

**REPORT TO THE
UTAH LEGISLATURE**

Report No. 99-10

**A Performance Audit
of the
9-1-1 System in Utah**

December 1999

Audit Performed by:

Audit Manager	Richard Coleman
Audit Supervisor	Maria Stahla
Audit Staff	Pauline Ingols

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Digest of A Performance Audit of the 9-1-1 System in Utah

**Chapter I -
Telecommunications
changes require
reevaluating state's
9-1-1 system.**

Major changes in the telecommunications environment have created a need to reevaluate the organizational structure and funding of the state's 9-1-1 system to ensure the citizens of the state are being well served by the system. The current decentralized organizational structure and funding mechanism were developed in the 1980s when there was one major telephone company, very few wireless phone companies and basic 9-1-1 telephone service. However, the telecommunications environment has changed dramatically since 9-1-1 service was established. Competition in the telephone industry has allowed many new companies to enter the market and begin offering telephone service and there has been tremendous growth in the number of wireless phones.

The dramatic increase in wireless use has placed new demands on the 9-1-1 system. A major issue currently facing the state is the implementation of wireless Enhanced 9-1-1 (E9-1-1), designed to improve servicing of 9-1-1 calls originating from wireless phones. Because of the many issues and parties involved, we believe a comprehensive statewide solution is needed.

The key findings and recommendations of this report include the following:

**Chapter II -
Creation of a State
9-1-1 office would
improve system.**

State Office Would Improve 9-1-1 System. Many 9-1-1 issues are broader than an individual Public Safety Answering Point's (PSAP) jurisdictional boundaries and can be more effectively addressed at a statewide level. Furthermore, the importance of state involvement is growing because ongoing technological advances and changes in service providers are making the telecommunications environment increasingly complex. Some other states have offices that plan and coordinate the 9-1-1 system and also provide valuable technical assistance to locally operated PSAPs. In order to get past the political service areas and meet users' expectations, we recommend that the Legislature create a state 9-1-1 office to provide needed state leadership.

**Chapter III -
Telephone Fee
Collection System
Should be Improved.**

Recommendation:

1. We recommend the Legislature create a state office that could assist in planning for the statewide 9-1-1 system as well as providing technical assistance and coordination to PSAPs.

9-1-1 Fee Collection System Should Be Improved. Changing the 9-1-1 telephone fee collection system can increase available funds needed to operate the 9-1-1 system. The existing system has many weaknesses because each local governing authority must collect from each telephone company. The decentralized system leads to a lack of accountability, making it difficult to know whether fees are properly collected. We estimate \$700,000 will be lost in calendar year 1999 by having a decentralized collection system. The most effective way to improve system efficiency would be for the Legislature to centralize collections with the Tax Commission which already has a collection system in place to collect the poison control telephone fee.

Recommendation:

1. We recommend the Legislature amend the **Utah Code** to centralize the collection of the 9-1-1 fee on a statewide basis under the State Tax Commission.

Legislature Should Clarify State 9-1-1 Fee Policy. Because the **Utah Code** is somewhat vague, some public agencies may use 9-1-1 fees in ways the Legislature did not intend. The ongoing rapid growth in fee collections may also contribute to an expansion of how the fee is used. We did not find that fees are used improperly, but inconsistent practices raise a variety of concerns that we discuss in this chapter. We feel the Legislature should clarify state policy on use of the fee, either in statute or by delegating rule-making authority to a 9-1-1 state office.

Because telephone fee revenue is currently growing so rapidly, now is an ideal time for the Legislature to review use of the fee. When the Legislature established the fee in 1986, both PSAP needs and the telecommunications industry were very different from what they are today. In light of the different environment, we think the Legislature should review the state's telephone fee policy. An

**Chapter IV -
Legislature Should
Clarify State 9-1-1
Fee Policy.**

important issue for the Legislature to consider is whether the 9-1-1 fee is intended to support a statewide emergency communications system or to fund local programs. Depending on its intended use, the current fee level may need to be adjusted and a new fee distribution method established.

Recommendations:

1. We recommend that the Legislature specify appropriate uses of 9-1-1 funds, either in the **Utah Code** or by delegating rule making authority to the State 9-1-1 Office recommended in Chapter II.
2. We recommend that the Legislature review the 9-1-1 fee level and consider:
 - a. Whether a fee review mechanism should be established to set the fee level to produce sufficient revenue to cover defined costs;
 - b. Whether fee levels should vary by phone type (business or residential) including whether wireline and wireless phone fees should be the same.
3. We recommend that the Legislature consider whether 9-1-1 fees should fund a statewide service level. If so, a new fee distribution mechanism would need to be established.

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Chapter I

Introduction

Telecommunications changes require reevaluating state's 9-1-1 system.

Major changes in the telecommunications environment have created a need to reevaluate the organizational structure and funding of the state's 9-1-1 system to ensure the citizens of the state are being well served by the system. The current decentralized organizational structure and funding mechanism were developed in the 1980s when there was one major telephone company, very few wireless phone companies and basic 9-1-1 telephone service. However, the telecommunications environment has changed dramatically since 9-1-1 service was established. Competition in the telephone industry has allowed many new companies to enter the market and begin offering telephone service, and there has been tremendous growth in the number of wireless phones.

The dramatic increase in wireless use has placed new demands on the 9-1-1 system. A major issue currently facing the state is the implementation of wireless Enhanced 9-1-1 (E9-1-1), designed to improve servicing of 9-1-1 calls originating from wireless phones. Because of the many issues and parties involved, we believe a comprehensive statewide solution is needed. This report will provide specific recommendations for improvements to the 9-1-1 system.

Organization and Funding of 9-1-1 Service Was Established in the 1980s

Utah Code allows local governing authorities to establish 9-1-1 telephone service and to levy a telephone fee to pay for that service. It is in the public interest to provide a three-digit number for any individual to gain rapid, direct access to emergency aid. The number 9-1-1 is provided with the objective of reducing response time to situations requiring law enforcement, fire, medical, rescue or other emergency service. The 9-1-1 calls are answered at a central location, called a Public Safety Answering Point (PSAP), by staff responsible for collecting information from the caller such as the type and location of the emergency. These staff, known as 9-1-1 call takers or dispatchers, then inform the appropriate emergency service providers of the need

Organizational structure and funding mechanism were developed in a different telecommunications environment.

for services. In most PSAPs the 9-1-1 call taker is also the dispatcher of emergency equipment.

The current organizational structure of the 9-1-1 system consists of thirty-five answering points throughout the state. The PSAP network evolved through local government initiatives and the state highway patrol dispatch network but no state oversight. Of the thirty-five PSAPs operating in the state, five are state-operated centers, seventeen county-operated centers, twelve city-operated centers, and one operated as an inter-local agreement among seven cities. Appendix A shows all the PSAPs in the state.

Annually, almost \$10 million in 9-1-1 telephone fees is collected by local governing authorities. Local governments as well as the state's Department of Public Safety provide funding for expenses that are not covered by the 9-1-1 telephone fee.

9-1-1 System Has Evolved into an Effective System for Wireline Phones

The entire 9-1-1 infrastructure was created for wireline phones.

Dialing 9-1-1 is a familiar way for the public to call for help in an emergency. When 9-1-1 was introduced in the 1970s, it was simply a telephone service that allowed the public to dial three digits instead of the traditional seven digit phone numbers to get emergency assistance. Taking advantage of advances in telephone and computer technology enhanced, or E9-1-1, service was introduced in the 1980s. Most Utah PSAPs upgraded to E9-1-1 service in the early 1990s. E9-1-1 service is superior to that of basic 9-1-1 service because the enhancements provide identification of the calling telephone, or automatic number identification (ANI), and the caller's street address, or automatic location identification (ALI). ANI allows PSAP personnel to dial back the calling party if the call is disconnected, and ALI enables more precise dispatching to the scene of an incident.

Wireless Environment Presents Major Challenges to the 9-1-1 System

The proliferation of wireless phones has created challenges for the 9-1-1 system.

Emergency calls made using wireless telephones (cell phones) are presently handled differently than traditional wireline telephone calls. The tremendous increase in wireless subscribers and a corresponding growth in wireless originated calls for emergency services have created

many challenges for the 9-1-1 system. The entire 9-1-1 infrastructure was set up for wireline phones, and there was no provision of ANI or ALI for wireless users. Some PSAPs receive number information on some wireless calls by using a service known as caller ID. None of the wireless 9-1-1 calls have location information. Because PSAPs do not receive location information on calls made from wireless phones, the caller must be able to tell the 9-1-1 call taker the location to get help.

Changes in federal regulations require wireless telephone companies to make ALI and ANI information available to PSAPs in the future.

Audit Scope and Objectives

The Legislative Audit Subcommittee requested this audit based on previous preliminary work completed by our office. In October, 1998 we issued an informal letter report titled "Staffing Levels in the State Operated Communications Centers" (Report # ILR 98-D). As we reviewed state-operated PSAPs at that time, we had some concerns about whether the entire 9-1-1 system was operated efficiently and effectively. Therefore, we recommended that the Legislative Audit Subcommittee authorize an expanded audit of the statewide 9-1-1 system. The subcommittee directed us to complete this audit.

Our audit objectives were the following:

1. Determine if the organizational structure of the state's 9-1-1 system is being run in an efficient and economical manner.
2. Determine whether the 9-1-1 telephone fee collection process is effective and efficient.
3. Evaluate how the 9-1-1 telephone fee is used.

To answer these audit questions, we collected information by interviewing PSAP managers and local government employees. We also relied on information gathered by surveying all public safety answering points in Utah. We sent 35 surveys and received responses from 19 PSAPs. In addition, we depended on literature written by two national professional groups involved with 9-1-1: the National Emergency Number Association (NENA) and the Association of

Public Safety Communications Officials International, Inc. (APCO). We also depended on information provided by other state 9-1-1 offices and performance audits completed in the states of Minnesota, Texas, and Wisconsin.

Because of the many acronyms used in the report, we have included a glossary in Appendix B.

Chapter II

State Office Would Improve 9-1-1 System

A state office is needed to address 9-1-1 issues that are broader than local PSAP boundaries.

Many 9-1-1 issues are broader than an individual PSAP's jurisdictional boundaries and can be more effectively addressed at a statewide level. Furthermore, the importance of state involvement is growing because ongoing technological advances and changes in service providers are making the telecommunications environment increasingly complex. Some other states have offices that plan and coordinate the 9-1-1 system and provide valuable technical assistance to locally operated PSAPs. In order to get past the political service areas and meet users' expectations, we recommend that the Legislature create a state 9-1-1 office to provide needed state leadership.

Utah's 9-1-1 system has evolved with little state involvement. In 1986, the Utah Legislature enacted the "Emergency Telephone Law," creating a funding source for the 9-1-1 system. In a subsequent session, the Utah Legislature passed a joint resolution which recommended that the Utah Public Service Commission encourage telephone companies to upgrade their facilities to provide Enhanced 9-1-1 (E9-1-1) capabilities. The Utah Public Service Commission led the effort to encourage statewide implementation and directed the Division of Public Utilities to establish an E9-1-1 Task Force.

A state task force coordinated the implementation of E9-1-1 in the early 1990's, but no state coordination has existed since that time.

In March 1990, the Division of Public Utilities organized the Utah E9-1-1 Task Force to encourage and assist all governmental and industry entities in procuring and implementing E9-1-1 type capabilities statewide. Chairing the task force were two state employees—the Telecommunications Specialist in the Division of Public Utilities and the Communications Bureau Chief in the Department of Public Safety. The task force met many times and created an information guide and basic implementation plan that was distributed to all cities and counties in February, 1991 by then Governor Norman Bangert. The task force disbanded when most areas had implemented their E9-1-1 systems.

