MINNESOTA DEPARTMENT OF PUBLIC SAFETY

2008

Statewide 911 Emergency Telephone

Service Program Report

December 31, 2008

Minnesota Statewide
9-1-1 Program

9-1-1 MINNESOTA

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Statewide 911 Emergency Telephone Service Program Report

I Executive Summary

Introduction

Minnesota's 911 emergency telephone service is a vital component of the State's emergency response system. Dialing 911 provides rapid and effective access to public safety services. Citizens of Minnesota expect that dialing 911 will link them to the right public safety agency and that emergency personnel will have vital location information to help speed the responders to their calls for assistance. The Commissioner of Public Safety is responsible for helping counties implement 911 service and for funding part of the costs of getting 911 calls to the appropriate city, county or state patrol public safety answering point (PSAP).

Reporting Requirement

Minnesota Statutes, Section 403.06, Subdivision 1a requires the Commissioner of Public Safety to prepare an annual report to the legislature. The annual report must include:

- Details of expenditures to maintaining the 911 system;
- 911 fees collected;
- The balance in the 911 Special Revenue Fund; and
- The administrative expenses of the 911 program.

This report explains the 911 expense elements in Appendix A and provides:

(1) The required financial information as of December 31, 2008 (Revenue projections based upon the December 31, 2008 revenue forecasts);
(2) Projections of the 911 program financial position through June 30, 2011;
(3) A brief summary of the status of enhancements and improvements to the Minnesota 911 system, and
(4) Other considerations and risks related to the 911 program.

FY2008 Financial Update

The 911 fee remained the same at 65 cents per access line. The fee generated $50,750,955 in total revenue during the fiscal year 2008. The beginning balance in the 911 Special Revenue Fund was $17,952,296 making the total available funding for the fiscal year $68,703,251. The total expenses for the year were $46,149,788 of which $579,247 were 911 program administration expenses. The year end balance in the 911 Special Revenue Fund was $22,553,463.

Financial Projections (through June 30, 2011)

Minnesota Statute 403.11 was amended in 2008 to increase the 911 fee cap in 2008, 2009 and 2010. This adjustment was made to accommodate the need to complete the construction of Minnesota's statewide public safety radio and communication system (ARMER or Allied Radio Matrix for Emergency Response). The fee cap was not raised on July 1, 2008, however it will

likely be raised to 75 cents on July 1, 2009, to 85 cents on July 1, 2010 and 95 cents on July 1, 2011. The additional revenue will be used to fund the debt service on 911 revenue bonds used to complete the implementation of the ARMER system backbone into the remaining 55 counties of the state. The appropriation language of the 2007 Omnibus Public Safety Bill also provided funding for the costs of operating four phases of the ARMER backbone, for detail design and advanced site development, and to upgrade the existing backbone in the metropolitan area.

Fiscal procedures implemented over the last few years have improved predictability and accountability in the 911 Special Revenue Fund, but the program continues to be plagued by the basic premise that the State should pay the costs of maintaining 911 service for any and all providers that connect to the 911 Network. The competitive nature of the telecommunications industry drives a continued expansion of competitive telecommunication businesses vying for the same customer base. As existing and new telecommunication companies expand their markets, 911 program costs have a potential to rise with no appreciable increase in program revenues or enhancements to the service functionality.

Figure 1 shows 911 program funding through fiscal year 2011. Revenue projections in fiscal year 2010 and 2011 provide for the assumed fee increase authorized by the 2007 legislature. The number of access lines, upon which the 911 fee is collected, is not expected to increase substantially as we move into the future based upon the fact that alternative services such as Voice over Internet Protocol (VoIP) and Wireless services are essentially competing with the traditional landline services for the same customer base. The implications of a transition of legacy telecommunication networks to broadband VoIP networks over the next decade will have a substantial impact upon the costs of the 911 network during the new network build out because that transition will require the simultaneous operation of both the existing 911 network and a new broadband VoIP network as the telecommunications network continues to evolve.

The cost increases in Figure 1 from fiscal year 2008 through 2011 are based upon the appropriations made to complete the ARMER system backbone. In FY2008, the appropriated costs related to the ARMER system substantially exceed 911 receipts resulting in a reduction in the fund balance. Similarly, the transition of the 911 network from a traditional Time Division Multiplexing (TDM) to Voice over IP (VoIP) network will require both networks to be operating simultaneously and therefore it is of vital importance that the fund balance remain intact for the funding of Minnesota's transition to and operation of a Next Generation 911 (NG911) network.

