

2021 **911** ANNUAL REPORT



IOWA DEPARTMENT OF
HOMELAND SECURITY AND
EMERGENCY MANAGEMENT

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Director

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Introduction

The Iowa Department of Homeland Security and Emergency Management (HSEMD) submits this 911 annual report to the Iowa General Assembly under Iowa Code § 34A.7A (3) (a). This section of the Code requires the 911 program manager to advise the General Assembly of the status of 911 wireline and wireless implementation and operations, the distribution of surcharge receipts, and an accounting of revenue and expenses of the 911 program.

Iowa's 911 system consists of 112 public safety answering points (PSAPs) across 99 counties (Attachment 1). The PSAPs answer wireline, wireless, and voice over internet protocol (VoIP) emergency calls, as well as Text-to-911 messages from across the state. The wireline 911 system was launched in Iowa in 1988. The wireline capability is funded through a wireline surcharge authorized by Iowa Code § 34A on wireline phone users' monthly bills and is managed by local 911 service boards. Wireless 911 capability was added to the system beginning in 1998. This wireless capability is funded through a wireless surcharge on wireless phone users' monthly bills and is managed by the Iowa Department of Homeland Security and Emergency Management under Iowa Code § 34A.7A. Recently, the Department converted the 911 network from analog technology to an emergency services internet protocol (IP) network (ESInet) referred to as a Next Generation (NG) 911 network. From July 1, 2020, through June 30, 2021, the NG911 network processed 1,029,196 wireless 911 calls and 2,639 texts to Iowa's PSAPs. Wireline 911 calls started traversing the NG911 network during this fiscal year. Local jurisdictions reported 69,808 wireline calls were delivered across the NG911 network. The wireline call count represents only a portion of the State's wireline calls that would have been delivered across the legacy network prior to the migration detailed in-depth in later sections of the report. Local PSAPs are the primary users of the NG911 network and answer and dispatch resources

for more than 98 percent of 911 calls in Iowa. The Iowa Department of Public Safety (DPS) handles the remainder of the 911 calls.

As detailed throughout this report, the entire Iowa 911 system is undergoing a significant upgrade to a fully end-state, NENA i3 911 system. i3 is an ANSI accredited, widely-recognized standard used throughout the United States. The first phase of this multi-phase effort into what is called the NG911 network has converted analog/copper trunking into the local PSAPs to a statewide, IP-based Ethernet network. The IP-based backbone was completed in November 2012 and leverages the Iowa Communications Network (ICN). The second phase of the network upgrade is nearly complete and includes updating individual PSAPs to IP-enabled call handling equipment and logging recorders. Ninety-eight percent of the state's PSAPs are fully end-to-end IP-enabled. As of December 2021, all but one of the local 911 PSAPs were capable of receiving Text-to-911 messages. Work has been progressing toward the State's virtual consolidation efforts, technologically merging the legacy wireline network with the NG IP-based network, as well as sharing technology for call processing equipment at the PSAPs. A fourth phase in the progression to a fully functioning i3 system will include behind-the-scenes upgrades to the way a caller is located and to ensure the call is more accurately delivered as well as decommissioning of legacy selective routers. This phase will most likely begin toward the end of 2021, but could continue for several years.

Iowa Code § 34A requires that each county establish a joint 911 service board that has authority over the local PSAP. Each board has the responsibility to develop a countywide 911 service plan, detailing the manner and cost for the implementation of a wireline and wireless 911 system for the PSAP geographical area. All 99 counties have approved countywide 911 service plans.

Legislative Updates to Iowa Code

The Iowa Department of Homeland Security and Emergency Management has the responsibility to review and approve the countywide 911 service plans. HSEMD is also responsible for the overall administration of Chapter 34A through a program administrator appointed by the HSEMD director.

Legislative Updates to Iowa Code

The 2021 Legislative session saw no significant changes to Iowa Code § 34A. One bill from the session, [SF 538](#) remains alive for the second year of the 89th General Assembly. This bill is in regard to Cost Recovery. HSEMD produced a report on Cost Recovery, which was released in August, and can be found on the [HSEMD website](#). There has been one significant update since the Cost Recovery report was released. In October, the National Association of State 911 Administrators (NASNA) petitioned the FCC to issue a ruling on this matter, and the FCC has subsequently opened a proceeding to consider the petition. The petition asks the FCC to declare if costs associated with getting the 911 call from the caller to the “entry point” of the 911 system are the fiscal responsibility of Originating Service Providers, while still leaving the ultimate decision regarding whether to pay those costs up to the states. The State 911 Program will continue to monitor this potential FCC action and update stakeholders as necessary.



911 Peer Assessment & Strategic Plan

In 2019, HSEMD engaged the National 911 Program, under the National Highway Transportation Safety Administration, to conduct a peer assessment. The [assessment](#) was an effort to analyze the State's Next Generation 911 progress, as well as provide a roadmap of future efforts. The assessment acted as a kick-off toward a comprehensive [strategic plan](#), which was finalized in January, 2021.

The State 911 Program, in reviewing the assessment findings, chose to include items that fell under the 'Does Not Meet' and 'Minimum Criteria' categories as the elements of the strategic plan. The guidelines were reviewed and placed into five categories: Legislative and Administrative, Systems and Standards, 911 Program, Education and Outreach (External/Public), and Facilities and Operations.

The plan was provided to the PSAPs for their review. PSAPs were encouraged to participate in the working groups that will meet over the next five years to work

on the identified areas over the strategic plan period. Though the strategic plan is finalized, many of the goals and topics identify the need for broader discussion within the 911 Community. These broader discussions may lead to future legislative efforts.

Two exciting products have been produced and will be launched following the first year of work on the Strategic Plan. The first product is a shared space for PSAPs to collaborate, share documents and best practices. The online intranet site can be used to share information and announcements amongst the PSAPs. The State 911 Program will also be able to share information and data with local PSAPs and 911 Service Boards.

The second product is a local 911 leadership course. The course is designed for lead telecommunicators, local 911 administrators, Service Board members, and other local 911 leaders. The lack of leadership training was identified as a gap. The first 6-hour course is expected to be held in January, 2022.

STRATEGIC PLAN PRODUCTS



1



INTRANET SITE
SHARED SPACE FOR PSAPS TO COLLABORATE, SHARE DOCUMENTS AND BEST PRACTICES

2



LEADERSHIP COURSE
COURSE DESIGNED FOR LEAD TELECOMMUNICATORS, LOCAL 911 ADMINISTRATORS, SERVICE BOARD MEMBERS, AND OTHER 911 LEADERS

Virtual Consolidation Update

Iowa Acts 2018, House File 2254, directed HSEMD to implement the plan for virtual consolidation. This plan does two things, detailed below, which combined are projected to save local jurisdictions \$6 million.