Since then, each local governing authority has operated their 9-1-1 system and made all decisions at the local level. One reason the system has been able to function without a state office is that US West, the major

telephone company in the state, employs a state 9-1-1 coordinator who acted as a resource. However, in the future telecommunications environment, we believe the state, rather than US West, needs to fill that role.

Other States Have Established 9-1-1 Offices

Some states have state 9-1-1 offices to plan, coordinate, and assist PSAPs with the 9-1-1 system.

Some states have small 9-1-1 offices that perform a variety of functions. State 9-1-1 offices are able to evaluate statewide emergency response system needs and advise lawmakers about policy options. State offices also provide technical assistance needed by individual PSAPs and coordinate the efforts of the state's network of PSAPs. Still many states, including Utah, do not have a state 9-1-1 office. We identified some states with state 9-1-1 offices; these state 9-1-1 offices are small units that are administratively tied to one of a number of departments. We briefly describe four states' offices we reviewed in depth:

- **Arizona** – Arizona's 9-1-1 office was created in 1985 in order to provide the same level of emergency 9-1-1 service to all residents in the state. The office is operated within the Department of Administration and has a staff of three people. The state office manages the Emergency Telecommunications services revolving fund. The office collects all 9-1-1 fees for the state and pays all state network, equipment, and maintenance costs for every PSAP in Arizona. Each year they recommend, to the Joint Legislative Tax Committee, the amount of the telecommunications services excise tax to be levied for the following fiscal year. They also analyze the numerous telephone bills to ensure the charges are appropriate.
- **Minnesota** – The state's role has been one of coordination and technical assistance to local governments. The state 9-1-1 office operates with a staff of three people. Within the Department of Administration's Inter-Technologies Group, the Telecommunications Division established a 9-1-1 program to set 9-1-1 operating standards, oversee the collection of fees and distribution of revenues for 9-1-1, contract with telephone companies to provide the equipment and services that transmit 9-1-1 calls, and assist local governments with developing and improving their 9-1-1 systems.

- **Texas** – The state of Texas’ 9-1-1 office operates under the Texas Advisory Commission on State Emergency Communications, with a staff of 20. Working under the state office is the Texas Poison Center Network and 24 regional councils which oversee nearly 700 PSAPs in 224 counties. The state 9-1-1 office levies and collects the 9-1-1 phone fees, disburses the funds to regional councils, identifies and prioritizes allowable 9-1-1 expenses, and communicates with legislators to assure sufficient revenues for the 9-1-1 system. They also coordinate the integration of poison control centers into the 9-1-1 network and create and implement policies and procedures for both 9-1-1 and poison control.
- **Washington** – The state of Washington’s E9-1-1 program was established by a voter referendum in 1991. The role of the state office is to coordinate and facilitate local planning and support counties that cannot implement E9-1-1 on their own. The state of Washington office operates under the Military Department with a staff of six people. The state office determines how 9-1-1 fees should be allocated to PSAPs, works with wireless companies to develop and implement wireless E9-1-1, reports progress of 9-1-1 to the legislature, and works with the FCC and national groups to develop standards for PSAPs.

Federal legislation passed in October 1999 encourages statewide coordination for 9-1-1 systems.

While many states still do not have state 9-1-1 offices, their use appears to be increasing. In fact, federal legislation passed in October, 1999 and awaiting the President’s signature is based on the premise that “the rapid and efficient deployment of emergency telecommunications service requires statewide coordination . . .” Senate Bill 800 requires the FCC to “encourage each state to develop and implement coordinated statewide deployment plans through an entity designated by the governor . . .” The remainder of this chapter describes some of the functions a state office could complete in the following areas:

- Statewide planning and coordination
- Technical assistance

State Office Could Provide Statewide Planning and Coordination

Statewide planning is necessary to respond to technological advances.

Statewide planning for the 9-1-1 system is necessary because of the numerous technological advancements, competitive changes, and legislative reforms that have occurred in the past few years. The tremendous growth of wireless telephone use over the past decade has placed new demands on the 9-1-1 system. The boundaries of wireless carriers' service areas do not correspond with political boundaries, emergency service zones, nor even with exchange carrier service boundaries. A state office could provide statewide planning that would transcend the numerous service area boundaries between telephone exchanges and units of government.

Planning for the implementation of wireless E9-1-1 and coordinating poison control and 9-1-1 will create a better managed 9-1-1 system. Advances in technology have created a complicated telecommunications network; planning and coordinating a statewide 9-1-1 system will reduce technical and financial complications in the future.

Statewide Approach Is Needed to Implement Wireless E9-1-1

Implementation of wireless E9-1-1 creates a statewide planning issue.

One of the major planning issues currently facing the state is the implementation of wireless E9-1-1. Nearly every component of the 9-1-1 system will be affected by the implementation of wireless E9-1-1. Some PSAPs are unaware of what they will need both financially and technologically to implement wireless 9-1-1. One PSAP manager told us the phone company simply needed to start feeding the wireless information to them. However, wireless E9-1-1 implementation is more complicated than simply having the phone company send the information.

Currently, when a 9-1-1 call is made from a wireless phone, no number or location information is sent to the PSAP as is sent with a call from a wireline phone. Wireless E9-1-1 must be implemented for PSAPs to receive number and location information. Communications experts report that planning for the wireless E9-1-1 challenge should be carried out holistically on a state-wide level. A statewide approach for planning and coordinating the implementation of wireless E9-1-1 will assure:

- The wireless system can be integrated into the current 9-1-1 system

- Cell site spectrums are coordinated with jurisdictional boundaries
- A sufficient cost recovery mechanism is available to pay for wireless E9-1-1

Other states have utilized state offices or task forces to work with wireless carriers to implement wireless E9-1-1.

Decision Needed on Wireless Technology. A statewide approach is needed to assure the wireless technology chosen will integrate into the current 9-1-1 system. A centralized point, such as a state office, can more easily handle the integration of E9-1-1 and communicate the needs and capabilities of the current 9-1-1 system than the 35 PSAPs working separately with every wireless company.

Technology for wireless E9-1-1 is still being developed and tested.

The FCC docket 94-102 orders wireless carriers to develop technology to provide number and location information of wireless callers to PSAPs.

The technology development is divided into two phases. Phase I technology is currently available from wireless carriers and can be implemented with few changes to the existing PSAP equipment and network. Phase I provides PSAPs with the wireless caller's phone number and the location of the cell tower receiving the call. Many PSAPs currently receive number information by routing wireless 9-1-1 calls to a 7-digit number and using caller I.D.; however, they do not receive cell tower location information.

Phase II technology is being developed and will provide PSAPs with the wireless caller's phone number and the location of the wireless phone within a radius of 50 to 100 meters. There are currently two Phase II technologies wireless carriers can choose from. The technology chosen must be able to integrate into the current 9-1-1 network, and PSAPs must have equipment capable of receiving the number and location data the wireless companies send. The two technologies being developed and tested are:

- **Triangulation** – Computers attached to cell towers measure the time or angle of the wireless call signal. The readings from multiple towers are combined and the results translated into the longitude and latitude of the caller. A wireless handset must be able to access multiple towers for triangulation to work.

- **Global Positioning Satellites (GPS)** – Satellites orbiting the earth transmit longitude and latitude information to a GPS receiver located in the wireless phone. Data from the receiver is then sent to computer equipment at the cellular tower which forwards the location information to the 9-1-1 network. A wireless handset must have a GPS receiver for this method to work.

In both methods, PSAPs must have software to translate latitude and longitude information into addresses or other meaningful locations.

The technology chosen for phase II wireless E9-1-1 will affect costs of the system.

The technology chosen may affect the costs of wireless E9-1-1 implementation. For example, the state of Washington estimated startup and implementation costs near \$67 million for the triangulation method; however, the state is currently pilot testing the GPS method and only had to make minor changes to the existing equipment and network and purchase data translation software at a minimal cost to use this system.

Wireless company's service areas and cellular tower spectrums do not match PSAP boundaries.

Coordination of Cell Site Spectrums and PSAP Boundaries Is Possible. Statewide planning is needed to coordinate cellular tower spectrums and jurisdictional boundaries. Wireless company's service areas and cellular tower spectrums do not match PSAP boundaries. A cellular tower spectrum is the geographic area covered by a cellular tower. For example, a wireless company may have one cellular tower on a high point, with a spectrum covering two or three counties; each of those counties may have their own PSAP. Someone must indicate which PSAP the 9-1-1 call, coming from the tower, should be directed to. If coordinated planning among PSAPs does not occur, PSAPs will be left at the mercy of the wireless company to determine how calls should be directed. With statewide planning, a state 9-1-1 office working with PSAPs could determine how wireless calls will be routed throughout the state network so emergency services will be sent to the right place in an acceptable time.

Statewide planning is needed to develop a cost recovery mechanism for wireless E9-1-1.

Cost Recovery Mechanism Is Needed. Statewide planning is also needed to develop a cost recovery mechanism for the implementation and operation of wireless E9-1-1. The FCC docket states a cost recovery mechanism must be in place before a PSAP can request wireless E9-1-1 information from a wireless carrier. Although some PSAPs collect a fee on wireless phones, the fee may not be adequate to meet the FCC's order for a cost recovery mechanism. Intent language, found in the house journal, states the intent of the three-cent increase in 1998 was for wireless

E9-1-1; however, the law does not state that any part of the fee is “earmarked” for wireless E9-1-1 costs.

Statewide cost studies, which analyze the costs to implement and operate wireless E9-1-1, are needed to assure a sufficient cost recovery mechanism is in place so wireless E9-1-1 service can be requested from wireless providers. Wireless carriers have determined costs for Phase I. Depending on the company, the costs range from 19 to 25 cents per wireless customer per month for service plus implementation costs. The cost to implement and operate Phase II is largely unknown because the technology has not been chosen. Once a cost study has been conducted, the Legislature can adjust the current fee, or language regarding the fee, to create a sufficient cost recovery mechanism throughout the state.

State 9-1-1 offices have made the implementation of wireless E9-1-1 easier and quicker.

State 9-1-1 Offices Have Implemented Wireless E9-1-1. The states of Washington, Oregon, and Colorado have implemented Phase I. AT&T wireless told us the implementation was easier and quicker in Washington and Oregon because they have state 9-1-1 offices. Colorado implemented wireless E9-1-1 on a local basis, which took more time and effort than implementation on a statewide basis.

Washington state has been very pro-active in implementing wireless E9-1-1. The following briefly describes areas in which the Washington state 9-1-1 office has provided assistance during the implementation of wireless E9-1-1:

- A number of years before the FCC docket was adopted, the Washington state 9-1-1 office, under the authority of administrative code, worked with wireless companies to “send number information to PSAPS on wireless E9-1-1 calls.” The state essentially had implemented Phase I of the FCC docket long before the FCC docket was written.
- The state 9-1-1 office, in conjunction with wireless phone companies, is currently “participating in a test program” for handset (GPS) based Phase II implementation. The test program has allowed the state to determine how the technology integrates with the current system and how accurate the information is.
- The 9-1-1 office, along with the Department of Revenue, was directed by the Legislature to conduct a cost study of the

implementation of wireless E9-1-1. The 200-page report was presented to Washington's Legislature in early 1999 and made recommendations for a variety of cost recovery mechanisms.

Other states are in the process of implementing wireless E9-1-1. Minnesota and Texas are developing statewide implementation plans, studying costs to implement wireless E9-1-1, and reporting to the Legislature on the progress of the plans.

State Office Can Coordinate 9-1-1 and Poison Control

Although they are funded from the same law, the Utah Poison Control Center and 9-1-1 centers operate autonomously. In 1998, the Legislature expanded the Emergency Telephone law to fund the Poison Control Center, using the Texas approach as a model. However, unlike Utah, in Texas one state agency oversees funding and rule-making for both poison control and 9-1-1.

