



Statewide 9-1-1 Emergency Telephone Service Program Report

February 2003

*Minnesota Statewide
9-1-1 Program*





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Statewide 9-1-1 Emergency Telephone Service Program Report

I Executive Summary

Introduction

Minnesota's 9-1-1 emergency telephone service is a vital component of the State's emergency response system. Dialing 9-1-1 provides rapid and effective access to public safety services. Citizens of Minnesota expect that dialing 9-1-1 will link them directly to the right public safety agency and emergency personnel will have vital location information to help speed the responders to their emergency. As required by Minnesota Statutes, Section 403.11, the Department of Administration funds part of the costs of 9-1-1 through a statewide uniform 9-1-1 fee charged to each wired and wireless telephone.

Reporting Requirement

Minnesota Statutes, Section 403.06, Subdivision 1(b) requires the Department of Administration to prepare an annual report to the legislature detailing the expenditures for maintaining the 9-1-1 system, the 9-1-1 fees collected, the balance of the 9-1-1 fund, and the 9-1-1-related administrative expenses of the department. This Statewide 9-1-1 Emergency Telephone Service Program (9-1-1 Program) Report explains the 9-1-1 expense elements (Appendix A) and provides: (1) the required financial information as of June 30, 2002, (2) projections of Admin's 9-1-1 program financial position through June 30, 2005, and (3) a brief summary of the status of enhancements and improvements to the Minnesota 9-1-1 system.

FY2002 Financial Update (as of June 30, 2002)

Fiscal year 2002 began with \$7,086,636 in the 9-1-1 Special Revenue Fund. Because the 9-1-1 fee had been frozen at 27 cents, spending on statutorily mandated 9-1-1 costs exceeded revenue, and a great deal of this carry-forward amount was used to make up the difference.

The 9-1-1 Program collected \$16,573,000 during the year and expended \$18,011,000, which included \$412,122 for the 9-1-1-related administrative expenses. On June 30, 2002, the fund balance was \$5,649,000 of which \$2,496,960 of that amount has been reserved for uncertified prior years obligations. This left a fund balance of \$3,151,615 at the end of the fiscal year, slightly less than the two month's worth of projected fiscal year 2003 expenses which generally agreed upon business principles consider to be a prudent fund balance.

Financial Projections (through June 30, 2005)

Initial projections of expense and revenues prepared for the FY04-05 biennial budget showed the carry forward balance in the 9-1-1 Special Revenue Fund approaching zero by the end of FY05. Current projections, taking into account the most recent data available, are now predicting a deficit situation by the end of fiscal year 2005. The greatest increase in spending between fiscal

years 2002 and 2003 occurred due to implementation of wireless enhanced 9-1-1 and associated network and database costs. Further significant spending increases between fiscal years 2004 and 2005 are projected due to scheduled increases in Enhanced 9-1-1 Grants and Metropolitan Radio Board Grants. Unless fee volumes are higher than projected, the fee is increased or spending is somehow reduced, there will be a declining accumulated ending balance and a projected deficit of \$1,149,000 in fiscal year 2005 (See Figure 1).