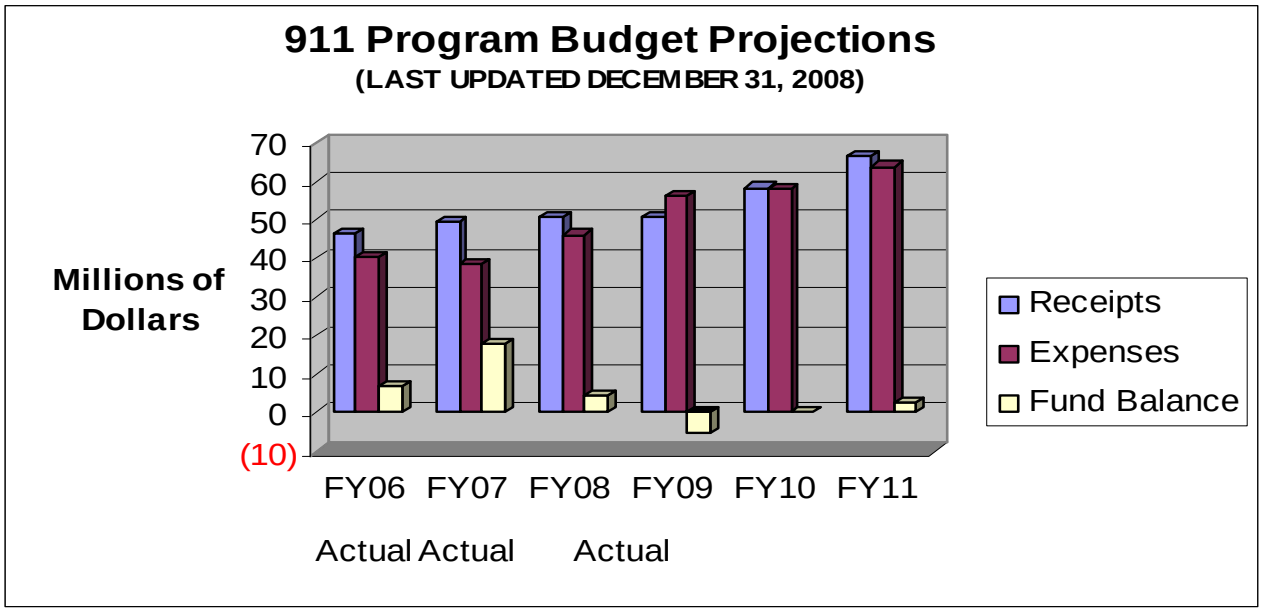

Figure 1 - 911 Program Funding

Status of Enhancements and Improvements to the Minnesota 911 System

Maintaining, enhancing, and expanding 911 services for both wire-line and wireless technologies are provided for under Minnesota Statutes, Section 403.025, Subdivision 7. Significant further progress has been made to integrate wireless 911 into the enhanced 911 systems, to increase the interoperability of separate 911 systems, and to position the state to be able to take advantage of enhanced 911 services for wireless and interconnected Voice over Internet Protocol (VoIP) telecommunications services. Appendix B shows the status of the enhanced 911 as of December 15, 2008. More information about enhanced 911 is available on the Minnesota 911 website at *http://www.911.state.mn.us/*.

The telecommunications industry is migrating from circuit switched to packet-based digital communications over broadband connections. New standards are under development at this time for the Next Generation 911 (NG911) system to match the new technologies and to provide 911 functionality for all modes of communications, including traditional wire-line and wireless voice, Voice over Internet Protocol (VoIP), VoIP over wireless broadband, and text and image devices. In 2008, the Minnesota 911 Program contracted with L. Robert Kimball and Associates to conduct a detailed assessment of the state's existing network, identify any major gaps in the existing network and make recommendations on how to proceed to implement a NG911 network. A NG911 Advisory Group representing various 911 and public safety stakeholders was established to oversee the development of a strategy for migrating to NG911. A copy of this report can be found on the Minnesota 911 website at *http://www.911.state.mn.us* under NG911.

The NG911 project will begin in 2009 and will be carried out in three phases. The first phase will be to establish interoperability between the two existing providers and a new VoIP backbone. The second phase will be to establish one IP (internet protocol) connection to each

Public Safety Answering Point (PSAP) while leaving an existing connection to the current 911 network. The second phase will build out a second total redundant IP path to the PSAP. This new IP network will allow advanced feature functionality such as text messaging, instant messaging, video and automatic crash notification systems and medical information to traverse the 911 emergency communications network. Once this Emergency Services IP Network (ESInet) is established in Minnesota, the long term goal is to establish connectivity with other State 911 networks to establish a nationwide Emergency Services IP Network (ESInet).

Conclusion

The success of the 911 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued success will require further cooperation to maintain program effectiveness as new telecommunications technologies, services, and service providers compete for market share and develop new technologies.

II. Background

The 911 emergency telecommunications system provides rapid access to emergency services. It is a simple concise way to reach police, fire and emergency medical services, which saves time for the caller and reduces overall response time for emergency service providers. The enhanced 911 system allows caller location to be displayed to the 911 call taker so help can be sent even if the caller does not or cannot provide an address, or, as in wireless calls, may be at a location that has no address. Statewide 911 answering is provided by 87 county 911 systems, 10 city systems, 10 public safety answering points (PSAPs) operated by State Patrol, and three PSAPs operated by other government agencies.