Coordination Would Allow Calls to Be Handled More Effectively. A state office could coordinate communication among PSAPs and Poison Control so poison related calls can be handled more effectively. The State of Texas has integrated Poison Control and 9-1-1 so they can easily transfer calls back and forth providing better service for their residents. In order to dispatch emergency service vehicles when necessary, the Texas poison control centers have direct connections to the 9-1-1 PSAP that is most closely located to each individual caller.

In Utah, transfers between Poison Control and PSAPs are difficult and do not include the number and location of the caller that are standard on 9-1-1 calls. Of the 45,000 calls taken by Utah's Poison Control Center in 1998, less than 1,000 were transferred by Utah's PSAPs. The Poison Control manager does not understand why more calls were not transferred from Utah's PSAPs, but she indicated that some PSAPs did not know that the Poison Control Center existed. Integrating the two systems would create better customer service and allow rapid access to the appropriate service.

Telephone Fees Can Be Coordinated. The Texas Advisory Commission on 9-1-1 is the state agency responsible for developing policies and procedures for the statewide implementation of 9-1-1 services and for

**Coordination of
poison control and
9-1-1 will create a
more efficient
environment for call
transfers.**

A state office can provide oversight of the poison control fee.

Statewide public education would be enhanced by coordinating 9-1-1 and poison control.

overseeing the funding and rule-making for a statewide poison control center network.

Utah's current system has very little oversight over the telephone fee established to fund the poison control center. Because of a proliferation of wireless phones and second phones, the Poison Control Center by assessing the telephone fee is receiving more revenue than they calculated they would receive. A calculation was made to determine what fee would be necessary to collect \$1.2 million to fund all expenses of the Poison Control Center. This fee was calculated at seven cents. Because the proliferation of wireless phones and increase in second lines was not considered when the poison control fee was set, Poison Control will net approximately \$1.35 million in 1999.

Public Education Can Be Coordinated. With few exceptions, public education for 9-1-1 has been limited. Due to a lack of resources, neither local governing authorities nor PSAPs maintain an aggressive campaign to educate the public on the proper use of 9-1-1. In contrast, Poison Control has a full-time public educator who conducts an outreach education program throughout the state. The Poison Control educator could include 9-1-1 education in the current outreach program, but have not done so because there is no avenue to get information to and from all the PSAPs in the state. A state 9-1-1 office could be the liaison for coordinating education efforts for 9-1-1 and poison control.

Education is the key to proper use of 9-1-1 and reducing the number of inappropriate 9-1-1 calls. Only 64 percent of 9-1-1 calls in Utah are considered emergencies. An Association of Public Safety Communications Officials (APCO) released position statement indicated that public education is the single most important factor in the appropriate use of 9-1-1. Non-emergency calls on 9-1-1 lines affect the cost to run the PSAP as expensive equipment and personnel are used to redirect non-emergency calls to the appropriate place. Public education efforts teach the public when to call 9-1-1, when to call a 7-digit non-emergency number, and when to call poison control, reducing the number of inappropriate calls on 9-1-1 lines.

A state office can provide planning and coordination of fee setting, communication, and funding issues.

Other Issues Also Need Statewide Planning and Coordination

In addition to the wireless and poison control issues discussed above, a state office would provide valuable planning and coordination of many other issues. Those issues are:

- **Fee Setting Issues** – The fee setting issue deals with the determination of what the 9-1-1 rate should be for business lines, residential lines, and wireless phones. Currently all of Utah’s rates are set at a maximum of 53 cents. Some other states charge a higher rate on business trunk lines because business trunk lines usually average five phones per trunk line.
- **800 Megahertz (MHZ) Issues** – State and local agencies are in the planning stages of building a statewide, digital-trunked public safety radio system. The purpose of the trunked public safety radio system is to ultimately serve all the public sector radio communications needs in the state. The intent of the system is to create sufficient capacity to relieve the congested radio channels that can, at times, prevent effective communications within and between agencies. The 800 MHZ system will also allow interagency radio communication and take advantage of the FCC influenced move toward equipment that operates on the more efficient narrowband radio waves. While the trunked statewide radio system itself is beyond the scope of this report, there may be coordination issues that relate to the 9-1-1 system.
- **Planning for Additional Sources of Funding** – The state 9-1-1 office could review other funding sources such as grants, loans, advances, and subsidies, as allowed by **Utah Code**. For example, the Minnesota 9-1-1 office acted in behalf of local PSAPs in obtaining Federal Block Grants to pay for the implementation of their 9-1-1 system.

State Office Could Provide Technical Assistance to PSAPs

The provision of 9-1-1 public safety dispatching occurs at the local level; however, some issues transcend the numerous different service area

boundaries between telephone exchanges and units of government. Legislators, government officials, telephone company representatives, PSAP personnel, and the public also need and request information about the 9-1-1 system. No central place in the state has information on 9-1-1 in Utah. Other states have state offices that perform many functions including:

- establishing minimum standards and assisting PSAPs to achieve the standards,
- insuring quality service for all citizens,
- reviewing PSAP's expenditures, and
- insuring funds are spent as allowed.

State Office Could Act as Technical Resource

The intricate 9-1-1 system may be beyond the experience and expertise of many PSAP managers. Our audit found that many PSAP managers lack knowledge regarding the technical components of the 9-1-1 system. PSAP managers may be police officers or dispatchers whose background is narcotics or dispatching, but not complicated telecommunications equipment. The main role of a PSAP manager is to link emergency services to citizens in need. A state office could respond to technical inquiries about network, equipment, and training, allowing local managers to concentrate on dispatching.

A state office can provide technical assistance for PSAPs.

State Office Can Respond to Inquiries. Local PSAP managers currently have no resource for technical assistance. US West has been able to answer questions in the past; however, with the proliferation of new phone companies, US West cannot be expected to provide information for all networks and equipments. PSAP managers have also turned to management at Valley Emergency Communications Center (VECC), the largest PSAP in Utah, to answer questions. Although VECC has technical expertise and is willing to assist other PSAPs, acting as a state resource is beyond the scope of VECC's objectives. As the telecommunications environment grows, US West and VECC will be unable to provide information for the spectrum of 9-1-1 issues that occur throughout the state. The knowledge and expertise that could be garnished by a state office would create a resource for local managers.

Identification of minimum equipment standards by a state office will insure acceptable 9-1-1 service throughout the state.

State Office Could Insure PSAPs Have Needed Equipment

A state office could identify minimum equipment specifications for PSAPs to assure an acceptable level of 9-1-1 service throughout the state. The state office could assist PSAPs in writing specifications for bid documents and in negotiating contracts with equipment suppliers to obtain the best equipment for the lowest price. Two PSAPs recently contracted for the purchase of new and upgraded 9-1-1 equipment without using a competitive bid process. Consequently, it is unclear if the purchase price of the equipment was reasonable. A state office could have helped insure that the PSAPs received the best equipment for the lowest price. During the course of our audit, several PSAPs indicated they will be purchasing new equipment within a year. A state office could coordinate multiple purchases of equipment to receive quantity discounts. The state office in Arizona has been able to get such quantity discounts for PSAPs in their state.

Currently, levels of equipment sophistication are also not consistent throughout the state which may create varying service levels. Equipment in PSAPs range from a basic 9-1-1 system in Garfield County to a state of the art E9-1-1 system at VECC. The type of equipment used in a PSAP is determined by the local governing authority whose decision is often affected by available funding and community needs. Funding issues are discussed in Chapter III.

State Office Could Insure Training Needs Are Met

Varying levels of dispatch training also exist from PSAP to PSAP, creating differing service levels in different areas of the state. A state office could review current training programs and meet with PSAPs and peace officer standards and training (POST) to make sure issues are being addressed. Consistent, quality service for all residents is a goal that could be accomplished if all 9-1-1 calls are answered by trained call takers.

Development and enhancement of training programs will improve 9-1-1 service.

Dispatchers working in state-operated PSAPs are required to meet legislated state training standards while dispatchers working for PSAPs operated by counties or cities may attend state training courses, but are not required to. This disparity opens a door for variation in service due to different levels of training. Although not required, more than 90 percent

of PSAPs use the state training program provided through POST. A majority of PSAPs also require training in emergency medical dispatching (EMD) and cardiopulmonary resuscitation (CPR).

State Office Could Assist in Other Areas

In addition to the issues discussed above, a state office would provide valuable assistance in many other areas, including

A state office could assist PSAPs in database maintenance, data collection, communication among PSAPs, and relations with telephone companies.

- **Database Accuracy** – Several 9-1-1 databases in the state are maintained by the individual phone companies. Information in the databases include names, telephone numbers, and addresses. The delivery of quality 9-1-1 service is dependent on the accuracy of the information in the database. Maintaining the accuracy of the data is handled by the local PSAPs. A state office could be a resource for those PSAPs that need assistance or training on how to develop or update the database. It would also provide a central location for telephone companies to call.
- **Call Analysis** – The state 9-1-1 office could assist PSAPs in determining what call data should be collected, maintained, and analyzed to enhance decision making. Standard data collections could be identified to compare 9-1-1 operations throughout the state.
- **Promoting Information Exchanges among PSAPs** – To provide an effective public safety response, PSAPs need to communicate regularly with all emergency response agencies and solicit feedback on how the dispatch and communications system is functioning and what can be improved. The state office could facilitate these exchanges.
- **Liaison Between the PSAPs and Telephone Companies** – The 9-1-1 office could communicate with telephone companies regarding matters of 9-1-1 system design and tariffs.
- **Contracting with Phone Companies** – The state 9-1-1 office could negotiate contracts with US West and other companies for developing and paying for the 9-1-1 system installation and recurring costs.

Recommendation:

1. We recommend the Legislature create a state office that could assist in planning for the statewide 9-1-1 system as well as providing technical assistance and coordination to PSAPs.

Chapter III

9-1-1 Fee Collection System Should Be Improved

\$700,000 will be lost by having a decentralized 9-1-1 fee collection system.

Changing the 9-1-1 telephone fee collection system can increase available funds needed to operate the system. The existing system has many weaknesses because each local governing authority must collect from each telephone company. The decentralized system leads to a lack of accountability, making it difficult to know whether fees are properly collected. We estimate \$700,000 will be lost in calendar year 1999 by having a decentralized collection system. The most effective way to improve system efficiency would be for the Legislature to centralize collections with the Tax Commission, which already has a collection system in place for the poison control telephone fee.

Existing System Has Many Weaknesses

Overall, the 9-1-1 fee collection system is confusing and lacks accountability.

Requiring each local government authority to collect the 9-1-1 fee from all telephone providers in their area is demanding on local governments and cumbersome for telephone companies. We found a great deal of inconsistency among public agencies and telephone providers in their handling of fees. Overall, the system is confusing and lacks accountability.

According to **Utah Code 69-2-5 (3)**:

The governing authority of any public agency providing 911 emergency telephone service may levy monthly an emergency services telephone charge . . . not to exceed 53 cents per month.

The law also states that “notification of intent to levy the charge shall be given to the Public Service Commission at least 30 days prior to the effective date.” The law does not indicate that phone companies must be notified but states the telephone service provider shall bill and collect the 9-1-1 fee and remit the funds “as directed by the public agency.”

The system may have worked well in the telecommunications environment of the 1980s; when the Legislature enacted Utah’s Emergency Telephone Service Law in 1986, there was one major

telephone company in each area and very few wireless companies. However, with the deregulation of the telecommunications industry and the development of wireless technology, the number of wireline and wireless companies providing service to Utah residents has grown and continues to grow.

Local Authorities Are Inconsistent in Fulfilling Responsibility to Collect 9-1-1 Fees

38 local authorities must notify numerous telephone companies to collect and remit the 9-1-1 fee.

