E911 Efficiencies Report

IOWA DEPARTMENT OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT

August 1, 2014

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STATE OF IOWA

TERRY E. BRANSTAD
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IOWA HOMELAND SECURITY AND
EMERGENCY MANAGEMENT DEPARTMENT
MARK J. SCHOUTEN, HOMELAND SECURITY ADVISOR
AND EMERGENCY MANAGEMENT DIRECTOR

August 1, 2014

Mr. Michael Marshall
Secretary of the Senate
Ms. Carmine Boal
Chief Clerk, Iowa House of Representatives
State Capitol Building
Des Moines Iowa 50319

Dear Sir and Madam,

During the 2013 session of the 85th General Assembly, HF 644 dealing with enhanced 911 emergency communications was passed and signed into law by Governor Branstad. The law directed the Homeland Security and Emergency Management Division of the Department of Public Defense "to conduct a study to identify areas in which efficiencies of operations and expenses could be achieved with regard to E911 emergency communications systems at both the state and local level."

To that end, I directed my staff to reach out to stakeholders in the 911 community to assist in this study. This group held its first meeting on September 12, 2013, and continued over the course of the fall and winter. A total of 75 people from various public safety disciplines and public and private companies actively participated in the process of developing this report.

Therefore, it is my pleasure to formally deliver the attached report and recommendations on this important topic to the Iowa State Senate and Iowa House of Representatives as required by law.

Sincerely,

Mark J. Schouten
Director

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TABLE OF CONTENTS

Contents

Letter of Conveyance ……... ii
Executive Summary ……. 1
History of 911 Service in Iowa …… 2
Discussion of Recommendations ……. 3
Conclusion ……10
Appendix—Stakeholder Participants ……... 11

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Executive Summary

During the 2013 session of the Iowa General Assembly, HF 644 was passed and signed into law by Governor Branstad. The bill directed the Iowa Department of Homeland Security and Emergency Management (HSEMD) to complete a study and provide recommendations on potential areas in which efficiencies of operations and expenses of the State's E911 communications system could be achieved. Specifically, the bill required the following:

> Homeland Security and Emergency Management Division of the Department of Public Defense shall conduct a study to identify areas in which efficiencies of operations and expenses could be achieved with regard to E911 emergency communication systems at both the state and local level. The division shall submit a report containing the results of the study to the General Assembly by July 1, 2014.

As part of the study, the Department's E911 program staff convened stakeholders from the members of the E911 community to provide background information, technical expertise, feedback, and recommendations. Over the course of four meetings, 75 people participated and provided their thoughts, ideas, and opinions on a wide variety of topics dealing with ways to increase the efficiency of the 911 system. The participants represented the Public Safety Answering Points (PSAPs), local E911 service boards, wireless service providers, telephone companies, lobbyists, Iowa Utilities Board, and the Legislative Service Agency.

With input from these stakeholders and after further study and discussion, the Department identified the following three main areas in which efficiencies of operations and expenses should be considered:

1. Public Safety Answering Point (PSAP) numbers and operations;
2. E911 wireline network operations; and
3. E911 wireless network operations.

HSEMD makes the following recommendations to improve the efficiency of 911 operations within Iowa. These six recommendations look to address both existing and emerging challenges faced by the 911 system in Iowa.

> **Recommendation 1.** The General Assembly should further explore consolidation of PSAPs and the technology that supports the PSAPs after the E911 system cost study requested by the General Assembly during the 2013 session is completed on January 1, 2016. In the meantime, HSEMD should offer incentives to encourage sharing equipment among PSAPs in order to more effectively spend surcharge dollars.
>
> **Recommendation 2.** Each PSAP should use a staffing tool, such as the Association of Public Safety Communications Officers (APCO) Project RETAINS (Responsive Efforts to Assure Integral Needs in Staffing) to determine appropriate staffing needs based on

that PSAP's individual needs. Project RETAINS uses scientifically derived methods to determine proper staffing needs.

