

IOWA DEPARTMENT OF HOMELAND SECURITY & EMERGENCY MANAGEMENT

2017

911 Annual Report



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Introduction

The Iowa Department of Homeland Security and Emergency Management (HSEMD) submits this 911 annual report to the General Assembly's standing committees on government oversight pursuant to 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.

The state's 911 system consists of 113 public safety answering points (PSAPs) across 99 counties. These PSAPs handle both landline and wireless emergency 911 calls from within Iowa. The wireline 911 system was launched in Iowa in 1988 and is managed by local 911 service boards. The funding to support the system is obtained through the contributions of local and a landline phone surcharge authorized by Code of Iowa Chapter 34A. Wireless 911 capability was added to the system beginning in 1998. This 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 pursuant to Code of Iowa Chapter 34A. Recently, the department has converted the wireless 911 network from analog technology to an Internet protocol (IP)-based system referred to as a Next Generation (NG) 911 network. From Oct. 1, 2016, through Sept. 30, 2017, this NG 911 network processed 900,631 wireless 911 calls to Iowa's PSAPs. Local PSAPs are the primary users of the NG 911 network and answer and dispatch resources for more than 98 percent of all wireless 911 calls in Iowa. The Iowa Department of Public Safety handles the remainder of the wireless 911 calls. The disparity in the wireless surcharge remitted per wireless 911 call noted in previous reports remains. In Polk County the wireless surcharge remitted per wireless 911 call is \$7.32. The highest, in Audubon County, is \$146.69.

As mentioned above, the wireless portion of the 911 system is currently undergoing a significant

upgrade to an IP-based system. The first phase of a multiphase effort into what is called the NG911 network has converted analog/copper trunking to the local PSAPs to a statewide, IP-based Ethernet network. The IP-based backbone was completed in November 2012. The second phase of the network upgrade is nearly complete. This phase of NG911 includes updating individual PSAPs to IP-enabled call handling equipment and logging recorders. When finished, this upgrade will ultimately allow PSAPs to receive IP-based signaling for the delivery of emergency calls that include text, video, and picture messaging. Ninety percent of the state's PSAPs are fully end-to-end IP-enabled. As of January 2018, 105 PSAPs are able to receive Text-to-911, up from just 11 noted in last year's legislative report. Additional future phases of NG911 efforts have started and include improved GIS mapping and database and address reconciliation, to improve the automatic locations services. When complete, this will allow a dispatcher to pinpoint the caller on recent GIS imagery of the geographical area the PSAP covers. It is increasingly important to begin thinking of the 911 system, including the individual PSAPs, as a complex, multifaceted, interconnected, IT network. The PSAPs are no longer individual dispatch centers operating independently, but rather a part of the entire state 911 network.

Chapter 34A requires that each county in the state 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. As of today, 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.

Legislative Updates to Iowa Code

During the 2017 legislative session, the following changes were made to the Iowa Code with the passing of Senate File 500:

- Modernization and terminology updates throughout Chapter 34A.
- GIS grants were established for local 911 service boards.
- \$100,000 was allocated for 911 Council travel, PSAP supervisor, and public education related to 911.
- Local consolidation grants were implemented in previous legislation, but SF 500 limited the grants to physical consolidation only.
- HSEMD was also tasked with developing a detailed engineering design and cost of implementing statewide virtual consolidation. The Plan on Virtual 911 Consolidation can be viewed [here](#).
- Local emergency management agencies were provided voting membership on the local 911 service boards.
- A representative from the Iowa Geographical Information Council was appointed to be a member of the Iowa 911 Communications Council.



Current Status and Modernization of the E911 System

Iowa has continued to maintain two different 911 networks which do not interface with each other. Technology currently exists to merge the wireline and wireless networks into a single 911 system. Senate File 500 tasked HSEMD with developing a plan to combine the wireline 911 network with the Next Generation 911 network. The Plan on Virtual 911 Consolidation can be found [here](#).

Wireline 911

The wireline 911 system is a legacy system that has been developed and implemented by the local joint 911 service boards. As such, the system is comprised of a variety of differing network elements. These differing network elements have led to a system of disparate 911 networks, which

include direct trunking to the PSAP, locally selectively-routed calls, and regionally selectively-routed calls. Trunk-based legacy systems are only capable of delivering wireline 911 calls.

Wireless Next Generation 911

Network

The current wireless 911 system is an enhanced 911 (E911) system that is undergoing a lengthy, multiple-phase transition to a next-generation (NG911) system. An E911 system can give automatic address or location data and routing capabilities as allowed by this system. An NG911 system is IP-based rather than analog-based, allowing for more precise call delivery, diverse routing, and transferring of calls.

Current Status and Modernization of the E911 System

Figure 1 below outlines some of the differences between enhanced and next-generation 911.

The core wireless 911 network, Emergency Services IP Network (ESInet) consists of 113 local and Iowa Department of Public Safety (DPS) primary PSAPs (Attachment 1). The ESInet also includes two redundant data centers connected by 50 MB circuits to handle the call volume and call routing. The two data centers are located in Davenport and West Des Moines. While the ESInet primarily uses fiber from the Iowa Communications Network (ICN), the data centers, State equipment in the PSAPs, and the policy call routing and handling functions are managed through a contract with Comtech TCS. The Comtech TCS contract is currently in year seven of a 10-year maximum contract.

Data centers receive incoming 911 calls directly from the wireless carriers and route the calls based on the location of the caller to the corresponding PSAP. If a call is received at a data center and it is unable to process the call, the call will be automatically rerouted to another data center.

HSEMD and Comtech TCS have continuously worked to upgrade the software and programming at the data centers for the way calls are delivered via IP. These upgrades use the National Emergency Number Association (NENA) i3 standard for call delivery. The ultimate goal of these upgrades is a NG911 network that will ultimately support the use

of text, video, and picture messaging to 911. Once these services 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.



PSAPs

As of Dec. 31, 2017, 112 out of 113 PSAPs have upgraded their call-handling equipment to NG911. These 112 PSAPs are now technologically capable of receiving network-delivered IP-based calls.