Efforts to collect 9-1-1 fees vary widely among local authorities. We identified 38 local authorities that collect the fee. Twenty-eight of the 30 local government agencies that operate a PSAP collect the fee (Weber County collects the fee for the PSAPs operated in Roy and Ogden). In addition, nine county governments and one city collect the fee in areas served by state-operated PSAPs. The collection system is somewhat chaotic because entities not operating PSAPs are collecting the 9-1-1 fee. Furthermore, in the current system, each of the 38 local governing authorities must identify and notify any of the numerous telephone companies operating in their area to collect and remit the 9-1-1 fee to their local authority. Appendix A shows the governing authorities that collect the fee. The maximum telephone fee is 53 cents per telephone line. Each governing authority determines what they will charge. Some charge 50 cents per line; others charge 53 cents per line.

Some local authorities told us they do not know if they are receiving the full fee due them because:

- They cannot identify all the telephone companies providing service in their area, especially wireless carriers.
- They do not know on how many telephone lines the telephone companies should be remitting a fee on.
- They may not know the legislative changes that have been made to the telephone fee.

Identifying and contacting all the phone companies operating in an area on a continual basis can be difficult.

Identifying All Telephone Companies Creates Problems. Some local authorities told us it is very cumbersome to try to find which telephone companies provide service in the local area. The difficulty of identifying local phone companies is exacerbated as companies come and go in the marketplace. We were able to identify 32 wireline and wireless telephone

companies doing business in Utah and were told by the Public Service Commission that since the beginning of 1999, another 30 companies have applied to begin providing service in Utah. Some governing authorities are more aggressive than others and try to write letters to each telephone company holding a license to do business, while other authorities do not keep up on all the changes in the telecommunications industry.

Even the larger PSAPs, like VECC, told us they have a difficult time tracking which telephone companies are operating in their area. VECC did a major mailing to all telephone companies when the fee was increased in 1998. VECC got a list of telephone companies authorized to do business from the Public Service Commission and sent each of them a form letter. They believe they were successful in notifying each of the companies, but it took a lot of time and resources. VECC does not plan to do mass mailings on an ongoing basis because of the time and resources involved. Consequently, when new companies begin offering service, which happens often, they will not be notified of the need to collect and remit the fee, and revenues may be lost.

Another large public agency told us instead of contacting all wireless companies, they simply try to collect from the four largest wireless telephone companies in their area. They know there are companies they have not requested fee collections from, but they do not make an effort to collect from them.

Local authorities simply accept the fee remitted by the telephone companies because there are few controls in place.

Determining Expected Revenue Creates Problems. Few checks and balances in the collection system exist to ensure that telephone companies are collecting a fee on all lines and forwarding the fee to the local authorities. Most authorities simply accept the amount remitted. VECC looks at the amount that is remitted and questions large fluctuations. However, investigating large fluctuations takes a lot of effort and generally does not result in an acceptable solution to the problem.

Most wireless telephone companies are very protective of their number of lines. We contacted many companies and asked for information about 9-1-1 fees remitted to local governing authorities. Most of the companies that provided information asked our office to keep the information confidential. One company declined to provide the information unless a confidential document was signed with their attorney.

PSAPs and local authorities are often unaware of legislative changes made to the 9-1-1 phone fee.

Dealing with 38 public agencies is cumbersome to telephone companies.

Different approaches used to request the 9-1-1 fee from the telephone companies create problems.

Tracking Legislative Changes Creates Problems. During our audit we found that several local authorities were not aware of the 1996 law allowing them to levy a 9-1-1 fee on wireless phones and the 1998 law allowing them to increase the fees from 50 to 53 cents.

Although the wireless fee went into effect in April, 1996, it took several years for local authorities to become aware of this law, and some may still not be aware. For example, one rural wireless telephone company provides service in six counties. Three of the six counties requested the telephone company to start collecting the fee in 1998. The other three counties have never asked for the fee to be collected. Why the governing authorities have not requested the fee to be collected is unclear to us as well as the phone company.

Telephone Companies Find the Current System Cumbbersome

Some telephone companies told us that dealing with the inconsistent practices of 38 public agencies make the current system cumbersome for them. **Utah Code** requires each telephone provider to remit the 9-1-1 fee “as directed by the public agency.” Depending on the service area, a company will typically receive letters from a number of governing authorities to collect and remit the telephone fee in their behalf. The telephone companies must submit individual checks to each of the governing authorities in their service areas. In addition, each company in the state sends a check to the State Tax Commission, remitting seven cents for poison control for each telephone line. Some companies stated they would prefer a centralized collection system. The main collection concerns expressed by phone companies include

- Lack of uniform approach in requesting fee,
- Uncertainty in determining when collections should begin, and
- Entering of data for multiple jurisdictions.

Lack of Uniform Approach in Requesting the Fee. Some local authorities request the fee be assessed by zip code, others request the fee be based on the areas they serve, and others request the fee by telephone number prefix. Some companies have told us this difference in procedure is cumbersome. Other companies have told us that zip codes and prefixes, in overlapping PSAP service areas, also create problems. One company told us that if they receive letters from two overlapping areas, they accept

the first letter they receive. One letter to phone companies from a PSAP included names of the cities to be assessed the fee; however, the attached zip code list did not contain three of the cities identified in the letter. Thus, the inconsistency in requests is confusing.

Phone companies have a difficult time determining when collections of the 9-1-1 fee should begin.

Uncertainty in Determining When Collections Should Begin.

Telephone companies are concerned that they will be held responsible for paying the telephone fee even if they haven't been notified by the local authority to begin collection. One telephone company had a major dispute with a city over the telephone fee. The governing authority of the city claimed they had sent a letter requesting the fee months earlier and demanded payment. Although the telephone company stated they never received a letter requesting them to collect the fee, they paid the city \$100,000 back-pay to resolve the problem. The same phone company told us they have denied similar requests for "back pay" to other cities in Utah. More than one telephone company was concerned that they would have to pay the fee without having collected it, so they made the effort to contact all PSAPs to ask if they should collect the fee in their behalf.

Entering data for multiple authorities is time consuming and may lead to data entry errors.

Entering of Data for Multiple Jurisdictions. Some phone companies told us it is very time consuming and tedious to enter data for multiple jurisdictions. Depending on their service area, phone companies could be processing data for many local authorities. Because of system constraints of some companies, zip codes, prefixes, and fee levels must be entered manually for each local authority. As stated by staff at one phone company, "the process is not horrific, but it does take a lot of time." The manual entry of multiple zip codes, prefixes, cities, and fees is also more susceptible to data entry errors than entering Utah as the jurisdiction and one fee level for the entire state. Data entry errors could lead to errors in revenue collection and remittance. Some phone companies told us they would prefer to send one check to one place with calculations based on one fee.

Current System Lacks Accountability

In addition, the varying capabilities and practices of public agencies and the reluctance of companies to provide information about the number of lines result in a collection system with little accountability. **Utah Code** is vague and does not adequately establish the basic administration provisions needed for an effective tax collection system. The following components should be addressed to improve the system's effectiveness:

- Procedures as to who will collect the tax and where and how often the fee will be remitted,
- Authority to impose penalties for non payment or late payment,
- Ability to audit the telephone companies, and
- Assignment of oversight responsibility.

More specific administrative procedures on the collection and remittance of 9-1-1 fees need to be identified.

More Specific Procedures Are Needed. The current collection system does not adequately specify who will collect the tax and where and how often the fee will be remitted. **Utah Code** requires the local governing authorities to notify the Public Service Commission (PSC) of their intent to levy the 9-1-1 fee, but it is silent about how telephone companies are notified to collect the fee. The law requires telephone companies remit the fee as “directed by the public agency,” but the law does not give any further guidance. In contrast, **Utah Code** and Administrative Rules for the Universal Service Fund specify the remittance process and establish other needed administrative procedures.

Remedies for Non-compliance Should Be Specified. Utah law also does not specify penalties for non payment or late payment of the 9-1-1 fee. A few companies pay the fee quarterly; others pay monthly. Some local officials told us they feel they are at the mercy of the telephone companies. In contrast, **Utah Code 54-8b-10**, which imposes a telephone fee to provide hearing and speech impaired persons with telecommunication devices, directs the phone companies to be subject to annual audits and imposes penalties for non payment.

Resources to audit phone companies are needed.

Audit Capability Is Needed. Local authorities do not have any way to know if they are receiving the total 9-1-1 fee from the various telephone companies. Consequently, they simply accept what the telephone companies forward to them. While each public agency could audit each telephone company to ensure fees are properly paid, that is not practical for public agencies or telephone providers.

Oversight Responsibility Should Be Clarified. Although **Utah Code** requires public agencies to notify the PSC of their intent to levy a 9-1-1 fee, the purpose of the notification is unclear. The PSC is not involved in levying, collecting, or monitoring the 9-1-1 fee, nor does it have any authority over wireless companies since they are unregulated. Since the purpose of the notification from the public agency is unclear, it is not surprising that the PSC file of notifications is incomplete.

Unless the PSC's role is clarified, it may make more sense to have the Tax Commission assume the oversight role. With the establishment of the poison control fee, the Tax Commission is now involved in collecting a monthly fee on every telephone line. Another option, discussed in chapter II, is to establish a state 9-1-1 office whose responsibilities could include oversight of collecting and distributing the telephone fees.

Significant Revenue May Be Lost

A decentralized collection system leads to lost revenue.

Because of weaknesses in the 9-1-1 fee collection process, we believe significant revenue is not being collected. Unfortunately, the lack of accountability in the system also makes it difficult to identify precisely how much potential revenue is lost. However, by comparing poison control fee collections to the 9-1-1 fee collections, we estimate approximately \$700,000 a year is being lost.

The Tax Commission is more diligent than local authorities in collecting phone fees.

We found the Tax Commission is more diligent in collecting the seven cent poison control fee than local agencies are in collecting the 53 cent 9-1-1 fee. Tax Commission staff told us that when they began collecting the poison control fee in 1998, they contacted the PSC and local governing authorities to help identify who was paying the 9-1-1 fee and would be subject to the poison control fee. The Tax Commission had a difficult time compiling the list of telephone companies from the information provided by the local governing authorities because the information was incomplete. The Tax Commission used their computer database of telecommunications companies paying other taxes to ensure they captured all telephone companies in the state. The Tax Commission also issued a Tax Bulletin putting all telephone companies on notice of their responsibility to collect and remit the new tax. By identifying and contacting as many telephone companies as possible, the Tax Commission collected \$691,000 in poison control fees in the first six months of 1999. The amount corresponds to about 1.64 million telephone lines in the state of Utah.

In contrast, the local authorities collected the 9-1-1 fee on 1.51 million lines for a loss of \$700,000 a year. The amount increases to \$872,000 a year if 53 cents was collected on all phone lines (some jurisdictions only collect 50 cents). The apparent loss of between \$700,000 and \$872,000 per year is significant because most PSAPs told us that the telephone fee was not enough to cover the 9-1-1 expenses in their centers.

While the annual revenue loss is admittedly a rough estimate because of incomplete data, we believe it is a reasonable figure. We encountered many instances where the 9-1-1 fee was not collected, especially on wireless telephones. In addition, we learned that even the Tax Commission does not collect from one company that should remit the fee. A Wyoming-based company that provides service in three Utah counties told us it has not been asked to collect either the 9-1-1 telephone fees in two counties or the poison control fee.

Legislature Should Establish a Centralized Collections System

The Legislature could improve the 9-1-1 fee collection by centralizing the system, as some other states have done. The Tax Commission already has a centralized system in place to collect the poison control fee from all the telephone companies. Consequently, we believe collection of the 9-1-1 fee by the Tax Commission would be the best alternative. Another alternative would be collection of the fee by a state 9-1-1 office.