Recommendation 3. The Iowa Law Enforcement Academy (ILEA) work with the PSAPs, the Iowa Chapter of APCO, and the Iowa Chapter of NENA (National Emergency Number Association) to explore ways to deliver telecommunication training that leverages technology to limit the fiscal and time management burden on the PSAPs. By exploring new avenues to deliver training, it is hoped the overall level of competency for telecommunicators will increase across all PSAPs in Iowa.

Recommendation 4. The HSEMD E911 program, along with the E911 Communications Council, work with the state and national NENA and APCO organizations to develop basic procedures for PSAPs to use when handling text to 911 calls that will be delivered via the wireless E911 network. As younger and older generations alike communicate in new ways, it is imperative that 911 telecommunicators are properly trained to address new methods.

Recommendation 5. The 911 community work with the Iowa Utilities Board (IUB), the telephone companies and the Iowa Communications Alliance (the association representing the rural communications industry) to encourage that ample consideration is given to the impacts of deregulation in phone service on PSAPs and to explore ways to ensure that costs associated with deregulation are manageable by the PSAPs. By engaging these groups it is hoped that in a deregulated environment costs can be negotiated up front to the satisfaction of all parties involved.

Recommendation 6. Wireline E911 calls should be delivered on the same statewide network used to carry wireless 911 calls. By using a statewide network, the PSAPs will be able to leverage technology that will increase their level of service during normal operations and also during times when failures have occurred in either the network or within the PSAP. While wireline call volumes have decreased, this system should leverage the same technology that supports the wireless E911 across Iowa.

History of 911 Service in Iowa

In 1986, the General Assembly passed a law that created a twenty-nine member State Emergency Telephone Number Commission. This Commission was directed to study the issue of statewide implementation of 911 services. The work of the Commission led to the creation of Code of Iowa Chapter 34A, Enhanced 911 Emergency Telephone Systems. The state saw deployment of this system beginning in 1988. Under the provisions of Chapter 34A, the Department of Homeland Security and Emergency Management (HSEMD) has responsibility for the administration of the Iowa Enhanced 911 (E911) program.

In 1996, the Federal Communications Commission (FCC) put forth a mandate that required wireless E911 service to be put in place and function similarly to wireline E911. The

1998 session of the General Assembly amended Code of Iowa Chapter 34A in response to the FCC action.

In Iowa, surcharge funds are used to support E911 services. Wireline and wireless phone users pay a monthly surcharge of $1.00 which the service providers remit on a quarterly basis to either the joint E911 service boards for wireline service or to the State E911 program for wireless service.

The wireless prepaid phone surcharge is collected in a different manner. A surcharge of $0.51 is collected from each transaction to purchase minutes for the phone. This is collected by the Iowa Department of Revenue and then provided to HSEMD. All surcharge revenue is used to pay the recurring and non-recurring costs associated with the receipt and disposition of any 911 call.

Presently, there are 115 PSAPS in the State of Iowa and all are capable of answering E911 calls from wire and wireless phones. This number is down from a high of 127 PSAPs in 1999. This number was reduced through the consolidation efforts of the local E911 service boards. All current PSAPs are able to accept and map the latitude and longitude location information that accompanies a wireless E911 call.

HSEMD has recently upgraded the wireless E911 network to support the use of the Next Generation 911 (NG911) emergency services, an Internet Protocol (IP)-based system. When complete, this upgrade will allow callers with text, video, and picture messaging to access emergency responders via 911 if the service is available from the wireless carriers. As of November 2, 2012, all 115 PSAPs have been migrated to the new Next Generation 911 network but there remains $16M in individual PSAP upgrades that must be done before the migration is complete. HSEMD has retained TeleCommunication Systems, Inc (TCS) on a five-year contact that ends in July, 2016, to develop and implement the upgrade.

Discussion of Recommendations

To aid in the completion of this report, HSEMD E911 program staff convened four meetings with stakeholders beginning on September 12, 2013. A total of 75 people from various public safety disciplines and public and private companies actively participated in the meetings.

