

DEPARTMENT OF  
**PUBLIC SAFETY**  
DIVISION OF  
**EMERGENCY  
COMMUNICATION  
NETWORKS**



2015–2016 BIENNIAL REPORT



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## TRANSFORMING WITH EVOLVING TECHNOLOGIES

The Minnesota Department of Public Safety-Emergency Communication Networks Division (DPS-ECN) is on the precipice of transformative changes. Ever-evolving technologies are offering more opportunities for our programs to provide effective and efficient services for Minnesota's first responders and public safety personnel. From upgrading our Next Generation 911 (NG911) backbone, to celebrating interoperability improvements, to the implementation of the dedicated wireless broadband network known as FirstNet, DPS-ECN is committed to embracing these changes. Our goal is to be on the forefront by offering the most advanced services to Minnesotans requesting emergency assistance.

Minnesota is among one of the early adopters of the NG911 technology, which will make Text-to-911 a reality throughout the state. Right now, the infrastructure is in place to accept text messages at Minnesota's 911 call centers. However, there is more work to be done before Text-to-911 can be deployed statewide. Over the coming months, DPS-ECN will work with vendors to ensure call centers have the necessary equipment and technology upgrades to accept emergency text messages. Once that is in place, dispatchers will undergo training and conduct tests to ensure they can accept texts from the wireless carriers.

If you have ever been in a crowd of thousands of people and tried to access the internet from your phone or send a text, you know what it's like to be on an overloaded network. While the public may be inconvenienced by the interruption, it could be the difference between life and death for law enforcement, firefighters and medics who are responding to an emergency. Believe it or not, Minnesota's public safety personnel currently use the same wireless networks that you use. That is one reason why DPS-ECN is working to develop a state plan to evaluate FirstNet's dedicated wireless broadband service for Minnesota. The network would allow our first responders to send and receive data and communicate with one another with priority and without interruption.

We celebrate the many milestones you will read about in this annual report and look forward to the many more that are to come. I am grateful for the dedicated work we have done and look forward to our continued success in serving the state of Minnesota.

Jackie Mines, Director  
Emergency Communication Networks





## DIVISION OVERVIEW

The Department of Public Safety's Division of Emergency Communication Networks (ECN) funds and supports interoperable public safety grade mission-critical communication solutions that allow 911 dispatchers, emergency services personnel, state, local, and federal agencies to communicate easily with each other to provide an immediate response to Minnesota citizens and visitors who find themselves in need of help.

### Services Provided

- State-of-the-art voice and data 911 communications backbone to 100 percent of Minnesota residents and visitors who request emergency assistance.
- Achieving 95 percent mobile radio coverage across all rural and metro counties, enabling emergency responders to communicate seamlessly with each other, as well as with every public safety answering point (PSAP) while responding to an emergency.
- Grant dollars to local governments to purchase necessary equipment for emergency responders.
- Applications to support comprehensive region-wide training and exercises for 911 dispatchers and emergency responders.

- Solutions allowing emergency responders to communicate with neighboring states, Canada and federal public safety responders
- Support the established statewide and regional emergency communications governance structure to ensure each user has a voice in how Minnesota's interoperable public safety systems function through collaboratively developed and implemented standards.

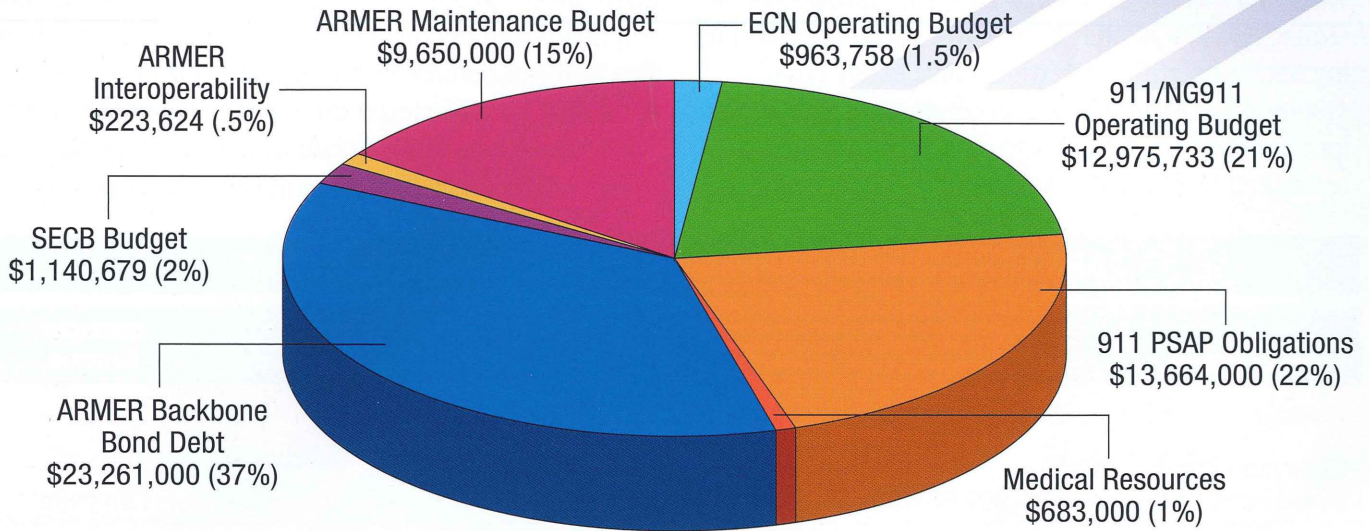
### Operating Expenses

DPS-ECN programs are funded with revenues collected from a 911 fee paid by every Minnesota telephone communications customer and deposited in the 911 Special Revenue Account. Those funds support:

- Statewide 911 program
- Next Generation 911 network backbone
- Equipment and dispatch proficiency expenses for 104 PSAPs
- Debt service on the revenue bonds sold to construct the ARMER (state-wide public safety radio) system
- ARMER backbone maintenance and operation costs
- Minnesota's interoperability program
- Statewide Emergency Communications Board (SECB)



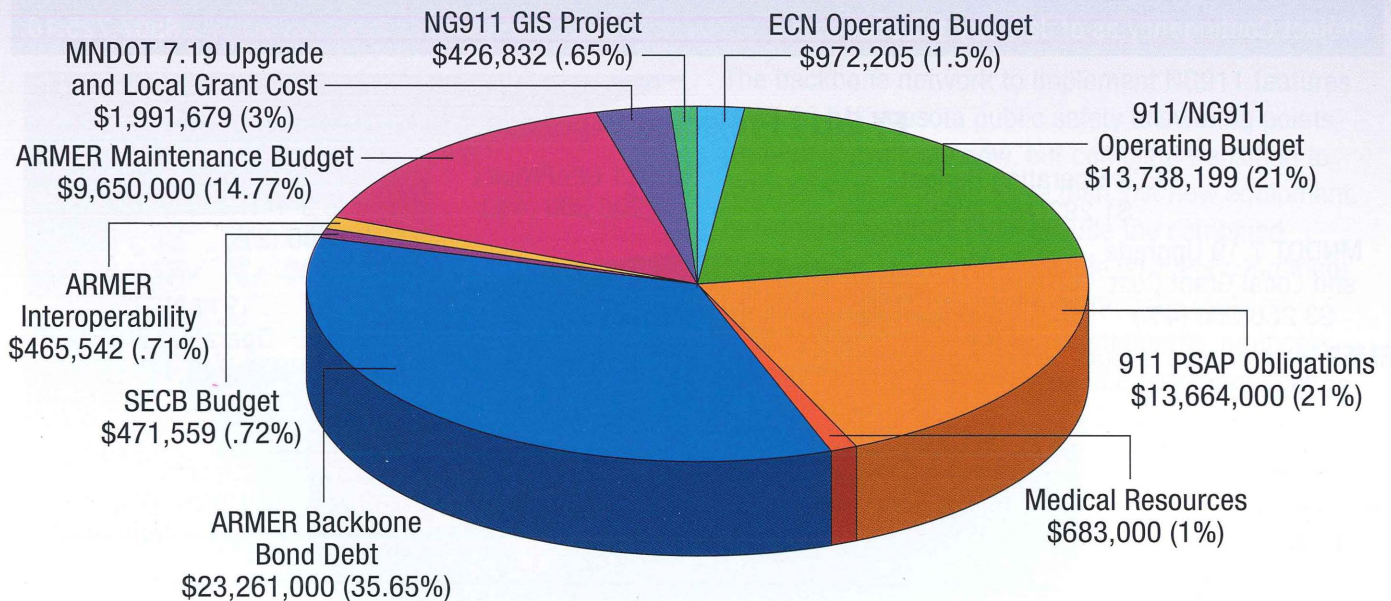
### FY 2015 Actual Expenses



The actual expenses for FY 2015 totaled \$62,561,793. The total amount of 911 fees collected was \$62,110,858. A total of \$27,322,733 was spent to support the 911 Program and \$33,134,624 went to the support the state-wide radio system known as ARMER.