Other States Have Centralized Collection Systems

Some of the other states' systems we reviewed have centralized fee collection systems. The following briefly describes centralized 9-1-1 phone fee collections in four states we reviewed:

- **Arizona** – A 9-1-1 state office collects fees on a statewide basis. One person in the office is responsible for identifying all phone companies operating in the state and notifying them to collect the fee. The person uses various resources to ensure she has captured all telephone companies operating in the state.
- **Washington** – 9-1-1 fees are collected on both a statewide and local basis. The statewide fee is collected by the Department of Revenue as a miscellaneous tax. The Department of Revenue maintains a list of licensed phone companies paying telecommunications taxes. The list is used to identify companies that should pay the 9-1-1 tax. The phone companies are responsible to pay the tax; no special letter requesting the tax be collected is sent to phone companies. The Department of Revenue also audits phone companies to assure complete tax is remitted.

Other states collect the 9-1-1 fee on a state level.

- **Minnesota** – All 9-1-1 fees are collected by the state 9-1-1 office. One person in the office is responsible for identifying operating phone companies and requesting the fee be collected and remitted. Requests are done on a continual basis as new companies enter the market. The office also reviews monthly remittance from phone companies to assure all fees are assessed and remitted. If discrepancies are found, the phone company is immediately contacted to resolve any funding issues.
- **Texas** – The 9-1-1 phone fees for the state’s 9-1-1 system are collected on a state level. Approximately 50 districts and home-rule cities are exempt from the state legislation and collect 9-1-1 fees on a local level. Previous to the last legislative session, the 9-1-1 fee was collected by the local authority in all areas of the state; however, in the last legislative session, the Legislature directed the Texas Advisory Commission on state Emergency Communications to collect the fee for the 700 PSAPs operating under state legislation.

Tax Commission Already Has System in Place

The Tax Commission has a collection system in place for collecting fees from phone companies operating in Utah.

Having the Tax Commission collect the 9-1-1 fee makes sense because the Tax Commission is currently collecting the poison control fee. Both telephone fees are collected by the same businesses from the same customers, and, as discussed above, the Tax Commission is more efficient at collecting fees than local agencies. Staff at the Tax Commission told us the amount of money collected for poison control is not material enough to conduct an audit; however, if 9-1-1 fees were also collected, the account would be one of the largest miscellaneous taxes and would be audited.

Compared to the Tax Commission, public agencies are not as well equipped to collect fees. VECC is Utah’s largest PSAP and collects more telephone fees than any other agency. But VECC’s mission involves receiving calls and dispatching public safety personnel, not collecting fees. The Tax Commission, on the other hand, is very well equipped to direct businesses to collect and remit fees, monitor fluctuations in remittances, impose penalties for nonpayment or late payment, and potentially audit phone companies to ensure compliance with the requirements.

Some local agencies expressed concern about having to pay the Tax Commission to collect the 9-1-1 fee. The commission charges a one and one-half percent administrative fee for collecting taxes. However, we believe the administrative fee would be offset many times over by the increased revenue collections. In addition, local agencies would experience administrative savings from not collecting the fee themselves.

Finally, we believe having the State Tax Commission collect the 9-1-1 fee would be less cumbersome for telephone providers. Tax Commission involvement would allow companies to remit the telephone fee to one agency instead of many different agencies.

Recommendation:

1. We recommend the Legislature amend the **Utah Code** to centralize the collection of the 9-1-1 fee on a statewide basis under the State Tax Commission.

Chapter IV

Legislature Should Clarify State 9-1-1 Fee Policy

9-1-1 fees may not have been used as intended

While Chapter III addressed fee collection issues, Chapter IV deals with how 9-1-1 fees are used. Because the **Utah Code** is somewhat vague, some public agencies may use 9-1-1 fees in ways the Legislature did not intend. The ongoing rapid growth in fee collections may also contribute to an expansion of how the fee is used. We did not find that fees are used improperly, but inconsistent practices raise a variety of concerns that we discuss in this chapter. We feel the Legislature should clarify state policy on use of the fee either in statute or by delegating rule-making authority to a 9-1-1 state office.

Because 9-1-1 fee revenue is growing rapidly, now is an ideal time for the Legislature to review use of the fee.

Because telephone fee revenue is currently growing so rapidly, now is an ideal time for the Legislature to review use of the fee. When the Legislature established the fee in 1986, both PSAP needs and the telecommunications industry were very different from what they are today. In light of the different environment, we think the Legislature should review the state's telephone fee policy. An important issue for the Legislature to consider is whether the 9-1-1 fee is intended to support a statewide emergency communications system or to fund local programs. Depending on its intended use, the current fee level may need to be adjusted and a new fee distribution method established.

Legislative Intent Is Uncertain

Appropriate use of the 9-1-1 fee is unclear.

We are uncertain what costs the 9-1-1 fee is intended to cover and whether the fee level is appropriate. The Legislature has set the maximum fee level, but there is no accountability mechanism in place to ensure the fee is used to pay for what the Legislature intended or that the fee is set at the appropriate level.

There are basically two views on what the 9-1-1 fee should be used for. One view is that the fee should only pay for the equipment and other costs that enable emergency 9-1-1 calls to ring at the appropriate PSAP without the user needing to dial the correct seven digit number. Under this interpretation, the fee pays for the technology to get the call to the

The 9-1-1 fee level depends on the intended use of the fee.

PSAP, but not for any of the costs of responding to the call. The second view is that the fee should pay for the technology and also for a portion of the response costs. The response costs are the costs associated with personnel determining the nature of the emergency. The dispatching of assistance for the emergency is not part of the 9-1-1 costs.

The appropriate fee level depends on its intended use. In recent years, fee collections have significantly increased, and the fee appears to generate more revenue than is needed to pay for 9-1-1 costs if they are limited to a narrow definition of the 9-1-1 network and telephone equipment. We did not attempt to compare fee revenues to the broader interpretation of allowable costs because there is no common cost allocation method. Another complicating factor with the fee level is the many unknowns surrounding future costs for wireless E9-1-1.

Appropriate Fee Use Is Unclear

Because state law is somewhat vague and there is no rule-making authority to clarify the law, the appropriate use of telephone fees is unclear. According to **Utah Code 69-2-5.(4)(b)**,

The money in the [9-1-1 fund]. . . shall be expended by the public agency to pay the costs of establishing, installing, maintaining, and operating a 911 emergency telephone system or integrating a 911 system into an established public safety dispatch center.

All of the PSAPs in Utah are integrated centers that not only receive 9-1-1 calls but dispatch public safety personnel as well. In an integrated center, the statute requires that fee revenues “may only be used for that portion of costs related to the operation of the 9-1-1 emergency telephone system.” However, there is no additional guidance on how the costs attributable to the 9-1-1 telephone system should be determined.

Fee was originally intended to pay for 9-1-1 equipment.

Original Intent of Fee Was to Pay 9-1-1 for Network and Telephone Equipment. The original intent of the fee appears to have been aimed at paying for technology as opposed to personnel. According to one of the original authors of the Emergency Telephone Service Law, the fee was to pay for telephone equipment and telephone network costs. He said he did not want the 9-1-1 fee to subsidize the dispatch portion of the center but to pay for the 9-1-1 emergency telephone system. However, the original author, who is involved in the Weber County Consolidated PSAP, now

feels that the 9-1-1 fee could be used for personnel and other expenses to answer the 9-1-1 call.

Additional Guidance Is Not Available. In Chapter II, we discussed the need for a state 9-1-1 office to provide state leadership and technical assistance for PSAPs. In the absence of a state office to provide guidance to PSAPs, local governing authorities exercise considerable discretion in how they spend the 9-1-1 fees generated in their area. While all believe they are spending the fee as allowed by the **Utah Code**, some governing authorities questioned the use of the fee by others.

Overall, it appears that some managers and governing authorities are unsure how the fee can be used. The US West 9-1-1 coordinator told us local officials often ask him if the 9-1-1 fee can be used to pay various expenses. Similarly, during our audit some local officials asked us what the fee could be used for. Several PSAP managers told us that they have been told to use the 9-1-1 fee carefully, but no one has ever reviewed their use of the fee.

Appropriate Fee Level Is Unclear

There is no clear rationale for Utah's current fee level. The 1986 Legislature set the initial fee at a maximum of 50 cents per month per telephone line. In 1996 the fee was extended to wireless phones, and in 1998 the maximum level was increased to 53 cents. However, there has not been any analysis of costs that should be covered by the fee. Indeed, as discussed in the previous section, no consensus exists on what costs would be included in a cost study.

Fee Level Is Not Based on a Cost Study. For some types of fees, the fee level is set based on studies that identify the costs covered and estimate their amounts. Utah's 9-1-1 fee is not based on that type of cost study, but it seems to be more of a general revenue source for local governing authorities. In contrast, some other states regularly review their fee levels to ensure that they generate the revenue needed to cover the specified costs.

Our brief review of other states' fees indicates a wide range of practices. We found monthly 9-1-1 telephone fees across the United States range from no telephone fee to as much as \$3.00 per telephone. Some states only allow equipment and network costs to be paid and have relatively

9-1-1 Fee is not based on cost studies but is a general revenue source.

low fees. Other states have higher fees because they allow the fee to be spent on salaries and other operating expenses associated with the operation of a dispatch center.

Some states we reviewed more narrowly define acceptable telephone fee uses and base fee levels accordingly. We discuss four states in more detail, later in this chapter, but generally they use the fee first to pay for PSAP equipment needs statewide and sometimes training. They do not, however, use the fee to pay for any PSAP salary costs. In part because they limit the fee use, these states routinely review fee levels to ensure they are set appropriately. For example, in Arizona the state 9-1-1 office annually reviews the fee level and recommends adjustments to the Joint Legislative Tax Committee. Similarly, the Minnesota, Texas, and Washington state 9-1-1 offices review the 9-1-1 expenses and make recommendations for fee adjustments on a periodic basis.

Legislative intent for fee increase was not adequately communicated.

Legislative Intent for Fee Increase Is Unclear. PSAPs may not be using the revenue from the 1998 three-cent fee increase as intended. Wireless telephone company representatives told us the increase was reserved for wireless E9-1-1 costs. As discussed in Chapter II, FCC rules require that states establish a cost recovery mechanism as a prerequisite for implementing wireless E9-1-1.

If the legislative intent was to reserve the three-cent increase for wireless E9-1-1 costs, that intent was not adequately communicated. According to the house journal,

It is the intent of the Legislature that all public agencies providing 9-1-1 emergency telephone service and receiving additional revenues authorized by this bill to utilize the funds to contract with wireless service providers for wireless enhanced 9-1-1 service, pursuant to Federal Communications Commissions Rules . . . and to otherwise pay for costs of implementing wireless enhanced 9-1-1.

However, neither the senate journal nor the bill itself contained similar language. Consequently, governing authorities did not know about the intent and most governing authorities are using the increased fee to pay current operating expenses in their centers. None of the PSAP managers or local representatives we asked knew about the intent.

Use of Fee Raises Concerns

The uncertainty about intended fee uses and appropriate fee levels discussed above make it difficult to evaluate current practices. Furthermore, there is no reliable reporting of fee use by governing authorities. We spoke with many local officials and 19 of 35 PSAPs returned a survey we sent them, but it was beyond our audit scope to complete detailed test work at local agencies. However, we found inconsistencies in the practices of some PSAPs that raise concerns. Because there is little accountability in how governing authorities use fee revenue, the on-going rapid growth in fee collections contributes to these concerns. The concerns discussed in this section include:

- Use of the 9-1-1 fee varies by governing authority.
- Fee pays a varying share of expenses.
- Dispatch centers became PSAPs to obtain 9-1-1 fees.
- Fee funds multiple PSAPs in some counties.
- Some authorities collect the fee but do not operate the PSAP.