The universal emergency 911 number is available throughout the state of Minnesota on wire-line and wireless phone lines. For wireless telephones, Federal Communication Commission (FCC) rules (Title 47, CFR 20.18) require the wireless carriers to put all 911 calls through to a PSAP, even if the caller is a non-subscriber. During 2005, the FCC enacted rules to require access to 911 from inter-connected Voice over Internet Protocol (VoIP) wire-line telephones to include location and callback number including the use of the wireless enhanced 911 technology where available (Title 47, CFR, Part 9). Because Minnesota had deployment of wireless enhanced 911 throughout the state, Minnesota PSAPs were prepared for the initial implementation of enhanced 911 service for inter-connected VoIP services.

The 911 Program at the Department of Public Safety (DPS) provides technical assistance to the cities and counties implementing, maintaining, and improving 911 systems, and oversees system standards. It also pays from money collected through a monthly statewide fee, the state's share of wire-line and wireless 911 costs authorized by Minnesota Statutes, Section 403.11 and contracted for with carriers; and administers payments to 911 agencies in accordance with Minnesota Statutes, Section 403.113.

The 911 fee is set by the Commissioner with the consent of the Commissioner of Finance. The fee collections are deposited in the 911 Special Revenue Fund, and these funds are appropriated by the Legislature to the Commissioner of Public Safety and the Commissioner of Finance to cover the expenses authorized by statute.

III. Fiscal Year 2008 Expenditures

Fiscal Year 2008 expenditures were less than anticipated.

M.S. 403.11: Network and database charges for 911 $10,707,348

Reimbursements were made to local exchange carriers and 911 service providers (Qwest and Independent Emergency Services (IES)) for costs incurred connecting telephone central offices with 911 networks and for maintaining the network (selective routers, databases and connections to Public Safety Answering Points (PSAPs)).

- M.S. 403.113: Enhanced 911 Grants (PSAP payments) $13,664,000

PSAPs in 87 counties, three other governmental entities, and State Patrol Communications centers receive grants from the State to help defray the costs related to providing enhanced 911 service.

- M.S. 403.11: Wireless 911 Transfers $722,898

A portion of the wireless customer 911 fee was directly transferred to the Minnesota State Patrol to offset the costs, including administrative and staffing costs, incurred in handling NG911 emergency calls made from cellular phones.

- M.S. 403.11: Enhanced Wireless 911 Implementation $3,588,124

Wireless carriers sign agreements with the State to implement enhanced 911 wireless services. The implementation costs incurred by these carriers and by the 911 service providers were reimbursed by the State and after implementation, ongoing operations costs are reimbursed.

- M.S. 403.27 & 403.275 Public Safety Radio Bond Debt service $7,559,000

2005 Laws of Minnesota, Chapter 136 consolidated debt service provisions related to the Statewide Public Safety Communication System. Those provisions related to 911 revenue bonds previously sold by the Metropolitan Council and new revenue bonds authorized as part of the 2005 legislation.

- M.S. 403.11: Administrative Expenses Including Salaries $579,247

Total cost is based upon administrative expense allocations, bargaining unit contracts, travel, and other office expenses.

- Laws 2005 c 136 art 1 s 9 sub 7, Medical Resource Communications $683,000

Specific appropriation for grants to the Minnesota Emergency Medical Services Regulatory Board for the Metro East and Metro West Medical Resource Communication Centers that were in operation before January 1, 2000.

- Laws 2005 c 136 art 1 s 9 sub 7, Statewide Radio Board $1,358,190

Specific appropriation for the Statewide Radio Board for costs of design, construction, maintenance of, and improvements to those elements of the first, second, and third phases that support mutual aid communications and emergency medical services, and for recurring charges for leased sites and equipment for those elements of the first, second, and third phases that support mutual aid and emergency medical communication services.

IV. Financial Outlook through June 30, 2011

Current projections of subscriber volumes are based on an assumption that the number of wire-line subscribers will continue to decline modestly as people abandon traditional phone service for wireless and VoIP services and switch modem lines to I.P. based connections. Between 2007 and 2008 there was a 5.5% decrease in wire-line subscribers compared to a quarter percent decline between 2006 and 2007. This decline has been offset by wireless and VoIP subscriber growth, but that growth is leveling off compared to previous years as wireless lines have saturated the market. In 2008, wireless continued to grow at 5% compared to 13% the previous year. VoIP growth quadrupled over 2008 and together with wireless made up for any decline in wire-line subscribers. It is anticipated that some customers will continue to drop their traditional landline phone and adopt the wireless phone as their primary phone service. Many wireless carriers are migrating to Fixed-Mobile Convergence technology which combines voice, data, wireless and video over a single network thus allowing a customer to buy one network connection and use a variety of services over that connection.