Currently, there are 102 PSAPs that have migrated and are truly receiving end-to-end IP-enabled wireless calls over the ESInet all the way 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 2).

SF 500 also called for HSEMD to develop a plan for PSAPs to share certain services. HSEMD has identified cost savings that could be realized in the sharing of call processing, computer-aided dispatch, mapping, logging recorder, and emergency medical dispatch equipment. This effort

E911	NG911
<ul style="list-style-type: none"> ◆ Analog-based call delivery ◆ Analog call-processing equipment ◆ Phase I-based call routing ◆ Phase II-based caller location ◆ Manual call rerouting for maintenance & outages ◆ Selective routers for call delivery ◆ No capability for text, pictures, or video 	<ul style="list-style-type: none"> ● IP-based call delivery ● IP-based call-processing equipment ● GIS-based call routing ● GIS pinpointing of caller location ● Multiple automatic, diverse paths for maintenance & outages ● Policy-routing functions w/in the data centers for call delivery ● Can transmit text, images, and video to 911

Figure 1

Current Status and Modernization of the E911 System

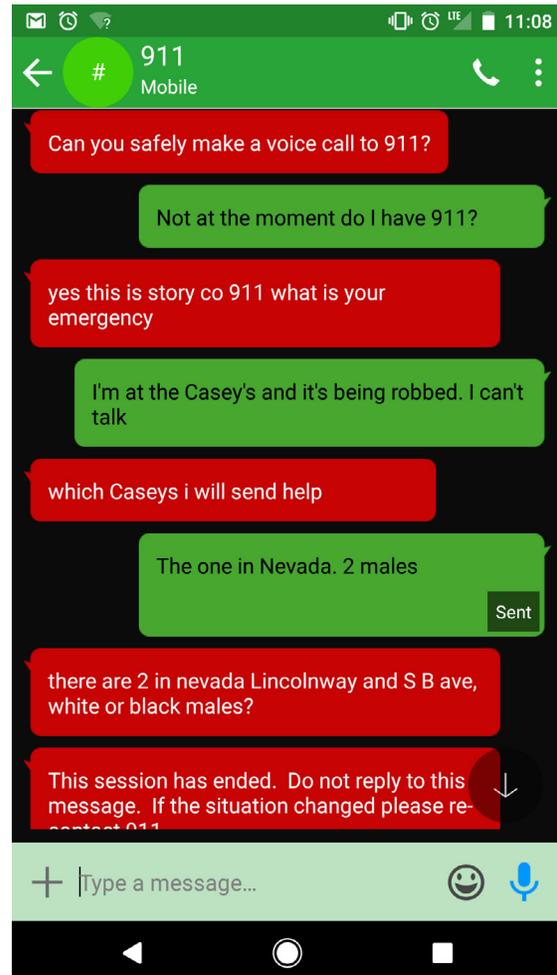
shrinks the technological footprint in each PSAP equipment room, and uses cloud-based technology and economies of scale to achieve cost savings. This consolidation plan is further discussed in the Plan on Virtual 911 Consolidation [here](#).

Redundancy and Secondary Network

Realizing the need for additional redundancy, HSEMD began a project with Comtech TCS to provide additional safeguards in the event of a statewide or large regional outage of the ESInet. Thirteen of the largest PSAPs were identified to act as part of a secondary ESInet. Completely diverse fiber, circuits, and State systems were used to build this second network, separate from the primary ICN backbone. The secondary ESInet is able to automatically route calls during an outage to the 13 PSAPs that would answer calls on behalf of the area experiencing the outage. There is an ongoing cost for managing this network of approximately \$259,000 annually, and the secondary ESInet has been built at a cost of \$101,355. Two PSAPs are yet to be added, which will complete the network.

Text-to-911

In an effort to facilitate the more rapid deployment of Text-to-911, HSEMD has contracted with six customer premise equipment (call-processing equipment) vendors to implement Text-to-911 in the PSAPs. This contract was put in place where existing vendor or customer relationships existed, and merely seeks to fund and centralize the rollout of the service statewide. Text-to-911 has been shown to save lives in other states in incidents including home intruders, domestic violence, and is instrumental for the deaf and hard-of-hearing community. Even in Iowa, positive outcomes have been achieved through the use of Text-to-911. Currently, 105 PSAPs representing 94 of Iowa's 99 counties are able to receive Text-to-911, as shown in Attachment 3. That is an increase of 93 answering points from the same time last year.



Geographic Information Systems, Aerial Photography, and NG911

Geographic Information Systems (GIS) technology provides the critical data backbone of the NG911 network and is key for call routing, call handling, call delivery, location validation, and emergency response. Data from GIS also provides dispatchers and responders access to additional information such as location, and details about the caller to include the caller's service provider or telematics. Information sharing is essential to building statewide GIS datasets, as more than 100 different data owners need to share information for the NG911 system. HSEMD will be entering the third year of a three-year, \$1.3 million contract with Surdex to provide aerial photography for use in all 113

Current Status and Modernization of the E911 System

PSAPs. A seamless, statewide imagery dataset can be used as a base map for the NG911 GIS activities in Iowa. Telecommunicators can use this imagery, along with the GIS data, to help provide situational awareness throughout the state to dispatch responders. The aerial photography is already being shared with other State government agencies and all levels of local government. It saves a significant amount of money as many counties were contracting for flights on their own – at an approximate cost of \$60,000 per county – and the data was not shareable outside that jurisdiction.

Additionally, SF 500 created GIS grants to assist local 911 service boards in the creation, improvement, and maintenance of their GIS information. HSEMD has offered \$15,000 grants per PSAP to help facilitate this critical local data. Thus far in FY 2018, 35 local 911 service boards have taken advantage of the grant, at a statewide total of \$642,687 (Attachment 4).