Use of the 9-1-1 Fee Varies by Governing Authority

Local governing authorities have different opinions of what the 9-1-1 fee can pay for. Some authorities believe that the 9-1-1 fee can only be used to pay for the telephone service (i.e., telephone network and database) to get the 9-1-1 call from the citizen to the PSAP. Other authorities perceive that the 9-1-1 fee can be used to pay for a combination of telephone service and personnel to answer the call. The five 9-1-1 expense categories paid by Utah PSAPs are:

- **Monthly Recurring Network and Database Costs** – Local authorities pay the monthly telephone network and database charges billed by the local telephone company to maintain the telephone system. Telephone companies charge 25 cents per telephone line per month in rural counties and on an individual case basis in urban counties. Telephone network and database charges are much lower in urban counties.
- **Customer Premises Equipment (CPE)** – Local authorities are responsible for procuring and providing 9-1-1 equipment. Equipment costs vary with the manufacturer and capacity. Most

Opinions differ regarding what the 9-1-1 fee can pay for.

authorities purchased new equipment when they started E9-1-1 in the early 1990s. Many authorities have recently upgraded or replaced their equipment.

- **Maintenance of Equipment** – Many local governing authorities have contracts with the local telephone company to maintain their CPE.
- **Salaries and Benefits of Center Employees** – Some authorities pay part of the salary and benefits for employees that answer the 9-1-1 calls. The amount of salaries that they pay is based on a decision made at the local level. Because center employees usually answer 9-1-1 calls and dispatch emergency equipment, splitting salary expenses between 9-1-1 and the dispatch center is subjective and various methods are used.
- **Other Operating Expenses** – Some authorities pay a portion of all operating expenses such as accounting services, insurance, office supplies, and building leases from 9-1-1 fees. Various methods are used to calculate the amount allocated to 9-1-1 services.

Some authorities allow payment for salaries of 9-1-1 operators while others only pay equipment.

Almost every PSAP uses the 9-1-1 fee to pay for the first three categories. Opinions on whether they can pay for the last two categories with 9-1-1 fees vary among governing authorities, and not all PSAPs pay for salaries or other operating expenses. Where the line is drawn between the delivery of a 9-1-1 call and the dispatch service is a decision that local governing authorities make.

Fee Pays a Varying Amount of Expenses

The current fee mechanism pays a varying amount of operating costs of each PSAP in the state. Consequently, some authorities have sufficient revenue to cover equipment and some salary costs, while other authorities may not have sufficient revenue even to upgrade the 9-1-1 equipment. Governing authorities and the state use other revenue to pay costs not covered by the telephone fee. Figure 1 shows the percent of total PSAP costs that **could** be covered by the telephone fee if the entire fee collection was spent.

Figure 1. Percent of Total PSAP Costs Covered by 9-1-1 Fee. The percent of 9-1-1 and dispatch costs covered by the collected 9-1-1 fee varies from PSAP to PSAP.

Selected PSAP	Total Annual PSAP Costs	Annual Collected 9-1-1 Fee	Percent PSAP Costs Covered by Fee
VECC	\$5,662,545	\$3,169,768	56%
St. George	385,414	188,369	49%
Utah County	904,190	352,587	36%
Bountiful	437,248	165,044	38%
Orem	816,197	304,767	37%
Provo	974,555	324,524	33%
Grand County	148,000	33,600	23%
Springville	275,000	57,600	21%
Sanpete County	224,784	42,986	19%
Cedar Communications *	586,273	97,073	17%
Tooele County	546,629	86,000	16%
Price Consolidated *	553,567	65,500	12%
Sevier Consolidated *	552,694	56,495	10%

This figure includes PSAPs that provided financial information either through a completed survey or through their finance department. This information is unaudited.

** Includes costs paid by counties and the state.*

Highly populated areas are able to fund a greater share of PSAP costs from the 9-1-1 fee.

Figure 1 indicates that urban PSAPs are able to fund a greater share of their costs from the telephone fee than rural PSAPs. For example, the telephone fee pays 56% of the total operating cost of VECC, while only paying 10% of the dispatch center in Sevier County. We acknowledge the amount of 9-1-1 work varies among PSAPs; therefore, the figure is not intended to imply what percent of PSAP costs should be covered by the 9-1-1 fee. Governing authorities in large urban areas can capitalize on the population levels and can collect the fee from many users. In addition, more wireless carriers in the large urban areas allow for more fees from wireless customers. There are economies of scale in operating large centers and fixed expenses can be spread over a larger population base.

Dispatch Centers Became PSAPs to Obtain 9-1-1 Fees

Recently, two dispatch centers apparently became PSAPs primarily to obtain the 9-1-1 fee. **Utah Code** allows any public agency “that provides or has authority to provide fire fighting, law enforcement, ambulance, medical, or other emergency services” to establish a PSAP and collect the telephone fee. The decision to become PSAPs made sense from the two cities’ perspective, but it may not have been cost effective from a statewide 9-1-1 system perspective.

The ability to collect the 9-1-1 fee influenced the local decision to become a PSAP.

In 1997 and 1998 Pleasant Grove and Springville pulled away from the Orem and Utah County PSAPs and became PSAPs. Staff at the PSAPs told us the ability to capture the 9-1-1 fee was an important factor in the decision to become PSAPs. It was beyond our audit scope to complete detailed test work at either city, but in both cases the decision to become a PSAP seems wise from a local perspective. However, since additional costs were incurred and the revenue was taken away from existing PSAPs, the decision may not have been a wise decision from a statewide perspective.

- **Springville** – A one-time expenditure of about \$87,000 was made to purchase new 9-1-1 equipment. No new staff were hired. Additional on-going costs including monthly network and database costs and equipment maintenance appear to be less than \$10,000 per year. Fee revenues are about \$58,000 per year. The excess 9-1-1 fees are being used to pay the loan on the new dispatch center building.
- **Pleasant Grove** – A one-time expenditure of about \$89,000 was made to purchase new 9-1-1 equipment. No new staff were hired. Additional on-going costs for network, database, and maintenance appear to be about \$26,000 per year. Fee revenues are about \$82,000 per year. Excess fees are used to pay salaries and other operating costs.

The local decision to operate a PSAP may not be a cost efficient choice for Utah as a whole.

While both cities made sound economic decisions, the interests of the state’s 9-1-1 system may not have been served. Revenue was lost by the Utah County and Orem PSAPs without any apparent cost savings. The costs to the state, as a whole, were increased by the cost to purchase two new sets of 9-1-1 equipment. There are 19 additional dispatch centers in the state that could become PSAPs if the governing authority decides to

capture the 9-1-1 fee. To prevent the inefficient proliferation of PSAPs, some states only allow one county to receive the 9-1-1 fee and make the determination of how many PSAPs will operate in the county.

Fee is Used to Fund Multiple PSAPs in Some Counties

The 9-1-1 fee is being used to pay for more than one PSAP in several counties. According to the original author of the 1986 bill, the 9-1-1 telephone fee was to fund one PSAP per county. Currently five out of twenty-nine counties operate multiple PSAPs. Figure 2 shows the counties with multiple PSAPs and the population served.

Figure 2. Counties with Multiple PSAPs, 1999. Five counties have multiple PSAPs.

County	PSAP Providing 9-1-1 Service	Population
Box Elder	Box Elder County Sheriff Brigham City	24,989 16,960
Davis	Davis County Layton City Bountiful City Clearfield City	111,597 55,112 40,427 25,877
Salt Lake	Valley Emergency Communications (VECC) Salt Lake City	676,319 174,348
Utah	Provo City Utah County Orem City Pleasant Grove City * Springville City **	110,419 98,660 78,937 26,871 20,748
Weber	Weber Consolidated *** Ogden Roy	93,139 66,507 31,441

* Includes the population of Pleasant Grove and Lindon.
 ** Includes the population of Springville and Mapleton.
 *** includes the population for Morgan County.

With the possible exception of very large counties, it probably is not cost effective to have more than a single PSAP per county. For example, Weber County has gone through a consolidation effort in the past few years and

Multiple PSAPs in a county create inefficiencies.

expects to soon have a single PSAP. According to the consolidation chair, Weber County will save \$8 to \$10 million over the next ten years by having one center instead of three. A consolidation report stated that most of the savings will be in personnel and equipment.

Many people told us that multiple PSAPs in a county increase costs without improving service. For example, one consolidation proponent stated that having multiple PSAPs is unnecessary for Davis County and Utah County and citizens should not bear the cost of multiple PSAPs. Another official told us that daily problems occur in Davis County because four separate PSAPs are dispatching the one consolidated county-wide paramedic squad. In addition, with the mobility of wireless phones, citizens trying to reach 9-1-1 may be going in and out of the jurisdictional boundaries of all four PSAPs in a matter of minutes. However, some Davis County PSAP managers stated that multiple PSAPs were not a strain on resources. One PSAP manager acknowledged that a county-wide consolidation would make sense and that there would be no decrease in the quality of service. Similarly, the state EMS director told us the best system for EMS is a consolidated dispatch system, including 9-1-1.

Some other states are trying to decrease the number of PSAPs in order to improve service, upgrade technology and equipment, and save money. For example, Washington has a state goal to decrease the number of PSAPs to one per county. To accomplish this goal, the Legislature has offered financial incentives to PSAPs that consolidate.

Some Governing Authorities Collect The Fee But Do Not Operate the PSAP

Fees are collected by authorities who do not operate PSAPs.

In some cases, a local governing authority collects the 9-1-1 fee, but the state operates the PSAP. The local governing authority determines the fee level and decides how the fee is spent even though it does not operate the PSAP. Ten local authorities (nine counties and one city) collect the fee in areas where the state operates five PSAPs. The local authorities pay the telephone network costs and decide what to do with the rest of the money.

For example, Morgan County collects about \$17,500 per year in telephone fees, but only pays \$6,500 a year in network costs and pays no other 9-1-1 costs. Since Morgan County has not paid any other PSAP costs as of December 1998, they had a fund balance of \$86,000 – five times their annual collections. While the Morgan County fund is sitting idle and

increasing each year, Weber County and the State of Utah have been paying the costs to run the center. Since the fund is ever increasing, the County Sheriff wondered if the funds could be used to purchase radios for the new 800 MHZ system.

It is unclear whether the Legislature intended for governing authorities to control 9-1-1 fees when they do not operate the PSAP. The **Utah Code** states that the governing authority of any public agency “providing” 9-1-1 service may levy the fee. Other than paying network charges, and some equipment, we are uncertain how the local governing authorities spend the fee revenue. Since they collect the fee, but do not operate a PSAP, the extra funds do not pay salaries or other PSAP operating costs. Apparently, the funds are used to defray other costs. For example, Carbon County pays a portion of the salary for a county 9-1-1 coordinator and a portion of county overhead expenses.

Legislature Should Clarify State Fee Policy

Because legislative intent is uncertain and actual use of the fee raises a variety of concerns, we think the Legislature should review the state 9-1-1 fee policy. We found some other states have more clearly specified 9-1-1 policies and require greater accountability for fee use than Utah. The issues the Legislature needs to review include intended fee uses, appropriate fee level, and whether fee revenue should be distributed on a statewide basis.

Rapid growth in fee revenue creates a need to review state policy.

The on-going rapid growth in telephone fee revenue contributes to the need for the Legislature to review the state fee policy. Although the fee has only risen from 50 to 53 cents, the proliferation of wireless phones and multiple lines in homes has driven the revenue increase. For example, VECC’s 9-1-1 collections have increased 150 percent from \$1.2 million in 1995 to \$3.2 million in 1999. In the same time period, VECC’s budget increased 60 percent, from \$3.09 million to \$4.9 million. We think now is an ideal time for the Legislature to review use of the fee since any changes in state policy can be made more easily in times of revenue growth. Furthermore, with the revenue growth comes the need for improved accountability for its use.