The June 29, 2005 FCC order requires inter-connected VoIP service providers to integrate their services into the 911 systems.[1] That order also dealt with the matter of 911 fee collection from VoIP service providers[2] and has been interpreted in conjunction with Minnesota statute as requiring collection and submission of the 911 fee. The VoIP technology, however, allows companies to sign up customers, provide service and receive payments over the internet, making the physical location of subscribers irrelevant to the business transaction. In order to meet the FCC 911 requirements, some VoIP services use self reported subscriber information for Enhanced 911 location data and as the venue for fee collection. Increased effort will be required to identify VoIP providers serving Minnesota and to collect the correct 911 fees from them.

There is no cap on 911 system costs under Minn. Stat. Section 403.11 and current legislation allows carriers to request the 911 Program to compensate them for their connection to the 911 network. However, the spending authority is capped in session law by direct appropriations from the 911 Special Revenue Fund. Similarly, 911 revenues are capped at 65 cents a month on all wireless, wire-line and VoIP customers. This continues to create some uncertainty in projecting 911 network costs. Preliminary costs for transition to an I.P. based network have been identified. It will be necessary to maintain two 911 systems while transitioning, causing increased costs for the next three to four years while all three Phases are completed.

[1] 70 FR 37286, released June 29, 2005

[2] In the Matter of IP-Enabled Services, WC Docket No. 04-36 and E911 Requirements for IP Enabled Service Providers, WC Docket No. 05-196, Adopted: May 19, 2005, Released: June 3, 2005, FCC05-116 at page 30.

V. 911 Goals and Status

Goal: Control Costs and Predictability to the 911 Program

When the statewide 911 program was originally established the process of implementing 911 was reasonably clear. There was a finite number of incumbent local exchange carriers (ILEC) with telephone service discretely associated with fixed sites in fixed service areas. Deregulation of the telecommunication industry, the proliferation of competitive local exchange carriers (CLEC) and the wireless telephone industry has changed the situation dramatically. In 1994, the legislature provided for reimbursement of the cost to implement and maintain enhanced 911 services for wireless carriers[3] and in 2002 the legislature provided for the reimbursement of the recurring costs of CLECs as they implement service within Minnesota.[4] As a result of these changes the statewide 911 network has become extremely complex. The process of administering changes and the costs of those changes have been a challenge.

Status: Ongoing. Legislative and procedural changes over the last three years[5] have given the Department of Public Safety a greater ability to deal with today's competitive telecommunications landscape. With those changes, the 911 program has been able to eliminate the certification process, reduce the billing period to less than 90 days and begin consolidating contracts and transactions with some vendors. Service level changes require specific approval before they can be implemented and retroactive approval of service level changes have been eliminated. The Department of Public Safety is also utilizing competitive bidding processes where services can be provided by more than one vendor.

Goal: Provide Enhanced 911 Benefits to Wireless 911 Callers

Although the present enhanced 911 systems routinely provide public safety responders an accurate location of each wire-line emergency caller when 911 is dialed from traditional landline telephones, it is more difficult to determine caller location from wireless telephones. The increasing use of cellular telephones by the public means that cellular 911 calls are becoming as likely to be placed from dwellings, sidewalks, boats or snowmobiles as from cars on highways. In 1996 the FCC clarified the requirement for wireless carriers to provide specific and accuracy location information to the 911 network. This wireless enhanced 911 implementation has required network, database, and PSAP equipment changes.

Status: Complete. Over the last few years, nineteen of the original wireless carriers providing service in Minnesota have consolidated into six carriers. The remaining six wireless carriers

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[3] Minn. Stat. Section 403.11, Subdivision 1(f) provides that the state will reimburse wireless carriers for installation costs and for their recurring costs for integrating wireless calls into the enhanced 911 system. This provision was enacted by Minnesota Laws 1997, Chapter 202, Article 3, Section 21. In 1999, the FCC ruled that wireless carriers were required to integrate into the 911 system irrespective of whether a state reimbursement provision was in place; Second Memorandum and Order, FCC Docket No. 99-352 revising FCC Docket No. 94-102, released December 8, 1999.

[4] Reimbursement of competitive local exchange carrier recurring charges did not begin until July 1, 2001. This provision was enacted by Minnesota Laws 2002, Chapter 372, Section 14. Prior to July 1, 2001, competitive local exchange carriers were required to and did provide 911 service without reimbursement of their expenses by the state.

[5] Laws 2005 Chapter 136, Article 10 and Laws 2006, Chapter 260, Article 6.

operating in Minnesota are Alltel, AT&T, Sprint/Nextel, T-Mobile, U. S. Cellular and Verizon. All six wireless carriers provide Phase II location information (specific longitude and latitude location information) on 911 calls. More information on wireless 911 is available on the Minnesota 911 website; *http://www.911.state.mn.us/*.