HSEMD, with support from GeoComm Inc., has developed and updated statewide NG911 GIS standards for Iowa. A committee of local GIS partners continue to assist with ongoing review and revision of the standards. The standards and GIS database schema provide a template and direction for the NG911 GIS community. The local GIS data feeds the statewide GIS portal, which is available for all PSAPs to share common data and location information available through the mapping systems at the PSAPs. HSEMD and GeoComm continue to work on assessing local data and providing reports where GIS data corrections or updates are needed. GeoComm is serving the Iowa NG911 GIS portal allowing the locals to upload their GIS data and view all of the other datasets in Iowa. HSEMD will continue to work with GeoComm, which will continue to process the data and aggregate the information for use in the statewide NG911 GIS system.

Grants to Local PSAPs

Through HF 2439, a maximum amount of \$4.4 million was approved for consolidation grants for FY 2017

along with \$100,000 for 911 council travel, public education, and training. Approved applicants are listed in Attachment 5. Of this \$4.4 million, more than \$4 million was spent on virtual consolidation grants, the majority of which represented statewide or regional radio projects. Approximately \$70,000 was used toward 911 council travel, public education, and training. The remaining \$300,000 was passed to local 911 service boards equally, in accordance with Iowa Code 34A.

Future 911 Considerations

Now is the time to determine how 911 will look in Iowa for the next 5-10 years. Ongoing and planned NG911 initiatives are sustainable into the future under the current model. Additionally, NG911 provides opportunities for cost savings, standardization throughout the state, economies of scale, and shared services at the technological level. Throughout the last three years, the Iowa Legislature and HSEMD have been interested in achieving cost savings in the program. Through this joint effort, HSEMD has worked toward achieving a cost savings for local PSAPs. Through proposed virtual consolidation efforts, HSEMD believes expenses at local PSAPs can be decreased while maintaining, if not improving, the quality of PSAP operations. Another benefit of virtual consolidation becomes the ease and promotion of future physical consolidation. Technology and public expectation of services provided continue to change and expand. To keep the 911 system viable, Iowa must include equipment replacement considerations in future initiatives.

Throughout this three-year process of identifying the best way to achieve statewide cost savings in the 911 program, HSEMD has produced a number of reports. Click the links to view each report:

- [2014: 911 Efficiencies Study](#)
- [2015: 911 PSAP Data Analysis Report](#)
- [2016: Study of Adequacy of \\$1 Surcharge and Biennial Cost Report](#)
- [2018: Plan on Virtual 911 Consolidation](#)

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, 2017, the wireless surcharges totaled \$26,842,513, an increase of \$135,888 from the same time frame the previous year.

Iowa 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 175 competitive local exchange service providers. Each local telephone service provider remits collected surcharge funds directly to the respective local 911 service board on a quarterly basis. In FY 2016, the total of wireline surcharges were \$11,163,568, a decrease of \$1,226,601 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 with Sept. 30, 2017, is \$2,248,366. This amount is \$102,895 more than 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 (VoIP) companies. These companies are now required to collect and remit surcharges as a communications service provider.

Cable TV 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 (e.g. Vonage) 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:

1. To Homeland Security and Emergency Management for program administration, an amount equal to that appropriated by the General Assembly. In 2017, this amount was \$250,000.

Subscriber Surcharges and Distribution

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) sets out how the 60 percent amount is to be distributed among the 113 PSAPs in the state. For the 12 months ending Sept. 30, 2017, this amount was \$17,454,528, an increase of \$3,169,813 from the previous 12 months. The reason for the large increase is due to the fact that this is the first year that the local 911 service boards received 60 percent of the wireless funding, as compared to previous years when it was 46 percent.
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 services. For the 12 months ending Sept. 30, 2017, this amount was \$679,289, an increase of \$156,996 from the previous 12 months.
4. To communication service providers, wireline carriers for eligible expenses for transport costs of calls between the 911 network routers and the local PSAPs related to the delivery of wireless 911 services and the integration of

an IP-enabled, Next Generation 911 network. For the 12 months ending Sept. 30, 2017, this amount was \$5,519,668, an increase of \$2,537,443. The reason for the large increase includes additional expenditures on the Text-to-911 and aerial photography projects.

5. For the purposes of 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 State FY 2017, the amount spent on these items was \$69,907.05 out of the allowable \$100,000. This was an increase of \$3,730.64 spent the previous fiscal year.

Attachment 6 describes the disparity of revenue and expenses for the 12 months ending Sept. 30, 2017 (Federal FY 2017).

Polk County, with 202,031, took the most 911 calls (22% of statewide wireless calls). With 650 wireless calls, Audubon County received the least (.07% of statewide calls). Local PSAPs took 99.72% of wireless calls. The remaining calls were taken by Department of Public Safety answering points. County wireless revenue per wireless call varied from a low in Polk County of \$7.32 per wireless call to a high in Audubon County of \$146.69 per call.

Conclusion

Advancements in technology allow for more accurate, efficient, and redundant systems that enable citizens to contact 911 to access life-saving resources. While cost savings in some areas have been achieved through economies of scale and creation of the NG 911 network, dedicated funding and resources still need to be continued for the program. Future expenses for life-cycle replacement and emerging technologies need to be considered as we continue to work toward a fully-implemented, end-to-end NG911 environment. As technology evolves and advances, the people of Iowa expect its public safety lifeline to adapt and make parallel strides to stay technologically relevant. As more and more citizens maintain only a mobile phone, it is imperative the NG 911 system 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, we continue to push for the capability for photos and video to be received by the PSAP from callers contacting 911, and relayed to responders in the field. The coming deployment of FirstNet, which will provide a dedicated public safety high speed wireless data network, will serve

to transport this additional data to first responders. The deployment of FirstNet and the integration of the 911 system is already being planned and discussed. These will be costly initiatives. The cost-saving measures achieved through virtual consolidation will save local PSAPs money, allowing them to consider how to better leverage emerging technologies while also exploring possible pathways to additional consolidation efforts.

The Iowa Department of Homeland Security and Emergency Management will continue to work in a collaborative manner with the Iowa 911 Communications Council, the Iowa Utilities Board, the Iowa Telecommunications Association, the Iowa Statewide Interoperable Communications System Board, the Iowa Communications Network, and local 911 service boards to maintain and improve the level of 911 services within the state.