The first effort is the merging of the wireline and is mostly complete. All of Iowa's 112 PSAPs are receiving wireline calls over the Next Generation 911 network. This migration added redundancy to the wireline network, along with seamless re-routes of wireline 911 calls in case of an outage. The migrations involved multiple private-sector vendors working in cooperation with the State 911 Program, the ICN, and the local PSAPs. A key component to the network merging is also a change in the manner automatic location information (ALI) and automatic number information (ANI) is handled and must be configured into the new combined system. ALI information will now come embedded with the call instead of the legacy ALI links, where it was an entirely separate part of the 911 call flow process. These changes to call flow delivery are a massive update toward Next Generation 911, allowing local PSAPs to terminate their relationships with the legacy selective router and ALI providers, shifting the costs to HSEMD while also achieving statewide savings.

A caveat to this update is that five PSAPs still receive a portion of their 911 calls using direct trunks from telcos to include their own standalone ALI database (Attachment 2). This is considered to be a basic or E-911 method of delivering 911 calls. The aforementioned wireline cost recovery issue arises when discussing moving the telco direct trunks to the legacy selective router or ICN point of ingress.

The next long term project will be decommissioning the legacy Selective Routers, owned and operated by Lumen (formally CenturyLink). The legacy Selective Routers are the current entry point for the wireline 911 network, but are an aging and unnecessary tech-

nology in the call flow process. In order to do this, HSEMD is beginning to have discussions with ICN on a plan to deliver 911 calls from the telco's central office, to a SIP device owned by ICN, which would then be the entry point to the State's 911 Network for wireline 911.

The second virtual consolidation project is the introduction of equipment that can be shared by multiple PSAPs. The vendor selected for this project is Zetron. The primary piece of equipment for PSAPs to share is the call processing equipment (CPE)—the main 911 system involved in call delivery. However, PSAPs can also opt into the sharing of logging recorders, mapping, computer-aided dispatch, and emergency medical dispatch. The above are components of a PSAP that formerly needed to be physically housed in each PSAP at a great cost to the State and/or PSAP. However, through technological advances, the entire state can share this equipment and achieve cost savings.

This initiative has seen significant growth and participation during the last year. As of last year's report, there were 21 PSAPs actively using the shared services. There are currently 32 PSAPs using the shared services with an additional 25 who have signed up and are awaiting their Go-Live (Attachment 3).

Through the shared services program, HSEMD worked with DPS and Zetron to create a mobile disaster PSAP. The mobile PSAP would have the ability to deploy to an area where a PSAP may be uninhabitable due to a variety of reasons. Through this project, telecommunicators would be able to receive and dispatch 911 calls as if they were in their own center.

The contract period with Zetron expires next year. HSEMD will be looking to continue this successful program into the future.

Next Generation 911 Progress

National 911 Grants

Iowa was awarded a grant of \$2,590,445 by the National 911 Office. The grant was available to states and tribes based on interstate mileage and population and was awarded for the benefit of PSAPs and states to further Next Generation 911 efforts. The grant closes in March of 2022 and will be used to help fund the virtual consolidation efforts discussed earlier in this report. The National 911 grant comes with a 40 percent state match, which will be funded by the emergency communications surcharge. As of September 30, 2021, HSEMD had received \$2,021,818.48 in grant funds. Find out more information about the grant program on the [911.gov website](https://www.911.gov).

Next Generation 911 Network

Prior annual legislative reports have detailed the configuration of the disparate legacy wireline network and the NG911 wireless network. This section describes the environment of the new combined network, which should be fully implemented by the spring of 2021.

The State 911 system is interconnected through ESInet, utilizing the ICN fiber network. All 112 local and Iowa Department of Public Safety primary PSAPs are connected via the ESInet. The “brains” of the ESInet are the two redundant CLCs connected by 100 MB circuits to handle the call volume and call routing. While the ESInet primarily uses fiber from the ICN, the CLCs state equipment in the PSAPs, and the policy call routing and handling functions (and now ALI) are managed through a contract with Comtech. This year HSEMD entered into a new 10-year contract with Comtech after the previous 10-year contract expired.

There have been minimal changes on the wireless side as part of the merged network environment. Wireless service providers will still ingress the Comtech-managed call logic centers (CLCs) located in Davenport and West Des Moines. From there, calls are transported via the ESInet for proper call delivery to PSAPs. In 2021, wireless operations underwent an operating system upgrade to bring it in line with the operating system already being used with the new wireline network.



Wireline traffic entering the new merged environment will be routed from the aforementioned Lumen legacy Selective Routers to ICN aggregation points located in Des Moines and Cedar Rapids. The ICN will transport the traffic from those aggregation points (via disparate and redundant paths from the ESInet) to the Comtech CLCs. At that point, wireline 911 traffic will be delivered to the PSAPs similarly to wireless 911 calls. As with wireless 911, wireline 911 calls will be able to be transferred to any PSAP across the state. As highlighted previously, a future step will be to remove the Lumen Selective Routers out of the call flow process altogether.

Next Generation 911 Progress

As referenced above, wireline ALI and ANI are now provided using a new methodology. In the new environment, ANI/ALI will be part of the State 911 system rather than being contracted by PSAPs to a third party. Historically, PSAPs have contracted with a third-party vendor to maintain and provide ALI/ANI as part of a 911 call. With the new ALI system, HSEMD is responsible for funding the delivery of ALI rather than the PSAP. This new methodology aligns with the concept of Next Generation 911 and the i3 Standard.

HSEMD and Comtech have continuously worked to upgrade the software and programming at the data centers for calls being delivered via IP. The ultimate goal of these upgrades is an NG911 network that will ultimately support the use of SMS Text, Real Time Text, video, and pictures messaging to 911. Once multimedia messaging services (MMS) become available from the wireless carriers and are capable of being processed and displayed by the PSAPs' call taker equipment, they will be implemented in Iowa.

Cyber Security is a critical component of Next Generation 911. The 911 Program partners with all of its private sector vendors on cyber efforts and closely works with the Network Operations Center for cyber monitoring and protection. One particular effort to highlight is a part of the Shared Services through Zetron. HSEMD and Zetron placed Overwatch Devices from SecuLore for enhanced cyber monitoring and reporting, protecting the critical Host devices for the PSAPs on the Shared Services.

Geographic Information Systems and NG911

A critical component of NG911 relies on geographical information system (GIS) data. The data is the foundation of Next Generation call routing, location validation, and emergency response. Information sharing is essential to building statewide GIS datasets, as more than 100 different data owners need to share information for the NG911 system. Data sharing work starts with the local jurisdictions updating their master street address guide, road centerlines, and site structure address points to have a seamless, statewide GIS data set. HSEMD entered into a second five-year contract with Geo-Comm to continue the existing statewide aggregation portal. Ensuring the data is up-to-date and accurate is a critical local responsibility.

Iowa Acts 2017, Senate File 500, allowed HSEMD to provide local GIS grants to assist local 911 service boards in the creation, improvement, and maintenance of their NG911 GIS information. For SFY 2021, HSEMD granted \$1,194,000 to PSAPs for local 911 services to help facilitate this critical local data.

