2023 IOWA 911 ANNUAL REPORT

IOWA DEPARTMENT OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT

John R. Benson
Director

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Introduction

The Iowa Department of Homeland Security and Emergency Management (HSEMD) proudly 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 110 public safety answering points (PSAPs) across 99 counties (Attachment 1). This is a decrease of two PSAPs from the previous year as two city police departments folded into larger county operations. 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. There is a wireline surcharge authorized by Iowa Code § 34A.7 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 an emergency communications 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. 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 starting in 2011. From July 1, 2022, through June 30, 2023, the NG911 network processed 102,760 wireline calls, 1,211,501 wireless 911 calls, 73,904 VoIP calls and 6,038 texts to Iowa's PSAPs. 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 industry standard used throughout the United States and Europe. The first phase of this multi-phase effort into 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-nine percent of the state's PSAPs are fully end-to-end IP-enabled. As of December 2023, all PSAPs in Iowa are 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 began in 2023 and included a behind-the-scenes upgrade to ensure the 911 call is more accurately routed to the most appropriate PSAP. Additional steps during this phase include decommissioning of legacy selective routers, and full i3 programming of call delivery. This phase has begun, but will continue for a number of years.

Iowa Code § 34A.15 requires that each county establish a joint 911 service board. Each board has the responsibility to develop a countywide 911 service plan, detailing the boundaries for public safety response and 911 call answering throughout the geographical area. All 99 counties have approved countywide 911 service plans. 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.

Virtual Consolidation Update

Iowa Acts 2018, House File 2254, directed HSEMD to implement the plan for virtual consolidation. This plan set out to accomplish two things, detailed below.

The first effort is the merging of the legacy wireline network onto the Next Generation 911 Network is mostly complete and has reached a steady state of completion. As of this year, all 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 within the State's 911 network, 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. An upgrade to the call delivery method next year will embed the ALI information into the SIP header of the call, allowing additional equipment to be removed at each of the PSAPs. This is what is referred to as NENA i3 call delivery.

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 technology 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 telecommunications company'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 call-taking equipment that can be shared by multiple PSAPs. This is referred to as "shared services." 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 65 PSAPs actively using the shared services or in the queue for turn up. There are currently 76 PSAPs using the shared services. An additional PSAP has signed up and is awaiting their go-live (Attachment 2).

Adding the remaining 34 PSAPs onto the shared services system would cost the State an estimated $9.6 million over 5 years, at a substantial cost savings for local jurisdictions.

Through the shared services program, HSEMD worked with DPS and Zetron to create a mobile disaster PSAP. The mobile PSAP is available to be deployed 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 program is in its fifth year of existence and has been funded through the State's 911 Surcharge Operating Surplus. It is estimated that in the first four-year period, the shared services program saved the state's 911 community $11 million dollars. This savings was realized through economies of scale and the purchasing of a statewide system versus PSAPs procuring their own equipment.

Next Generation 911 Progress

Next Generation 911 Network

This section describes the environment of Iowa's Next Generation 911 Network.

The State 911 system is interconnected through an ESInet, utilizing the ICN fiber network. All 110 local and Iowa Department of Public Safety primary PSAPs are connected via the ESInet. The "brains" of the ESInet are the two redundant geographically diverse call logic centers (CLC) connected by 100 MB circuits to handle the call volume and call routing. While the ESInet primarily uses fiber from the ICN, the CLCs equipment in the PSAPs, policy call routing and handling functions, and ALI are managed through a contract with Comtech. HSEMD entered into a new 10-year contract with Comtech in 2021 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 still ingress the Comtech-managed CLCs located in Davenport and West Des Moines. From there, calls are transported via the ESInet for proper call delivery to PSAPs.

Wireline traffic entering the new merged environment is 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.

As referenced above, wireline ALI and ANI are now provided statewide through the HSEMD contract with Comtech. ANI/ALI is an integrated component 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. ALI will further be integrated into the actual call through the i3 upgrade later in 2024.

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. To this end, there are some over-the-top vendors providing live stream, picture and video capabilities already. Some PSAPs have begun to explore these opportunities in Iowa.

Along with these exciting new advances in over-the-top technology, device manufacturers and some cellular providers have implemented 911 via satellite technology. This allows a caller to reach assistance through 911 even if they are not able to access traditional cellular service. This could be especially valuable when citizens are outdoors in remote areas of the state that don't have reliable cellular signal. Iowa is well positioned to benefit from these services because it ultimately uses text to 911 technology at the PSAPs via satellites.

Cybersecurity

Cybersecurity 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 centers for cyber monitoring and protection. As part of the procurement of services, HSEMD works with Iowa Office of the Chief Information Officer (OCIO) to ensure the latest cybersecurity provisions are included. As part of the shared services partnership with 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.

The HSEMD 911 program also worked with the Iowa Statewide Interoperability Communications Systems Board and the U.S. Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA) to conduct a cyber assessment on the State's 911 system. This assessment occurred during FY 2023. The final report can be made available upon request.