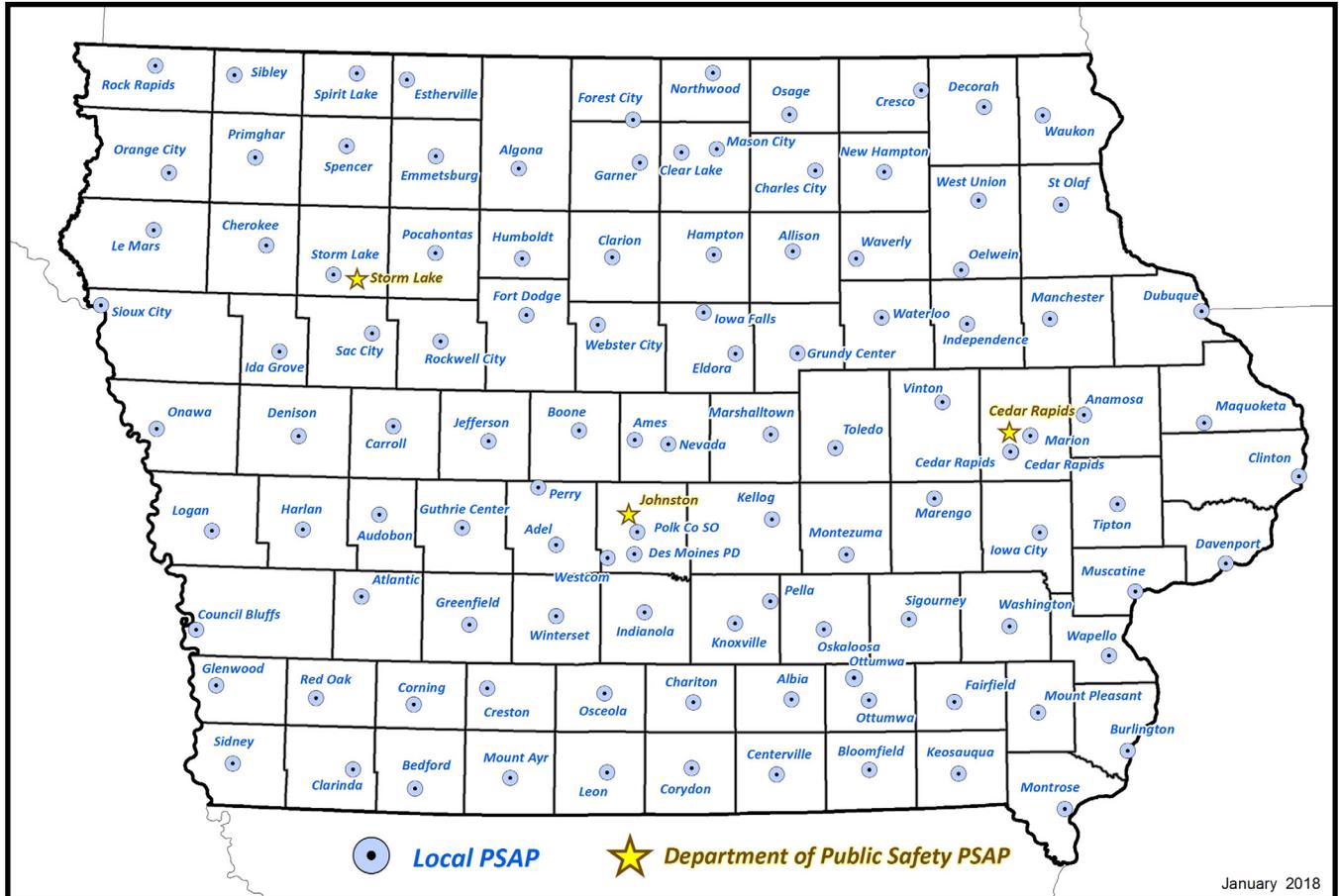
For more information about Iowa's 911 program, visit: www.homelandsecurity.iowa.gov.