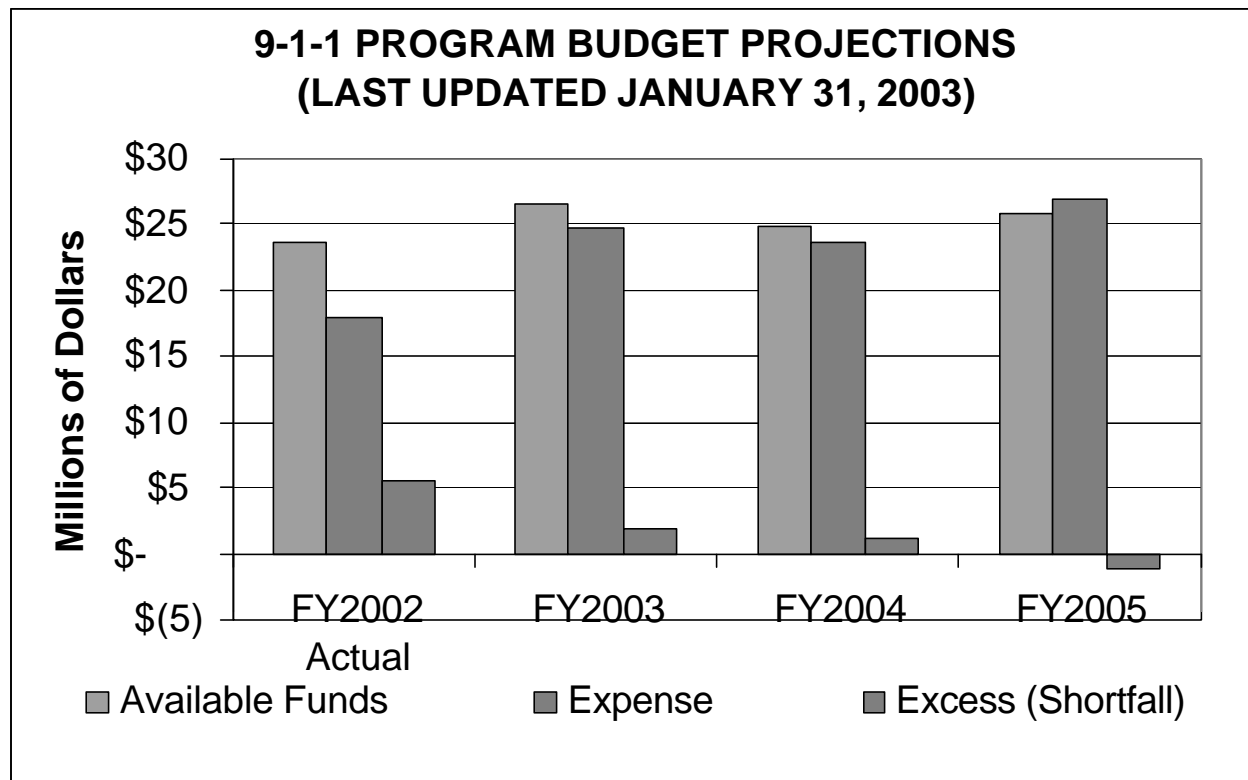


Figure 1. 9-1-1 Fund Deficit Projected for Fiscal Year 2005

Status of Enhancements and Improvements to the Minnesota 9-1-1 System

Maintaining, enhancing, and expanding 9-1-1 services for both wired and wireless technologies are required under Minnesota Statutes, Section 403.01, subdivision 7. Significant progress has been made to integrate wireless 9-1-1 into the Enhanced 9-1-1 systems, increase the interoperability of separate 9-1-1 systems, and position the state to be able to take advantage of future Enhanced 9-1-1 services for wireless. As of December 31, 2002, 9 out of 20 wireless carriers had provided Phase I Enhanced Wireless 9-1-1 among 67 of the 87 counties. However, the pace of these improvements are impeded by restricted funding, technical complexity, and the time consuming process of signing service contracts with each wireless carrier in the State. Status updates are regularly posted on the Minnesota 9-1-1 website, www.911.state.mn.us.

Added Considerations

- Current volume projections could turn out to be too high or expense projections could turn out to be too low. If this is the cases, funding for the 9-1-1 program could experience significant shortfalls.
- Enhanced 9-1-1 service has not been fully implemented due to the expenses associated with implementing Enhanced 9-1-1 wireless telephone services.
- Costs are increasing for the 9-1-1 Program.

Conclusion

The success of the 9-1-1 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued success will require appropriate funding and further cooperation to solve the current and worsening problems caused by the growth of wireless telephone service and emerging new technology.

II. Background

The 9-1-1 emergency number provides rapid access to emergency services, which saves time for the caller in dialing and reduces overall response time for emergency service providers. The 9-1-1 system is currently evolving into an Enhanced 9-1-1 system that will allow caller location to be displayed even if the caller does not or cannot provide their address. Statewide 9-1-1 coverage is provided by 87 county systems plus 19 city systems and 13 Public Safety Answering Points (PSAPs) operated by state and other government agencies.

The universal emergency 9-1-1 number is available throughout the state of Minnesota on wired and wireless phone lines. For wireless telephones, Federal Communication Commission (FCC) rules (Title 47, CFR 20.18) require the wireless carriers to put all 9-1-1 calls through to a PSAP, even if the caller is a non-subscriber.

The 9-1-1 Program at the Department of Administration provides technical assistance to the cities and counties implementing, maintaining, and improving 9-1-1 systems, and oversees system standards. It also pays from money collected through a monthly statewide wired and wireless telephone fee the state's share of wired and wireless 9-1-1 costs authorized by Minnesota Statutes, Section 403.11 and contracted for with carriers; administers grant funds for 9-1-1 agencies in accordance with Minnesota Statutes, Section 403.113; and distributes funds to the Metropolitan Radio Board in accordance with Minnesota Statutes, Section 673.901.

The fee is set by the Commissioner of Administration with the consent of the Commissioner of Finance. Effective July 1, 2002, the fee was increased from 27 cents to the cap of 33 cents in order to fund statutorily required costs. The fee collections are deposited in the 9-1-1 Special Revenue Fund, and these funds are appropriated by the Legislature to the Commissioner of Administration to cover the expenses authorized by statute.

III. Statutorily Required 9-1-1 Obligations

Fiscal Year 2002 statutory obligations required a spending rate of 29.3¢ against a revenue collection rate of 27¢

- M.S. 403.11: Network and database charges for 9-1-1 (10.3¢)

Reimbursements are made to local exchange carriers and 9-1-1 service providers (Qwest and Independent Emergency Services(IES)) for costs incurred connecting telephone central offices with 9-1-1 networks. According to statute, all certified costs must be reimbursed by the State.

- M.S. 403.113: Enhanced 9-1-1 Grants (PSAP payments) (10.0¢)

PSAPs in 87 counties, 3 other governmental entities, and State Patrol Communications centers receive grants from the State to help defray their 9-1-1 costs. The amount paid to PSAP's is determined by the Department of Administration based upon PSAP needs and the amount of

appropriation authority/funds left after all other statutory requirements are fulfilled. Historically, 10 cents of the 9-1-1 fee has been distributed to the PSAP's.

- M.S. 403.11: Wireless 9-1-1 Transfers (0.8¢)

2-cents of the wireless subscriber 9-1-1 fee is directly transferred to the Minnesota Department of Public Safety. These funds are used by the Minnesota State Patrol to offset the costs, including administrative and staffing costs, incurred in handling 9-1-1 emergency calls made from cellular phones.

- M.S. 403.11: Enhanced Wireless 9-1-1 Implementation (1.1¢)

Wireless carriers sign agreements with the state to implement enhanced 9-1-1 wireless services. The implementation costs incurred by these carriers and by the 9-1-1 service providers are then reimbursed by the State and after implementation, ongoing operations costs are reimbursed. As time goes on, the reimbursement amounts will increase as more carriers implement the service and ongoing operations expenses increase.