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 is contracted 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 2023, HSEMD granted $1,302,000 to PSAPs for local 911 services to help facilitate this critical local data.

To continue improving the data, HSEMD increased the benchmarks for FY 2024 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 at least monthly

Two years ago, the 911 program implemented a statewide GIS-based master street address guide (MSAG). This means that PSAPs now 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.

This year, HSEMD implemented an emergency call routing function (ECRF) during the summer of 2023. More broadly known as Geospatial Routing, an ECRF 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 predetermined routing. ECRF also provides PSAPs greater control of 911 call routing, as routing is based on the GIS data provided and maintained by the counties. During the first full month of the ECRF implementation, 1,728 911 calls were routed more accurately and to the most appropriate PSAP than they would have been using the legacy cell sector routing methodology. This is an enormous leap forward in 911 technology and will save lives by cutting down on transfers and delaying emergency response.

Public Safety Answering Points

Iowa's 110 PSAPs are now technologically capable of receiving network-delivered IP-based calls. Of the 110 PSAPs with upgraded equipment, 109 are truly receiving end-to-end IP-enabled wireless calls over the ESInet to their call-taker screens. In the remaining case, additional local software upgrades are needed before migration to a true IP-based call environment is possible (Attachment 3).

In 2023, Iowa had two PSAPs consolidate or fold into another PSAP's operations. The Iowa Falls Police Department closed its PSAP functions and merged into the Hardin County Sheriff's Office. Similarly,

Perry Police Department closed its PSAP functions and folded into the Dallas County Sheriff's Office. Previously, these PSAPs would have been eligible for consolidation grants to help with costs associated with the merger. However, the physical consolidation grant program was allowed to sunset at the end of FY 2022.

Dallas County Sheriff's Office PSAP

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, which 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.

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. 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. This is one of the most important features of shared services. 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. This means in Iowa, almost three quarters of Iowa PSAPs will have disparate ESInet pathways, insuring connectivity back to the Comtech data centers. This is an area of huge improvement over the last handful of years.

Coordination and Integration

988 National Suicide Hotline

The 911 Program has had continued engagement with the Iowa Department of Health and Human Services and the 988 crisis centers in Iowa throughout the 988 implementation. The 911 Program provided information and technical background on 911 to the 988 planners. There is a very important intersection of 911 and 988 regarding transfers and operational considerations that the two programs will remain engaged into the future. This year, three PSAPs (Muscatine County, Johnson County, and Black Hawk County) participated in a pilot program with the state's two 988 centers. They tested and developed technology and protocols for warm handoffs from callers who dialed 911, who may be more appropriately assisted through the services offered through 988. This capability and relationship between PSAPs and 988 Crisis Centers will continue to expand throughout the state over time.

FirstNet, Land Mobile Radio, and Computer Aided Dispatch Interoperability

The continued rollout 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. HSEMD was also engaged during the previous year with several central Iowa PSAPs, the Iowa Statewide Interoperability Communications Systems Board, and federal partners on a pilot program regarding CAD (computer-aided dispatch) to CAD interoperability that will allow disparate jurisdictions to share dispatch information. That report is available here and is referred to as the information sharing framework. 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.

Connectivity with Adjoining States

Iowa has long participated in an initiative called the Interstate Playbook, facilitated by the National 911 Office. This was a collaborative effort to bring four Midwest states (Iowa, Minnesota, North Dakota, and South Dakota) together for the purposes of linking ESInets to allow for seamless transfers of 911 calls complete with location information and call-back number. The challenge in linking states together stems from the use of different vendors, even though the same industry standards are used. In calendar year 2022, Iowa and Minnesota were among the first states to link ESInets from disparate network providers. This means that counties along the border of Iowa/Minnesota can transfer 911 calls exactly the same as PSAPs in the state transfer calls today, complete with all data associated with the call. Previously, these transfers would have had to use 10-digit administrative lines and would not come with any call data. During calendar year 2023, Iowa continued to connect with other states bringing the same transfer capabilities to the counties bordering South Dakota, Nebraska, Illinois, and Missouri. Discussions with additional neighboring states are continuing as well. When those additional states reach a level of readiness similar to our own, Iowa will be able to link with those states as well.

Subscriber Surcharges and Distribution

Funding

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 Iowa 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, 2023, the wireless surcharges totaled $30,774,868, an increase of $249,452 from the same timeframe 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 2022, the reported total of wireline surcharges was $9,402,011, an increase of $243,023 from the previous year.

Attachment 4 shows the total statewide surcharges by source from 2015-2023.

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, 2023, was $2,704,292, an increase of $384,809 from the same timeframe 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 voice over internet protocol (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 5).

1. To the Department of Homeland Security and Emergency Management for program administration, an amount equal to that appropriated by the General Assembly. In 2023, this amount was $300,000.
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 110 PSAPs in the state. For the 12 months ending Sept. 30, 2023, this amount was $20,214,778, an increase of $507,839 from the previous 12 months.
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, 2023, this amount was $387,718, a decrease of $241,736 from the previous 12 months. Currently only one wireless carrier submits invoices for repayment. It

should also 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, 2023, this amount was $11,347,850, a decrease of $27,017.