Goal: Integrate VoIP 911 Calls into the enhanced 911 networks

In the last few years, advances in Voice over Internet Protocol (VoIP) technology and wider use of high speed Internet connections in homes and offices have made it possible to replace ordinary circuit switched telephone service with VoIP service. VoIP service is difficult to integrate into the existing 911 systems because it can be provided with no knowledge of the customer's physical location, and that location can change quickly. For example, a Vonage customer living in Saint Paul can take the VoIP interface unit along when traveling to Orlando. By plugging the interface unit into an Internet connection in an Orlando hotel room the customer could place and receive "local" phone calls just as at home. Also a Minnesota customer could have a New York telephone number if desired. Nomadic usage and non-native telephone numbers are incompatible with our existing 911 systems that were built for traditional telephone service. In order to accommodate these potentially nomadic VoIP services, a technology model known as Interim i2 has been developed by the National Emergency Number Association (NENA). It uses a native routing number to get calls to the correct PSAP and a dynamically updated 911 database to provide the location of nomadic users that have updated their location profile. The dynamic update portion of the technology is similar to wireless enhanced 911. Because the 911 databases and PSAPs in Minnesota have already been modified for wireless enhanced 911, i2 can be readily implemented.

This is a transitional step in the evolution of the telecommunication industry. It is simply an adaptation to patch into the existing legacy 911 network. By all estimates, the telecommunication industry is in the midst of an industry wide evolution to a broadband network and that evolutionary step will also be required for the state 911 networks.

With the implementation of the Interim i2 technology model, many CLECs in Minnesota have begun expanding their networks to provide VoIP related 911 services in various counties in the state. 911 Program costs have escalated as these carriers expand into additional counties.

Status: Ongoing. Several interconnected VoIP providers have implemented enhanced 911 using Interim i2 standard.

Goal: Improve the Interoperability Capabilities of Minnesota 911 Systems

Minnesota is in the forefront of enhanced 911 coverage. Delivering emergency calls to 911 PSAPs through selective routers allows calls to be sent to the correct PSAP regardless of caller location, and facilitates transfers to neighboring PSAPs. This generally holds true, however, only if the correct 911 PSAP is connected to the same 911 system as the caller's telephone exchange or cellular mobile switching center. The purpose of interoperability improvements is to allow 911 calls to be transferred and perhaps even selectively routed between different 911 systems. This applies both to different 911 service providers Qwest and Independent Emergency Services, LLC (IES) in Minnesota, and to state border issues, such as between the Minnesota counties of Washington and Goodhue served by Qwest 911 systems and the Wisconsin counties of Saint Croix and Pierce served by the AT&T 911 system.

Status: DPS has advanced the discussion of the NG911 network as a way to resolve this issue much more broadly. DPS has also released an RFP that specifically addresses this issue as a requirement as well as includes requirements to upgrade the network to a high speed data network with Next Generation feature functionality. Negotiations are currently underway and contract signature is anticipated in 1Q09.

Goal: Develop the next generation of 911

In 2008, DPS developed a comprehensive report detailing Minnesota's strategic direction and necessary improvements needed to the 911 network due to the changing telecommunications environment. The final report aids in setting minimum standards for the 911 network throughout the state, in setting program priorities, in prioritizing funding decisions, in defining the steps necessary to improve the 911 network, and begin the planning process to migrate the existing 911 network to the NG911 network. The report received input from the Next Generation Advisory Group (NGAG), a group of Public Safety stakeholders and then was released by the Commissioner of Public Safety

Status: Ongoing. . In June 2008, a Request for Proposal (RFP) for a statewide NG911 System was released and evaluated by a group of eight made up of sheriffs, PSAP managers, Deaf and Hard of Hearing community, Metropolitan Emergency Services Board and Department of Public Safety. The award will be made in 1Q09 and Phase 1 of the project will commence.

Goal: Efficient use of and consolidation of resources

In 2003, the 911 program was asked to study the issue of PSAP consolidation and PSAP standards. The study completed in early 2004 clearly indicated that any overt efforts to mandate consolidation would be ill-advised. It did elevate the discussion and highlight some of the potential benefits of consolidating PSAP services.

Status: Kandiyohi, Big Stone and Swift Counties have entered into a Shared Services Agreement that allows for consolidation of resources to handle PSAP responsibilities. Kandiyohi will answer calls for Big Stone allowing them to save substantial personnel costs. Swift County will utilize Kandiyohi's services on an as needed basis such as on nights or weekends or when personnel shortages occur due to illness and holidays. Over the last three years, three metropolitan area counties have moved toward consolidating their PSAPs. In 2006, Washington County consolidated two PSAPs into a single operation. In 2007, Dakota County consolidated the operation of six PSAPs into a single operation and Ramsey County consolidated three of the four PSAPs in the county into a single operation. Similar, discussions are occurring in different regions within the state.