- M.S. 473.901: Metropolitan Radio Board Grants (3.9¢)

The Metropolitan Council approves an annual budget for the Metropolitan Radio Board that cannot exceed the equivalent of 4-cents on every subscriber line. The Department of administration is required to distribute one twelfth of the approved budget to the Metropolitan Radio Board each month.

- M.S. 403.11: Administrative Expenses Including Salaries (0.7¢)

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

- M.S. 403.11: Other Obligations (2.5¢)

Prior year obligations that were carried forward and expensed in fiscal year 2002 and Poison Center Grant in fiscal year 2002.

IV. Financial Update (as of June 30, 2002)

As required by Minnesota Statutes, Section 403.11 and outlined in the above section, part of the costs of 9-1-1 in Minnesota are funded through a statewide uniform 9-1-1 fee.

Fiscal year 2002 began with \$7,086,636 in the 9-1-1 Special Revenue Fund. Because the 9-1-1 fee had been frozen at 27 cents, spending on statutorily mandated 9-1-1 costs exceeded revenue, and a great deal of this carry-forward amount was used to make up the difference.

The 9-1-1 Program collected \$16,573,000 during the year and expended \$18,011,000, which included \$412,122 for the 9-1-1-related administrative expenses. On June 30, 2002, the fund balance was \$5,649,000 of which \$2,496,960 of that amount has been reserved for uncertified prior years obligations¹. This left a fund balance of \$3,151,615 at the end of the fiscal year,

¹ The 2002 Legislature changed 9-1-1 laws to encourage those companies that had not certified their prior and future charges to do so. Ninety days after January 1, 2003, the 9-1-1 Program will only be allowed to reimburse telephone companies for old charges going back for two years, eliminating a bookkeeping headache caused by ever mounting

slightly less than the two month's worth of projected fiscal year 2003 expenses which generally agreed upon business principles consider to be a prudent fund balance.

Appendix B details 9-1-1 funding in FY2002.

V. Financial Outlook (through June 30, 2005)

The legislature changed Chapter 403 during the 2002 session, reinstating the Commissioner of Administration's authority to set the 9-1-1 fee within a range authorized by statute, and with the approval of the Commissioner of Finance. This allowed the increase in the fee to 33 cents to meet statutory funding requirements at least equal to the equivalent of 33-cents in fiscal years 2003, 2004 and 2005.

A recent review of the 9-1-1 funding plan, using January 2003 projections of revenue volumes, shows that the current 9-1-1 fee level of 33 cents will barely meet the foreseen funding needs of the state funded parts of the 9-1-1 Program through fiscal year 2004. Any carry-forwards in the account will be needed in order to meet statutorily mandated obligations in the succeeding years. Complicating matters, some money needs to be maintained in the special revenue fund to meet current expenses because revenues lag expenses by at least one month.

The current projections of these subscriber volumes and expenses indicate a shortfall of \$1,149,000 for the 9-1-1 Program at the end of fiscal year 2005. The amount of the prior years uncertified obligations (\$2,496,960) that have been carried forward to fiscal year 2003, which can be claimed by wired and wireless carriers by March 31, 2003 will also affect the fund balance. The net effect of subscriber volumes and resultant revenues flowing in, new expenses flowing out, and old uncertified expenses claimed will determine whether or not a fee increase will be needed for fiscal year 2005, and if so, how much. If funding shortfalls cannot be resolved by increasing the 9-1-1 fee, cutting spending by decreasing the amounts sent to PSAPs appears to be the only alternative for the Department of Administration because all other major expenses are locked in by legislation or contract.

VI. 9-1-1 Goals and Status

Goal: Provide Enhanced 9-1-1 Benefits to Wireless 9-1-1 Callers

Although the present Enhanced 9-1-1 systems routinely provide public safety responders an accurate location of each wired emergency caller when 9-1-1 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 9-1-1 calls are becoming as likely to be placed from dwellings, sidewalks, boats or snowmobiles as from cars on highways.

uncertified obligations. This change led to a number of certifications being submitted in fiscal year 2002 where the costs were actually incurred in previous fiscal years.

Efforts to have cellular 9-1-1 emergency calls integrated into the Enhanced 9-1-1 systems to provide caller location and callback number to be displayed at the answering PSAP are ongoing. Also, the Enhanced 9-1-1 systems continue to be improved to allow rapid transfers of misdirected wireless 9-1-1 calls among all nearby PSAPs, including those which are served by different Enhanced 9-1-1 systems.

Status: At the end of calendar year 2000, only one wireless carrier had provided FCC Enhanced Phase I (general location and callback number) service. By the end of 2001, three more had implemented it. In calendar year 2002, a fifth wireless carrier implemented Phase I in the Metropolitan area, seven wireless carriers began providing Phase I service among 58 counties in Greater Minnesota, and one carrier has also implemented a version of Phase II (latitude and longitude of the 9-1-1 caller) in four Greater Minnesota counties. Appendix C contains details. As of December 31, 2002, many PSAPs are converting PSAP equipment to accept the Phase II information, which many wireless carriers are now, or will soon be, ready to provide. Status updates are regularly posted on the Minnesota 9-1-1 website, www.911.state.mn.us.