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



Attachment 1

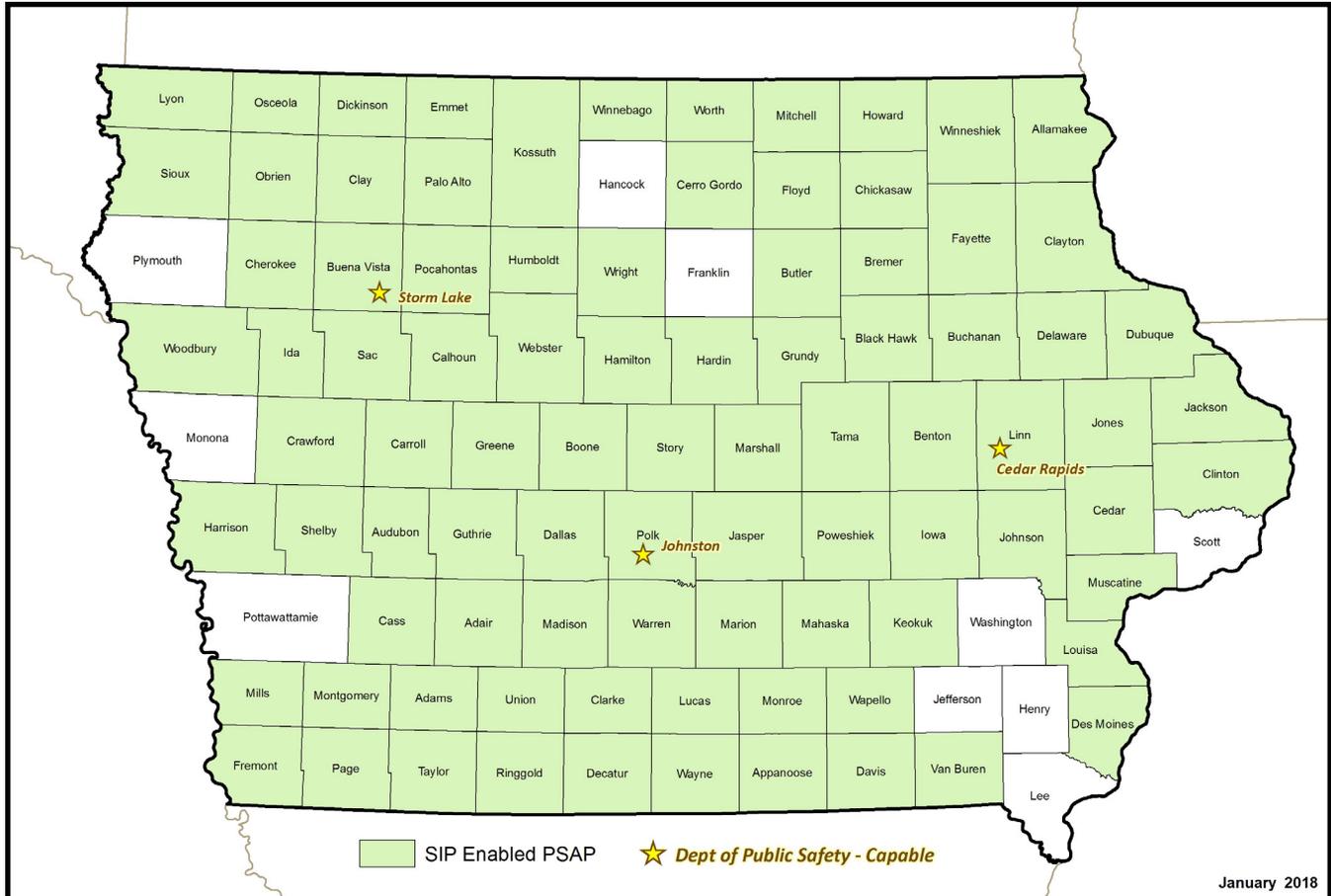
Iowa's Public Safety Answering Points



Attachment 2

SIP-Enabled PSAPs

PSAPs receiving end-to-end IP-enabled wireless calls over the ESInet

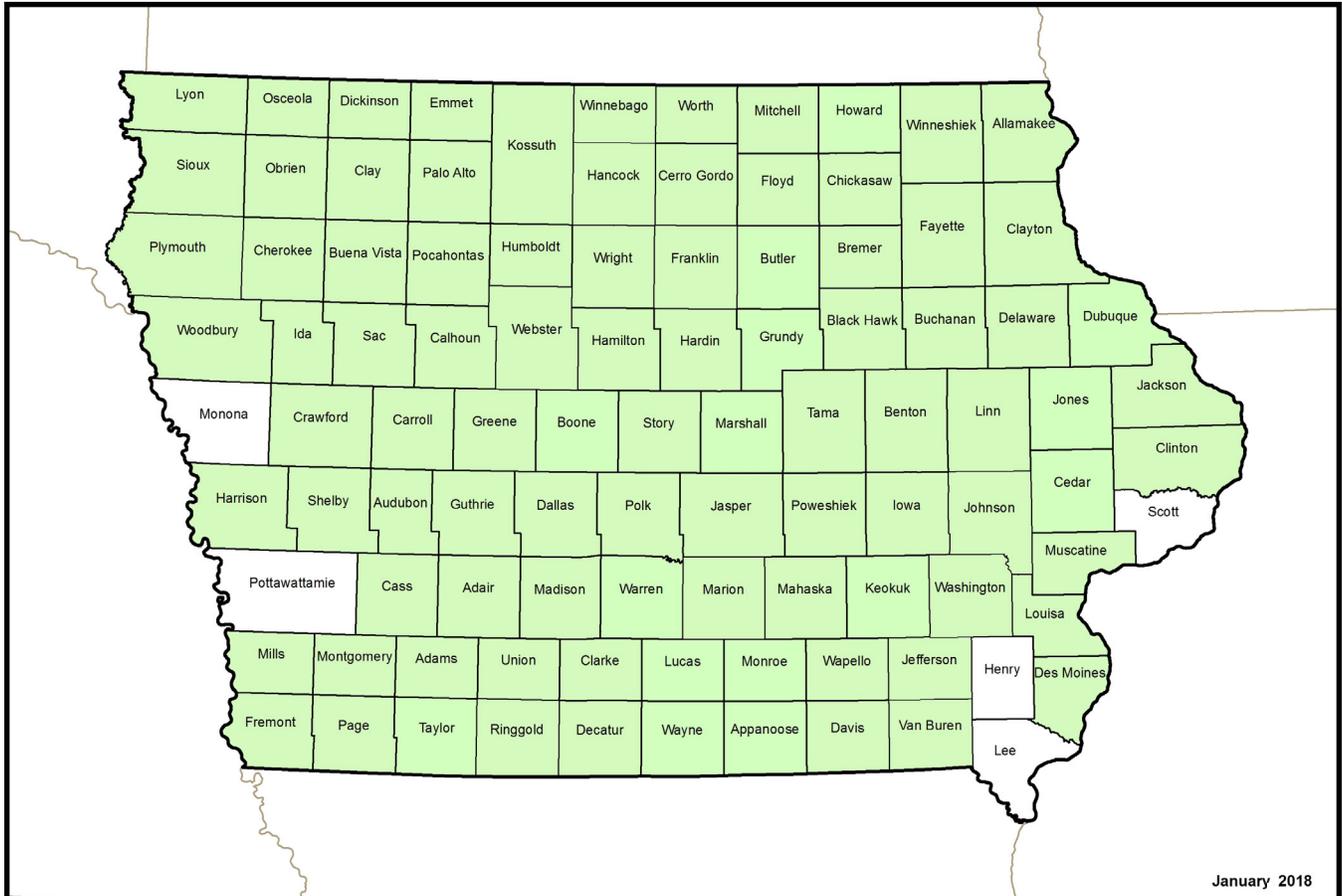


