

# **Enhanced 911 Status Report Iowa Homeland Security and Emergency Management Division Department of Public Defense**

## **Enhanced 911**

Enhanced 911 (E911) means a service which provides the user of a public telephone system the ability to reach a public safety answering point (PSAP) by dialing the digits 911, and which has the following additional features:

- a. Wireline, Voice over Internet Protocol (VoIP), and Wireless systems route an incoming 911 call to the appropriate public safety answering point selected from the public safety answering points operating in a 911 service area.
- b. Wireline and VoIP systems automatically display the name, address, and telephone number of an incoming 911 call as well as the public safety agency servicing the address at the appropriate public safety answering point.
- c. Wireless systems automatically display location of the tower that received the call and the call back number of the phone used to make the 911 call. This is referred to as a Phase 1 call. A Phase 2 call will include latitude and longitude location information of the phone making the 911 call. A Phase 2 call allows the PSAP to map the location of the caller within 300 feet.

## **Wireline E911**

### **History**

In 1986, the General Assembly passed a law that created a 29 member State Emergency Telephone Number Commission. This commission was directed to study the issue of statewide implementation of 911 services and submit a written report with its recommendations. The Commission issued their report in January 1987 and the legislative language contained in the report was introduced as House File 2400. House File 2400 was passed by the General Assembly and was signed into law by Governor Branstad on May 6, 1988. This law has been amended several times, most recently during the 2004 session and is codified as Code of Iowa, Chapter 34A.

Under the provisions of Chapter 34A (Administrative Rules 605-Chapter 10), the Homeland Security and Emergency Management Division has responsibility for the administration of the Iowa Enhanced 911 (E911) Program. The law also requires that each county in the state establish a joint 911 service board. Each board has the responsibility to develop a countywide E911 plan, detailing the manner and cost for the implementation of an E911 system. However, joint 911 service boards are not

required to implement service. The Homeland Security and Emergency Management Division has the responsibility to review and approve these plans. All 99 counties have approved E911 service plans.

## **Surcharge**

Should a joint E911 service board decide to implement service, they may elect to fund the recurring and non-recurring cost of the system with an E911 surcharge on each telephone access line within the E911 service area. In order to impose the surcharge, a referendum must be passed by a simple majority of the voters within the service area. The amount of surcharge to be placed on the referendum is determined by a formula, established in law, and can vary from \$.25 to \$2.50 per month, per telephone access line. The \$2.50 surcharge can only be in place for 24 months, after which time the surcharge would revert to \$1.00. All increases beyond \$1.00 require a voter referendum for each 24 month period.

If the voters approve the referendum, the county commissioner of elections must certify the election to the Homeland Security and Emergency Management Division and the joint E911 service board must make a written request that the surcharge be imposed. The Homeland Security and Emergency Management Division then has the responsibility to order the implementation of the surcharge with each telephone service provider, providing service within the E911 service area. Within the state there are 165 incumbent telephone service providers and numerous competitive service providers. Each telephone service provider remits collected surcharge funds directly to the respective joint E911 service board on a calendar quarterly basis.

*As of December 31, 2008, surcharge was being collected by the service boards at the following rates:*

<i>Surcharge</i>	
<i>Surcharge = \$1.00</i>	<i>81 counties</i>
<i>Surcharge &lt; \$1.00</i>	<i>15 counties</i>
<i>Surcharge &gt; \$1.00</i>	<i>2 counties</i>
<i>Surcharge = \$0.00</i>	<i>1 county</i>
<i>(See Attachment #1)</i>	

## Coverage

The entire State of Iowa provides Enhanced 911 Wireline Service to all its citizens.

# Wireless E911

## History

In 1996, the Federal Communications Commission (FCC) put forth a mandate that requires wireless E911 service to be put in place and function similarly to wireline E911. The 1998 General Assembly amended Code of Iowa Chapter 34A in response to the FCC action.

Under this law, the Homeland Security and Emergency Management Division is given the responsibility for the “wireless” E911 program. The 911 Program within the Homeland Security and Emergency Management Division is funded by an annual appropriation of wireless surcharge funds made by the Iowa Legislature.

## Surcharge

In accordance with 34A (Administrative Rules 605-Chapter 10), the State E911 program manager ordered the collection of a statewide wireless E911 \$0.50 surcharge to begin on January 1, 1999. The amended surcharge rate of \$0.65 went into effect on July 1, 2004. This surcharge is collected by the wireless service providers and remitted to the State E911 program on a quarterly basis. These funds are to be used for the development and on-going operation of a wireless E911 phone network.