Goal: Incorporate Wireless 9-1-1 Calls into Existing Enhanced 9-1-1 Systems

Minnesota Statutes, Section 403.08, Subdivision 7 requires cooperation among wireless carriers and 9-1-1 service providers to plan for and implement Enhanced Wireless 9-1-1. It also requires the Department of Administration to coordinate planning and to contract with wireless carriers and 9-1-1 service providers to integrate wireless 9-1-1 calls into Enhanced 9-1-1 systems; and authorizes funding from the 9-1-1 Special Revenue Fund to be used for both the installation and recurring costs for integrating wireless 9-1-1 calls into Enhanced 9-1-1 systems.

Status: As required by Minnesota Statutes, Section 403.08, the 9-1-1 Program developed plans for integrating cellular service into the Enhanced 9-1-1 systems. These plans have been updated periodically as new information is learned and changes occur in both the cellular and 9-1-1 systems.

Goal: Route Existing Wireless 9-1-1 Calls to Local Public Safety Answering Points

In the early 1980's, as the first wireless systems were deployed in Minnesota, the Minnesota State Patrol was designated as the default answering point for basic 9-1-1 calls. In that era, up to 85% of wireless 9-1-1 calls were from cars on highways, and the technology was not readily available to reliably send calls to local PSAPs. As wireless communications developed, a larger number of 9-1-1 calls were placed from portable phones which were not on highways. The 9-1-1 law was changed in 1997 to provide for calls to be answered by local PSAPs pending implementation of enhanced wireless 9-1-1 service.

Status: Outside of the Metropolitan area, 34 local government PSAPs have wireless 9-1-1 calls from one or more of seven wireless carriers (ACC of Minnesota, AT&T Wireless, Cellular Mobile Systems of Saint Cloud, Northern PCS, Rural Cellular Corporation, Western Wireless, and Wireless Communications Ventures) in their area routed directly to that PSAP rather than a

district State Patrol communications center. This Phase 0 service is a temporary measure, pending implementation of Phase I, then Phase II Enhanced 9-1-1 service. No location or callback information is provided, and investigating misrouted calls is difficult. Many of the Phase 0 PSAPs reported last year have since been converted to Phase I Enhanced Wireless 9-1-1.

Goal: Improve the Interoperability Capabilities of Minnesota 9-1-1 Systems

Minnesota is in the forefront of Enhanced 9-1-1 implementation and in a good position to implement wireless Enhanced 9-1-1 statewide because nearly 98 percent of the state's wired telephones are served by selective router based Enhanced 9-1-1 systems. Delivering emergency calls to 9-1-1 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 only if the correct 9-1-1 PSAP is connected to the same 9-1-1 system as the caller's telephone exchange or cellular mobile switching center. The purpose of interoperability improvements is to allow 9-1-1 calls to be selectively routed and transferred between different 9-1-1 systems.

Status: The Enhanced 9-1-1 selective router contract with Qwest has been modified to have the five Lucent Model 5E 9-1-1 selective routers provided by Qwest connected together so that any 9-1-1 call on a Qwest selective router can be transferred to any PSAP served by another Qwest selective router. The 9-1-1 Program has requested IES to make a similar interconnection among their seven CML Model ECS-1000 selective routers. The eventual goal is for these two different types of selective routers to be able to selectively route or transfer to each other too. Qwest and IES jointly developed plans and conducted tests during 2002 to explore interoperability issues between their two different 9-1-1 network and database systems.

Transfers between Qwest and IES selective router based 9-1-1 systems have been performed in tests conducted among Itasca, Koochiching, and Saint Louis Counties' PSAPs. Numerous technical and database concerns, primarily call setup times and database synchronization issues, were identified in those tests that are currently being addressed by the 9-1-1 service providers.

Goal: Contract with Wireless Providers and 9-1-1 Service Providers

Implementation of Phase I Wireless Enhanced 9-1-1 involves extensive coordination with local PSAPs in order to help determine where calls should be answered and develop plain language cell sector descriptions for display at the PSAP.

Status: A total of fifteen wireless carriers are covered by eleven contracts for Phase I (four more than in 2001). These carriers provide wireless service to approximately 94 percent of all Minnesota subscribers. Several other carriers are in various stages of the contracting process. The target for having all wireless carriers under contract is June 30, 2003.

VII. Added Considerations/Risks

While good progress to date has been made in the conversion to Enhanced 9-1-1, the following challenges jeopardize the effectiveness of the 9-1-1 Program:

Funding could be inadequate for 9-1-1 services if volume projections are too high.

The amount of funding for 9-1-1 is dependent on the number of wired and wireless subscribers paying the 9-1-1 fee and the amount of the fee. According to statute, the Legislature sets the 9-1-1 fee range and appropriates funds from the special revenue account generated from those fees. In the 2002 legislative session, funding allocated for the 2002-2003 biennium was increased in order to cover statutorily mandated requirements and the ongoing needs for the program. An increase of the 9-1-1 fee from 27 cents to 33 cents was approved in order to cover projected expenses and to complete the process of implementing the Enhanced 9-1-1 wireless telephone services. If the number of wired and wireless subscribers turns out to be significantly lower than projections, the current fee amount of 33 cents will not generate enough revenue to cover 9-1-1 costs in the next biennium. No authoritative industry projection of future subscriber volumes has been found.

Enhanced 9-1-1 service has not been fully implemented due to the expenses associated with implementing Enhanced 9-1-1 wireless telephone services.