The SECB budget was \$1,140,679 of which \$1,060,578 was granted out to local units of government to offset their costs to join ARMER. The DPS-ECN operating budget to support eight staff and three part-time regional interoperability coordinators was \$963,758.

### FY 2016 Actual Expenses



The actual expenses for FY 2016 totaled \$65,324,016. The total amount of 911 fees collected was \$69,470,000. A total of \$28,512,031 was spent to support the 911 program and \$35,368,220 went to the support ARMER.

The SECB spent \$471,559 and the remainder of the SECB budget carried over to FY 2017. The DPS-ECN operating budget to support nine staff and three part-time regional interoperability coordinators was \$972,205.



## ARMER Construction Budget

The ARMER construction budget shown below demonstrates how the ARMER bonds have been spent to build the backbone of the statewide public safety radio system. Over \$163,000,000 in bonds were sold to pay for the ARMER backbone. The debt service on those bonds is \$23,261,000 paid out of the 911 account. In

2016, DPS-ECN paid off one callable bond of \$7,590,000 and refinanced the rest of the bonds reducing the interest rate from 4.8 percent to one percent. This saved the state more than \$8 million over the life of the bonds in interest. The term of the existing bonds was reduced by four years to 2021 resulting in over \$120 million in savings.

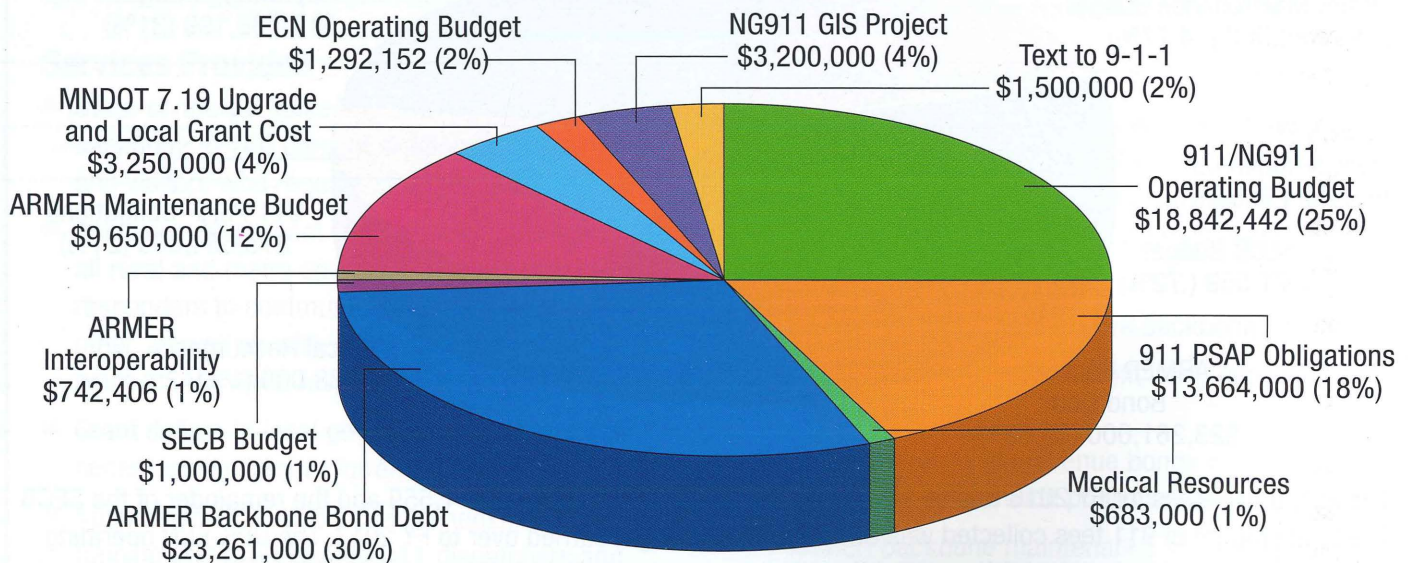
### ARMER Construction Budget Status as of January 1, 2017

Project Funding	Original Budget	Spent to Date	Unspent Balance Remaining	Encumbered	Available Balance
Phase 3	\$45,000,000.00	\$44,952,397.19	\$47,602.82	0.00	Complete
Statewide Radio Board Funds (FY09)	\$1,902,831.00	\$1,902,831.00	0.00	0.00	Complete
Phase 456 (FY09 Bonds)	\$61,996,958.00	\$61,996,958.00	0.00	0.00	0.00
Phase 456 (FY10 Bonds)	\$62,015,407.77	\$61,972,579.77	\$42,828.00	\$29,810.00	\$13,018.00
Phase 456 (FY11,12,13 Bonds)	\$61,987,634.34	\$56,636,744.52	\$5,350,859.82	\$1,518,152.72	\$3,832,707.10
<b>Total Phase 456</b>	<b>\$186,000,000.00</b>	<b>\$180,606,312.18</b>	<b>\$5,393,687.82</b>	<b>\$1,547,962.72</b>	<b>\$3,845,725.10</b>

Project Contingency as of January 1, 2017

\$507,725.10

### FY 2017 Projected Expenses



DPS-ECN's projected budget for FY 2017 is \$77,085,000. The 911 fee was increased on January 1, 2016 from 78 cents to 95 cents per subscriber. The expenses are outlined within the pie chart above.



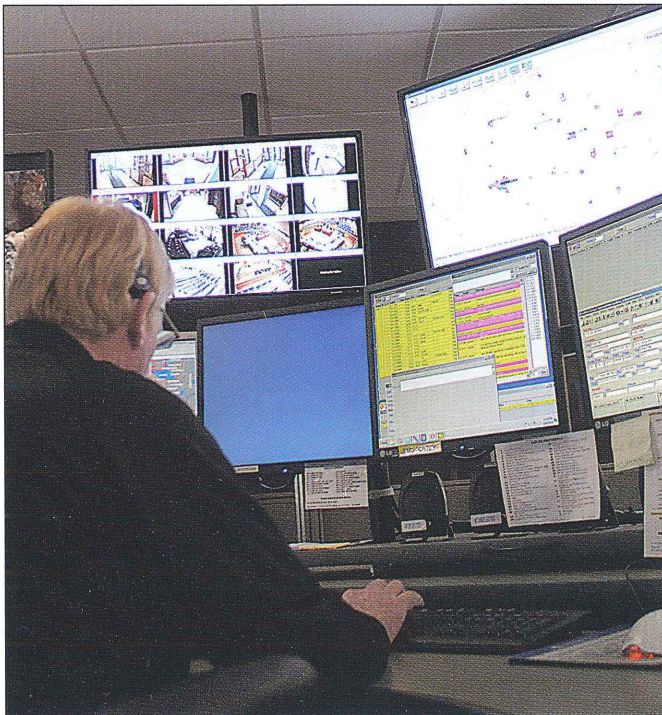


## STATEWIDE 911 PROGRAM

### Next Generation 911

Next Generation 911 (NG911) is faster, more flexible and resilient compared to the communication technology used by the public today. Today's 911 networks carry only voice, but our world is becoming all about

data. NG911 will allow for voice, text messages — and eventually — photos and videos to be sent from the public through the 911 system and on to emergency responders.

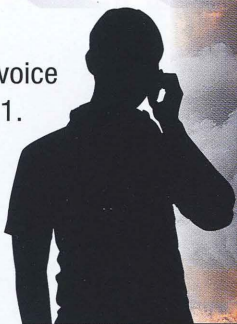


The backbone network to implement NG911 features to all 104 Minnesota public safety answering points (PSAPs) is available now, but complete transition to NG911 involves much more than just new equipment. Implementing NG911 will include the combined initiatives of many skilled people who will coordinate efforts to plan and deploy a continually evolving system of hardware, software, standards, protocols and training. On the next page is a conceptual use case illustration.