By law, the surcharge is expended in the following order: Homeland Security and Emergency Management for program administration, 21% of the collected funds to fund wireless service providers Phase 1 costs, wireline carrier’s transport costs, 911 database and routing charges, and PSAP funding of 25% of the collected funds.

It should be noted that wireless carriers are only allowed to recover costs that are related to Phase 1 service. Any additional costs that they incur to provide Phase 2 service are their responsibility. The wireless carriers agreed to this payment methodology during the 2004 legislative session

In the past, the revenue generated by the surcharge had been insufficient to address all cost recovery obligations in providing Wireless E911 Phase 1 service. Cost savings were achieved through a tariff renegotiation with Qwest Communications. These savings allowed the wireless surcharge to fully pay the quarterly obligations as well as make partial payments on the outstanding debt owed to wireless carriers and the wireline companies that transport the call. The final payment against the debt was made in January 2006.

## Phase 1 Implementation

As of December 31, 2002, all 99 counties in the state have all wireless service providers providing Phase 1 (call back number and location of tower that received the call) service.

## **Phase 2 Implementation**

There are two technical requirements for the PSAP to be able to answer Phase 2 Wireless E911 calls. The first is for the PSAP to be able to accept the latitude/longitude information that accompanies a Phase 2 E911 call. The second requirement is that the PSAP has an automatic mapping system that can plot the location data in a format the call taker can utilize. All PSAPs in Iowa are capable of accepting Phase 2 Wireless E911 calls. A portion of the funds needed to complete these upgrades were grant funds obtained from the Public Safety Foundation of America.

As of December 31, 2007, 122 PSAPs in all 99 counties were accepting Phase 2 calls from at least one wireless service provider. Please see Attachment #2.

## **Voice over Internet Protocol (VoIP) E911**

In June of 2005 the Federal Communications Commission issued guidance that required VoIP phone service providers to deliver E911 calls through the native 911 network. In response to this guidance the State E911 Program began discussions with both local and industry representatives on the best method to deliver the VoIP E911 call to the PSAP. By mutual agreement it was determined that the most efficient way to deliver the call is via the wireless E911 network. Presently, VoIP service providers are connecting to the wireless E911 network to deliver their customers 911 calls to the appropriate PSAP.

While the wireless E911 network provides the most technologically efficient platform to deliver the call, there are underlying issues that will require further consideration. Based on an FCC ruling declaring VoIP companies data service providers, these companies are not required to collect an E911 surcharge by Iowa law.

## **2009 Goals and Initiatives**

**In 2009, there are several goals to be achieved and multiple initiatives that will need to be addressed.**

**First, present law allows the wireless E911 surcharge to generate carryover funds for the improvement of the wireless E911 network and the PSAPs that answer the wireless E911 calls. It is our intention to use these funds to put in network elements to allow for the movement of calls and data from Iowa PSAPs to PSAPs in neighboring states. Additionally these funds will be used to upgrade the data circuits within the network so they may better support the PSAP. These improvements will improve the capabilities of the network while also improving the redundancy of the wireless 911 system.**

**Secondly, the public safety community needs to plan for new technologies entering the 911 system. VoIP is the first of many new technologies that will require access to the 911 system. We feel that the State E911 Program should take the lead on evaluating these new technologies and their impact on 911.**

**Third, it appears that the technical and political environment is pointing towards the melding of all emergency communications systems. As interoperable public safety communications solutions are being reviewed, it is imperative that 911 be a part of these discussions. To this end, the State E911 Program is in the final stages of a Next Generation 911 Trial with Qwest, Intrado, and Positron, along with various other equipment vendors. We plan on using the data from the test to develop a plan to move forward with a Next Generation 911 system for the State of Iowa.**

**Finally, the Homeland Security and Emergency Management Division will continue to work hand in hand with the Statewide E911 Communications Council, the Iowa Utilities Board, the Iowa Telecommunication Association, the Iowa Statewide Interoperable Communications Board, and Local E911 Service Boards to maintain and improve the level of 911 services within the state.**