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 2023, the amount spent on these items was $59,607 of the allowable $100,000, which includes nine training opportunities and public outreach materials.

6. Finally, Iowa Code 34A.7A directs HSEMD to pass through any remaining surplus funds to PSAPs equally. For SFY 2023, $1.2 million was passed through to local 911 service boards, an amount of $10,775 per PSAP. It should be noted that rather than retaining the full 12.5% or $4.1 million of catastrophic reserve authorized by Iowa Code 34A.7A 2.*e*, HSEMD instead retained only $2 million in catastrophic reserve in order to provide some level of pass through any end of year funds given the current obligated expenditures for FY 2024.

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 enhances 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, improved call routing, 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, 988, Iowa Communications Network, FirstNet, 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: homelandsecurity.iowa.gov.

Inquiries may be directed to the 911 program administrator at 515.725.3231 or 911@iowa.gov.
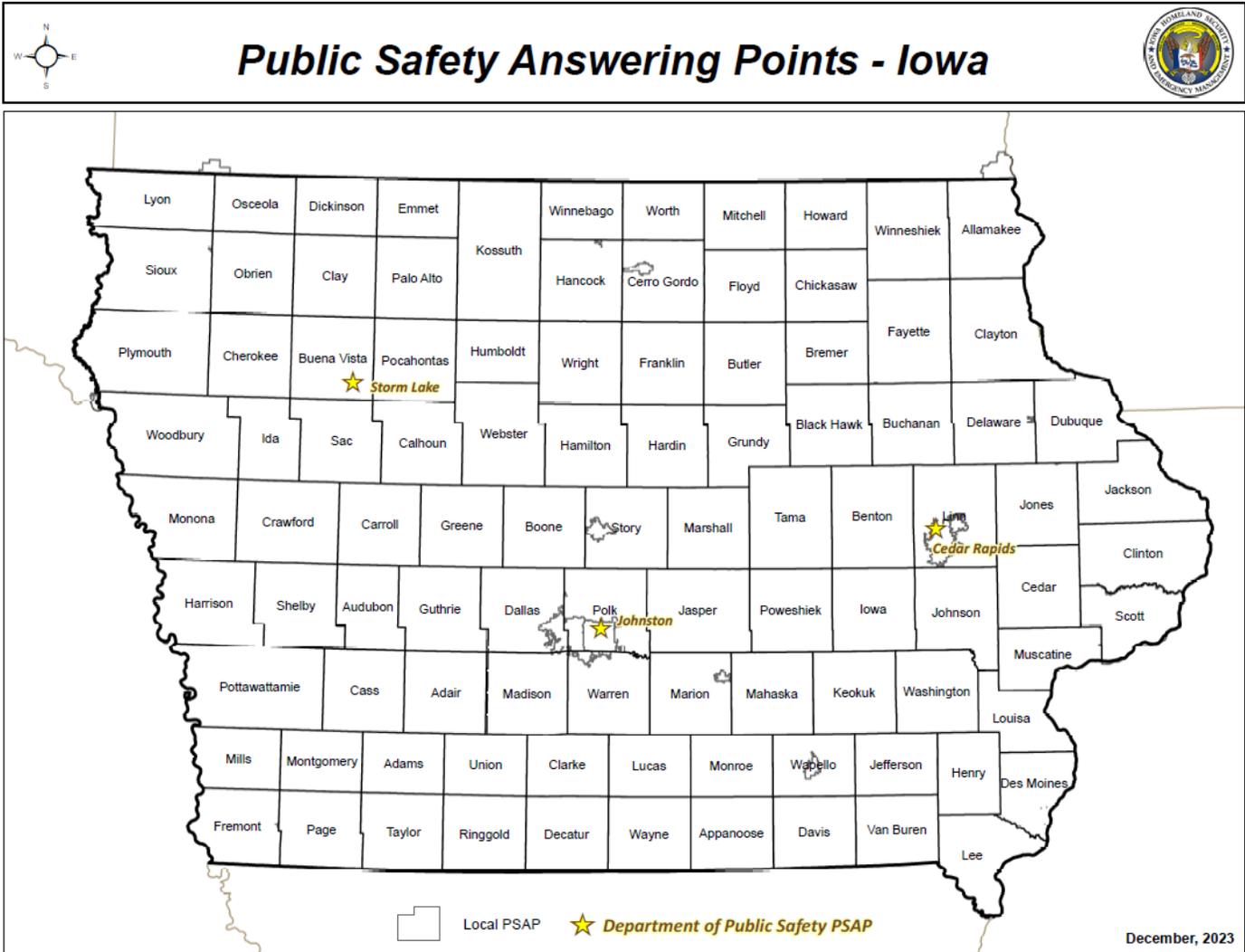
Attachment 1

Public Safety Answering Points - Iowa

Attachment 2

Shared Services Status

Shared Services Active (76)

Signed; Pending implementation (1)