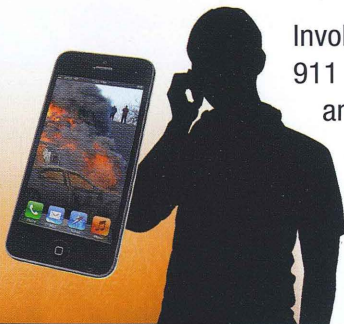


**Crash: Hazardous Materials Tanker vs Telematics Equipped Vehicle**

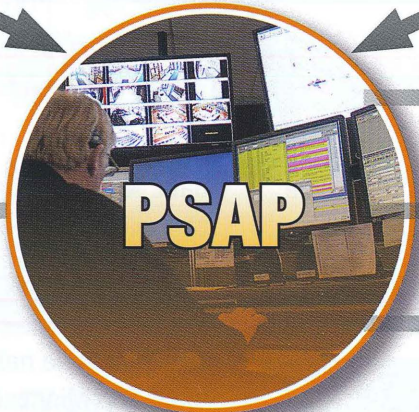
Passerby places a voice call to 911.



Involved driver texts 911 using smart phone and sends photos and video of crash to PSAP.



Vehicles send telematics data directly to PSAP



PSAP forwards photos and video sent by 911 caller to LE and fire.



PSAP sends data to DOT for intelligent traffic reroute.

PSAP forwards telematics data sent from vehicles to hospital and dispatches first responders/ambulance simultaneously.



HAZMAT acknowledged at time of crash.



Hospital activates burn unit.



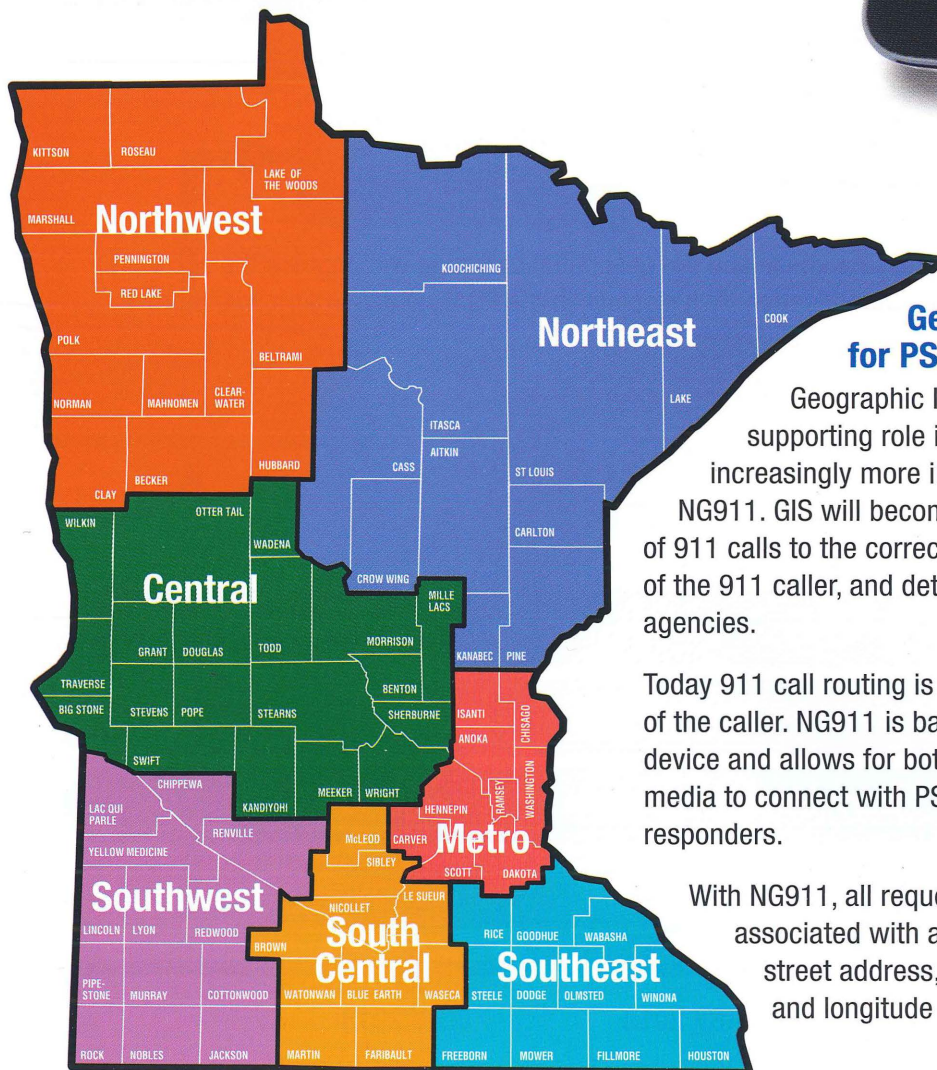
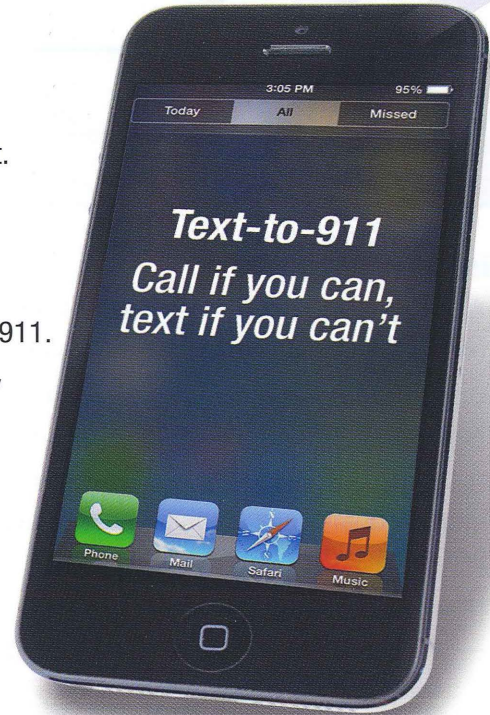
## Minnesota's Text-to-911 Vision

Text-to-911:

- Utilizes a single vendor solution for all of Minnesota.
- Accepts text messages from all wireless carriers.
- Integrates the solution directly into PSAP call answering equipment.
- Includes the ability to transfer text messages between PSAPs.
- Includes a coordinated statewide public education campaign with implementation.
- Serves as a complement to, and not a substitute for a voice call to 911.

Consumers and members of the deaf and hard-of-hearing community are looking forward to the ability to text to 911 when a voice call is not possible. DPS-ECN is working to deploy Text-to-911 in 2017.

Minnesota's statewide implementation uses a well-planned and coordinated deployment approach starting at the regional level.



### Geographical Database for PSAPs

Geographic Information Systems (GIS) play a supporting role in today's PSAPs and will become increasingly more important in the advancement of NG911. GIS will become the data source for the routing of 911 calls to the correct PSAP, identifying the location of the 911 caller, and determining the correct responding agencies.

Today 911 call routing is based on the telephone number of the caller. NG911 is based on the location of the calling device and allows for both voice and other communications media to connect with PSAPs as well as with emergency responders.

With NG911, all requests for emergency assistance are associated with a location. The location may be a street address, a geodetic shape, or a latitude and longitude coordinate.