Attachment #1

# Iowa E911 Program

## Wireline Surcharge Status Report

Lyon \$1.00	Oceola \$1.00	Dickinson \$ .75	Emmet \$ 2.00	Kossuth \$ 1.00	Winnebago \$1.00	Worth \$1.00	Mitchell \$1.00	Howard \$1.00	Winneshiek \$1.00	Allamakee \$1.00	
Sioux \$ 1.00	O'Brien \$1.00	Clay \$1.00	Palo Alto \$1.00	Hancock \$1.00	Cerro Gretto \$ .50	Floyd \$1.00	Chickasaw \$1.00	Fayette \$1.00	Clayton \$1.00		
Plymouth \$1.00	Cherokee \$1.00	Buena Vista \$1.00	Pocahontas \$1.00	Humboldt \$1.00	Wright \$ .75	Franklin \$1.00	Butler \$1.00	Bremer \$ .73	Buchanan \$ .82	Delaware \$1.00	Dubuque \$1.00
Woodbury \$1.00	Ida \$1.00	Sac \$1.00	Calhoun \$1.00	Webster \$ .75	Hamilton \$1.00	Hardin \$1.00	Grundy \$1.00	Black Hawk \$ .98	Jones \$ .98	Jackson \$1.00	Clinton \$ .75
Monona \$1.00	Crawford \$1.00	Carroll \$1.00	Greene \$1.00	Boone \$ .85	Story \$1.00	Marshall \$1.00	Tama \$1.00	Benton \$1.00	Linn \$ .25	Cedar \$1.00	Scott \$ .00
Harrison \$1.00	Shelby \$1.00	Audubon \$1.00	Guthrie \$1.00	Dallas \$1.00	Polk \$1.00	Jasper \$1.00	Poweshiek \$1.00	Iowa \$1.00	Johnson \$ .45	Muscatine \$ .60	Louis \$1.00
Pottawattamie \$1.00	Cass \$1.00	Adair \$1.00	Madison \$1.00	Warren \$1.00	Marion \$1.00	Mahaska \$1.00	Keokuk \$1.00	Washington \$1.50	Henry \$1.00	Des Moines \$ .50	Lee \$ .50
Mills \$1.00	Montgomery \$1.00	Adams \$1.00	Union \$1.00	Clarke \$1.00	Lucas \$1.00	Monroe \$1.00	Wapello \$ .85	Jefferson \$1.00	Van Buren \$1.00		
Fremont \$1.00	Page \$1.00	Taylor \$1.00	Ringgold \$1.00	Decatur \$1.00	Wayne \$1.00	Appanoose \$1.00	Davis \$1.00				

**81 Counties Surcharge = \$1.00**

**15 Counties Surcharge < \$1.00**


**2 County Surcharge > \$1.00**

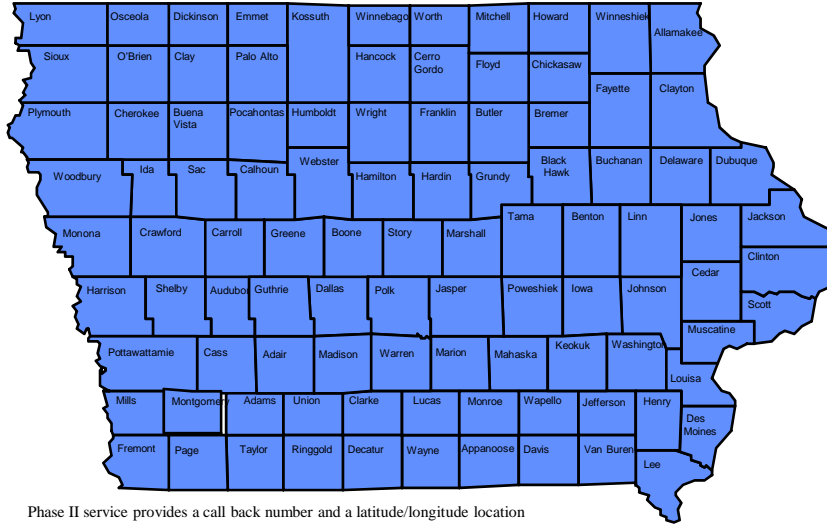
**1 County Surcharge = \$0.00**

*Iowa Homeland Security and  
Emergency Management Division  
December 2, 2008*

**Wireless E911 Phase II Deployments**

Attachment #2

 Phase 2 Service Deployed – 99 Counties – 122 PSAPs



Phase II service provides a call back number and a latitude/longitude location of a caller making a 911 call from a wireless (cellular,PCS) phone.

December 31, 2007