To continue improving the data, HSEMD increased the benchmarks for FY 22 to:

- Overall NG911 GIS accuracy at or above 98 percent and submission of all required data layers and zero critical errors
- Automatic location information synchronization to GIS road centerline accuracy of 98 percent or above and zero critical errors
- Provide updated information twice, in two six-month periods

Next Generation 911 Progress

For SFY 22 through December 2020, HSEMD provided grant funding at a statewide level totaling \$360,000.

In the upcoming 12 months, HSEMD along with GeoComm and Comtech is implementing a GIS-Based MSAG as well as what is known as ECRF/LVF or, Emergency Call Routing Function and Location Validation Function.

- A GIS-based MSAG will allow counties/PSAPs to manage their MSAG data through GIS. As street and address data changes within a jurisdiction, those changes are made in the county/PSAP GIS data rather than traditional table-based MSAG. This means that counties/PSAPs no longer need to maintain table-based MSAG, and their GIS data becomes the single source of truth for 911 call routing and address validation.

- LVF using GIS: Allows carriers to validate subscriber location records against the GIS-based dataset that is provided and maintained by counties/PSAPs. Validation of subscriber location records ensures 911 calls are routed to the appropriate PSAP, and location information is properly displayed to the call takers.

- ECRF using GIS: Utilizes location data associated with a 911 call and PSAP provided GIS boundaries to determine routing of each 911 call. This technology allows the NG911 system to dynamically route each call based on the caller's location rather than pre-determined routing. ECRF also provides counties/PSAPs greater control of 911 call routing, as routing is based on the GIS data provided and maintained by the counties/PSAPs.

Public Safety Answering Points

Iowa's 112 PSAPs are now technologically capable of receiving network-delivered IP-based calls. Of the 112 PSAPs with upgraded equipment, 110 are truly

receiving end-to-end IP-enabled wireless calls over the ESInet to their call-taker screens. In the remaining cases, additional local software upgrades or the purchase of an IP-capable logging recorder may be needed before migration to a true IP-based call environment is possible (Attachment 4).

In 2021, Iowa had one PSAP consolidate or fold into another PSAP's operations. Oelwein PD closed and merged into Fayette County Sheriff's Office. The two PSAPs took advantage of the Physical Consolidation Grant, outlined in Iowa Code § 34A.7A. The two PSAPs were able to receive approximately \$284,000 in State 911 funds as an incentive to consolidate. The physical consolidation grant provides up to \$200,000 per PSAP with equal local match and is available until June, 2022.

Redundancy within the Network

There are a number of levels of redundancy within the State's 911 network. There are two geographically diverse Comtech Call Logic or Data Centers that can be operated completely independent of each other. These Data Centers have multiple fiber paths. Wireless Providers connect into both data centers.

There are two geographically diverse Zetron Hosts, that can be operated completely independent of each other. The Host devices are located in separate data centers from the Comtech Network data centers.

All PSAPs have policy routing, which means if a PSAP cannot answer calls for a variety of reasons, the 911 calls intended for that PSAP will be automatically and seamlessly re-routed to a pre-identified PSAP. There are multiple levels of this policy routing, including local, regional, and state routing.

Next Generation 911 Progress

In a number of the biggest PSAPs in the state, the PSAPs are not only connected via ICN, but also through a completely different carrier altogether. In the case of a large ICN outage, these PSAPs would continue to receive their calls.

The PSAPs on the Shared Services also enjoy an extra level of redundancy. Similar to the redundancy detailed above, the PSAPs on the Shared Services are also connected to the Hosts through FirstNet. FirstNet is the National Public Safety Broadband Network specifically built for public safety. FirstNet awarded a 25-year contract to AT&T to build the network which is traditionally used as another cell phone network, but which gives priority and preemption to public safety subscribers. HSEMD is leveraging the broadband data capabilities for additional backhaul connectivity. HSEMD has worked with the ICN and FirstNet to provide the additional connectivity between the two host systems and the PSAPs connected remotely.

Coordination and Integration with other Services

Emergency Medical Dispatch Protocols

Throughout 2021, the 911 Program conducted two statewide requests for information from local PSAPs. The first sought to determine how many PSAPs in Iowa use Emergency Medical Dispatch or EMD. EMD are medically-based protocols in which public safety telecommunicators can provide medical assistance, over the phone to the 911 caller, before the arrival of EMS. EMD is proven to save lives and is one of the programs offered through the Shared Services program. As of October, it was determined that 58 PSAPs in the state use this critical, lifesaving program (Attachment 5).

Language Translation Services

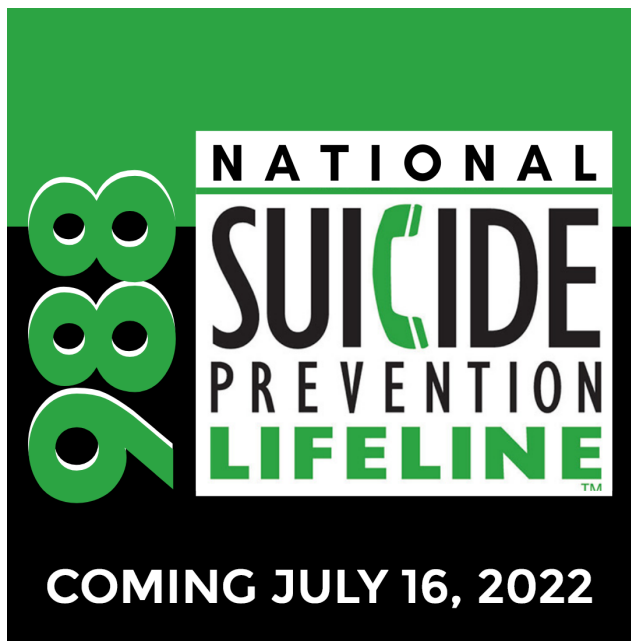
The 911 Program also conducted a request for information with Iowa PSAPs regarding language translation services. Through a Department of Administration (DAS) master contract, PSAPs can contract for emergency translation services at a fraction of the price they could procure on their own, with no costs incurred by the PSAP until the translation services are utilized. While the master contract is available for one vendor, there are multiple vendors who do emergency translation services, and PSAPs can choose a vendor of choice. PSAPs that utilize the DAS contract can conference in and access a translator for over 100 different languages to help talk to a 911 caller. As of November, 74 PSAPs have responded to the request for information, a 66% response rate. Survey results determined that around 57% of Iowa PSAPs utilize this critical, life-saving resource, and around 17% of PSAPs have taken advantage of the DAS contract (Attachment 6).