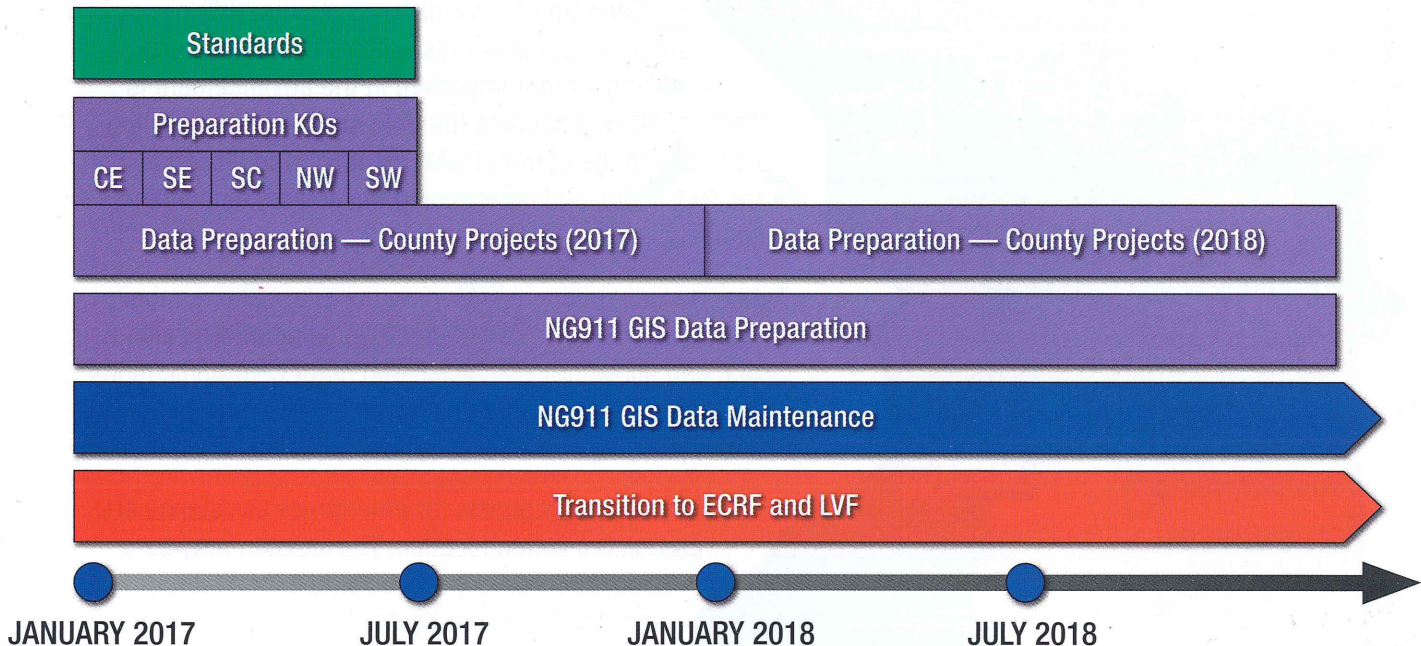


## Minnesota GIS Vision

- All critical GIS data is ready for deployment for NG911 call routing and location validation.
- Ongoing GIS data maintenance processes and workflows are in place to meet the needs of 911.
- GIS data achieves and maintains the level of data accuracy and completeness needed for 911 service delivery.
- NG911 GIS datasets will include:
  - PSAP Boundary Polygons and Emergency Service Response Polygons
  - Road Centerline
  - Address Points
- NG911 dataset readiness conditions:
  - Reflect official addresses and service areas.
  - Meet identified schemas.
  - Edge match/aggregate with regional and statewide data.
  - Achieve accuracy levels on required data validations.
  - Have maintenance processes in place.

## Project Timeline:

The synchronization of the street address database and the geospatial database will improve the accuracy of GIS data, and the automatic location identification (ALI) displays in the PSAP, which in turn will improve PSAP map displays for all types of emergency calls.



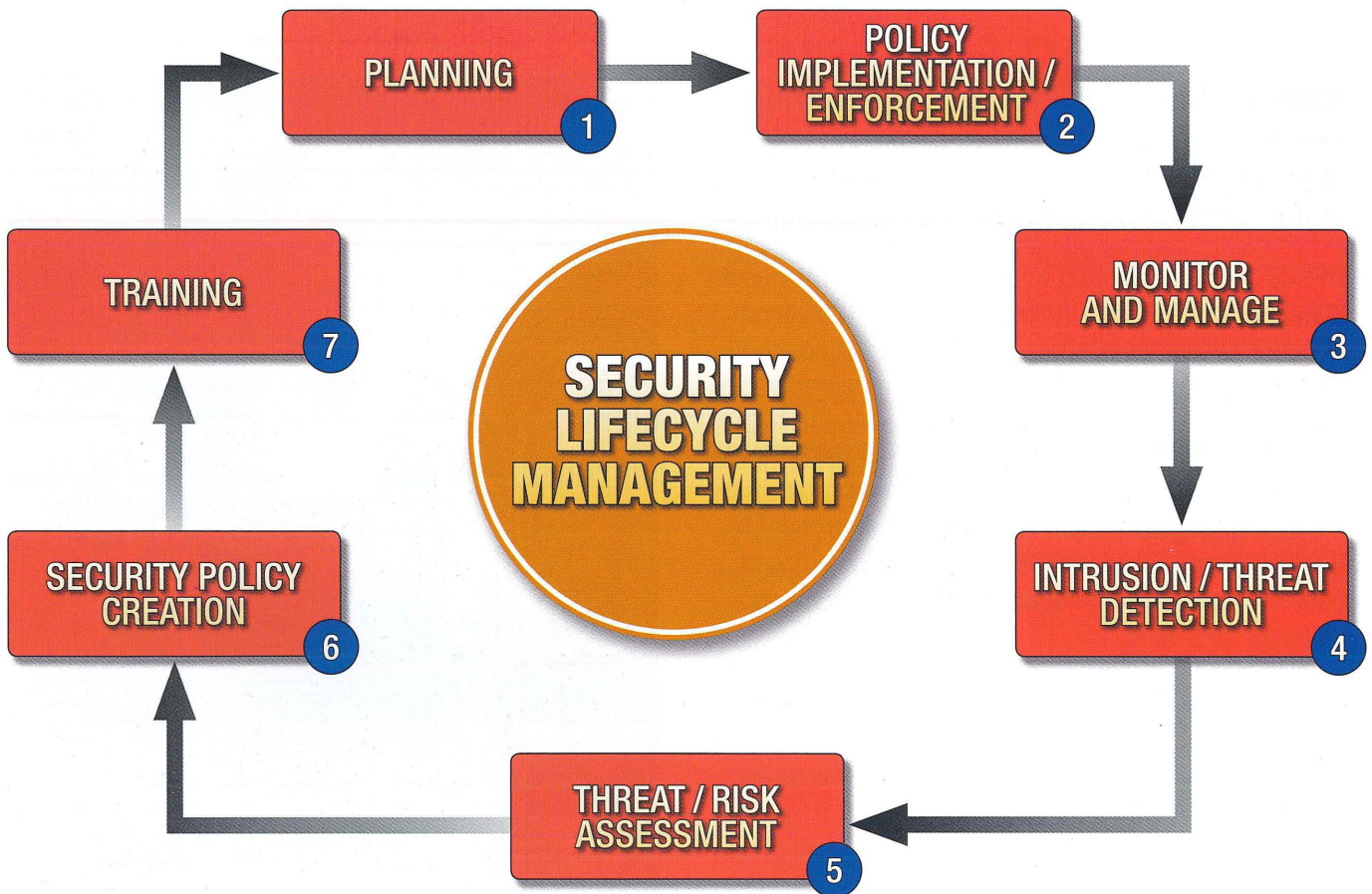




## Cybersecurity for PSAPs

As PSAPs are becoming more connected to the public, to various systems serving the public, as well as to each other, the importance of having firewalls is increasingly important. NG911 systems are based on internet protocol (IP) networks that are increasingly and deliberately being targeted and attacked. Safeguarding the PSAPs and the NG911 core services is paramount. Having firewalls to protect the call handling equipment to the internet, 911 network, and other inter-connected networks is the primary defense.

DPS-ECN will be implementing a managed service offering to complete the purchase, configuration, installation, management, and ongoing monitoring of firewalls to provide protection including intrusion prevention and intrusion detection for all 104 Minnesota PSAPs.

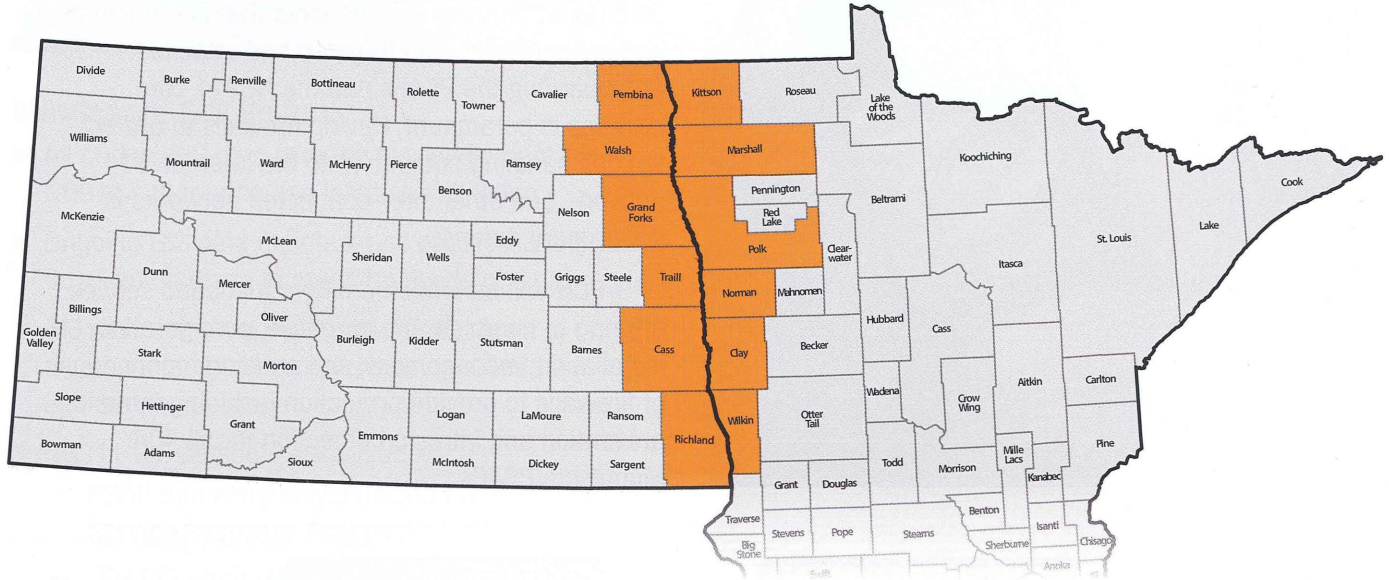




## 911 Interoperability Initiatives

DPS-ECN has worked with the State of North Dakota and their respective 911 service providers to deploy wireless 911 call transfer to include a display of the call back number and location of the caller between

all bordering PSAPs along the Minnesota/North Dakota border. Minnesota and North Dakota are the first two states in the nation to achieve this capability in the NG911 environment.