October 2023

Attachment 3

SIP Enabled PSAP

December, 2023
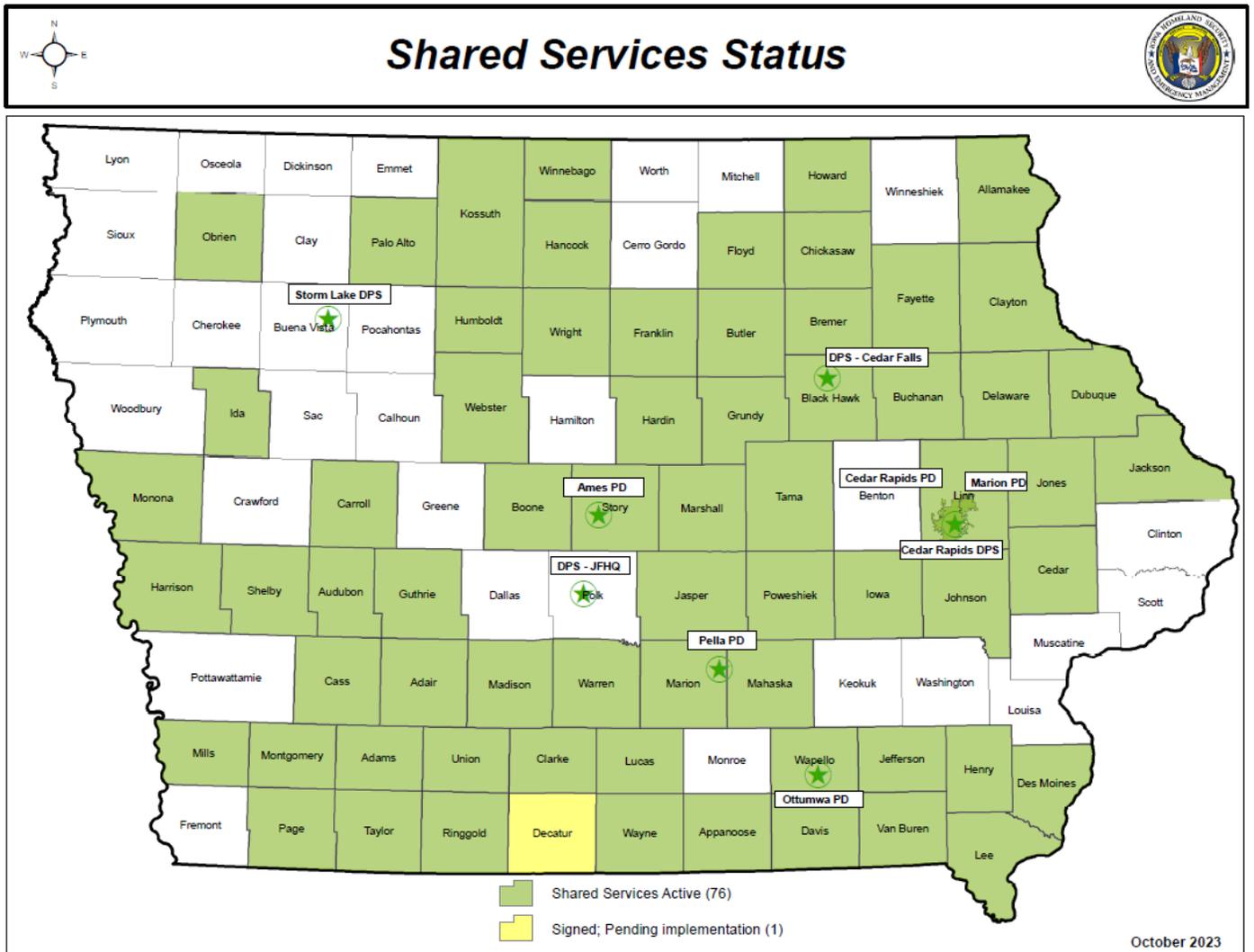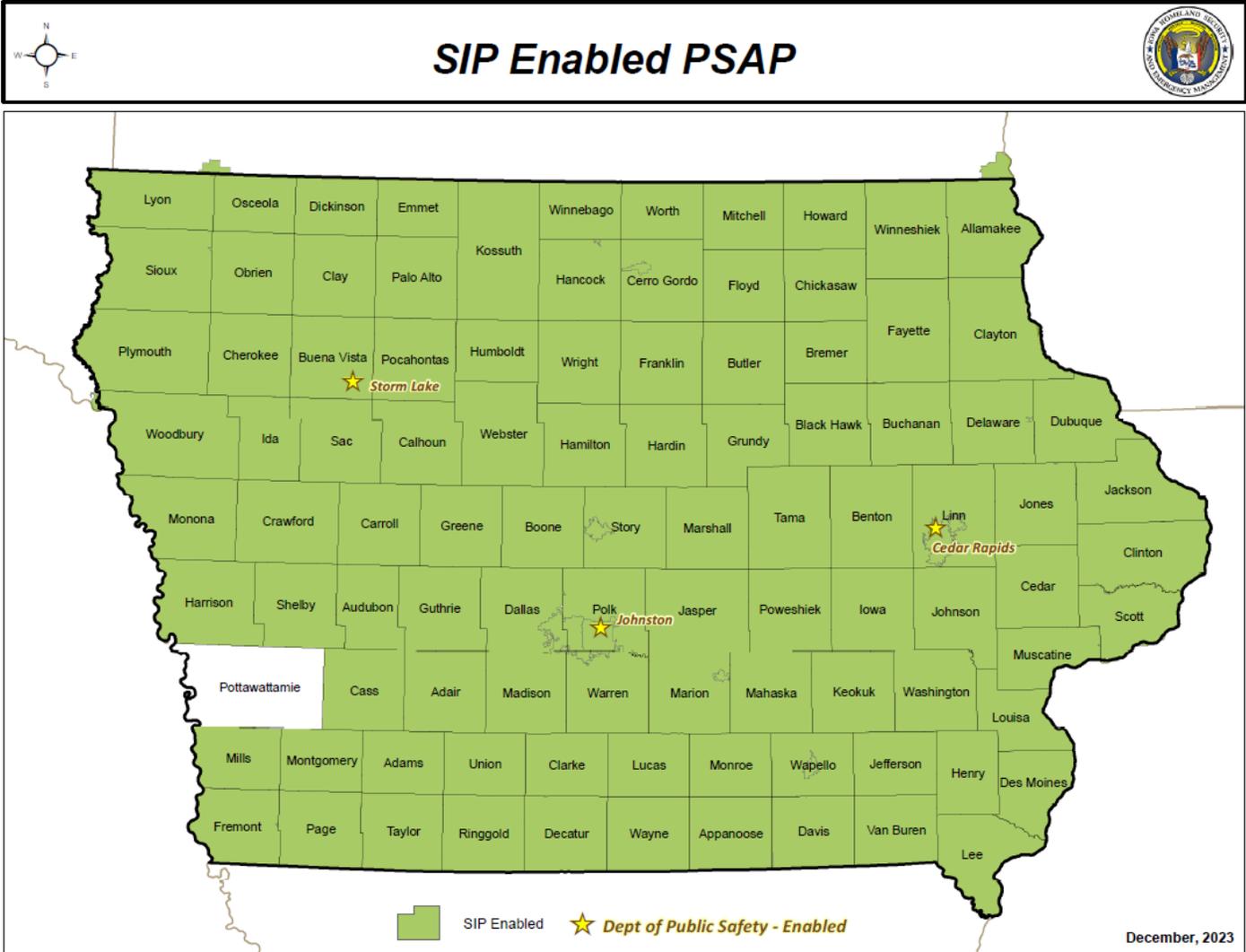
Attachment 4-A