Next Generation 911 Progress

988 National Suicide Hotline

The 911 Program participated in planning sessions for the 988 National Suicide Hotline transition with the Iowa Department of Public Health, Iowa Department of Human Services, and a vast array of stakeholders in the state. The 911 Program provided information and technical background on 911 to the 988 planners. There will be a very important intersection of 911 and 988 regarding transfers and operational considerations that the two programs will need to remain engaged on into the future. State and national level organizations are going through this roll out of 988 simultaneously. Iowa will be able to tailor best practices and use these developed resources for a successful launch of 988 in 2022.



FirstNet, Land Mobile Radio, and Computer Aided Dispatch Interoperability

The continued roll-out and development of FirstNet, already being heavily used in Iowa and within the state's 911 system, will serve to transport this additional data to first responders and provide critical redundancy. Another integration that continues to be discussed is the dispatch component of the 911 call. HSEMD helped fund access to the Iowa Statewide Interoperable Communications System, which will assist in the dispatch of 911 calls from PSAPs and regional back-up facilities. HSEMD is also engaged with several Central Iowa PSAPs, the Iowa Statewide Interoperability Communications Systems Board, and federal partners on a pilot program regarding CAD to CAD interoperability that will allow disparate jurisdictions to share dispatch information. The cost-saving measures achieved through virtual consolidation will save local PSAPs money, allowing them to consider implementing the ever-evolving world of emerging technologies in the public safety communications field.



Subscriber Surcharges and Distribution

Funding for the wireline and wireless portions of the 911 system are set in Iowa Code § 34A.7 and 34A.7A, respectively. In July 2013, the General Assembly set the surcharge for both wireline and wireless 911 services at \$1 per month per access line across the entire state. The wireline surcharge is deposited in the local 911 service fund and disbursements are made by the local 911 service board. The wireless surcharge is deposited in the State 911 Emergency Communication Fund administered by HSEMD. For the 12 months ending Sept. 30, 2021, the wireless surcharges totaled \$29,254,252, an increase of \$567,840 from the same time frame the previous year.

HSEMD has the responsibility to order the implementation of the surcharge with each telephone service company providing landline service within the 911 service area. Within the state, there are more than 150 competitive [local exchange service providers](#). Each local telephone service provider remits collected surcharge funds directly to the respective local 911 service board every quarter. In SFY 2020, the reported total of wireline surcharges was \$10,147,733, a decrease of \$615,142 from the previous year.

Prepaid Wireless and VoIP Surcharges

In 2012, Iowa Code § 34A.7B authorized a surcharge on prepaid wireless phone transactions. The prepaid surcharge is remitted to the Iowa Department of Revenue, which transfers all remitted prepaid wireless 911 surcharges to the state treasurer for deposit in the 911 emergency communications surcharge fund. In 2013, Iowa Code § 34A.7A was amended to allow the prepaid wireless surcharge to increase or decrease proportionately to the wireless surcharge. As a result of that change, the prepaid surcharge is currently 51 cents per prepaid transaction, and the total revenue generated for this surcharge for the 12 months ending Sept. 30, 2021, was \$2,396,097, an increase of \$125,493 from the same time frame the previous year.

In 2012, the definition of a communication service provider in Iowa Code § 34A.2 was amended to include service providers that transported information over the internet, including voice over internet protocol companies. The companies are now required to collect and remit surcharges as a communications service provider.

Cable television companies that sell static VoIP services as part of a bundled package also pay their collected surcharges to the local wireline 911 service boards. Nomadic VoIP providers that are not restricted to a particular location pay the surcharges assessed to their customers to HSEMD through the state 911 emergency communications service surcharge.

Wireless Surcharge Distribution

The bulk of the 911 surcharge revenue is obtained through the wireless surcharge. Under Iowa Code § 34A.7A (2), the collected surcharges must be distributed in the following order (Attachment 7).

1. To the Department of Homeland Security and Emergency Management for program administration, an amount equal to that appropriated by the General Assembly. In 2021, this amount was \$250,000.
2. To joint 911 service boards, 60 percent of the total surcharge funds generated for communications equipment utilized in the implementation and maintenance of 911 services within the local PSAP. Iowa Code § 34A.7A (2) defines how the 60 percent amount is to be distributed among the 112 PSAPs in the state. For the 12 months ending Sept. 30, 2021, this amount was \$18,990,210, an increase of \$416,000 from the previous 12 months.

Subscriber Surcharges and Distribution

3. To wireless service providers, 10 percent of surcharge funds generated from July 1, 2013, through June 30, 2026, to recover their costs of providing 911 wireless phase one service. For the 12 months ending Sept. 30, 2021, this amount was \$867,575, an increase of \$42,900 from the previous 12 months. It should be noted that while authorized by Iowa Code 34A, there is no federal requirement that cost recovery be provided to wireless carriers for 911 service.
4. To Next Generation 911 network providers, 911 call processing equipment providers, 911 call transport providers, and third party 911 automatic location identification database providers for the costs of maintaining and upgrading the Next Generation 911 network functionality, 911 call processing equipment, 911 call transport from the NG911 network to local PSAPs, including local GIS grants. For the 12 months ending Sept. 30, 2021, this amount was \$9,137,914, an increase of \$2,805,432. This marked increase is due to the recurring costs involved with operating the merged 911 network to include the statewide ALI database and the shared service infrastructure. HSEMD is also responsible for expenses associated with ESInet relocation costs when PSAPs move their equipment or move physical locations. During this period, no PSAPs relocated.
5. For the development of public awareness and educational programs related to the use of 911, for the expenses of the 911 Communications Council for travel and training. For the state fiscal year 2021, the amount spent on these items was \$45,030 of the allowable \$100,000. The lack of funds spent was heavily influenced by COVID-19.
6. For the virtual consolidation efforts approved through HF2254, HSEMD estimates \$6 million in build-out costs for the shared services project and \$5 million for the network migration project. Recurring costs associated with the effort are included in item 4 above. Nonrecurring costs associated with the combination of the virtual consolidations projects totaled \$2,103,579.28 during the 12 months ending September 30, 2021. This is a decrease of \$1,325,962 from the previous year.
7. Finally, the act directed HSEMD to pass through any remaining surplus funds to PSAPs equally. For SFY 2021, \$2.88 million was passed through to local 911 service boards, an amount of \$25,553.33 per PSAP.

Conclusion

The 911 landscape is consistently evolving to ensure advancements in technology are incorporated into the system to allow for more accurate, efficient, and diversified technology that enhance the ability for 911 dispatchers to receive calls and for residents to contact 911 for life-saving resources. As technology evolves and advances, the people of Iowa expect its public safety lifeline to make parallel strides to stay technologically relevant. As more and more citizens maintain only a mobile phone, the NG911 system must be able to receive calls, transfer calls, visualize the caller's environment, and dispatch the right responders with the right equipment, all in a matter of seconds.

Along with Text-to-911 being implemented statewide, HSEMD continues to advocate for increased caller location information, and the capability for photos and video to be received by the PSAP from callers contacting 911 and relayed to responders in the field. Continued advocacy and implementation of forward-thinking policies and new technology to enhance 911 will continue to be a priority for HSEMD.