January 2018

Attachment 3

Text-to-911-Enabled PSAPs

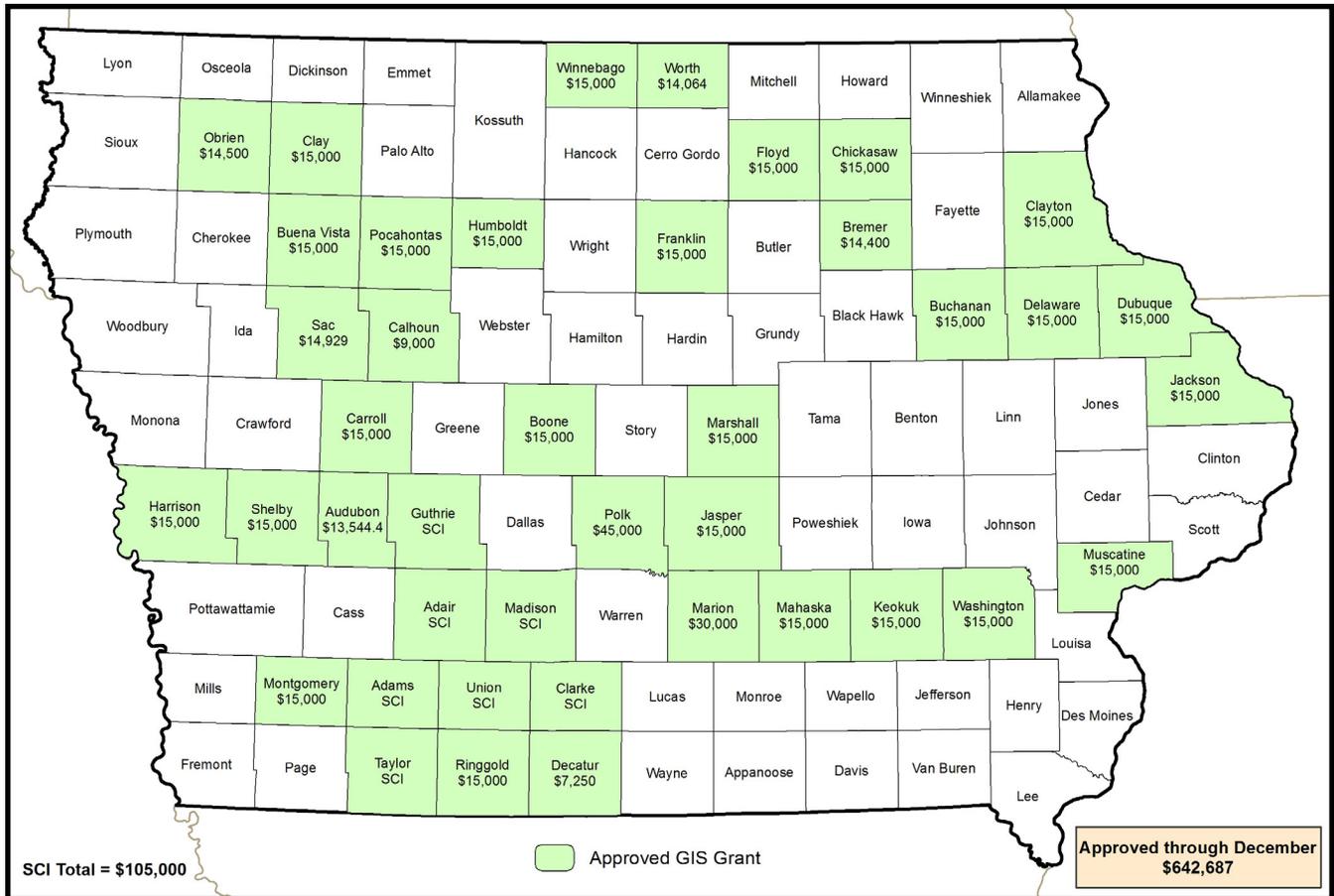
*PSAPs capable of receiving text messages**



*As of 2017, six mobile carriers allow Text-to-911 in Iowa: AT&T, i-Wireless, Sprint, T-Mobile, U.S. Cellular, and Verizon.