Prepaid	
FY 2015	$ 2,033,581.00
FY 2016	$ 2,124,959.00
FY 2017	$ 2,229,785.00
FY 2018	$ 2,222,994.00
FY 2019	$ 2,013,303.00
FY 2020	$ 2,238,344.00
FY 2021	$ 2,378,050.00
FY 2022	$ 2,257,979.00
FY 2023	$ 2,791,972.00

Prepaid 911 Surcharge
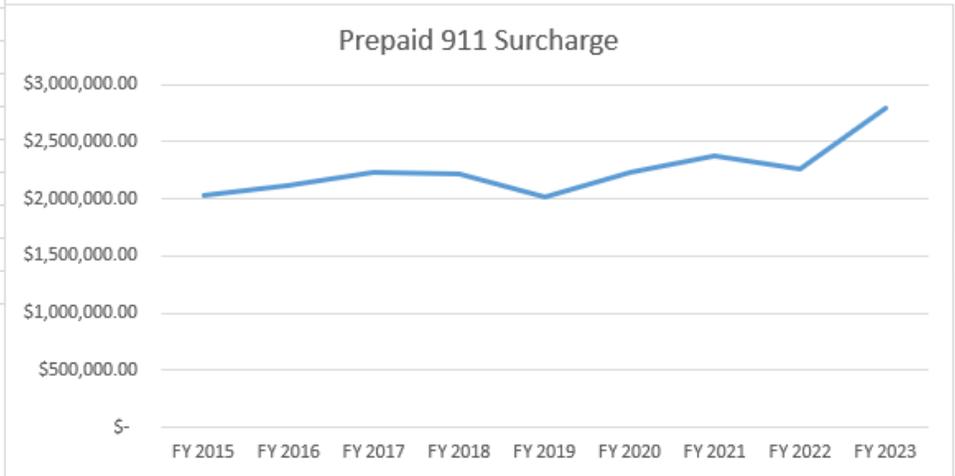
Wireline	
FY 2015	$ 11,834,577.00
FY 2016	$ 12,316,005.00
FY 2017	$ 11,993,482.00
FY 2018	$ 10,809,437.00
FY 2019	$ 9,980,018.00
FY 2020	$ 10,762,875.00
FY 2021	$ 10,147,733.00
FY 2022	$ 9,158,988.00
FY 2023	$ 9,402,011.00