Wired telephones can be readily located by Enhanced 9-1-1 systems because the telephone number generally indicates its fixed location. A wireless telephone is constantly changing its location. The growing affordability and portability of wireless telephones is already allowing many customers to choose between wired and wireless service, and that option will be open to more people as the technology matures. Until wireless telephone 9-1-1 calls can be fully integrated into the Enhanced 9-1-1 system, the net result of the migration to wireless telephones will be an erosion of the Enhanced 9-1-1 system's ability to provide caller location information. In order to adapt to this new technology, higher costs are currently being shouldered by local governmental entities that operate the PSAPs.

Costs for maintaining and improving 9-1-1 are increasing

The 9-1-1 Program is making progress to integrate wireless 9-1-1 into the Enhanced 9-1-1 systems and increase the interoperability of separate 9-1-1 systems in order to take advantage of future fully Enhanced Wireless 9-1-1 services. Improving the Enhanced 9-1-1 networks and connecting wireless carriers will increase the authorized expenditures required for the 9-1-1 Program. Appendix A contains a table showing the different expense elements for 9-1-1, along with statute citations, the amount, calculation basis, to which agency it is paid, and comparison between the previous and current biennia.

Public Safety Communications Associations and local government agencies recognize that expensive upgrades are needed at PSAPs to deal with wireless issues. Specifically, mapping systems and 9-1-1 answering equipment will need to be upgraded to provide more complex information to 9-1-1 call takers and to interface with map coordinate based instead of address based location readouts. Minnesota local units of government pay for their 9-1-1 costs from a mix of property tax revenue and telephone 9-1-1 fee grant funds. Whether more of local 9-1-1

costs should be funded out of local taxes or telephone fees is a public policy issue the Legislature may be asked to decide.

VIII Conclusion

The current 9-1-1 fee level of 33 cents will meet the foreseen funding needs of the state funded parts of the 9-1-1 Program through fiscal year 2004 if projected wired and wireless subscriber volumes and projected expenses are accurate. The current projections of these subscriber volumes and expenses indicate a shortfall of \$1,150,697 for the 9-1-1 Program at the end of fiscal year 2005. The net effect of subscriber volumes and resultant fees paid, new expenses, and old uncertified expenses claimed will determine whether or not and how much of a fee increase will be needed for fiscal year 2005. If funding shortfalls cannot be resolved by increasing the 9-1-1 fee, cutting spending by decreasing the amount sent to PSAPs appears to be the only alternative for the Department of Administration because all other major expenses are locked in by legislation or contract.

The success of the 9-1-1 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued success will require appropriate funding and further cooperation to solve the current and worsening problems caused by the growth of wireless telephone service and emerging new technology.

Appendix A. –9-1-1 Expenses Required by Statute Fiscal Year 2002 and 2003

EXPENSE	STATUTE REQUIRING	AMOUNT	CALCULATION BASIS	PAID TO	ACTUAL COSTS FOR 2002	FY 2002 FEE EQUIVALENT	PROJECTED COSTS FOR 2003	FY 2003 FEE EQUIVALENT
Network and Database charges for 9-1-1	M.S. 403.11	Per tariff charges approved by Public Utilities Commission	Connections from each telephone central office to 9-1-1 networks and maintenance of 9-1-1 databases	Incumbent local exchange carriers, interexchange carriers and 9-1-1 service providers (Qwest and Independent Emergency Services, llc)	\$ 6,312,046	10.3	\$ 8,603,960	13.6
Enhanced 9-1-1 Grants	M.S. 403.113	Currently \$0.10 per subscriber line or trunk equivalent for both wired and wireless service Set by Commissioner of Administration in consultation with counties and 911 system users To be increased to \$0.115 in Fiscal Year 2005	All of the first half divided on a per capita basis among centers in the 87 counties	106 county and city agencies (87 counties and 19 cities)	\$ 3,074,049	5.0	\$ 3,162,728	5.0
			87% of the second half among the 9-1-1 centers in 87 counties	106 county and city agencies (87 counties and 19 cities)	\$ 2,674,422	4.4	\$ 2,751,573	4.4
			3% of the second half among three government entities	U of M PD, Airport PD, and Red Lake Indian Reservation PD	\$ 92,221	0.2	\$ 94,882	0.2
			10% of the second half among ten State Patrol Communications centers	Transfer to Minnesota Department of Public Safety	\$ 307,405	0.5	\$ 316,273	0.5
Wireless 9-1-1 Transfers	M.S. 403.11	Varies with the number of wireless phone subscribers paying the 9-1-1 fee	\$0.02 per wireless subscriber line or trunk equivalent	Transfer to Minnesota Department of Public Safety	\$ 502,466	0.8	\$ 550,774	0.9
Implement Wireless Enhanced 9-1-1	M.S. 403.11	Depends on network complexity and number of wireless subscribers	Reimbursement of wireless carrier costs as represented by wireless carriers and contracted for with State, and tariff connection and database charges from 9-1-1 service providers	Wireless carriers and the 9-1-1 service providers (Qwest and Independent Emergency Services, llc)	\$ 679,626	1.1	\$ 3,793,808	6.0
Metropolitan Radio Board Grants	M.S. 473.901	Budget as approved by the Metropolitan Council	Metro Radio Board Budget, not to exceed \$0.04 (\$0.055 after FY04) of per line fee	Metropolitan Council	\$ 2,398,481	3.9	\$ 2,494,368	3.9
Poison Center Grants	Laws, 1994, Chapter 634, Article 1, Section 25(a)	\$50,000 in FY 2002	Fixed amount	Poison Centers	\$ 50,000	0.1		
Administrative Expenses Including Salaries	M.S. 403.11	Depends on indirect charges, employment contracts, travel, and miscellaneous costs	Per administrative indirect expense allocations, bargaining unit contracts, travel, etc	Varies	\$ 412,122	0.7	\$ 422,000	0.7
TOTAL APPROPRIATED EXPENSES					\$ 15,692,967	25.6	\$ 21,323,319	33.7
TOTAL TRANSFER EXPENSES					\$ 809,871	1.3	\$ 867,047	1.4
TOTAL CURRENT EXPENSES					\$ 16,502,838	26.9	\$ 22,190,366	35.1
PRIOR YEAR OBLIGATIONS CARRIED FORWARD AND EXPENSED IN CURRENT YEAR					\$ 1,509,364	2.5	\$ 2,496,960	3.9
TOTAL EXPENSES FOR THE YEAR					\$ 18,012,202	29.3	\$ 24,687,326	39.0