HSEMD and those stakeholders assisting HSEMD relied heavily on the recommendations from a GeoComm Final Recommendations Report that was completed in February, 2012, by the Iowa Statewide Interoperable Communications Systems Board (ISICSB).[1] Some of the recommendations from the GeoComm report that HSEMD considered include:

- Create a standardized process to collect workload data;
- Use an industry standard process to manage current and future staffing levels;

[1] The full GeoComm report entitled *ISICSB 9-1-1 Feasibility Study*, can be viewed at: http://www.isicsb.iowa.gov/documents/ISICSB_FinalRecommendationsReport.pdf

- Review the state required telecommunicator training curriculum to ensure it meets industry minimum training standards;
- Develop and adopt more robust and contemporary network standards; and
- Encourage local agencies to look for synergy with neighboring PSAPs where operationally and financially feasible.

There are several underlying facts that should be kept in mind when considering the recommendations outlined below. The State of Iowa presently has 115 PSAPs in Iowa's ninety-nine counties. Based on the state's population, each PSAP serves an average of 26,873 citizens. Between July, 2013 and December, 2013, the median number of wireless calls per month answered by PSAPs was 182 with 18 PSAPs answering less than 100 wireless calls per month. Finally, 70% of all 911 calls received at the PSAPs are from wireless devices, reflecting a clear and longtime trend away from wireline service to wireless service.

Recommendation 1. HSEMD recommends the General Assembly should further explore consolidation of PSAPs and the technology that supports the PSAPs when the E911 system cost study requested by the General Assembly during the 2013 session is completed on January 1, 2016. In the meantime, HSEMD should offer incentives to PSAPs to encourage sharing equipment among PSAPs in order to more effectively spend surcharge dollars.

One of the most frequent queries with regard to PSAP operations is whether Iowa has the appropriate number of PSAPs and should the state consider consolidating these facilities as a way of making better use of 911 surcharge dollars? Currently HSEMD is engaged in a $16,000,000 effort to upgrade PSAP and wireless E911 network equipment so the wireless E911 network and PSAPs operate in an IP environment. In FY 2014 HSEMD expended $1,547,000 in PSAP network interface upgrades and has currently obligated $3,819,906 for upgrades in 2015. Are we using these dollars to the best benefit of Iowa citizens?

The process of PSAP consolidation in Iowa has historically happened when the local E911 Service Board has recognized that cost savings and operational efficiencies can be achieved through the consolidation. In some instances, consolidation has not involved the physical location of the PSAP but rather using technology to combine equipment that can serve multiple PSAPs.

In Iowa, the process for determining the number and location of PSAPs resides with the Local E911 Service Board as created in Code of Iowa Section 34A.3. The local boards considered a wide variety of factors when determining their need. Considerations included population served, existing dispatch facilities, existing geo-political landscape, technical capabilities of phone companies to deliver the call, and various other factors. For the most part, rural counties in Iowa established a single PSAP to serve the entire county while the more metropolitan counties elected to establish multiple PSAPs.

Over the course of time several service boards have consolidated their PSAP operations. Examples can be found in Cerro Gordo, Clayton, Johnson, Lee, Polk, and Scott counties. Additionally, the Department of Public Safety recently consolidated from six PSAPs to three.

Factors driving consolidation include: more staff to handle 911 call volumes, regional management of response resources, network and 911 equipment cost savings, and more effective usage of revenue.

In instances where consolidation has taken place, cooperation amongst the participating agencies has been paramount to its success. The public safety agencies involved took the time to review the gains and losses for each agency. For Johnson, Lee and Scott counties the prime driver was recognizing that the existing PSAPs were outdated and a new consolidated facility would provide them with a more efficient operation. These efforts not only involved combining 911 operations but also combing radio communications to improve interoperability among the member agencies. These PSAPs answer 911 calls with greater efficiency than they have in the past while also being able to more effectively communicate with all of their first responder agencies.