Wireline Surcharge
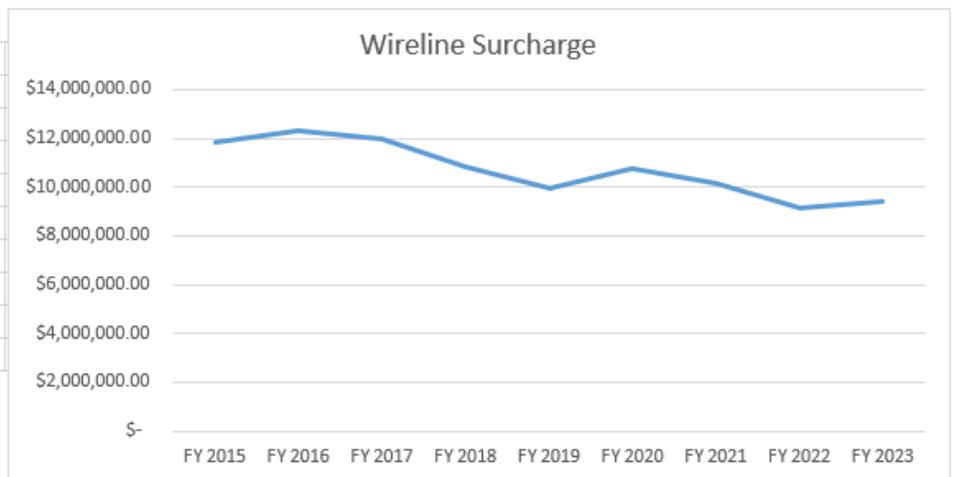
Attachment 4-B

Wireless	
FY 2015	$ 26,204,982.94
FY 2016	$ 26,561,070.72
FY 2017	$ 26,778,982.75
FY 2018	$ 27,146,110.00
FY 2019	$ 28,180,296.00
FY 2020	$ 28,419,280.00
FY 2021	$ 29,648,093.00
FY 2022	$ 29,906,237.25
FY 2023	$ 30,774,868.08

Wireless Surcharge
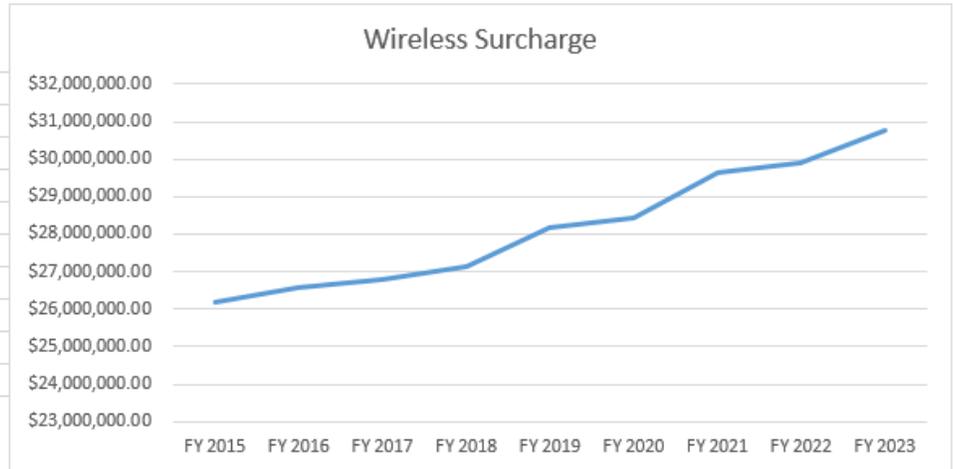
Total	
FY 2015	$ 40,073,140.94
FY 2016	$ 41,002,034.72
FY 2017	$ 41,002,249.75
FY 2018	$ 40,178,541.00
FY 2019	$ 40,173,617.00
FY 2020	$ 41,420,499.00
FY 2021	$ 42,173,876.00
FY 2022	$ 41,323,204.25
FY 2023	$ 42,968,851.08

Total Statewide Surcharge Generated (all sources)
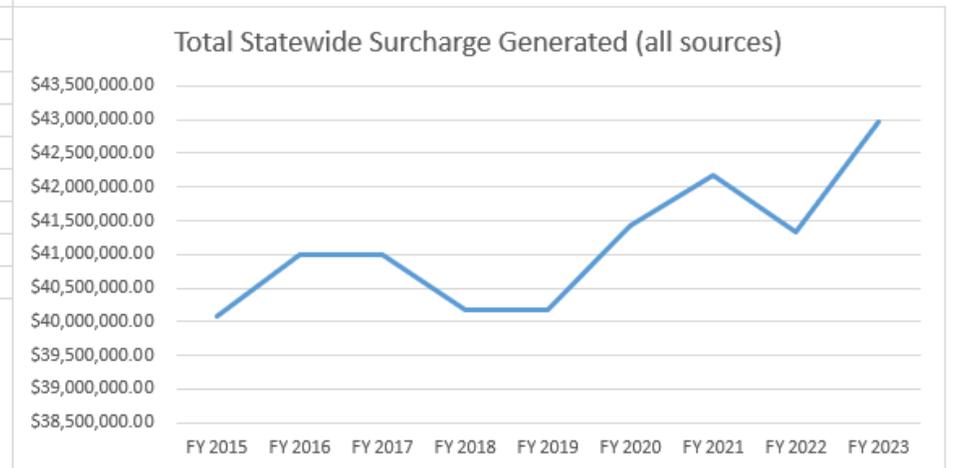
Attachment 4-C