Attachment 4

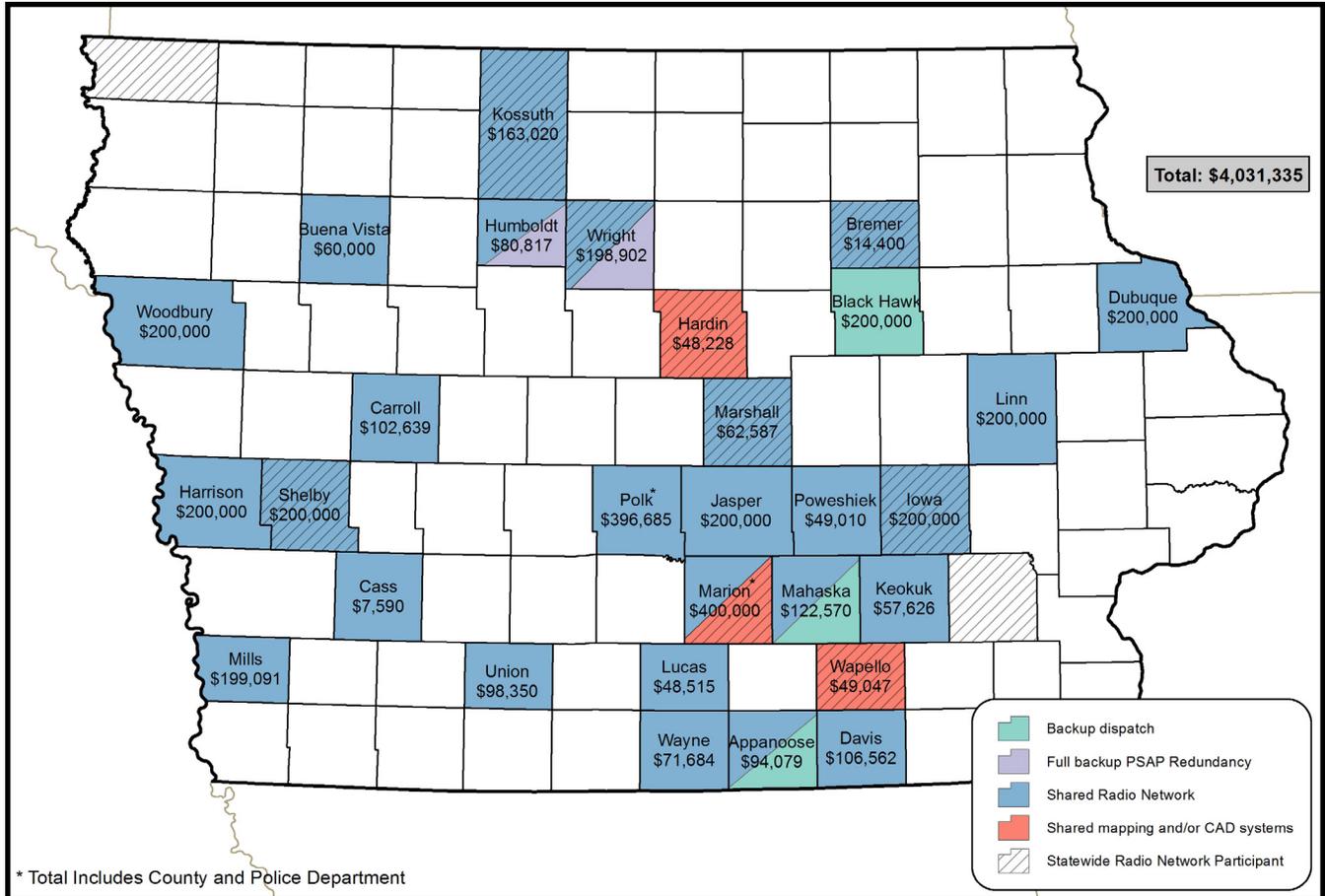
Approved GIS Grant Applications



The South Central Iowa (SCI) Regional Board is comprised of Adair, Adams, Clarke, Guthrie, Madison, Taylor, and Union counties. The total grant amount approved for SCI was \$105,000.

Attachment 5

2017 Consolidation Grant: Overview



Attachment 6

Revenues and Expenditures

Oct. 1, 2016, through Sept. 30, 2017

Revenues	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Totals
Surcharge Funds Received	\$ 7,286,753.43	\$ 7,308,134.67	\$ 7,178,053.03	\$ 7,317,939.01	\$ 29,090,880.14
Interest	\$ 46,962.10	\$ 32,512.21	\$ 27,331.60	\$ 27,598.34	\$ 134,404.25
Total Revenues	\$ 7,333,715.53	\$ 7,340,646.88	\$ 7,205,384.63	\$ 7,345,537.35	\$ 29,225,284.39

Expenditures

HSEMD Administration	\$ 250,000.00	*	*	*	\$ 250,000.00
Wireless Service Providers-cost recovery for wireless Phase 1 services	\$ 252,512.64	\$ 174,856.70	\$ 124,002.05	\$ 127,918.50	\$ 679,289.89
Network Costs	\$ 1,448,385.91	\$ 1,765,070.36	\$ 1,364,530.29	\$ 882,353.04	\$ 5,460,339.60
GIS Grants Paid to Local 911 Service Boards†	\$ 59,329.00	NA	NA	NA	\$ 59,329.00
PSAP Distribution (60% of surcharge revenue)	\$ 4,372,052.07	\$ 4,384,880.80	\$ 4,306,831.82	\$ 4,390,763.41	\$ 17,454,528.10
Council Travel, Public Education, PSAP Supervisor Training	\$ 2,879.03	\$ 58,361.39	\$ 6,302.08	\$ 5,140.23	\$ 72,682.73
Consolidation Grants and Surplus Paid Out	\$ -	\$ 3,365,699.83	\$ 964,550.52	\$ -	\$ 4,330,250.35
Total Expenditures	\$ 6,385,158.65	\$ 9,748,869.08	\$ 6,766,216.76	\$ 5,406,175.18	\$ 28,306,419.67

Additional to Operating Surplus	\$ 951,435.92	\$ 953,339.57	\$ 1,347,520.47	\$ 1,882,002.40	\$ 5,134,298.36
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**Full annual allocation of \$250,000 was provided to HSEMD in Q1, 2017.*

†The GIS Grants Paid to Local 911 Service Boards were not available until Q1, 2018.