In the case of Polk, Clayton, and Cerro Gordo, the service boards recognized they were able to eliminate PSAPs due to their low call volume and transfer these calls to other PSAPs with minimal impact to the surviving PSAP's operation. Most importantly, the people calling 911 and the first responders being dispatched to those calls see no decrease in the level of service.

Conversely, other service boards have explored consolidation but their research indicated that consolidation would not be beneficial and they did not move forward with the effort. The issues cited as problematic included merging communications infrastructure, loss of local control of telecommunicators, loss of local knowledge of communities and roads, re-assignment of ancillary duties, and political resistance. In some cases, any one of these issues by itself is enough to stall any consolidation effort.

The re-assignment of ancillary duties is particularly challenging in a smaller PSAP operation as the telecommunicator may have other duties beyond 911. Duties may include functioning as a jailer and providing administrative support to the parent agency. If the PSAP functions depart, the other duties will remain as do the associated costs. For example, if the telecommunicator also handles jailer duties, when the 911 activities depart to the consolidated PSAP, the jailing function will still remain at the original facility. In these types of situations cost savings that may be experienced by combining 911 functions are typically offset by cost associated with the residual functions that did not transfer to the consolidated facility.

One of the main drivers in cost savings can be found in leveraging new technologies that have become available to the 911 system. In its report, GeoComm strongly noted that technology is one of the primary methods that PSAPs can use to address increasing costs:

> In a very real sense, communities may no longer be able to afford to operate in the same way they always have. Local jurisdictions should engage their county Joint E9-1-1 Service Boards to explore methods for reducing the costs to provide E9-1-1 services in their communities, including but not limited to sharing technology or infrastructure as well as combining PSAPs or other local cost sharing efforts.[2]

[2] Page 1-3, ISICSB 9-1-1 Feasibility Study, GeoComm, February 2012.

Technology is allowing call takers to receive 911 calls and dispatch resources from a variety of locations. Traditionally a PSAP has been a physical structure that receives 911 calls and dispatches public safety resources and has had its own equipment located within the PSAP. However, we are starting the see the physical structure aspect of the PSAP being removed from the equation as new technology suggests virtual PSAPs. Equipment does not need to be located within the PSAP itself to perform the function. With IP based technologies coming to 911 networks and PSAP operations, there are examples of PSAPs using this technology to their benefit. For example, in south central Iowa a consortium of seven counties has joined together to provide 911 services. In the past, each of the seven counties owned their own 911 call processing equipment. By using new technology, these same seven counties now use only three sets of call processing equipment. For the telecommunicators, they have seen no change in how they interact with the 911 system and the caller. However, most importantly, the seven counties experienced a cost savings of $400,000; an amount that can be used to improve other aspects of their 911 system.

To further encourage technology consolidation by the PSAPs, HSEMD is considering methods to create incentives for PSAPs to undertake similar projects as the one undertaken by the seven counties. One possible method would be to give priority to those service boards making application to the Wireless Carryover Fund that propose projects that would consolidate technology with other PSAPs.

This same concept of technology consolidation is being implemented in the 911 networks as well. By using IP technology to deliver calls, the network creates a diverse routing environment where each PSAP in the state can back up any other PSAP regardless of location. Additionally, this technology will allow citizens to reach 911 via text and also allow citizens to send pictures and videos to the PSAP.

One of the largest challenges in considering consolidation is generating a clear and concise picture of how E911 operates within the state and what it costs. The inability of state policy makers to have a clear view of how 911 is implemented, managed and funded makes it difficult to make any determination on appropriate policy to move the system forward. To that end, the General Assembly has directed the Department to:

> …conduct a study to review the administration of the enhanced E911 emergency telephone communication system and expenditures associated with maintaining and operating the system commencing July 1, 2013. The study shall include an assessment of the adequacy of and necessity for the one dollar wire-line E911 service surcharge imposed pursuant to section 34A.7 and the one dollar emergency communications service surcharge imposed pursuant to section 34A.7A, and a recommendation regarding continuation of the surcharges at those levels or at a reduced level. The division shall submit a report containing the results of the study to the general assembly by January 1, 2016.[3]

This study will, for the first time, accurately convey the actual costs associated with operating a PSAP. It will capture all costs associated with the PSAP and place them into easily

[3] Iowa General Assembly, HF 644 (2013).

understandable cost centers while also capturing all associated network costs. The study will also capture the varied revenue streams that support 911 operations at the local and state levels. The goal of the study is to create a body of accurate data that can be used by legislators as they consider any possible policy changes to Iowa's 911 system.