**Appendix A. –9-1-1 Expenses Required by Statute (Continued from previous page)
Fiscal Year 2004 and 2005**

EXPENSE	STATUTE REQUIRING	AMOUNT	CALCULATION BASIS	PAID TO	PROJECTED COSTS FOR 2004	FY 2004 FEE EQUIVALENT	PROJECTED COSTS FOR 2005	FY 2005 FEE EQUIVALENT
Network and Database charges for 9-1-1	M.S. 403.11	Per tariff charges approved by Public Utilities Commission	Connections from each telephone central office to 9-1-1 networks and maintenance of 9-1-1 databases	Incumbent local exchange carriers, interexchange carriers and 9-1-1 service providers (Qwest and Independent Emergency Services, llc)	\$ 8,603,960	12.3	\$ 8,603,960	11.6
Enhanced 9-1-1 Grants	M.S. 403.113	Currently \$0.10 per subscriber line or trunk equivalent for both wired and wireless service	All of the first half divided on a per capita basis among centers in the 87 counties	106 county and city agencies (87 counties and 19 cities)	\$ 3,486,645	5.0	\$ 4,260,473	5.8
		Set by Commissioner of Administration in consultation with counties and 911 system users	87% of the second half among the 9-1-1 centers in 87 counties	106 county and city agencies (87 counties and 19 cities)	\$ 3,033,381	4.4	\$ 3,706,611	5.0
			3% of the second half among three government entities	U of M PD, Airport PD, and Red Lake Indian Reservation PD	\$ 104,599	0.2	\$ 127,814	0.2
		To be increased to \$0.115 in Fiscal Year 2005	10% of the second half among ten State Patrol Communications centers	Transfer to Minnesota Department of Public Safety	\$ 348,665	0.5	\$ 426,047	0.6
Wireless 9-1-1 Transfers	M.S. 403.11	Varies with the number of wireless phone subscribers paying the 9-1-1 fee	\$0.02 per wireless subscriber line or trunk equivalent	Transfer to Minnesota Department of Public Safety	\$ 682,645	1.0	\$ 772,237	1.0
Implement Wireless Enhanced 9-1-1	M.S. 403.11	Depends on network complexity and number of wireless subscribers	Reimbursement of wireless carrier costs as represented by wireless carriers and contracted for with State, and tariff connection and database charges from 9-1-1 service providers	Wireless carriers and the 9-1-1 service providers (Qwest and Independent Emergency Services, llc)	\$ 4,062,972	5.8	\$ 4,444,295	6.0
Metropolitan Radio Board Grants	M.S. 473.901	Budget as approved by the Metropolitan Council	Metro Radio Board Budget, not to exceed \$0.04 (\$0.055 after FY04) of per line fee	Metropolitan Council	\$ 2,789,316	4.0	\$ 4,075,232	5.5
Administrative Expenses Including Salaries	M.S. 403.11	Depends on indirect charges, employment contracts, travel, and miscellaneous costs	Per administrative indirect expense allocations, bargaining unit contracts, travel, etc	Varies	\$ 447,000	0.6	\$ 473,000	0.6
TOTAL APPROPRIATED EXPENSES					\$ 22,527,874	32.3	\$ 25,691,385	34.7
TOTAL TRANSFER EXPENSES					\$ 1,031,310	1.5	\$ 1,198,284	1.6
TOTAL CURRENT EXPENSES					\$ 23,559,183	33.8	\$ 26,889,669	36.3
PRIOR YEAR OBLIGATIONS CARRIED FORWARD AND EXPENSED IN CURRENT YEAR								
TOTAL EXPENSES FOR THE YEAR					\$ 23,559,183	33.8	\$ 26,889,669	36.3

Appendix A. – Notes regarding 9-1-1 Expenses Required by Statute (Continued from previous page)

Notes

These 9-1-1 Funding Matrices show projections of the different expense elements for 9-1-1 appropriated and transfer expenses in each fiscal year from 2002 to 2005.

Fee Equivalents are indicated to provide a general idea of funding needs. Fee amounts shown for each expense element are somewhat skewed by the wireless 9-1-1 transfer expense, which is assessed only on wireless subscribers rather than all fee payers.

Total fee equivalent expenses for each year exceed the fee income (27 cents in fiscal year 2002 and 33 cents thereafter). Income shortfalls are offset by the dwindling accumulated balance in the 9-1-1 Special Revenue Fund.

Appropriated expenses are for networks and databases for 9-1-1 service, Enhanced 9-1-1 grants to PSAPs (except Enhanced 9-1-1 Grants to State Patrol are transfers), networks and databases for wireless enhanced 9-1-1, Metropolitan Radio Board, Poison Center Grants (2002 only), and 9-1-1 Program salaries and administrative expenses (including administrative allocations).