In the future, there are multiple initiatives that HSEMD will continue to work on to further the topics discussed in this report and will continue to work collaboratively with the Iowa 911 Communications Council, Iowa Utilities Board, Iowa Telecommunications Association, Iowa Statewide Interoperable Communications System Board, Iowa Communications Network, and local 911 service boards to maintain and improve the level of 911 services within the state.

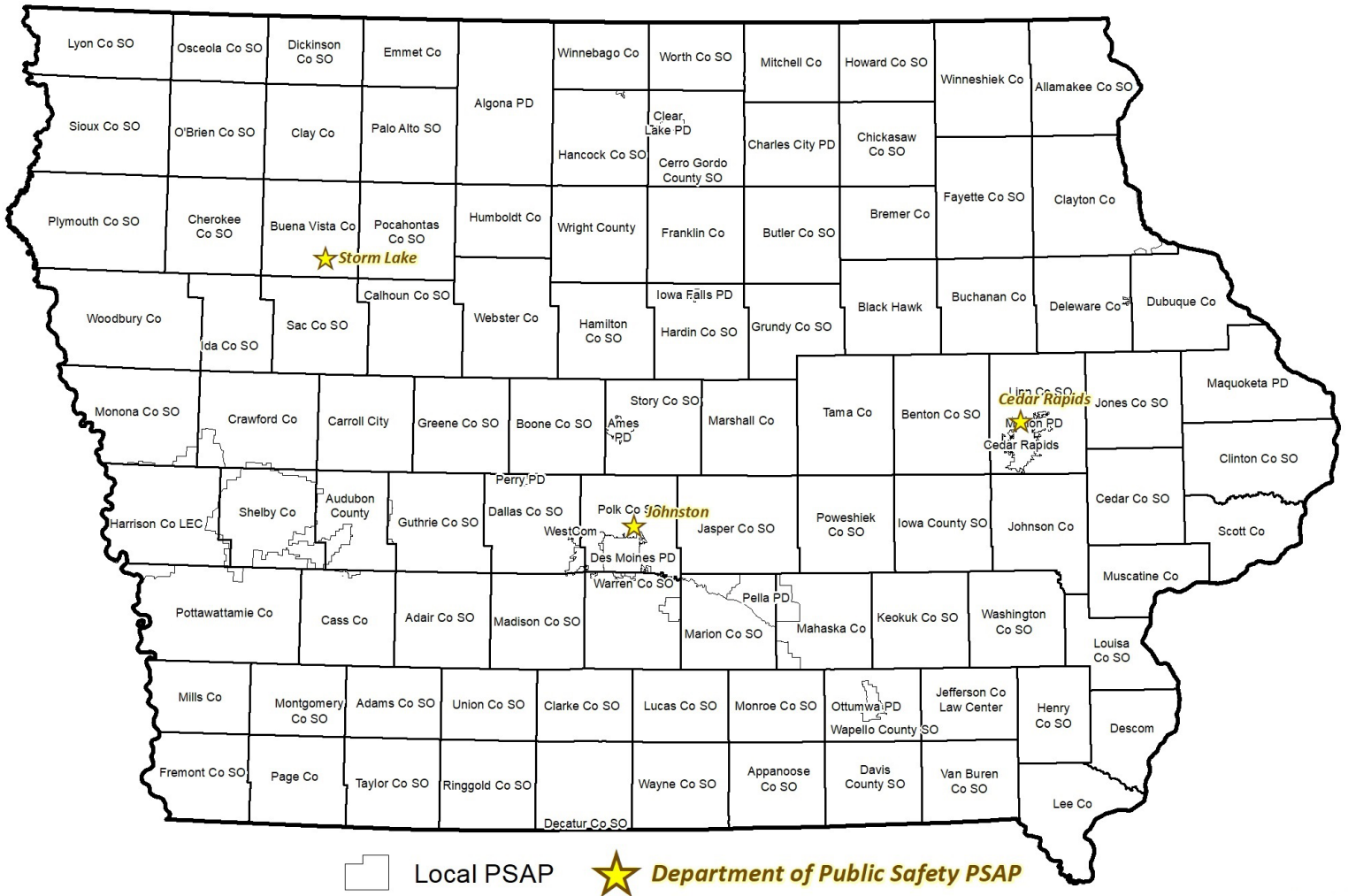
For more information about Iowa's 911 program, visit: www.homelandsecurity.iowa.gov.

Inquiries may be directed to the 911 program administrator at 515.725.3231 or 911@iowa.gov.