Total County Revenue (all Surcharge sources)

FY 2015	$ 34,173,403.62
FY 2016	$ 36,711,136.98
FY 2017	$ 37,064,808.78
FY 2018	$ 36,177,497.58
FY 2019	$ 32,888,800.64
FY 2020	$ 32,318,847.67
FY 2021	$ 33,531,965.22
FY 2022	$ 31,379,112.10
FY 2023	$ 32,089,617.02

Total County Surcharge Revenue (all sources)
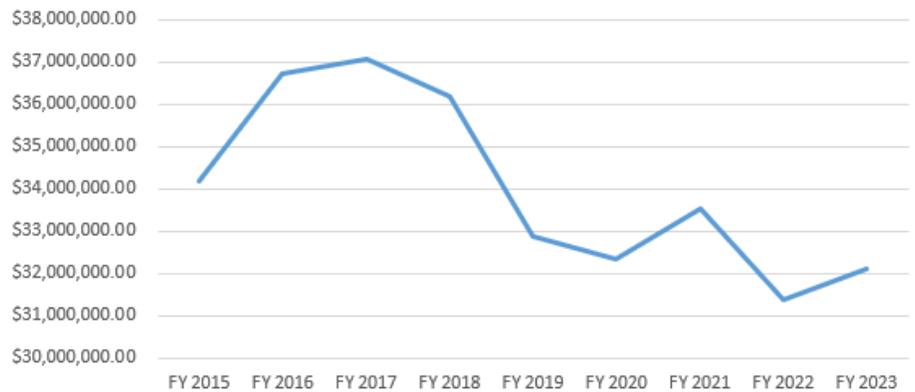
State Surplus	
FY 2015	$ 19,798,811.21
FY 2016	$ 16,276,029.90
FY 2017	$ 12,510,131.52
FY 2018	$ 12,584,027.82
FY 2019	$ 12,301,221.72
FY 2020	$ 11,487,599.52
FY 2021	$ 10,016,209.56
FY 2022	$ 8,564,671.63
FY 2023	$ 6,265,492.85

State Operating Surplus
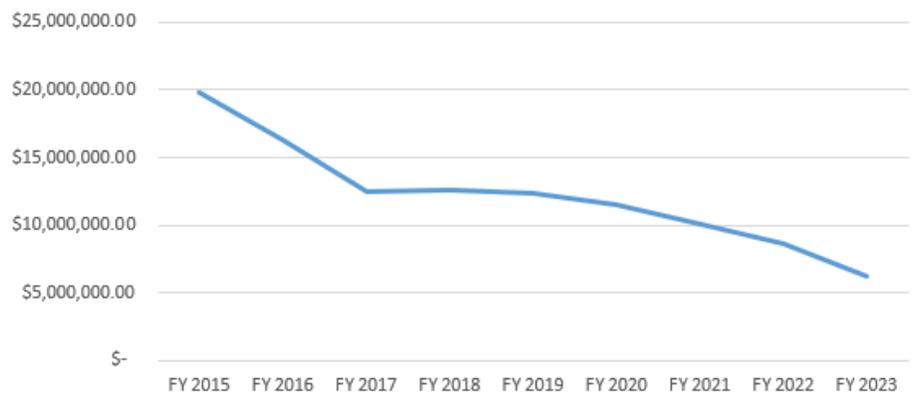
Attachment 4-D

Virtual Consolidation Costs	
FY 2019	$ 2,913,933.97
FY 2020	$ 5,255,964.30
FY 2021	$ 2,151,448.54
FY 2022	$ 3,431,669.55
FY 2023	$ 4,320,295.07

State Virtual Consolidation Costs
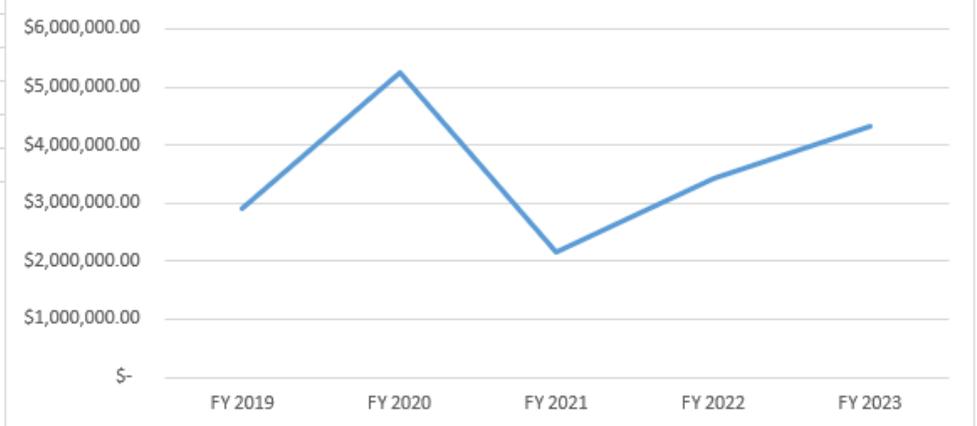
Shared Services Adoption Rate	
FY 2019	21
FY 2020	32
FY 2021	57
FY 2022	65
FY 2023	76