The 2004 PSAP Consolidation and PSAP Standard Report did suggest that funds be made available for agencies operating PSAPs to evaluate the issues related to consolidating services. The Commissioner of Public Safety is seeking to create a consolidation friendly environment for local jurisdictions interested in educating themselves on a shared services model. The Commissioner has authorized grant dollars from the appropriated 911 funds for agencies seeking to study the elements of a multi-agency PSAP or for the implementation of a multi-agency or shared services PSAP.

VI. Added Considerations/Risks

While good progress to date has been made in the conversion to enhanced 911, the following challenges jeopardize the future effectiveness of the 911 Program:

Costs for maintaining and improving 911 are increasing

As the telecommunications industry continues to change, the costs of adding new technologies to the existing 911 network continues to increase. The cost of adding trunked circuits from an expanding number of carrier switches to each of the 911 selective routers within the state is not efficient and fails to address the changing character of the industry. Although DPS has successfully kept the cost of operating the current 911 network (selective routing, ALI database charges and circuits to the PSAPs) relatively stable over the last few years, there is a clear understanding that resources will be needed to implement fundamental changes in the 911 network. The 911 Program continues to work with carriers to reduce unnecessary trunking and to provide optimum services through increasing efficiencies in the existing 911 network. Wireless carrier consolidation has aided in stabilizing the costs of providing wireless access to the 911 network. Next Generation technology will also provide improved accessibility to the 911 network and a goal of reducing costs. Appendix A contains a table showing the different expense elements for 911.

Additional expenses will be incurred during migration to a new 911 system

The 911 Program will begin to build out a high speed data network and address interoperability concerns between 911 providers during the 2009-2011 budget year. During the transition it will be necessary to maintain both the existing 911 network and the new NG911 network for a period of time until the new network is fully tested causing increased costs to maintain the 911 systems. This transition will take place in multiple phases.

The State of Minnesota has maintained a national leadership role in the deployment of enhanced 911 services. To ensure the integrity of the 911 system the following objectives are important for the state:

1) It is important that policymakers at all levels commit to the development and deployment of the interoperable statewide Emergency Services network as a fundamental 911 and emergency communications policy objective.

2) 911 and emergency services authorities need to review existing legislation and regulations to ensure there are no barriers to, and sufficient authority for, the establishment of a state-wide Emergency Services network. Statutes and regulations to enable a NG911 system statewide must be actively supported.

3) State, regional, local 911 and emergency services authorities should work cooperatively toward establishing a state-wide interoperable NG911 system.

4) 911 funding should be safe guarded for the sole purpose of supporting the Emergency Services network which includes the ARMER radio build out.

5) Further efforts to integrate the Radio network with the secure Next Gen IP network and the existing state infrastructure that supports emergency applications to the counties should be supported.

The cost of subsidizing competitiveness in the telecom industry

As previously noted, the 911 program has operated under a premise that the state collects a 911 fee and then pays all costs of maintaining the 911 network. With the continued expansion of Competitive Local Exchange Carriers (CLECs), we have noted a diminished effort by CLECs to structure 911 connectivity to the 911 network in an efficient and cost effective manner. Similarly, the 911 Program now finds itself subsidizing the operating costs for CLECs that are literally marketing their services to VoIP telecommunication carriers based upon their access to the 911 network. These CLECs submit few 911 fees relative to the costs associated with connecting them to the 911 network and provide little assistance in assuring compliance with the 911 fee provisions.

Based upon the changing nature of telecommunications and the 911 network, it may be appropriate to examine the underlying reimbursement scheme. That scheme was developed in the highly regulated telecommunications environment of the 1960's and 70's where there was no obligation to out switch 911 calls or to connect those calls to the 911 network. In 1996, the FCC held that wireless carriers were required to connect to the state's 911 network regardless of whether the state reimbursed those costs. That decision also established the selective router as the common access point where the state's network begins. Similarly, in its 2006 IP enabled services decision requiring VoIP telecommunication providers to connect to the 911 network, the FCC articulates a presumption that the cost of providing access to these new providers would be negligible based upon the assumption that the state's network begins at this common access point. Many states provide no reimbursement to Competitive Local Exchange Carriers for out switching 911 calls or for the cost of connecting those calls to the 911 selective router. One might argue that the idea of reimbursing carriers for the cost of out switching 911 calls and connecting those 911 calls to the state's 911 network is a vestige of the past and contrary to the competitive nature of the telecommunications market.