## State Partnerships Provide Cost Sharing

Providing network resiliency and diversity to all 104 Minnesota PSAPs is a primary goal and a significant contributor to the on-going cost of the project.

DPS-ECN has developed a partnership with Minnesota IT services (MN.IT) for the provisioning of a diverse network path to more than 50 percent of Minnesota's PSAPs.

Utilization of the MN.IT network results in overcoming diversity challenges, particularly in greater Minnesota. It also results in cost sharing with the Department of Public Safety's Division of Bureau of Criminal Apprehension, and in turn, a reduction to overall network costs for DPS-ECN.



Dana Wahlberg, 911 Program Manager, DPS-ECN





## ALLIED RADIO MATRIX FOR EMERGENCY RESPONSE (ARMER)

ARMER is a robust, scalable land mobile radio (LMR) system serving as the primary voice communications tool for the majority of state, county and local public safety entities in Minnesota. ARMER is a Motorola Smart Zone trunked radio system operating in the 800 MHz radio spectrum.

ARMER was first built in the Twin Cities in 2004, then in St. Cloud and Rochester, and has since migrated throughout the rest of the state. The Minnesota Department of Transportation (MnDOT) owns the core infrastructure providing the ARMER backbone and 95-percent mobile coverage, as measured county-by-county. Many local units of government own local enhancements providing improved local and in-building coverage.

### Status

Currently, 98 percent of the ARMER towers are complete. MnDOT has identified 335 sites for ARMER towers and repeaters. To date, 331 of those sites are “on the air.”

The four remaining sites are in varying stages of land acquisition or construction. Two of the “on-the-air” sites are using old or temporary towers and, while operational, are slated for improvements.

Entities using ARMER file a Participation Plan with the Statewide Emergency Communications Board (SECB) and, when approved, enter into a consent agreement to operate under MnDOT’s FCC license. Of Minnesota’s 87 counties, 86 have requested and received full participant status from the SECB. One county maintains its legacy VHF radio system and interoperates with its neighbors using ARMER under a limited participation plan.

The SECB has supported keeping the ARMER system upgraded to protect the large investment and avoid huge one-time upgrade costs in the future. It is currently at version 7.15. ARMER will be upgraded to version 7.17 at the end of 2018 and 7.19 at the end of 2020. Hardware updates are currently being rolled out in preparation for the 7.19 update.



## By the Numbers

- Six zone controllers regulate all radio traffic throughout the state.
- 93,344 ARMER radios have been identified for use on ARMER.
- 78,935 radios are actively used.
- 7,167 talkgroups (channels) are available.
- 6,209 active talkgroups.







## Success Story

### Connecting Ontario and Minnesota Radio Systems

Minnesota's international northern border extends 547 miles and separates our state's most remote areas from two Canadian provinces, Manitoba and Ontario. Although separate nations, the need exists for cross-border public safety communications. In 2016, Minnesota and Ontario completed a project providing interoperability between Ontario's FleetNet public safety radio system and Minnesota's ARMER radio system.

Technically, the project was straight forward. Ontario provided Minnesota with one of their public safety radios programmed with a dedicated interoperability talkgroup. Minnesota installed that radio at one of our repeater sites and connected it to ARMER. The Minnesota State Patrol controls the patch between the Ontario talkgroup and ARMER. This solution provides interoperability between any law, fire, emergency medical service, or forestry unit in Ontario with any unit anywhere in Minnesota.

Greater than the technical accomplishments were establishing and formalizing the relationships, permissions and guidelines authorizing and regulating the interoperability tool. Ontario and Minnesota officials agreed upon terms and entered into a Memorandum of Understanding (MOU). Approvals were received from the Federal Communications Commission (FCC) and then explanations were requested for the National Telecommunications and Information Administration (NTIA) to use Canadian public safety frequencies in Minnesota, as they were not part of the United States public safety band. Finally, operating guidelines were created and an operating standard was adopted.

Our accomplishment was heralded by US and Canadian authorities as an excellent example of international cooperation.





## INTEROPERABILITY

The Department of Homeland Security (DHS) SAFECOM Program defines interoperability as “the ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized.”

Minnesota public safety enjoys tremendous interoperability. By design, ARMER provides local, regional, and statewide talkgroups dedicated just for interoperability and the system is sufficiently robust to handle large scale events involving ARMER radio users from various disciplines and jurisdictions. Furthermore, Minnesota has implemented other layers of interoperability providing quality radio connectivity with non-ARMER users such as federal law enforcement, transient EMS entities and the handful of public safety entities not yet transitioned to ARMER.

### **Interoperable ARMER Talkgroups**

Interoperability is most common at the local level, and as such, is very healthy. Countless ARMER talkgroups are shared within counties, providing common communication paths between neighboring municipalities and local public safety agencies.

Each of Minnesota’s seven Emergency Communications Board regions possess ten or more talkgroups dedicated for intraregional interoperability. At a state level, there are 14 statewide talkgroups available for any ARMER user and 16 statewide talkgroups available to just law enforcement users.

### **Non-ARMER Channels**

ARMER radios are also programmed with traditional simplex radio channels for antenna-to-antenna communications. These channels are called SOAs, for Scene of Action, and provide a few miles range and excellent in-building communications. While off of the ARMER network, these channels will work in areas where ARMER coverage may be poor.

### **National Interoperability Channels**

Minnesota maintains a VHF network tying 109 strategically-placed VHF towers to the ARMER network. This network, known as the Cross Spectrum Interoperability System, allows VHF radio system users to connect with ARMER using a variety of VHF interoperability channels. VHF users include a handful of fire, law enforcement and EMS entities, public safety from neighboring states, and federal law enforcement.



All ARMER radios are required to be programmed with 800 MHz National Interoperability Channels. Similar to SOAs, these channels provide antenna-to-antenna coverage of a few miles but they are available to every public safety entity in the nation and Canada. Although not every entity uses the 800 MHz spectrum, these channels are common in mobile communications platforms so that they may be patched to other systems. Minnesota has also installed these channels in nearly a dozen fixed repeaters sites in metropolitan areas, providing a redundant communication platform for these population centers.

### Communications Unit

The Communications Unit is an established component of the Incident Command System (ICS), a nationwide system of the National Incident Management System (NIMS). Minnesota prepares its Communications Unit personnel providing and supporting training for:

- Communications Unit Leaders (COMLs)
- Communications Unit Technicians (COMTs)
- Auxiliary Communicators (AUXCOMMs)

Minnesota also supports ongoing training and exercising through organized local, regional, and state events.

### MNFOG

Minnesota maintains a Field Operations Guide, known as the MNFOG, detailing operational and technical capabilities. This tool is, generally, not for the public safety end user but for communications and technical staff supporting public safety.