Attachment 7

Wireless Calls and Payment Distribution

Oct. 1, 2016 through Sept. 30, 2017

County	Wireless Calls	Wireless Surcharge Remittance Received	Wireless Revenue per Wireless Call	Percentage of Statewide Calls
Allamakee	1,889	\$ 145,781.70	\$ 77.17	0.21%
Appanoose	2,551	\$ 122,358.00	\$ 47.96	0.28%
Audubon	650	\$ 95,347.62	\$ 146.69	0.07%
Benton	4,060	\$ 172,021.17	\$ 42.37	0.45%
Black Hawk	45,005	\$ 414,767.05	\$ 9.22	5.00%
Boone	5,064	\$ 150,235.62	\$ 29.67	0.56%
Bremer	3,946	\$ 116,464.41	\$ 29.51	0.44%
Buchanan	3,421	\$ 139,109.97	\$ 40.66	0.38%
Buena Vista	3,264	\$ 139,509.59	\$ 42.74	0.36%
Butler	1,826	\$ 130,309.80	\$ 71.36	0.20%
Calhoun	1,892	\$ 128,867.41	\$ 68.11	0.21%
Carroll	3,199	\$ 137,208.87	\$ 42.89	0.36%
Cass	3,826	\$ 140,201.15	\$ 36.64	0.42%
Cedar	5,541	\$ 154,697.45	\$ 27.92	0.62%
Cerro Gordo	12,897	\$ 206,107.88	\$ 15.98	1.43%
Cherokee	1,594	\$ 127,903.23	\$ 80.24	0.18%
Chickasaw	1,464	\$ 113,019.45	\$ 77.20	0.16%
Clay	2,773	\$ 134,616.50	\$ 48.55	0.31%
Clayton	2,706	\$ 177,532.58	\$ 65.61	0.30%
Clinton	15,366	\$ 245,318.33	\$ 15.97	1.71%
Crawford	3,024	\$ 164,408.86	\$ 54.37	0.34%
Dallas	8,255	\$ 176,420.74	\$ 21.37	0.92%
Davis	851	\$ 108,821.54	\$ 127.87	0.09%
Decatur	1,940	\$ 121,541.27	\$ 62.65	0.22%
Delaware	2,258	\$ 132,593.49	\$ 58.72	0.25%
Des Moines	14,977	\$ 187,762.00	\$ 12.54	1.66%
Dickinson	3,061	\$ 103,296.03	\$ 33.75	0.34%
Dubuque	21,913	\$ 269,716.88	\$ 12.31	2.43%
Emmet	1,517	\$ 93,152.54	\$ 61.41	0.17%
Fayette	3,136	\$ 172,384.92	\$ 54.97	0.35%
Floyd	3,308	\$ 124,373.25	\$ 37.60	0.37%
Franklin	1,829	\$ 119,951.43	\$ 65.58	0.20%
Fremont	1,677	\$ 116,509.25	\$ 69.47	0.19%
Greene	1,438	\$ 125,610.45	\$ 87.35	0.16%
Grundy	1,817	\$ 114,562.89	\$ 63.05	0.20%
Hamilton	3,821	\$ 142,572.69	\$ 37.31	0.42%
Hancock	1,251	\$ 124,732.54	\$ 99.71	0.14%
Hardin	3,238	\$ 141,269.63	\$ 43.63	0.36%
Harrison	4,246	\$ 169,608.94	\$ 39.95	0.47%
Henry	4,382	\$ 118,857.58	\$ 27.12	0.49%
Howard	1,233	\$ 105,201.44	\$ 85.32	0.14%
Humboldt	1,522	\$ 99,566.80	\$ 65.42	0.17%
Ida	1,139	\$ 96,349.46	\$ 84.59	0.13%
Iowa	4,423	\$ 148,474.65	\$ 33.57	0.49%
Jackson	3,389	\$ 153,969.79	\$ 45.43	0.38%
Jasper	11,404	\$ 223,335.40	\$ 19.58	1.27%
Jefferson	3,197	\$ 110,938.84	\$ 34.70	0.35%
Johnson	37,309	\$ 373,000.45	\$ 10.00	4.14%
Jones	3,295	\$ 139,053.32	\$ 42.20	0.37%
Keokuk	1,313	\$ 126,545.39	\$ 96.38	0.15%

County	Wireless Calls	Wireless Surcharge Remittance Received	Wireless Revenue per Wireless Call	Percentage of Statewide Calls
Kossuth	1,782	\$ 207,036.13	\$ 116.18	0.20%
Lee	11,359	\$ 184,951.75	\$ 16.28	1.26%
Linn	66,103	\$ 590,950.79	\$ 8.94	7.34%
Louisa	2,253	\$ 100,936.31	\$ 44.80	0.25%
Lucas	1,485	\$ 99,140.50	\$ 66.76	0.16%
Lyon	1,465	\$ 129,001.63	\$ 88.06	0.16%
Mahaska	4,655	\$ 147,386.02	\$ 31.66	0.52%
Marion	5,569	\$ 156,801.46	\$ 28.16	0.62%
Marshall	10,953	\$ 189,342.31	\$ 17.29	1.22%
Mills	4,208	\$ 118,297.38	\$ 28.11	0.47%
Mitchell	1,102	\$ 103,496.16	\$ 93.92	0.12%
Monona	1,755	\$ 152,814.71	\$ 87.07	0.19%
Monroe	1,611	\$ 99,985.80	\$ 62.06	0.18%
Montgomery	2,259	\$ 102,349.90	\$ 45.31	0.25%
Muscatine	12,089	\$ 171,935.76	\$ 14.22	1.34%
O'Brien	2,554	\$ 133,388.07	\$ 52.23	0.28%
Osceola	1,001	\$ 88,979.21	\$ 88.89	0.11%
Page	2,774	\$ 127,429.14	\$ 45.94	0.31%
Palo Alto	1,269	\$ 124,134.17	\$ 97.82	0.14%
Plymouth	2,936	\$ 193,122.67	\$ 65.78	0.33%
Pocahontas	1,205	\$ 125,493.86	\$ 104.14	0.13%
Polk	202,031	\$ 1,477,877.80	\$ 7.32	22.43%
Pottawattamie	48,666	\$ 513,529.60	\$ 10.55	5.40%
Poweshiek	4,520	\$ 148,879.35	\$ 32.94	0.50%
Ringgold	794	\$ 115,047.20	\$ 144.90	0.09%
Sac	1,294	\$ 126,166.15	\$ 97.50	0.14%
Scott	98,638	\$ 746,157.34	\$ 7.56	10.95%
Shelby	1,407	\$ 129,460.47	\$ 92.01	0.16%
Sioux	4,683	\$ 185,997.92	\$ 39.72	0.52%
Story	16,791	\$ 231,620.07	\$ 13.79	1.86%
Tama	4,409	\$ 174,935.70	\$ 39.68	0.49%
Van Buren	1,064	\$ 107,377.35	\$ 100.92	0.12%
Wapello	11,307	\$ 168,200.70	\$ 14.88	1.26%
Warren	9,768	\$ 181,239.62	\$ 18.55	1.08%
Washington	4,452	\$ 145,599.71	\$ 32.70	0.49%
Wayne	903	\$ 113,569.47	\$ 125.77	0.10%
Webster	9,975	\$ 210,863.56	\$ 21.14	1.11%
Winnebago	1,595	\$ 93,378.60	\$ 58.54	0.18%
Winneshiek	2,240	\$ 154,282.06	\$ 68.88	0.25%
Woodbury	36,302	\$ 415,918.16	\$ 11.46	4.03%
Worth	2,149	\$ 97,096.24	\$ 45.18	0.24%
Wright	1,985	\$ 131,485.68	\$ 66.24	0.22%
South Central Iowa Regional Board	13,616	\$ 814,070.26	\$ 59.79	1.51%
Public Safety	2,558	\$ 28,841.12	\$ 11.27	0.28%
TOTAL:	900,631	\$ 17,454,528.10		69.01%
AVERAGE:	14,126	\$ 224,058.36	\$ 52.84	1.57%