Stability of 911 revenues

Revenue projections shown in this report are based on continued modest growth in wireless subscribers and a slight decline in wire-line subscribers that are paying the 911 fee. These revenue projections also reflect the increase in the fee in years 2010-2011. The increase is offset by the costs associated with the ARMER radio build-out. The fund balance represented is a result of initiatives by the 911 program to stabilize and reduce costs for unnecessary circuits and other network elements. This fund balance is necessary for NG911 network improvements slated for 2009-2011.

VII Conclusion

The Department of Public Safety, 911 Program, has identified a strategy and plan for the migration to a Next Generation 911 network. In the Public Safety Act of 2007, the United States Congress directed the U. S. Department of Transportation to create a plan to move the nation from the current 911 system to an interoperable IP-based emergency response network that can handle voice, video and data. Substantial changes have been made in some states and many others are currently considering strategies to migrate from the existing legacy 911 network to the NG911 network of the future.

Even if access line counts remain stable, the continued proliferation of competitive telecommunication service providers has the potential to continue to drive up the costs of implementing and maintaining the carrier's access to the state's 911 network. Similarly, if customer counts decline as voice services transition to wireless and unregulated data services over a broadband network there is a potential for additional strain on the budget.

The success of the 911 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued cooperation among these stakeholders is essential for ongoing success.

Appendix A-911 Revenue/Expenses Required by Statute

	FY 2005 ACTUAL	FY 2006 ACTUAL	FY 2007 ACTUAL	FY 2008 ACTUAL	FY 2009 PROJECTED	FY 2010 PROJECTED	FY 2011 PROJECTED
Revenue							
Actual	$27,323,188	$46,229,523	$49,527,236	$50,750,955			
Projected					$50,750,955	$58,383,825	$66,528,990
Appropriated/Est. Expenses		$44,368,000	$44,635,000	$55,681,000	$50,385,000	$58,039,000	$63,743,000
Difference		$1,861,523	$4,892,236	$(4,930,045)	$365,955	$344,825	$2,785,990
Program Expenses							
Unspecified Appropriations							
911 Network	$10,385,774	$10,270,084	$10,410,729	$10,707,348	$11,505,000	$11,420,000	$11,420,000
Wireless Transfers-MSP	$684,631	$675,000	$722,898	$722,898	$723,000	$723,000	$723,000
Wireless 911 Network	$4,046,473	$3,728,216	$3,610,312	$3,588,124	$5,497,000	$5,576,000	$5,564,000
Multi-Agency PSAP Shared Serv.					$100,000		
Administrative Expense	$415,132	$526,071	$544,242	$579,247	$611,000	$623,000	$635,000
Specified Appropriations							
PSAP Grants	$6,830,805	$13,640,000	$13,664,000	$13,664,000	$13,664,000	$13,664,000	$13,664,000
Medical Resource Center Grants		$682,000	$683,000	$683,000	$683,000	$683,000	$683,000
Prior Year Obligations	$5,202,419	$2,647,680					
Debt Service- 911 Revenue Bonds	$2,732,321	$7,543,000	$7,559,000	$7,460,163	$13,263,000	$18,967,000	$24,671,000
Statewide Radio Board		$421,361	$1,358,190	$10,000	$1,000,000	$1,000,000	$1,000,000
ARMER Interoperability Planning				$223,487	$416,000	$323,000	$323,000
ARMER Backbone Operating Costs				$3,110,000	$3,110,000	$5,060,000	$5,060,000
ARMER- Planning/Zone Controller				$5,401,520	$5,598,480		
Total Current Expenses		$40,133,412	$38,552,371	$46,149,787	$56,170,480	$58,039,000	$63,743,000
Fund Balance							

Appendix A (Continued) - Fiscal Years 2006-2011 - Notes

This 911 Funding Matrix shows projections of the different expense elements for 911 expenses in each fiscal year from 2006 through 2008 (actual) and 2009 through 2011 (projected).