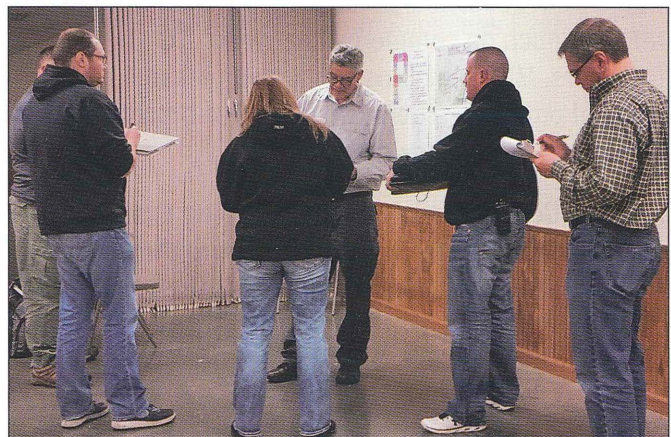
### Strategic Technology Reserve

Minnesota's Strategic Technology Reserve is a collection of communications assets available to Minnesota Public Safety to support large events and major emergencies. Each emergency communications region in Minnesota maintains a towable repeater/tower unit. Each unit has a crossband VHF-800 MHz repeater and a 50 foot tower. Each region keeps a cache of at least thirty 800 MHz portable radios.

The Strategic Technology Reserve also includes a Satellite Equipped Communications Site on Wheels known as the SATCOW. The SATCOW comprises three units: a command truck, a 109 foot tower trailer, and a communications trailer housing (among many other pieces of technology) an ARMER repeater site.

### Relationships

DPS-ECN staff maintain affiliations and relationships with several federal organizations supporting interoperability. We play an active role in the FEMA's Region V Regional Emergency Communications Coordination Working Group. Staff also actively participates in National Council of Statewide Interoperability Coordinators (NCSWIC), a SAFECOM organization charged with promoting the critical importance of interoperable communications and the sharing of best practices to ensure the highest level of interoperable communications across the nation.







## FIRSTNET: PUBLIC SAFETY WIRELESS BROADBAND NETWORK

Many of Minnesota's emergency responders utilize a variety of data in responding to an incident. It is critical that an incident commander know where all of their responders are during an event. A law enforcement officer may need to understand a suspect's prior arrest history. Access to critical data can protect the lives of emergency responders. Today, commercial carriers like AT&T and Verizon provide wireless broadband to carry this data to emergency responders, however the network is often not available during critical emergency events and becomes overwhelmed with traffic from subscribers. Public safety is hesitant to rely too much on commercial networks. For the last five years, Minnesota has conducted research on the value of providing a dedicated wireless broadband network to emergency responders.

In 2012, Congress passed a law creating FirstNet, an independent federal agency tasked with building a Nationwide Public Safety Broadband Network (NPSBN).

The development of the NPSBN continues its mission to implement and operate the network for emergency responders nationwide. The State of Minnesota continues to support the development of a strategic plan by focusing on the needs of our constituents.

### Primary Goals

- Continued education and outreach on FirstNet and the state plan proposed by FirstNet.
- Promote and support the needs of public safety users on a broadband network built in Minnesota by FirstNet.
- Develop technical requirements of the FirstNet network
- Develop a method to compare the FirstNet state plan against Minnesota requirements.





# FirstNet<sup>®</sup>

## Strategy

The strategy for wireless broadband is to evaluate the requirements and features of a reliable, dedicated, public safety network that would guarantee access to data in high-demand situations when commercial carriers are not available or systems are overloaded.

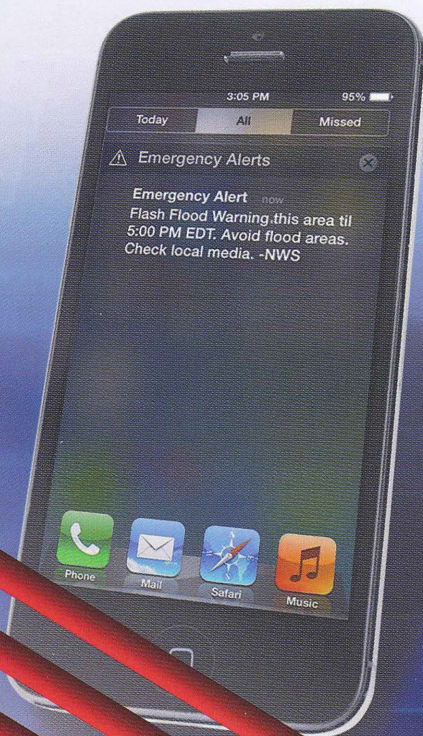
DPS-ECN continued its consultation with FirstNet concerning the NPSBN. The following list highlights the work completed by Minnesota in 2016:

- Hired new staff members
  - Engage 2371 stakeholders in FirstNet meetings.
  - Social media and web tools used to educate emergency responders and public on FirstNet goals
  - Extended seven regional grant contracts to assist with education on wireless broadband.
  - Introduced FirstNet tribal representatives to Minnesota's 11 recognized tribes and encouraged tribal participation at all levels of statewide communications.
  - FirstNet released the federal radio access network (RAN) build-out request for proposal (RFP) January 2016; partner to be announced in 2017.
  - FirstNet is currently considering bidders for FirstNet RFP.
- More than 70 volunteers from the state, counties and cities reviewed requirements for State Plan Evaluation which will include a Business Plan outlining the opt-in/opt-out risks, costs, feasibility and benefits.
  - Volunteers committed more than seven hours per week to reviewing the FirstNet state plan evaluation.

The Broadband program continues to do this work in the most cost effective manner by managing the State and Local Grant Program (SLIGP) issued by the federal government and the National Technology and Information Administration (NTIA). SLIGP funding provided for 19 thought leaders and key influencers to attend broadband conferences.

- Association of Public Safety Communications Officials (APCO)
- Public Safety Communications Research (PSCR) — Communications Research
- Homeland Security and Emergency Management (HSEM) — New Mexico Band Class 14 Test Exercise, JAMX16
- International Wireless Communications Expo (IWCE)





## IPAWS ALERT AND WARNING



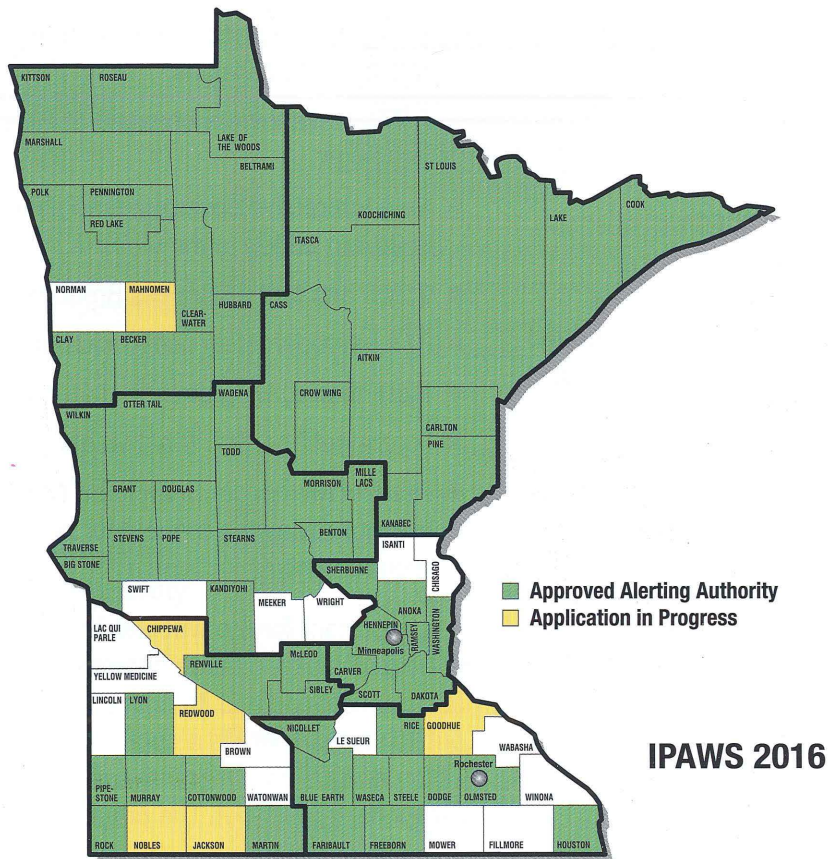
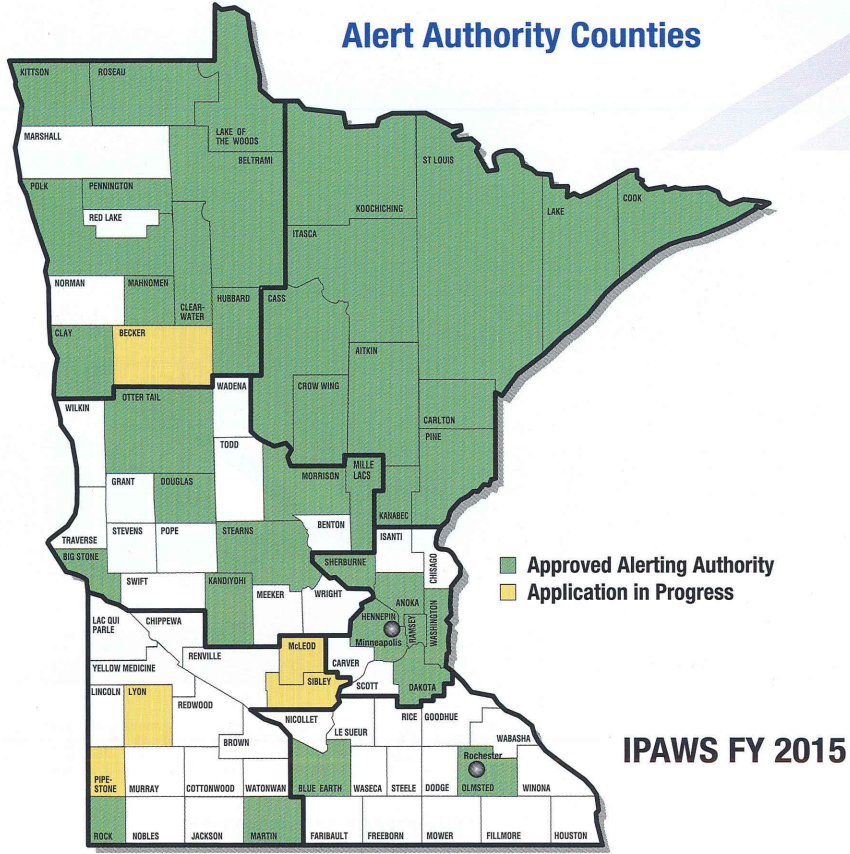
Things have changed quite a bit for the Integrated Public Alert and Warning System (IPAWS) under the Statewide Emergency Communications Board (SECB). IPAWS provides state, tribal, county and city authorized professionals the opportunity to issue alerts and warnings under certain circumstances. The messages are sent through mass notification systems like the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEAs) on cell phones.