> **Recommendation 2.** HSEMD recommends that each PSAP should use a staffing tool, such as the Association of Public Safety Communications Officers (APCO) Project RETAINS (Responsive Efforts to Assure Integral Needs in Staffing) to determine appropriate staffing needs based on that PSAPs individual needs.

Determining the staffing needs at the PSAP is challenging. PSAPs need enough staff on duty to handle normal call volumes but to also handle call volume spikes associated with accidents that occur on the highways or large scale, high visibility, events. All of these factors make it difficult to determine and balance the staffing needs.

PSAPs should consider utilizing tools, such as APCO Project RETAINS, to assist in determining their staffing needs. There are three tools in RETAINS designed to estimate appropriate staffing levels for the PSAP, calculate the PSAP's retention rate, and conduct an employee satisfaction survey. These tools use scientifically derived methods to determine actual staffing needs for the PSAP.

> **Recommendation 3.** HSEMD recommends the Iowa Law Enforcement Academy (ILEA) work with the PSAPs, the Iowa Chapter of APCO, and the Iowa Chapter of NENA (National Emergency Number Association) to explore ways to deliver telecommunications training leveraging technology to limit the fiscal and time management burden on the PSAPs.

Telecommunicators staffing PSAPs are required to take an initial forty hour basic training and then eight hours of continuing education each year after the initial training. While training is a vital component, the logistics of sending staff to training may cause major staffing issues at the PSAP. Travel time, costs for the travel, and time away from their duties are reasons management struggles with sending staff for training. This recommendation is closely related to Recommendation 2 as they both deal with having the appropriate number of trained staff to address PSAP operations.

The E911 program staff should partner with ILEA staff to coordinate training needs and to explore other options for training beyond the ILEA facility in Johnston. Other methods may include. webinars, regional training, and a website that lists available online training. By exploring new avenues to deliver training, it is hoped the overall level of competency for telecommunicators can be increased across all PSAPs in Iowa.

> **Recommendation 4.** HSEMD recommends the HSEMD 911 program, along with the E911 Communications Council, work with state and national NENA and APCO organizations to develop basic procedures for PSAPs to use when handling text to 911 calls that will be delivered via the wireless E911 network.

With texting becoming the preferred method of communication for an entire generation, it is imperative PSAPs are able to respond effectively to 911 calls that will be delivered in this way. While all PSAPs within Iowa are familiar with how to handle TTY/TDD calls, texting, in spite of its' similarities to TTY/TDD, creates a new set of challenges for telecommunicators.

The national organizations of NENA and APCO have begun the process of developing recommended standard operating procedures for use by PSAPs. The Iowa 911 community should take these procedures and create Iowa versions that can be used by the local PSAPs. By creating common procedures that can be used by all PSAPs in Iowa it ensures that people contacting 911 via text will be treated consistently irrespective of where they initiate the text.

By having common procedures in place, this will also better position the PSAPs to handle future communication methods they may receive. This would include pictures, videos and other data that future communications devices may be able to deliver via the 911 network.

Recommendation 5. HSEMD recommends the 911 community work with the Iowa Utilities Board (IUB), the telephone companies and the Iowa Communications Alliance, an association representing the rural communications industry, to ensure that ample consideration is given to the impacts of deregulation in phone service on PSAPs and to explore ways to ensure costs associated with deregulation are manageable by the PSAPs.

The cost of providing wireline E911 service within a PSAP's service area is the responsibility of the local Joint E911 Service Board. Funding for this network and PSAP is not limited to the wireline surcharge, and surcharge revenues may be supplemented by other permissible local and state revenue sources.