Other States Specify What the 9-1-1 Fee May Be Spent on

While Utah allows great autonomy in spending 9-1-1 funds, some other states have very specific laws defining what 9-1-1 funds can be used for. We reviewed four states and found that, in statute or by rule making authority of the state 9-1-1 office, they are very specific in what items can be paid from the 9-1-1 fee. Allowed expenses from 9-1-1 funds for each state are briefly discussed below. Appendix C has additional detail on each of the four states.

Minnesota's fee is 27 cents.

Minnesota Pays Recurring Costs With State Fee. The state office pays the phone and network charges for all PSAPs in the state. Beyond telephone and network charges, Minnesota allows local PSAPs to use 9-1-1 funds to pay for the lease, purchase, and maintenance of E9-1-1 telephone, recording, and computer equipment; dispatcher training; and long distance charges to transfer 9-1-1 calls. Local PSAPs pay these other 9-1-1 charges that are audited annually by the state office. Minnesota's state fee is 27 cents.

Arizona's fee is 16 cents for residential, 40 cents for business and 10 cents for wireless.

Arizona Allows Telephone Expenses, but No Salaries. Arizona law allows the 9-1-1 tax to be used to pay all the network costs, equipment and maintenance of the 9-1-1 equipment for all PSAPs in the state. None of the 9-1-1 tax can be spent on salaries. Arizona's fee is 16 cents per residential line and 40 cents for business lines.

Texas' state-wide fee is 50 cents and a percentage of intra-state long distance .

Texas Pays 9-1-1 Expenses Using a Tiered System. Texas uses the 9-1-1 funds to pay for the administrative expenses of the regional council of governments and network and equipment on a three-tiered system. Every PSAP must have all components of a tier before 9-1-1 fees can be expended on the items in the next level. Level one allows payments for ANI equipment and network and language lines; level two pays for ALI, PSAP training, and addressing and maintenance; and level three pays for enhancements, such as mapped ALI, recorders, and training positions. Texas' fee is 50 cents on wireline and wireless phones and a percentage of intrastate long distance charges with a maximum of 50 cents.

Washington's state fee is 20 cents, and the local fee is 50 cents on wireline and 25 cents on wireless phones.

Washington Allows Specific System Costs. Washington has identified four components of the 9-1-1 system and allows charges for those components. The four components are network, database, customer premise equipment, and operational items. Within each component is

detailed list of specific items that can be paid. Washington's fee is 20 cents on wireline phones at the state level; local authorities may collect an additional 50 cents on wireline phones and 25 cents on wireless phones.

Legislature Should Clarify Purpose of 9-1-1 Fee

To ensure the state has a cost-effective 9-1-1 system, the Legislature should review state policy. We believe the purpose of the 9-1-1 fee needs to be more clearly defined, and there should be greater accountability for fee use. While the Legislature must ensure overall state policy is adequately defined, many policy details can be delegated to a rule-making authority. If the Legislature establishes a state 9-1-1 office, as we recommended in Chapter II, the office could fulfill that role. Some of the broad issues the Legislature should review include the following:

What Are the Appropriate Uses of the 9-1-1 Fee? As discussed earlier, there are two basic views of how the fee should be used. Is the fee just to get the call to ring at the PSAP, or does it cover response costs as well? We found the actual use of the fee varies. Generally, those governing authorities in Utah that collect the fee but do not operate a PSAP hold the narrow view that the fee should not pay call taker salaries. In contrast, governing authorities that operate PSAPs generally pay some salary costs with the fee. However, the ability to defray some dispatch center costs with fee revenue may encourage the inefficient establishment of new PSAPs and lead to multiple PSAPs in some counties. We think that legislation or rules should clearly identify appropriate fee uses.

Should the Fee Level Be Adjusted? Once allowed 9-1-1 expenses are more specifically identified, a fee level based on actual costs can be set. In addition to the current telephone fee of 53 cents for 9-1-1, an additional seven cents is collected for the poison control program. The poison control fee was established in 1998 to generate the full budget of the University of Utah's Poison Control Center but revenue is increasing so fast that too much revenue will be generated unless the Center's budget grows rapidly. Similarly, over the past few years, 9-1-1 fee revenues have grown much more rapidly than PSAP costs. The current 9-1-1 fee may be too high or too low, depending on what is considered a 9-1-1 expense, but the rapid fee growth may lead more governing authorities to establish PSAPs.

**Appropriate use of
9-1-1 fee should be
clarified.**

**The 9-1-1 fee should
be based on actual
allowable costs.**

Legislature may consider a redistribution system.

An important fee level issue involves future wireless E9-1-1 costs. Since 1996, governing authorities have collected the fee on wireless phones but have had few additional costs. Wireless users have paid the same fee as wireline users, even though the service received has been less since there is no ANI or ALI information. In the future, the cost situation may be reversed as wireless E9-1-1 is implemented because automatically determining the location of a wireless phone may be costly.

Should Fees Be Distributed on a Statewide Basis? An important issue for the Legislature to consider is whether the 9-1-1 fee is intended to support a statewide emergency communications system or to fund local programs. We found that the fee pays a varying share of costs at PSAPs. The current fee system tends to favor densely populated areas and puts a burden on sparsely populated areas. Some other states view 9-1-1 as a statewide system and redistribute fees to insure that adequate service is available in all locations. A redistribution of some of the 9-1-1 fees would reduce the variable service levels that are caused by funding constraints in sparsely populated areas.

Recommendations:

1. We recommend that the Legislature specify appropriate uses of 9-1-1 funds either in the **Utah Code** or by delegating rule making authority to the State 9-1-1 Office recommended in Chapter II.
2. We recommend that the Legislature review the 9-1-1 fee level and consider:
 - a. Whether a fee review mechanism should be established to set the fee level to produce sufficient revenue to cover defined costs.
 - b. Whether fee levels should vary by phone type (business or residential) including whether wireline and wireless phone fees should be the same.
3. We recommend that the Legislature consider whether 9-1-1 fees should fund a statewide service level. If so, a new fee distribution mechanism would need to be established.

Appendices

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Appendix A

9-1-1 Structure and Funding

County	Entity Collecting 9-1-1- Fee	PSAPs Providing 9-1-1- Service
Beaver	Beaver County	Beaver County Sheriff
Box Elder	Box Elder County Brigham City	Box Elder County Sheriff Brigham City
Cache	Logan City	Logan City Police
Carbon	Carbon County	Price Communications (State Operated)
Davis	Davis County Bountiful City Clearfield City Layton City	Davis County Sheriff Bountiful City Police Clearfield City Police Layton City Police
Emery	Emery County	Emery County Sheriff
Garfield	Garfield County	Garfield County Sheriff
Grand	Grand County	Grand County Sheriff
Iron	Iron County	Cedar Communications (State Operated)
Juab	Juab County	Juab County Sheriff
Kane	Kane County	Kane County Sheriff
Millard	Millard County	Millard County Sheriff
Morgan	Morgan County	Weber Consolidated (See Weber County)
Rich	Rich County	Rich County Sheriff
Salt Lake	VECC Salt Lake City	VECC Salt Lake City Police
San Juan	San Juan County	San Juan County Sheriff
Sanpete	Sanpete County	Sanpete County Sheriff
Sevier, Wayne, Piute	Sevier County Wayne County Piute County	Sevier Consolidated (State Operated)
Summit	Summit County	Summit County Sheriff
Tooele	Tooele County	Tooele County Sheriff
Uintah, Duchesne	Uintah County Vernal City Duchesne County	Uintah Basin Communications (State Operated)
Utah	Utah County Orem City Pleasant Grove City Provo City Springville City	Utah County Sheriff Orem City Police Pleasant Grove City Police Provo City Police Springville City Police
Wasatch	Wasatch County	Wasatch County Sheriff
Washington	Washington County	St. George Police
Weber	Weber County	Weber Consolidated (State Operated) Ogden City Police Roy City Police

Note: Daggett County does not collect any 9-1-1 fee, because a volunteer family answers all 9-1-1 calls.

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Appendix B

Glossary

ALI – Automatic Location Identification. A feature that identifies and displays at the PSAP the address/location of the telephone originating a 9-1-1 call.

ANI – Automatic Number Identification. A feature that identifies and displays at the PSAP the number of the telephone that originates a 9-1-1 call.

APCO – Association of Public Safety Communications Officials. A not-for-profit professional organization dedicated to the enhancement of public safety communications.

CAD – Computer Aided Dispatch. A computer-based system intended to increase the efficiency and accuracy of public safety call handling and dispatching.

Central Office. A telephone company facility that houses the switching and trunking equipment serving telephones in a geographically defined area.

CPE – Customer Premise Equipment. Telephone equipment which is under the control of the customer.

E9-1-1. An expanded or enhanced 9-1-1 system using selective routing, ANI, and/or ALI.

FCC – Federal Communications Commission. An independent United States government agency directly responsible to Congress. The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC's jurisdiction covers the 50 states, the District of Columbia, and U.S. possessions.

MSAG – Master Street Address Guide. The computer record that lists the standard street names, address ranges, and routing codes used in

the Data Management system of an E9-1-1 system equipped with selective routing, ANI and/or ALI.

NENA – National Emergency Number Association. A national group that fosters the technological advancement, availability and implementation of a universal emergency telephone number system and promotes research, planning, training and education.

PSAP – Public Safety Answering Point. The primary location where a 9-1-1 call is received for action by a public safety agency; if the call is relayed or transferred, the next receiving PSAP is designated a secondary PSAP.

PSC – Public Service Commission. An independent state agency primarily responsible to ensure safe, reliable, adequate, and reasonably priced utility service through the regulatory decisions the Commission makes and through rules it adopts.

TDD – Telecommunications Device for the Deaf. A telecommunication device for the hearing and speech impaired.

Trunk. A circuit connecting switching equipment at two sites (e.g. between a PBX and central office or between two central offices).

Selective Routing. A feature that automatically routes the 9-1-1 call to the proper PSAP serving its community, regardless of municipal and telephone company wire center boundary alignments.

UPS – Uninterruptible Power System. The capability of providing a continuous source of power without regard to the interruption or loss of commercial power. Also known as Un-interruptible Power Supply.

VECC – Valley Emergency Communications Center. Utah's largest PSAP providing 9-1-1 service for all of Salt Lake County excluding Salt Lake City.

Appendix C

Allowed 9-1-1 Expenses in Other States

The following provides a detailed list of allowable 9-1-1 expenses as stated in statute or administrative rules in Minnesota, Arizona, Texas and Washington.

Minnesota

Minnesota Statutes 1998, 403. Minnesota statute specifies that some 9-1-1 costs will be paid by the state and some by the local jurisdiction.

403.11 911 system costs; fee; account

403.11 Subdivision 1. Emergency telephone services fee. (a) Each customer of a telephone company or communications carrier that provides service capable of originating a 911 emergency telephone call is assessed a fee to cover the costs of ongoing maintenance and related improvements for trunking and central office switching equipment for minimum 911 emergency telephone service, plus administrative and staffing costs of the department of administration related to managing the 911 emergency telephone service. Recurring charges by a public utility providing telephone service for updating the information [database] . . . must be paid by the commissioner of administration. . . The commission or administration shall transfer an amount equal to two cents a months from the fee assessed . . . on cellular and non-wire access services to the commissioner of public safety for the purpose of offsetting costs . . . incurred by the state patrol . . . in handling 911 emergency calls made from cellular phones. Money remaining in the 911 emergency telephone service account after all other obligations are paid . . . is carried forward . . . and may be appropriated . . . to counties for the improvement of local emergency telephone services.