Attachment 1

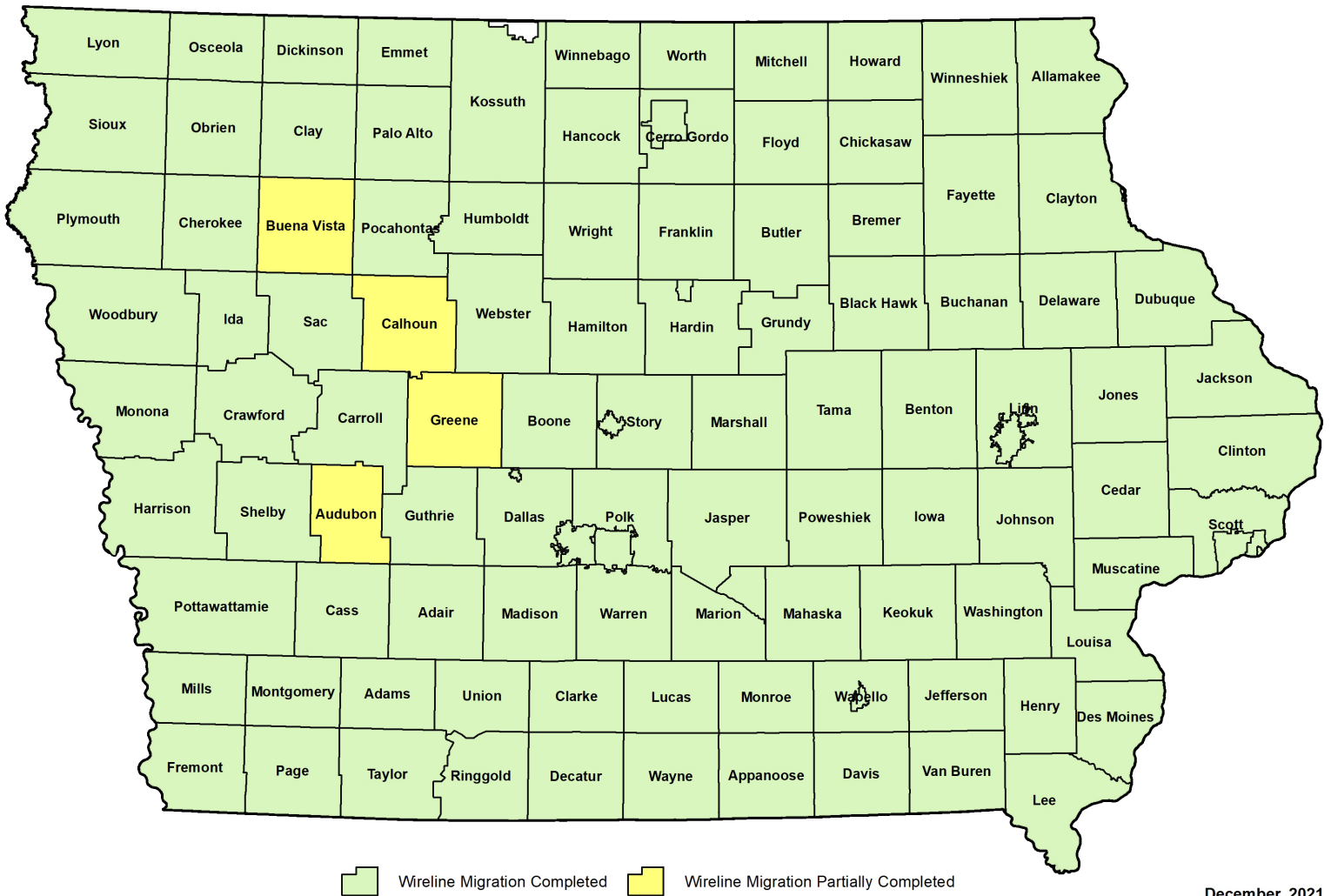
Iowa's Public Safety Answering Points



December 2021

Attachment 2

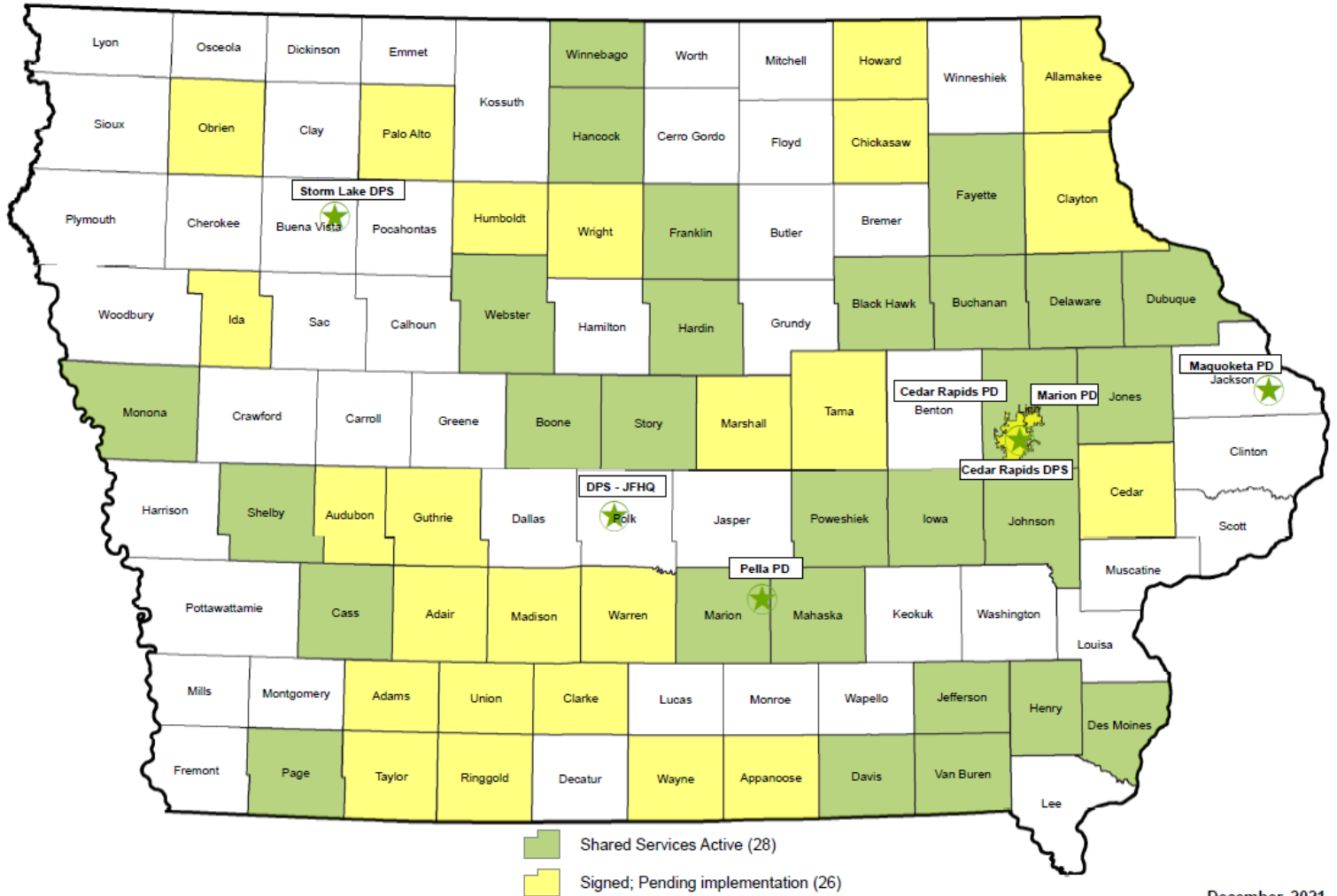
State of Iowa Wireline ALI Deployment



December, 2021

Attachment 3

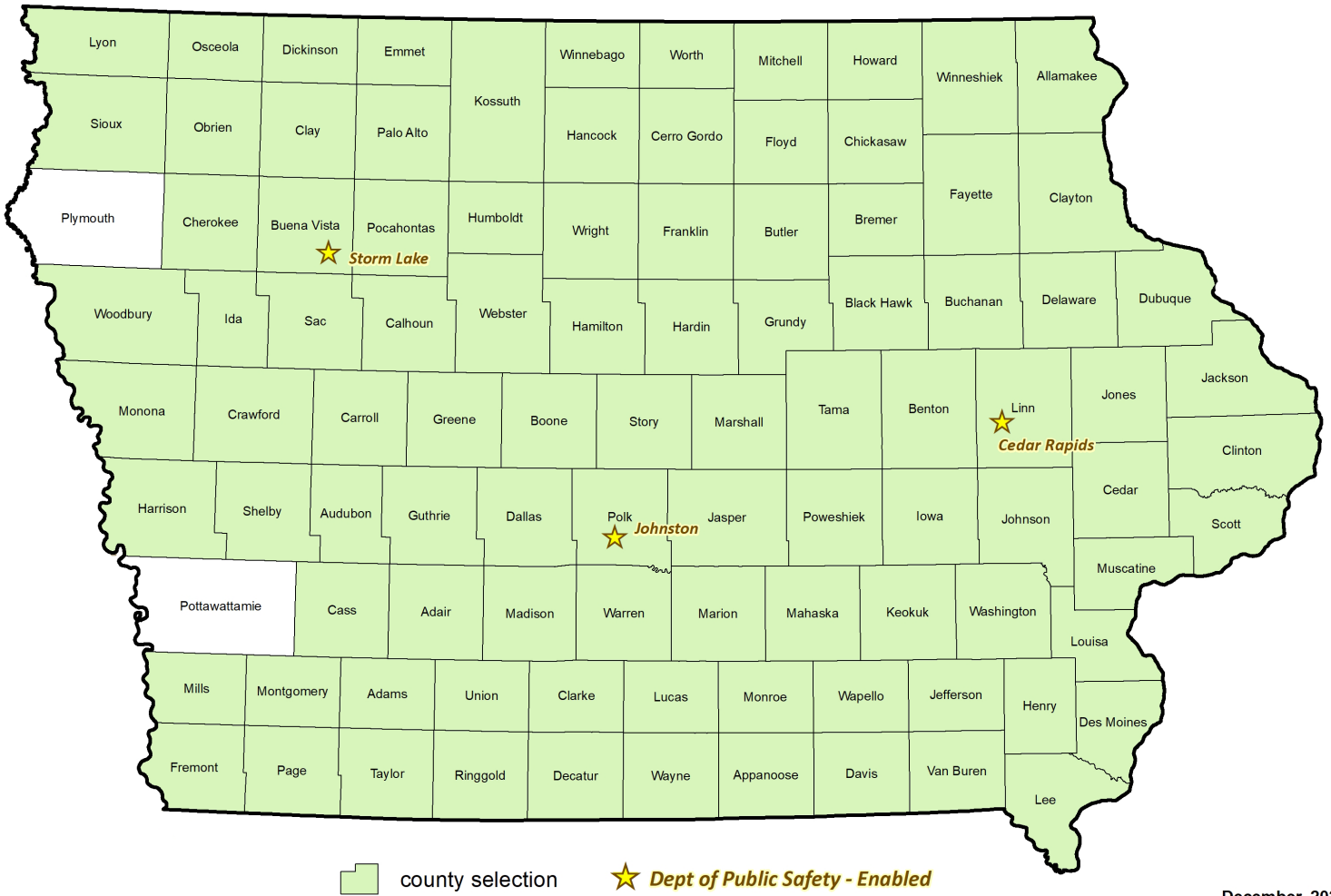
Shared Services Status



December, 2021

Attachment 4

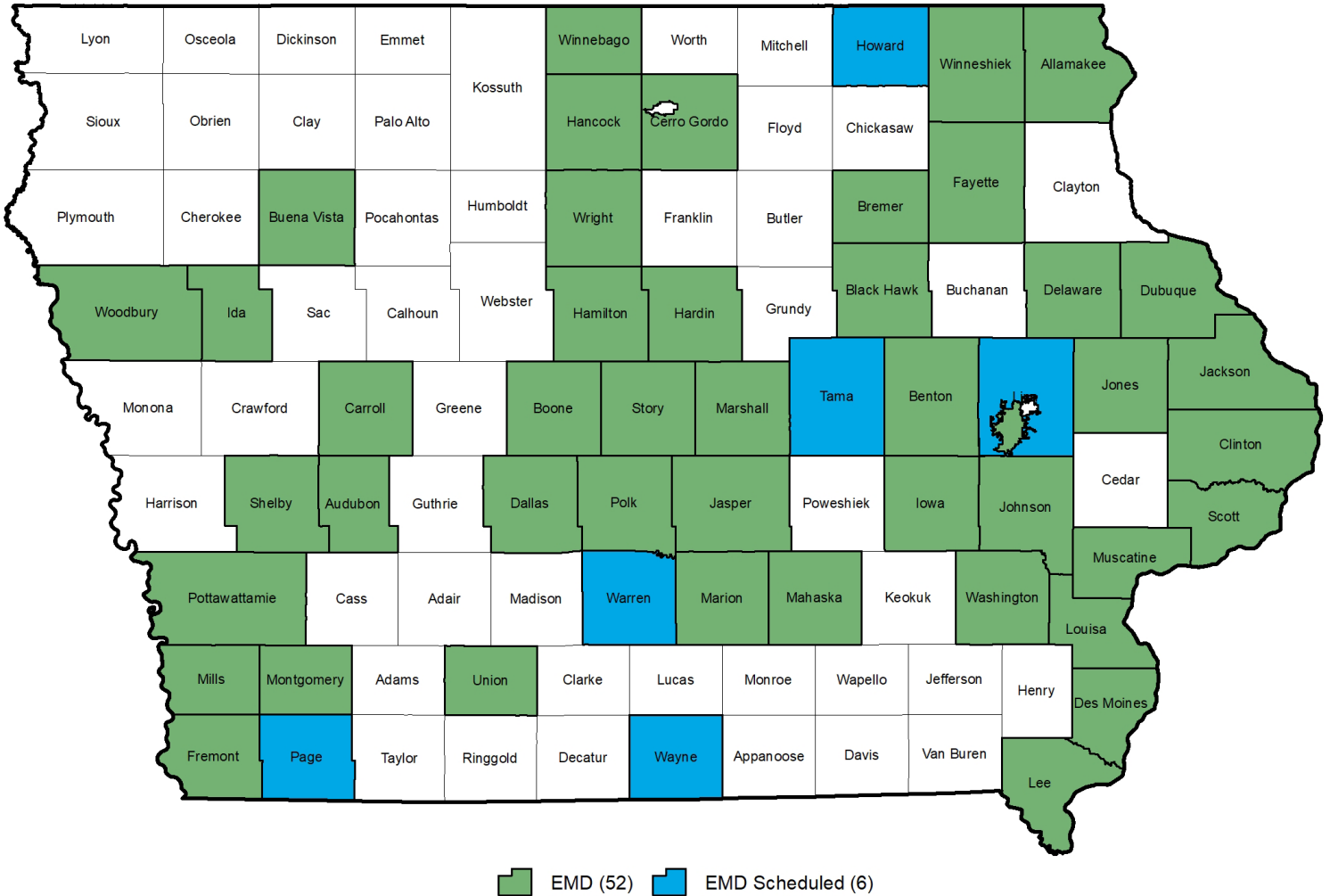
SIP-Enabled PSAPs



December, 2021

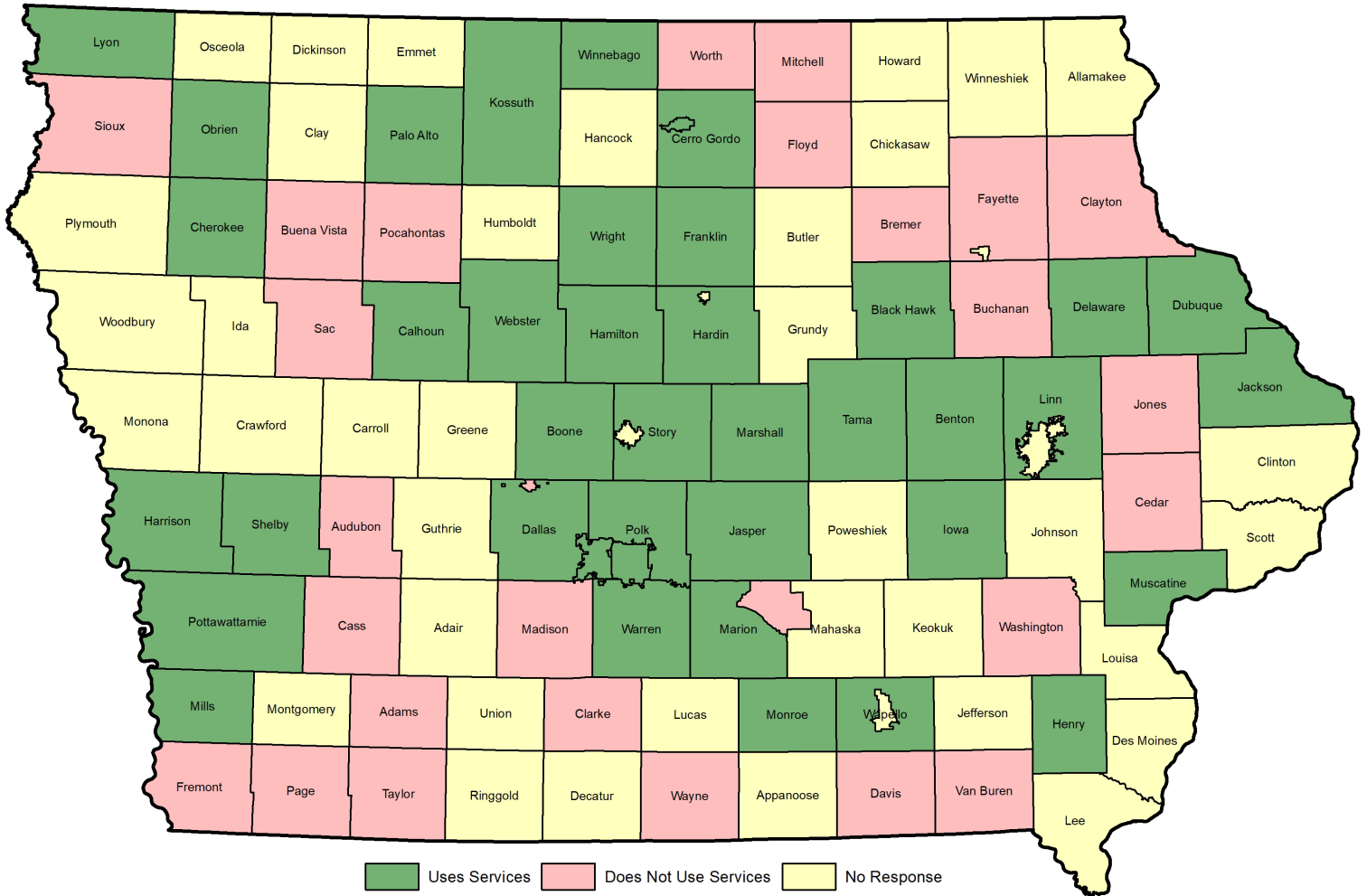
Attachment 5

Emergency Medical Dispatch Status



Attachment 6

Language Translation Service Usage in PSAPs



December 2021

Attachment 7

Revenues and Expenditures Oct. 1, 2020, through Sept. 30, 2021

Revenues by FY Quarter					
	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Totals
Surcharge Funds Received	\$7,897,632.62	\$8,153,902.40	\$7,976,992.44	\$7,621,822.22	\$31,650,349.68
Interest	\$9,851.48	\$6,870.82	\$5,227.20	\$3,768.70	\$25,718.20
Total Revenues	\$7,907,484.10	\$8,160,773.22	\$7,982,219.64	\$7,625,590.92	\$31,676,067.88
Expenditures					
HSEMD Administration	*	*	*	\$250,000.00	\$250,000.00