Shared Services Adoption Rate
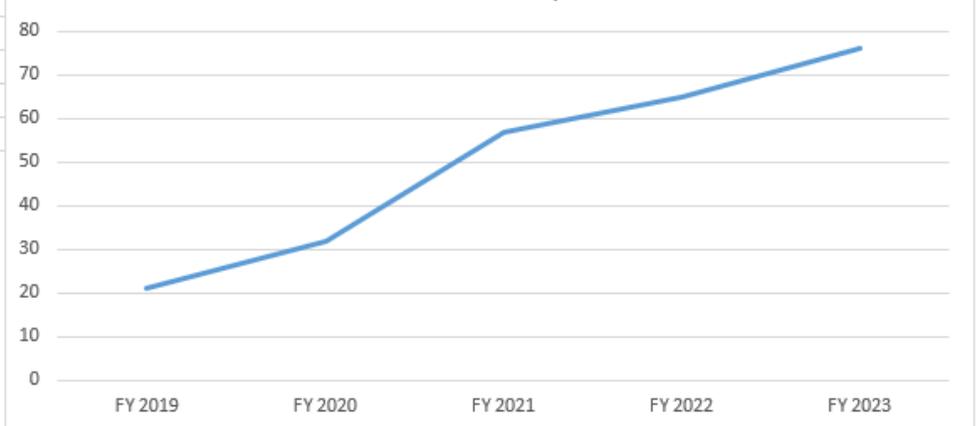
Attachment 5

Revenues by FY Quarter					
	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Totals
Surcharge Funds Received	$ 8,542,056.27	$ 8,188,841.67	$ 8,533,437.08	$ 8,426,961.47	$ 33,691,296.49
Interest	$ 38,319.43	$ 65,901.19	$ 72,714.79	$ 84,626.44	$ 261,561.85
Total Revenues	**$8,580,375.70**	**$8,254,742.86**	**$ 8,606,151.87**	**$8,511,587.91**	**$33,952,858.34**
Expenditures					
HSEMD Administration	*	*	*	$ 300,000.00	$ 300,000.00
Wireless Service Providers-cost recovery for wireless Phase 1 services	$ 131,160.25	$ 130,489.29	$ 126,068.81		$ 387,718.35
Network Costs (includes NGCS contract, transport, GIS contract, GIS grants)	$ 2,620,258.67	$ 2,388,745.02	$ 2,776,634.89	$ 3,562,211.75	$ 11,347,850.33
PSAP Distribution (60% of surcharge revenue)	$ 5,125,233.76	$ 4,913,305.00	$ 5,120,062.25	$ 5,056,176.88	$ 20,214,777.89
Subtotal Expenditures	$ 7,876,652.68	$ 7,432,539.31	$ 8,022,765.95	$ 8,918,388.63	$ 32,250,346.57
Additional to Operating Surplus	$ 703,723.02	$ 822,203.55	$ 583,385.92	$ (406,800.72)	**$ 1,702,511.77**
Operating Surplus					
Existing Surplus Amount	$ 7,301,722.46	$ 7,169,911.99	$ 7,713,123.35	$ 6,265,492.85	
Surplus Revenues	$ 703,723.02	$ 822,203.55	$ 583,385.92	$ (406,800.72)	$ 1,702,511.77
Surplus Subtotal	$ 8,005,445.48	$ 7,992,115.54	$ 8,296,509.27	$ 5,858,692.13	
Surplus Expenses					
Council Travel, Public Education, PSAP Supervisor Training	$ 7,432.00	$ 15,588.00	$ 36,298.68	$ 432.00	$ 59,750.68
Network Enhancements/PSAP moves	$ -		$ -	$ 160,890.00	$ 160,890.00
Virtual Consolidation	$ 828,101.49	$ 263,404.19	$ 787,915.50	$ 491,296.17	$ 2,370,717.35
Surplus Paid out			$ 1,206,802.24		
Remaining in Surplus	$ 7,169,911.99	$ 7,713,123.35	$ 6,265,492.85	$ 5,206,073.96	
	* Full annual allocation of $300,000 was provided to HSEMD in Q1, 2023				

Glossary of Terms

ALI: Automatic Location Information

ANI: Automatic Number Information

CLC: Call Logic Center

CPE: Call Processing Equipment

DPS: Department of Public Safety

ECRF: Emergency Call Routing Function

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