### Milestones

- Participation grew to 71 percent of counties having IPAWS message capability, that's 62 of 87, an increase of 27 percent from 2015.
- Twelve workshops on the Public Alerting Authority Best Practices Guide, with a total of 238 persons attending.
- The IPAWS Best Practices guide was approved by the SECB and released in November 2015 to help dispatchers and emergency managers use IPAWS effectively.
- Completion of a pilot to demonstrate IPAWS multi-lingual capabilities.



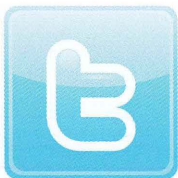
## Alert Authority Counties







## COMMUNICATION AND OUTREACH



DPS-ECN added a Twitter account to its communication toolbox in February of 2016 with the handle: @MnDPS\_ECN. The account has more than 100 followers and that number is growing by the day. On average, DPS-ECN's tweets earn about 56 impressions per day.



By the end of 2016, ECN's Facebook page had more than 340 likes. That is a 49 percent increase in page likes over the same time period in 2015. Social media engagement is expected to increase as the division continues to highlight key program improvements such as the implementation of Text-to-911 and FirstNet in Minnesota.

Public outreach continues on DPS-ECN's website with regular updates on items such as updates to the NG911 backbone, the benefits of FirstNet's dedicated wireless broadband network for public safety, training opportunities and regional leadership meetings.

ECN's ARMER, 911 Program and Interoperability web pages are among the most visited.

### FirstNet Highlights

- 450 new social media followers.
- Most improved social media outreach compared to other DPS divisions.
- 2,371 stakeholders engaged at FirstNet outreach meetings.
- New interactive coverage map showing a proposed build-out added to the website.
- 2,396 hits to the Wireless Broadband web pages.
- 314 Interoperability conference attendees.
- More than 2,335 outreach materials distributed.
- Four meetings with tribal leadership teams.
- FirstNet Minnesota SharePoint collaboration site built for reviewing request for proposal (RFP) requirements

It is important for the wireless broadband program to help all stakeholders understand public safety communications and its critical role in all aspects of public safety. There is a continuing effort to educate decision makers on a monthly basis about the progress of the FirstNet build-out. The program accomplished this





with three educational packets for outreach to fire, law, and EMS; as well as a quarterly newsletter. Topics for 2016 included:

- FirstNet RFP
- FirstNet for Firefighters
- FirstNet for Law Enforcement
- FirstNet for Emergency Medical Services
- FirstNet Early Builders
- FirstNet for Tribes

### Text-to-911 Highlights

The coordinated statewide public education campaign for Text-to-911 continued in 2016 with the creation of a handout for Minnesota's deaf, hard-of-hearing and speech disabled individuals.

DPS-ECN is currently building partnerships with public safety partners, state and local agencies as well as other stakeholders to increase public outreach as Text-to-911 is implemented statewide in 2017.

## Minnesota Department of Public Safety Emergency Communication Networks



### Text-to-911 in Minnesota:

- 911 call center infrastructure is in place to accept text.
- Projected statewide launch in 2017.
- Text-to-911 may be used when individuals are unable to make a voice call or when it is unsafe to do so.
- Individuals who are deaf, hard-of-hearing, or speech disabled may use Text-to-911 as the first contact option.

### Text-to-911 can be used when:

- The reporting party cannot speak.
- A crime is in progress (i.e. domestic abuse or home invasions).
- The reporting party must remain quiet in order to maintain safety.

### A few things to know if you need to text 911:

- Location is not as precise with text as it can be with a wireless voice call.
- Language translation for non-English speaking callers is not yet available.
- As with all text messages, 911 messages can take longer to receive, can get out of order or may not be received.
- A 911 call-taker is unable to hear background noise or obtain cues from voice inflection that are present with voice calls.
- Text-to-911 is not available when roaming.
- A text or data plan is required to place a text to 911.
- If text to 911 is not available, you will receive a message asking you to contact 911 by other means.
- Do not send your text to 911 to more than one person.
- Do not text and drive!

#### Questions?

Contact: Dana Wahlberg, Emergency Communication Networks 911 Program Manager  
 (651) 201-7546, dana.wahlberg@state.mn.us





# STATEWIDE EMERGENCY COMMUNICATIONS BOARD (SECB)

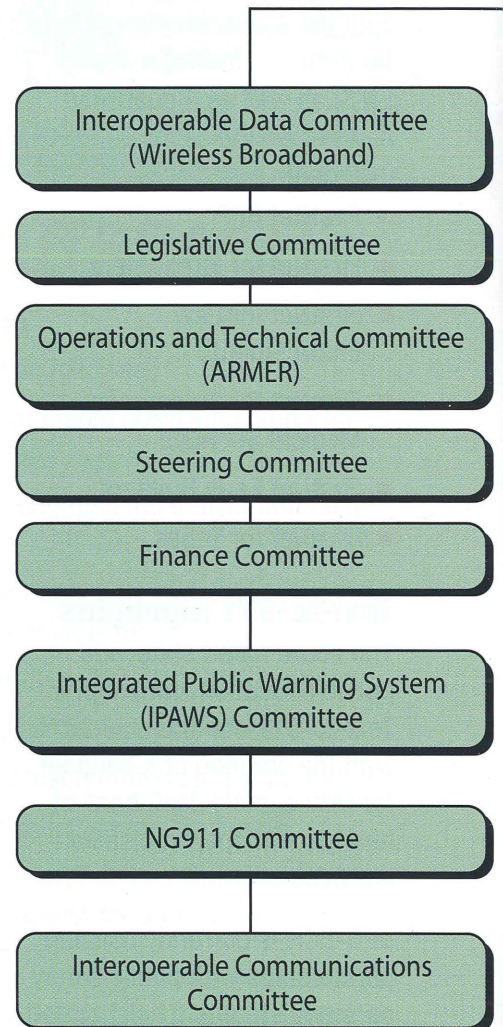
## Vision

The safety of Minnesota's emergency responders, citizens and visitors is accomplished through the state-of-the-art interoperable public safety communications systems.

## Mission

Enable emergency responders and citizens to communicate easily and respond immediately in critical emergency situations by providing reliable and robust systems for interoperable communications across counties, state, federal and tribal regions.