Wireless Service Providers-cost recovery for wireless Phase 1 services	\$215,989.94	\$82,839.06	\$341,934.06	\$226,811.56	\$867,574.62
Network Costs (includes NG contract, transport, aerial photography, GIS contract, GIS grants, text to 911)	\$2,204,579.28	\$2,206,570.04	\$2,350,892.51	\$2,375,872.46	\$9,137,914.29
PSAP Distribution (60% of surcharge revenue)	\$4,738,579.57	\$4,892,341.44	\$4,786,195.46	\$4,573,093.33	\$18,990,209.80
Subtotal Expenditures	\$7,159,148.79	\$7,181,750.54	\$7,479,022.03	\$7,425,777.35	\$29,245,698.71
Additional to Operating Surplus	\$748,335.31	\$979,022.68	\$503,197.61	\$199,813.57	\$2,430,369.17
Operating Surplus					
Existing Surplus Amount	\$12,264,083.92	\$12,735,923.79	\$13,795,307.04	\$10,016,209.56	
Surplus Revenues	\$748,335.31	\$979,022.68	\$503,197.61	\$199,813.57	\$2,430,369.17
Federal 911 Grants	\$-	\$386,094.20	\$-	\$568,473.77	\$954,567.97
Surplus Subtotal	\$13,012,419.23	\$14,101,040.67	\$14,298,504.65	\$10,784,496.90	
Surplus Expenses					
Council Travel, Public Education, PSAP Supervisor Training	\$-	\$8,100.00	\$35,580.00	\$1,350.00	\$45,030.00
Consolidation Grants and Surplus Paid Out	\$-	\$-	\$2,887,526.29	\$-	\$2,887,526.29
Network Enhancements/PSAP moves	\$-	\$-	\$-	\$-	\$-
Virtual Consolidation	\$276,495.44	\$297,633.63	\$1,359,188.80	\$170,261.41	\$2,103,579.28
Remaining in Surplus	\$12,735,923.79	\$13,795,307.04	\$10,016,209.56	\$10,612,885.49	

*Full annual allocation of \$250,000 was provided to HSEMD in Q1, 2022

Glossary of Terms

ALI: Automatic Location Information

ANI: Automatic Number Information

CLC: Call Logic Center

CPE: Call Processing Equipment

DPS: Department of Public Safety

ESInet: Emergency Services IP Network

FY: Fiscal Year

GIS: Geographical Information System

HSEMD: Iowa Department of Homeland Security and Emergency Management

ICN: Iowa Communications Network

IP: Internet Protocol

LEC: Local Exchange Carrier

LVF: Location Validation Function

MSAG: Master Street Address Guide

NENA: National Emergency Number Association

NG: Next Generation

PSAP: Public Safety Answering Point

SIP: Session Initiation Protocol

VoIP: Voice Over Internet Protocol