With the move toward further deregulation of utilities within Iowa, consideration must be given to how this effort will impact the financial viability of the PSAPs. Recently some 911 service boards have experienced sizable cost increases on deregulated circuits that deliver 911 calls to the PSAP. The 911 community needs to work with the Iowa Utilities Board (IUB), telephone companies, and the Iowa Communications Alliance to ensure that ample consideration is given to the impacts of deregulation on PSAPs and to explore ways to ensure that costs are manageable by the PSAPS. By engaging these groups, it is hoped that in a deregulated environment costs can be negotiated up front to the satisfaction of all parties involved.

Recommendation 6. HSEMD recommends that wireline E911 calls be delivered on a statewide network.

The wireline E911 network is designed to deliver the landline 911 calls to a PSAP. When dialing 911 from a landline phone, the call goes to the telephone company and is then sent to the appropriate PSAP based on the caller's address and phone number. The address and phone number information is sent to the PSAP to assist in dispatching the appropriate services.

The wireline 911 system was created as each Joint E911 service board worked with their local telephone company to install the network to handle 911 wireline calls. This led to the creation of disparate networks that use a variety of techniques to deliver the call. These

networks may have the ability to selectively route the calls to the PSAPs while others may simply use direct trunks from the telephone company's central office to the PSAP. In either instance, these technologies are outdated and limit the capability of the PSAP to effectively manage 911 calls during both normal operations and times of disaster. Network failures cause calls to 911 on wireline systems to be default routed to a plain telephone line and will not carry any location or call back information.

The statewide 911 wireless network is managed by the HSEMD 911 program. This network delivers wireless 911 calls to all PSAPs within Iowa on a dedicated platform. In November, 2012, the HSEMD 911 program migrated the statewide wireless E911 network from the legacy analog technology to IP based technology. This has put the statewide wireless network in the position to be able to handle new technologies, as they become available from the wireless carriers, such as text to 911 messaging, picture messaging and video messaging.

In their study of 911 in Iowa, GeoComm noted that the state as a whole needs to move to more robust and contemporary networks to deliver 911 calls.

> The state E9-1-1 Program Office, E9-1-1 telephone service providers, and county Joint E9-1-1 Service Boards and local operating authorities all should employ the best and most affordable technologies and methods available to provide quality E9-1-1 services to the public. This can best be achieved by establishing standards that direct any future investment and energies toward areas of improved interoperability and service quality.[4]

Specifically they recommend that 911 calls within Iowa be delivered via an NG 911 network similar to that being presently used to deliver wireless E911 calls in the state.

The ninety-nine Joint E911 service boards should consider new alternatives for utilizing a more robust network similar to the statewide wireless E911 network. As we see wireline phone usage continue its steady decline, we should explore the option of moving this traffic onto the statewide wireless E911 network. While we know the technology on the wireless E911 network exceeds that on the wireline network, a further exploration of the capacity of the network and associated costs needs to be undertaken. If the capacity and cost factors are favorable, wireline E911 traffic should be placed on the statewide wireless E911 network thereby creating a unified statewide E911 network.

[4] Page 4-6, ISICSB 9-1-1 Feasibility Study, GeoComm, February 2012.

Conclusion

When the Iowa General Assembly asked the Iowa Department of Homeland Security and Emergency Management to undertake a study to identify areas in which efficiencies of operations and expenses could be achieved within the E911 phone system we recognized that members of the legislature were looking for recommendations from HSEMD and the larger 911 community as to what steps can be taken to improve 911 efficiency within Iowa.

Some of the recommendations in this report are actions that can be undertaken by the 911 community of their own while others require thoughtful consideration by local and state policy makers together to determine if and how to best implement the recommendation. Each recommendation is unique and yet each impacts the other recommendations. This is similar to how the 911 system itself functions—it is a collection of unique processes that combine together to address an important public need.

