully standard compliant digital Next Generation 9-1-1 (NG9-1-1) system as defined by the National Emergency Number Association (NENA). This plan will document the progress that has been made, and the implementation milestones currently planned for 2016 and 2017.

The diagram below has been used to depict the major components that will compose the metro area NG9-1-1 system when it becomes current with the NG9-1-1 standards.





## Current Progress:

The MESB, in cooperation with the State 9-1-1 Program, and the metro area Public Safety Answering Points (PSAPs), has made significant progress in preparing the foundation for the implementation of the metro area NG9-1-1 system. Each of the major NG9-1-1 components are listed below with a summary of the current status toward NG9-1-1 compliance:

1. **Regional GIS** – This effort has been underway for several years. All 9-1-1 call routing in a NG9-1-1 environment will be based on geographic information. The PSAP and emergency response agency service areas are currently being mapped. In addition, the Master Street Address Guide (MSAG), which is the basis for 9-1-1 call routing in E9-1-1, is being synchronized with local GIS information. This will allow for telecommunication service providers to transition from MSAG-based routing to geo-based routing without any major disruptions in service or call routing accuracy. This NG9-1-1 GIS data preparation is approximately 70% complete for the nine-county metro area.
2. **Enhanced PSAP Connectivity** – The State 9-1-1 Program took the initiative five years ago to move the 9-1-1 system connectivity, including the metro area system, to digital, IP-based connectivity between the 9-1-1 Service Provider and the PSAPs. The 9-1-1 system currently transports 9-1-1 calls in a digital format. This digital 9-1-1 network is referred to as an Emergency Services IP Network (ESInet). Currently, eight of the primary metro PSAPs are able to accept calls directly in that digital format. The other eleven primary PSAPs in the metro area utilize a gateway between the 9-1-1 system and the PSAP 9-1-1 call answering application to convert from the digital format to the analog signaling used by the PSAP application. Most PSAPs are making the transition from analog to digital when they replace or upgrade their call answering applications.
3. **NENA i3 Architectural Standard** – NENA has several standard development work groups currently defining design and operating standards for NG9-1-1 components. As with most software driven applications, the NG9-1-1 standards are expected to regularly evolve in order to remain consistent with the current trends in how telecommunications services are being used by the general public. This need for the 9-1-1 system to continue to evolve was recognized as the use of wireless communications began to rapidly replace the use of the wireline telephone system on which 9-1-1 was originally designed. The current 9-1-1 system in Minnesota, and 9-1-1 systems throughout most of the country, does not yet utilize NG9-1-1 system functions that are compliant with the NENA i3 NG9-1-1 standard. The telecommunications service providers serving the metro area are also not yet operating in compliance with the NENA i3 NG9-1-1 standard.
4. **Multi-media Features** – A fully standard compliant NG9-1-1 system will support the delivery of emergency calls for service using different communications mediums,



including voice, real-time text, images, and streaming video. Most of the PSAP answering applications currently in use in the metro area would be capable of handling these different call formats, although a software upgrade may be required. The 9-1-1 system and the telecommunications service providers are unable to support the delivery of anything but 9-1-1 voice calls at this time.

### **Strategic Initiatives Planned for 2016 and 2017:**

Based on the MESB's ongoing work with the PSAPs, the State of Minnesota, and other MESB member agencies and departments (e.g. IT departments, GIS departments, etc.) which support the PSAPs and the 9-1-1 system, the MESB staff have identified eight priorities in the transition process for completion in the next two years.

1. Complete the metro centerline/MSAG reconciliation project. **(Regional GIS)**
2. Design a pilot project to explore NG9-1-1 standard compliant ESInet implementation options that address cost, availability, reliability, and quality assurance. **(NENA i3 Architectural Standard and Enhanced PSAP Connectivity)**
3. Identify the GIS data requirements needed to support dispatchable location accuracy from nomadic or mobile telecommunication devices. **(Regional GIS)**
4. Continue to evaluate the current 9-1-1 system and identify issues that could be improved within the metro area, considering PSAP needs and the 911 Service Provider capabilities. **(Enhanced PSAP Connectivity)**
5. Explore NG9-1-1 systems which mirror the Twin Cities region to identify what options are working well and which options have caused problems. Use that information to further develop and refine the metro area transition plan. **(Enhanced PSAP Connectivity and NENA i3 Architectural Standard)**
6. Expand MESB's quality assurance processes beyond the legacy wireline system to include wireless and VoIP customer and routing data. **(Enhanced PSAP Connectivity and NENA i3 Architectural Standard)**
7. Coordinate the MESB NG9-1-1 transition planning with the State 9-1-1 Program, while maintaining the option to permit the metro area to move quicker, or specify a higher level of service, in the transition process if it is in the best interest of the metro area PSAPs and residents (e.g. implement additional ESInet redundancy and diversity than is practically available in greater Minnesota). **(Enhanced PSAP Connectivity and NENA i3 Architectural Standard)**



8. In coordination with the State 9-1-1 Program, implement an interim SMS Text-to-9-1-1 solution in the metro area by the end of 2016 in order to adequately support Individuals who are deaf, deaf-blind, hard-of-hearing, and individuals with speech disabilities until fully NG9-1-1 standard compliant real-time text messaging becomes available within the 9-1-1 system. **(Multi-media Features)**

## Conclusion:

The transition from the legacy E9-1-1 system to a standards compliant NG9-1-1 system will continue over the next several years. The 9-1-1 system will continue to evolve over time to remain compatible with the current trends in technology and how people routinely communicate. This will be challenging, but not insurmountable. It will, however, require an awareness that the system will always be changing and not a one-time project which can be completed and not need to be addressed for another few years.

Minnesota, and the metro area in particular, is well positioned in this transition process. Minnesota is moving forward as one of the leaders in the process, without the risk of being too far out in front of the technology or the standards. 9-1-1 staff is leveraging the experience of the early NG9-1-1 adopters, and using that experience to make sure the metro area's level of 9-1-1 service is not compromised during the transition. The MESB's goal is to continue to provide the most reliable and accurate 9-1-1 system possible with the resources available.