Transfer expenses are for State Patrol Enhanced 9-1-1 grants and wireless 9-1-1 transfers.

The matrices include statute citations, amounts, the basis for each calculation, and recipients.

A comparison between the current biennium and projected future biennium shows wireless enhanced 9-1-1 costs increasing from about one cent of the 9-1-1 fee in fiscal year 2002 to six cents as more wireless carriers connect to 9-1-1 selective routers and convert to Wireless Enhanced 9-1-1.

Expense element increases for Enhanced 9-1-1 Grants and Wireless 9-1-1 Transfers are directly caused by increases in the number of wire line and wireless subscribers paying the fee through fiscal year 2004 because they are based on a fixed number of cents of the fee. An additional cost increase is shown in fiscal year 2005 due to a scheduled grant increase from 10 cents to 11.5 cents.

Metropolitan Radio Board grant increases are based on volume projections through fiscal year 2004. The Metropolitan Radio Board budget for fee income is limited by statute not to exceed 4 cents of the fee. An additional cost increase is shown in fiscal year 2005 due to a 2002 change to M.S. 473.901 that increased the limit to 5.5 cents beginning July 1, 2004.

If funding shortfalls require cutting spending rather than increasing the 9-1-1 fee, decreasing the amounts sent to PSAPs by deferring the scheduled fiscal year 2005 increase to the Enhanced 9-1-1 Grant amount, or actually decreasing the grant amount to below ten cents appears to be the only alternative for the Department of Administration. All other major expenses are locked in by legislation or contract.

Appendix B. - 9-1-1 Funding Plan Projected Through Fiscal Year 2005

These three charts show projections of Departmental Earning and spending for fiscal years 2002 through 2005 as used in the biennial budget process, updated projections as of December 31, 2002, and the differences between the first two charts.

The largest differences are in the projected amounts of fees collected, possibly a reflection of the weak economy. Fee submissions lag collections by two months. The carriers are allowed time to collect the fees and are not required to submit them until the 25th of the month following the month of collection.

The later projections are based on actual 9-1-1 fee collections through October 2002. They show about three percent less money is projected to be available for 9-1-1 in fiscal year 2003, one percent less in fiscal year 2004, and another three percent less in fiscal year 2005. These cumulative decreases in revenue (\$ 1,723,000) are somewhat offset by an overall decrease in projected expenses (\$ 502,000) through fiscal year 2005. The moderate decrease in projected expenditures is because some of the expenses are based directly on the amount of customers paying the fee (both the 10 cent enhanced 9-1-1 grants and the 2 cent wireless grants, for example).

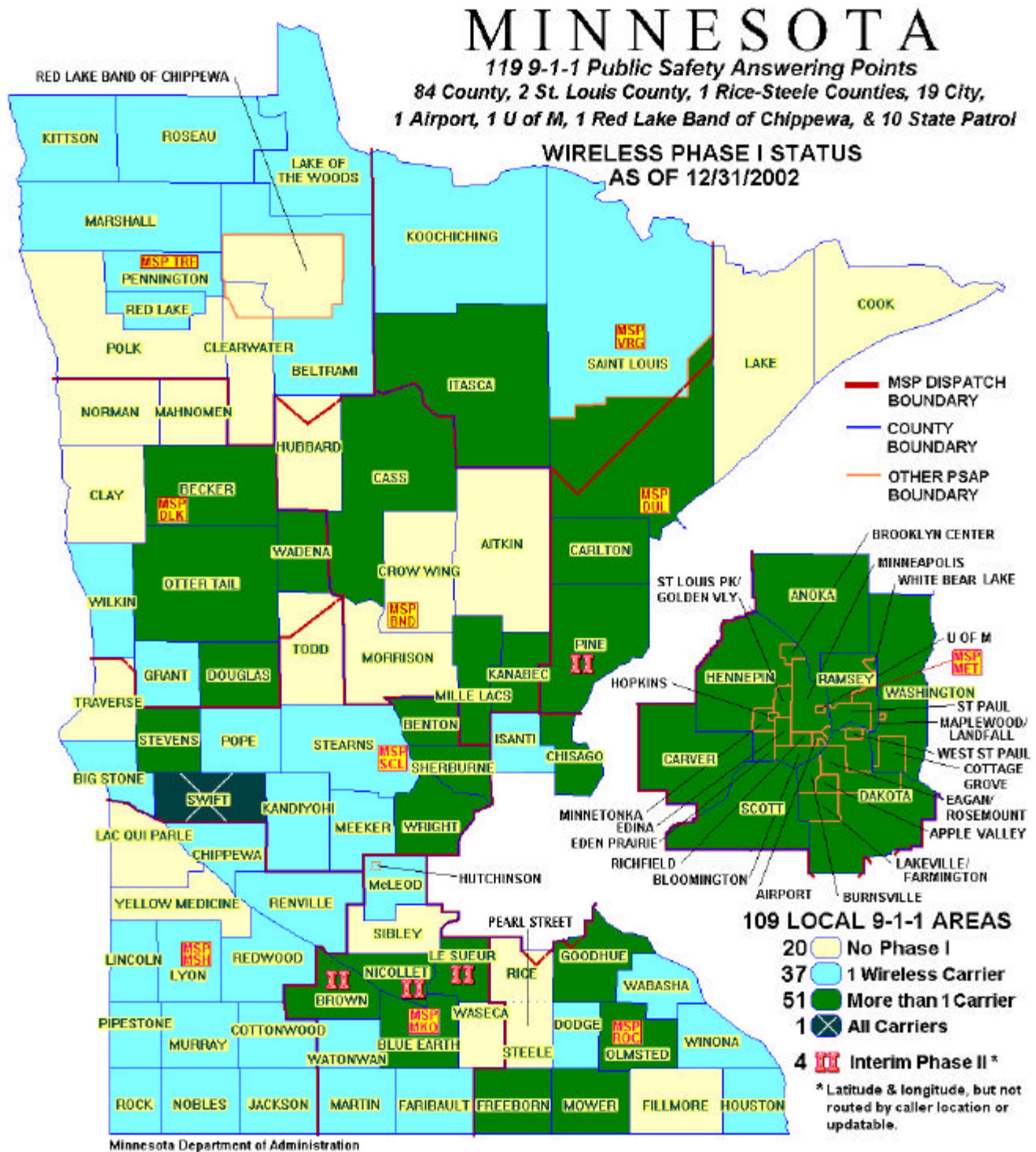
The projected \$74,000 increase in expenses shown in fiscal year 2003 reflects an additional wireless cost obligation which was only determined after the original projection had been done.