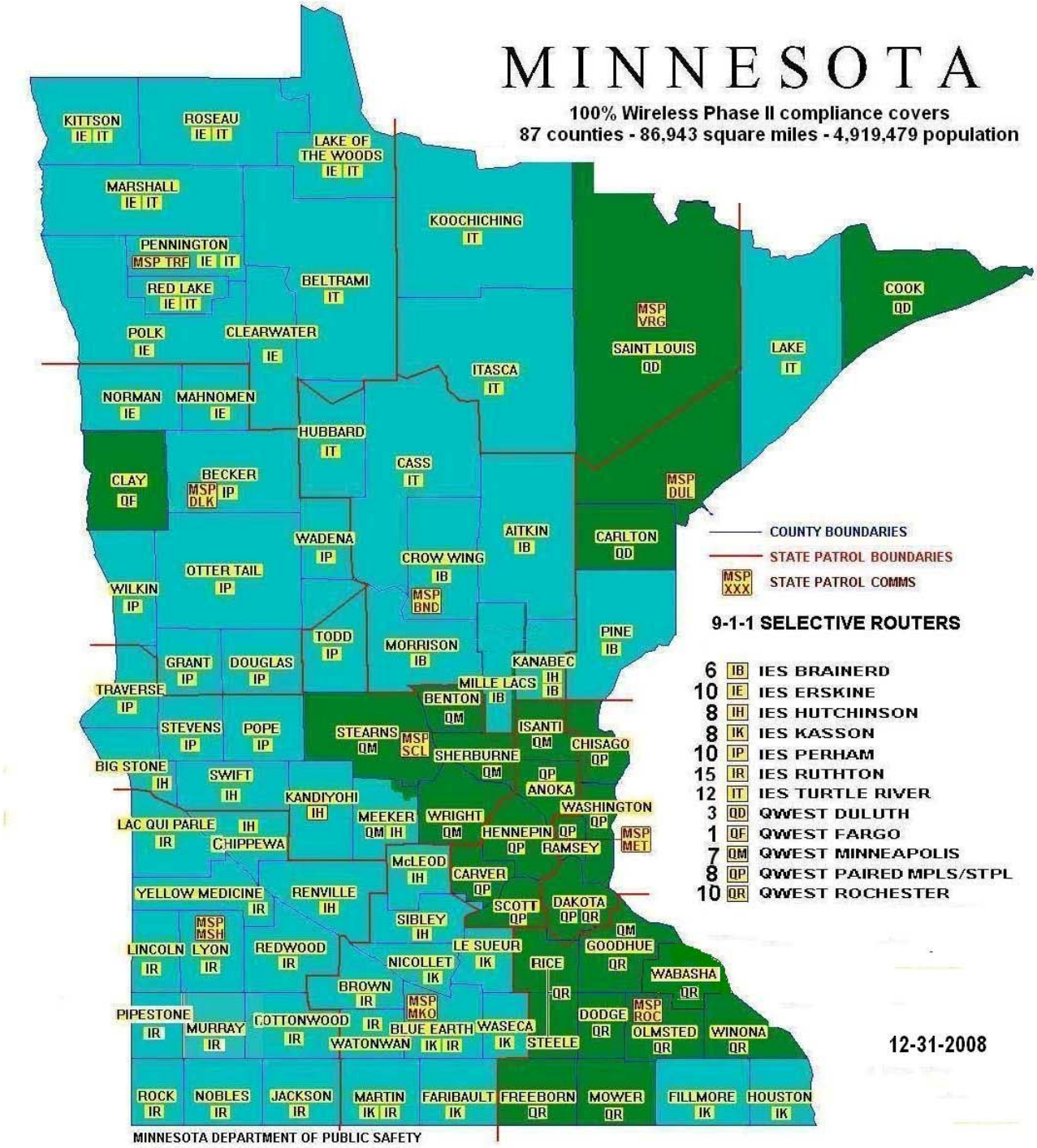
Assumed annual fee collection from one cent based on projections of the average number of telecommunication customers in each fiscal year:					
FY 2006 Actual	FY 2007 Actual	FY 2008 Actual	FY 2009 Projected	FY 2010 Projected	FY 2011 Projected
$ 711,223	$ 761,957	$ 780,784	$ 780,784	$ 778,451	$ 782,694

Specific appropriations were passed in 2007 (Minnesota Laws 2007, Chapter 54, article 1, Section 4, Subdivision 7) beginning in fiscal year 2008 for:

- Bonding costs for continuing implementation of the statewide shared public safety radio system in the remainder of the state.
- Funding of backbone operating costs in Phase One and Three of the statewide shared public safety radio system.
- Upgrading the Phase One backbone in statewide shared public safety radio system to provide the highest level of interoperability throughout the state.
- Funding the detail design work and advanced site development for the statewide shared public safety radio system in the remainder of the state.

Statutory changes in 2007 (Minnesota Laws 2007, Chapter 54, Article 8, Section 4) provided for procedural changes in the 911 programs revenue compliance processes:

- Allows the commissioner of public safety to dispute fee submission and requires telecommunications providers to submit sworn statements attesting to the accuracy of their fee submissions.
- Allows the commissioner of public safety to estimate amounts due and refer them to the Department of Revenue for collection where a provider fails to submit a sworn statement attesting the accuracy of fee submissions.
- Allows the commissioner of public safety to conduct an examination of fees in accordance with “attestation audit standards” to verify any sworn statement attesting to the accuracy of fee submissions.

Appendix B. - Wire line and Wireless 911 Status in Minnesota

Green shaded counties indicate Qwest as the Enhanced 911 service provider for wire line and wireless. Aqua shaded counties indicate Independent Emergency Services, LLC as the E911 service provider for wire line and wireless 911. All wireless carriers are providing Phase II wireless enhanced 911 providing the latitude and longitude of the 911 caller. With few exceptions, all of these carriers are providing the location service in each of the 87 counties.