It is this important public need that ultimately drives the request for and the creation of this report. Everyone involved in this report is driven to insure that Iowa has a 911 system that is efficient and reliable while also protecting the safety of it citizens. Meeting this goal has been and will continue to be a collaborative effort among state and local policy makers, state and local agencies, private companies and the public.

Appendix—Stakeholder Participants

The Iowa Department of Homeland Security and Emergency Management thanks the following stakeholders who provided valuable input into this process.

Jennifer	Acton	Iowa Legislative Services
Chris	Barr	Communication Innovators
Ginger	Bates	Webster County E911
Doug	Beaird	Burlington Police Department
Tom	Berger	Dubuque Emergency Communication Center
Jim	Bogner	ISICSB
Scott	Bonar	Lee County Sheriff's Office
Robert J	Bowers	Iowa State University
Samantha	Brear	Polk County Emergency Management
Terry	Brennan	Racom
Dan	Brickner	Perry Police Department
Jamie	Cashman	Capitol Consultants
Sean	Cory	CenturyLink
Eric	Dau	Clinton Co Communications
Rob	Dehnert	Polk County - WestCom
Dave	Donovan	Scott Emergency Communication Center
Kevin	Doty	Fort Dodge Police Department
Tom	Drzycimski	Cerro Gordo County
Jeff	Dumermuth	Polk County - WestCom
Martha	Dykstra	Marion County Sheriff's Office
Michael	Ehret	Dickinson County E911
Diana	Fincher-Smith	Lee County Sheriff's Office
Judy	Flores	Black Hawk County
John	Gohr	Charles City Police Department
Darren	Grimshaw	Burlington Police Department
Sally	Hall	Iowa County Sheriff's Office
Connie	Hambly	Story County Sheriff’s Office
Butch	Hancock	CenturyLink
Kent	Hartwig	Advocacy Strategies LLC
Marla	Hemmie	Lee County Sheriff's Office
Kathy	Herrick	Charles City Police Department
David	Hinton	Keokuk Police Department
Steve	Holmes	Racom
Doug	Houghton	Ames Police Department
Joe	Hrdlicka	Iowa Telecommunications Assn.
Mark	Hunefeld	Palo Alto County E911
Mike	Jensen	Shelby County E911

Brenda	Johnson	Cedar County Sheriff's Office
Brian	Johnson	Lobbyist-US Cellular
Dave	Kaus	Iowa Wireless (i-wireless)
Randy	Kult	Communication Innovators
Lorrie	Lacina	Muscatine County E911
Teresa	Lang	Marshall County Communications Center
Tom	Ling	Mills County 9-1-1
Barb	Loop	Jones County E911
Tim	Malott	Cedar County E911
Kenny	Marlette	Louisa County
Doug	McCasland	Warren County E911
Sarah	McClure	Ames Police Department
Bruce	McCormack	Gowrie Police Department
Dina	McKenna	Story County Sheriff’s Office
Sandy	Morris	Des Moines Police Department
Mark	Murphy	Dubuque Emergency Communications Center
John	O'Connor	CenturyLink
Scott	Pappan	CenturyLink
David	Penton	Kossuth County
Ken	Rasing	Chickasaw County E911
Steven	Ray	DPS - Iowa State Patrol
Lori	Riley	Perry Police Department
Gary	Schwab	Jones County E911
Bob	Seivert	Shelby County E911
Cherese	Sexe	Humboldt County E911
Jim	Sholl	Lee County Sheriff's Office
Matt	Shook	Muscatine County E911 / EMA
Dave	Skou	Cherokee County E911
Suzanne	Smith	Iowa Utilities Board
Cara	Sorrells	Washington County E911
Jim	Stubbs	Webster County E911
Ginger	Thompson	Mitchell County 911
Brenda	Vande Voorde	Fayette County Sheriff's Office
Roxane	Warnell	Hardin County E911 Board
Bobbie	Wells	Sac County 911
Kami	Wernimont	South Slope
Jay	Whitaker	Keokuk Police Department