PROJECTIONS AS OF YEAR END FISCAL YEAR 2002 AS USED IN BIENNIAL BUDGET PROCESS						
SOURCE OF FUNDS	2002	2003	Total 02 - 03	2004	2005	Total 04 - 05
Beginning Carry Forward Balance	\$ 7,087	\$ 5,649	\$ 7,087	\$ 2,608	\$ 2,181	\$ 2,608
Fees Collected	\$ 16,573	\$ 21,622	\$ 38,195	\$ 23,257	\$ 25,181	\$ 48,438
Available Funds	\$ 23,660	\$ 27,271	\$ 45,282	\$ 25,865	\$ 27,362	\$ 51,046
USES OF FUNDS						
Earnings Transferred Out	\$ 809	\$ 917	\$ 1,726	\$ 1,043	\$ 1,248	\$ 2,291
Direct Expenditures	\$ 17,109	\$ 23,645	\$ 40,754	\$ 22,540	\$ 25,941	\$ 48,481
Indirect Expenditures	\$ 93	\$ 101	\$ 194	\$ 101	\$ 101	\$ 202
Total Use of Funds	\$ 18,011	\$ 24,663	\$ 42,674	\$ 23,684	\$ 27,290	\$ 50,974
Ending Carry Forward Balance	\$ 5,649	\$ 2,608	\$ 2,608	\$ 2,181	\$ 72	\$ 72

LATER PROJECTIONS AS OF 12/31/2002						
SOURCE OF FUNDS	2002	2003	Total 02 - 03	2004	2005	Total 04 - 05
Beginning Carry Forward Balance	\$ 7,087	\$ 5,649	\$ 7,087	\$ 1,836	\$ 1,289	\$ 1,836
Fees Collected	\$ 16,573	\$ 20,874	\$ 37,447	\$ 23,012	\$ 24,451	\$ 47,463
Available Funds	\$ 23,660	\$ 26,523	\$ 44,534	\$ 24,848	\$ 25,740	\$ 49,299
USES OF FUNDS						
Earnings Transferred Out	\$ 809	\$ 867	\$ 1,676	\$ 1,031	\$ 1,198	\$ 2,229
Direct Expenditures	\$ 17,109	\$ 23,719	\$ 40,828	\$ 22,427	\$ 25,590	\$ 48,017
Indirect Expenditures	\$ 93	\$ 101	\$ 194	\$ 101	\$ 101	\$ 202
Total Use of Funds	\$ 18,011	\$ 24,687	\$ 42,698	\$ 23,559	\$ 26,889	\$ 50,448
Ending Carry Forward Balance	\$ 5,649	\$ 1,836	\$ 1,836	\$ 1,289	\$ (1,149)	\$ (1,149)

DIFFERENCE						
SOURCE OF FUNDS	2002	2003	Total 02 - 03	2004	2005	Total 04 - 05
Beginning Carry Forward Balance	\$ -	\$ -	\$ -	\$ (772)	\$ (892)	\$ (772)
Fees Collected	\$ -	\$ (748)	\$ (748)	\$ (245)	\$ (730)	\$ (975)
Available Funds	\$ -	\$ (748)	\$ (748)	\$ (1,017)	\$ (1,622)	\$ (1,747)
USES OF FUNDS						
Earnings Transferred Out	\$ -	\$ (50)	\$ (50)	\$ (12)	\$ (50)	\$ (62)
Direct Expenditures	\$ -	\$ 74	\$ 74	\$ (113)	\$ (351)	\$ (464)
Indirect Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Use of Funds	\$ -	\$ 24	\$ 24	\$ (125)	\$ (401)	\$ (526)
Ending Carry Forward Balance	\$ -	\$ (772)	\$ (772)	\$ (892)	\$ (1,221)	\$ (1,221)

Appendix C. - Cellular 9-1-1 Status in Minnesota



Five wireless carriers have converted to wireless enhanced 9-1-1 (with cell sector location and callback number) in 28 Twin Cities metropolitan Public Safety Answering Point (PSAP) areas. Seven wireless carriers among 60 counties in Greater Minnesota are receiving Phase I service. Swift County has Phase I from all carriers. T-Mobile is providing interim Phase II 9-1-1 service (latitude and longitude, but without selective routing based on the caller location and without the capability to send an updated location during a call) in Brown, Le Sueur, Nicollet, and Pine counties.