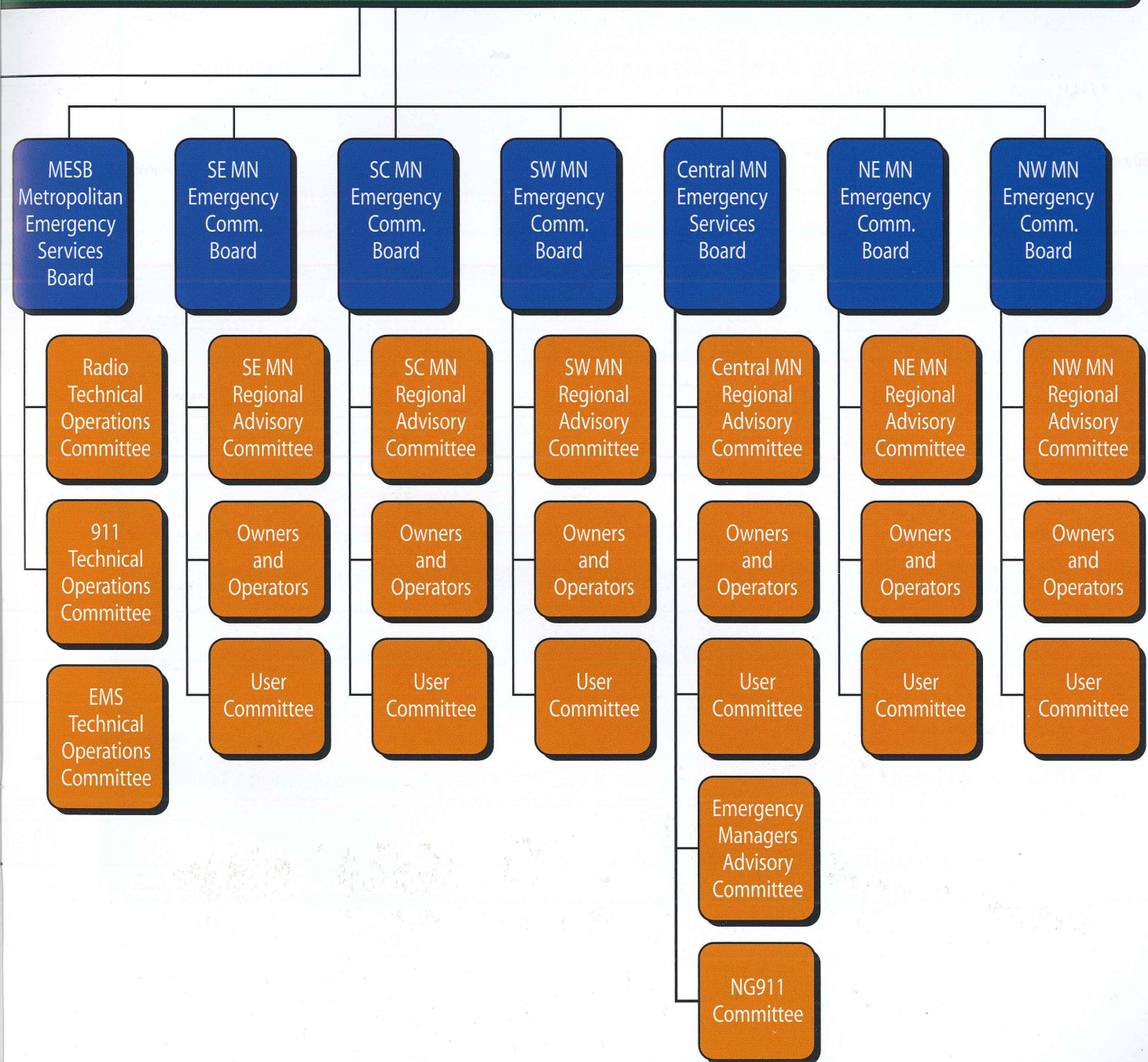
## Statewide





# Emergency Communications Board

(Statewide Interoperability Executive Committee)





## SECB Goals

**Evaluate technology to provide optimal systems to secure paramount public safety solutions for Minnesota citizens, visitors and emergency responders.**

- Regular upgrades to ARMER to ensure efficient system performance and avoid cybersecurity risks.
- Implement statewide geographical database to support more accurate location of wireless devices dialing 911.
- Implement Text-to-911 for the deaf and hard of hearing community and those who find themselves unable to dial 911.
- Implement IPAWS statewide.
- Evaluate requirements of public safety for a dedicated wireless broadband network.

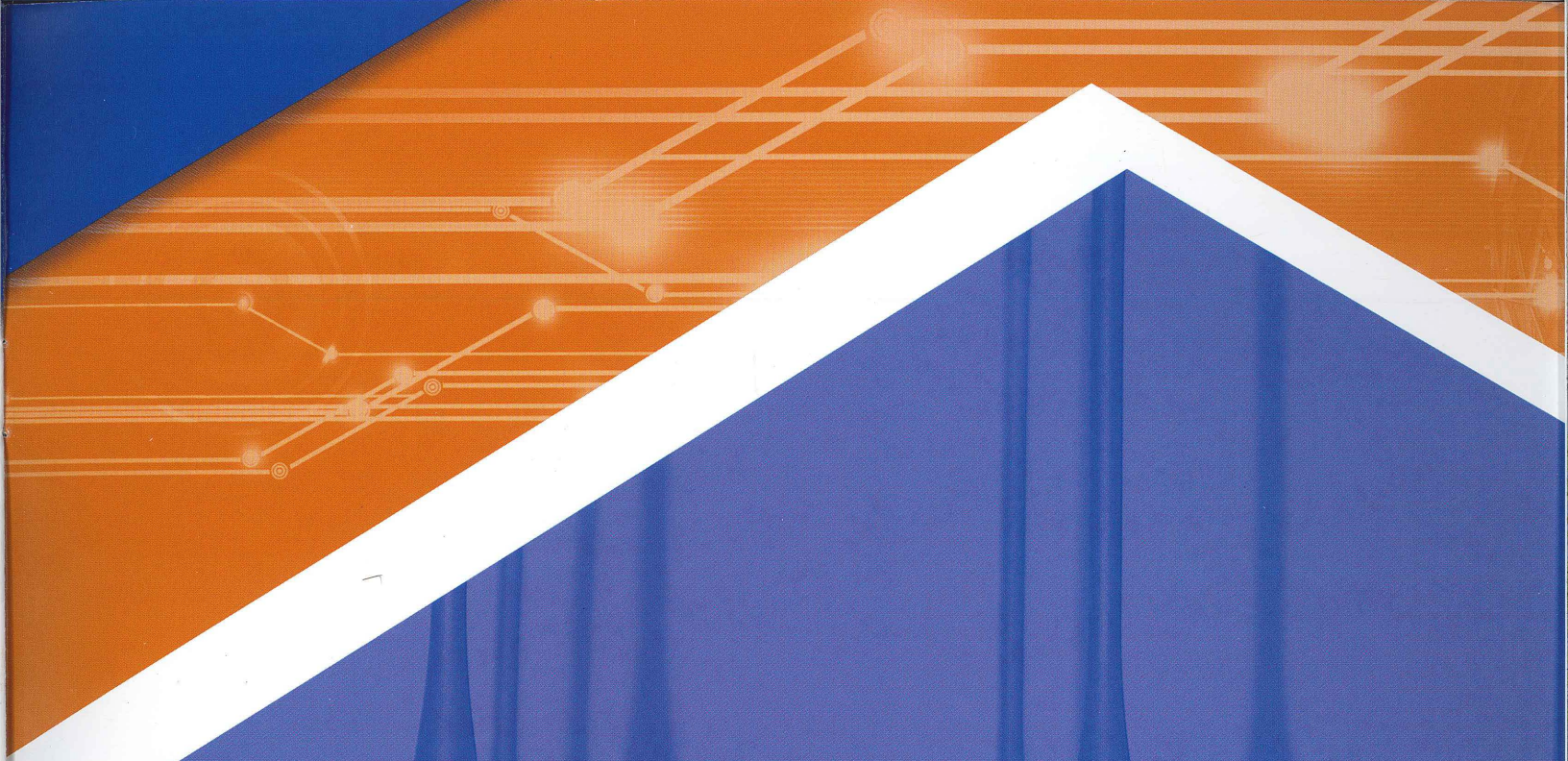
**Secure funding for state and local units of government to support the most efficient, reliable, and cost-effective public safety communications systems.**

- Increase the 911 fee to cover new technology initiatives.
- Provide grant funding to encourage regional long range planning.
- Pursue early ARMER bond payoff.

**Educate decision-makers about the criticality of public safety communications systems and changes necessitated by consumers' changing technology behaviors.**

- Train system users to ensure first-rate performance on new and infrequently used technologies.
- Utilize social media and web tools to educate public and emergency responders on public safety issues.
- Create low cost training opportunities for public safety responders.





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Division of Emergency Communication Networks

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