403.11 Subd. 2. Modification costs. (a) The costs of public utility incurred in the modification of central office switching equipment for minimum 911 service shall be paid from the general fund of the state treasury by appropriations for that purpose.

(b) The installation and recurring charges for integrating cellular and other wireless access services 911 calls into enhanced 911 systems must be paid by the commissioner if the 911 service provider is included in the statewide design plan and the charges have been certified and approved under subdivision 3, . . .

Subd. 4 Local recurring costs. Recurring costs of telephone communications equipment and services at public safety answering points shall be borne by the local governmental unit operating the public safety answering point . . .

403.113 Enhanced 911 service costs; fee

Subdivision 1. Fee. (a) In addition to the actual fee assessed under section 403.11, each customer. . . is assessed a fee to fund implementation and maintenance of enhanced 911 service, including acquisition of necessary equipment and the costs of the commissioner to administer the program.

Subd. 3. Local expenditures. (a) Money distributed . . . for enhanced 911 service may be spent on enhanced 911 system costs for the purposes stated in subdivision 1, paragraph (a). In addition, money may be spent to lease, purchase, lease-purchase, or maintain enhanced 911 equipment, including telephone equipment; recording equipment; computer hardware; computer software for database provisioning, addressing, mapping, and any other software necessary for automatic location identification or local location identification; trunk lines; selective routing equipment; the master street address guide; dispatcher public safety answering point equipment proficiency and operational skills; pay for long-distance charges incurred due to transferring 911 calls to other jurisdictions; and the equipment necessary within the public safety answering point for the community alert systems and to notify and communicate with the emergency requested by the 911 caller.

(b) Money distributed for enhanced 911 service may not be spent on:

(1) purchasing or leasing of real estate or cosmetic additions to or remodeling of communications center;

(2) mobile communications vehicles, fire engines, ambulances, law enforcement vehicles, or other emergency vehicles;

(3) signs, posts, or other markers related to addressing or any costs associated with the installation or maintenance of signs, posts, or markers.

Arizona

Arizona Administrative Code R2-1409 Funding Eligibility. Arizona code states the following regarding 9-1-1 expenses.

The following costs of providing 9-1-1 service shall be reimbursed from the Fund, subject to available funds and the following requirements, to those 9-1-1 planning committees that have been issued a Certificate of 9-1-1 Service Plan Approval by the Assistant Director:

- *Costs of the Network Exchange Services necessary to provide the minimum grade of service defined herein.*
- *Costs for station terminal equipment required to receive and process, or relay 9-1-1 calls and messages.*
- *Ongoing maintenance costs following the warranty period, if any, for the station terminal equipment used in the receiving and processing of 9-1-1 calls and messages.*
- *Necessary and appropriate consulting services, or administrative costs, not to exceed three percent of the amounts deposited annually in the revolving fund.*

Texas

Texas Advisory Commission on State Emergency Communications Rule 251.6, as authorized by Chapter 771 of the Texas Health and Safety Code. Rule 251.6 provides guidelines for strategic plans, amendments, and equalization surcharge allocation.

B. Strategic Plan Levels. Regional strategic plans developed in accordance with chapter 771, along with commensurate allocation of the . . . funds, shall reflect implementation consistent with the following three major strategic plan levels (in order or priority).

1. Level I: 9-1-1 service generally associated with automatic Number Identification (ANI), to include the following components and associated costs:

- *ANI equipment and network;*
- *Public Safety Answering Point (PSAP) room preparation;*
- *Language line;*
- *PSAP supplies;*

- *Telecommunications Device for the Deaf (TDD);*
- *Maintenance/Repair (ANI/TDD); and*
- *Capital recovery (ANI/TDD)*

2. Level II: 9-1-1 service generally associated with ANI, Selective Routing (SR), [and] Automatic Location Identification (ALI) and any other network and/or database system enhancement, to include the following components and associated costs:

- a. ANI/ALI selective routing (equipment and network);*
- b. PSAP Room Preparation;*
- c. Addressing;*
- d. Addressing and maintenance;*
- e. PSAP training;*
- f. Maintenance/repair (CPE); [and]*
- g. Capital recovery ([addressing and] telephone equipment); and*
- h. Capital Recovery (addressing)*

Level III: Other 9-1-1 equipment, services and enhancements to same, to include, but not limited to the following components and associated costs:

- *Additional Trunk Diversity;*
- *Other Redundancy;*
- *Wireless Access;*
- *Training Positions;*
- *Emergency Power;*
- *Recorders;*
- *Pagers;*
- *Detectors/Diverters;*
- *External Ringers;*
- *Mapped ALI;*
- *Maintenance/Repair ([recorders,] ancillary equipment);*
- *Capital Recovery (ancillary equipment [emergency power, recorders, training positions]); and*
- *Other*

Washington

Washington Administrative Code 118-65-050 Fundable items.
 Washington administrative code specifies four fundable areas for 911 expenses.

Enhanced 9-1-1 systems are made up of four main components: Network, data base, customer premise equipment (CPE), and operational items. Both the implementation and maintenance costs of these components will be eligible for funding. The following sub-components within each of these major components will be eligible for funding from the enhanced 9-1-1 accounts.

(1) NETWORK: (a) central office enabling; (b) Automatic number identification (ANI) provisioning; (c) selective routing (hardware, software, data base); (d) 9-1-1 voice network (B.01/P.01 service level required); Automatic location identification (ALI) data link; (f) non-compatible central office switch upgrades; (g) diversity; (h) network, performance level monitoring; (i) traffic studies; (j) alternate routing or night service.

(2) DATA BASE: (a) county or regional provided: (i) addressing (house number, street, postal community) exclusive of house numbering and street signs; (ii) MSAG development and maintenance (b) telephone company provided: (i) ALI data base: MSAG development and maintenance; subscriber record purification. (ii) ALI DMZ equipment (for the storage and retrieval of ALI) may be provided by several vendors but the equipment must conform to the interfacing telephone companies standards.

(3) CUSTOMER PREMISE EQUIPMENT: (a) ANI/ALI display for both primary and secondary PSAPs; (b) telephone system if existing is incompatible with E9-1-1; (c) ALI controller; (d) ANI controller; (e) ALI/DMZ equipment (must conform to interfacing telephone company's standards); (f) call detail interface and printer; (g) telephone system management information system; (h) radio communications equipment (if necessary as part of a regional or consolidated E9-1-1 system); (i) uninterruptible power supply (UPS) for telephone system and 9-1-1 equipment; (j) auxiliary generator to support 9-1-1 emergency telephone service for backup; (k) TDD is existing is incompatible with E9-1-1; (l) recording equipment if existing is incompatible with E9-1-1; (m) reverse ALI search capability.

OPERATIONAL ITEMS: (a) funding necessary to develop the detailed E9-1-1 implementation and budget plan required by the state 9-1-1 office; (b) call receiver training.

ADDITIONAL ITEM: Additional equipment and local requirements will be considered for funding if they are an element in a regional or consolidated E9-1-1 system, including increased PSAP staffing needs directly attributable and documentable as being required for E9-1-1 implementation.

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Agency Responses

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VECC

VALLEY EMERGENCY COMMUNICATIONS CENTER

December 8, 1999

Mr. Wayne Welsh
Legislative Auditor General
1 30 State Capitol
Salt Lake City, Utah 84114

Dear Mr. Welsh:

Valley Emergency Communications Center (VECC) is an emergency 911/dispatch center created with a mission to protect, preserve, and enhance the health, safety, and welfare of the citizens residing within our jurisdiction. We appreciate the opportunity to respond to the information contained in the "Performance Audit of the 911 System in Utah" report prepared by your audit staff.

VECC was formed in 1988 under Utah Code, Chapter 11-13, Section 10-1-202 and Section 17-4-3 by the communities of Midvale, Murray, Sandy, South Jordan, West Jordan, West Valley, and Salt Lake County to provide emergency 911 service, as well as police, fire, and medical dispatch. We also provide contract service for Bluffdale Fire, Draper Fire, Riverton Fire, and Salt Lake Community College. When VECC was formed, one of the primary issues was to specifically deal with 911 by consolidating, thus reducing the potential for the number of PSAP's (Public Safety Answering Points) in the area.

VECC has two operational bodies that control the Center. The Board of Trustees is the governing board, comprised of the member's elected official or his appointed representative. The executive body of the Center is the Board of Operations, consisting of the police and fire chief of each member city. The elected official each year holds a public hearing and ultimately adopts our budget in a process similar to city or county jurisdictions.

As we evaluate the enabling legislation allowing communities to collect the 911 fee, we understand the importance of separating the 911 funds from the dispatch operational funds. From our very inception, we have created separate funds and separate budgets for 911 and dispatch operations. This process allows us to control each of the operations' expenses and optimize them for efficiency. Each year we evaluate the total 911 operations, looking at call

5025 South State Street
Murray, Utah 84107-4824
P.O. Box 57040
Murray, Utah 84157-0040
(801) 265-4002
Fax (801) 265-4040

volume, operational efficiency of the equipment, potential growth, changes in technology, etc. We then prepare a projected budget for review of the Operations Board and, ultimately, the Board of Trustees. We believe that having the involvement of so many people (so many operational and elected people) gives us an extremely good oversight process and makes certain that we are operating efficiently and serving the needs of our citizens.

We are appreciative of the opportunity we have had from the Office of the Legislative Auditor General to respond to this report and, realizing that this is an exhaustive report, we would like to respond to two or three areas and volunteer to be part of any continuing process to evaluate the 911 system.

1. We recognize the need for a small statewide office to coordinate 911 service. We believe the office should primarily be technology based, tasked with the process of coordinating technology enhancements and dealing with the wireless 911 issues. We would like to see that funded from the state budget as opposed to 911 funds. Our agency has put some effort into making sure that we collect all the revenues available from the telephone providers. We do not see a great deal of value for us personally in a statewide office, although we recognize there are many centers across the state who do not have the resources available to the larger centers. It is important to realize that 911 is inseparably intertwined with law enforcement, fire, and medical disciplines. 911 is the conduit through which calls for service flow. 911 is not a separate system. In regards to training and quality control, the operating police and fire departments are in the best position to evaluate quality of service. We agree with the audit report in that there are already adequate training mechanisms in place through POST and EMD protocols to meet our needs and satisfy oversight requirements.

2. We understand that there are two different views on how 911 money should be spent. We support the idea that the 911 funds should be used for any part of the 911 operation. In order to do this, we maintain a separate budget to maintain separation of funds.

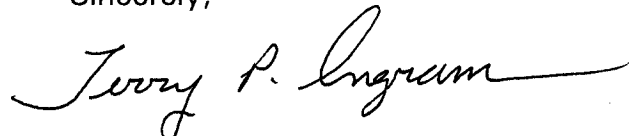
3. Since the addition of the funding from the wireless services, we have seen a substantial increase in 911 funds as reported in the audit. However, it should also be noted that in the three year period of 1996 to 1999, we have seen a 184% increase in wireless 911 calls, a result of all the additional cellular phones. This is very dramatic because of the difficulty in handling these calls. We have to screen many more calls to make sure we derive the specific location of the emergencies and the most pertinent information available. We recognize that in a metropolitan area there are more cell users and, hence, more revenue. That fact alone creates problems that do not exist in rural settings. An automobile wreck in a rural community will generate fewer calls in proportion to metropolitan areas as fewer people drive by and see it. In a metropolitan area, it would generate substantially more because of the number of drivers passing by who use their wireless phone to call 911. Due to the high call volume, we struggle to use the most updated equipment which enables us to be cost effective in utilizing our personnel. In less dense areas, equipment functionality is less critical so the need to upgrade equipment as quickly is not as necessary. Since our budget is strictly operational based, we recognize the need for continuing enhancements, wireless 911 implementation as well as continued growth of the system. In order to further these changes, we have put money in fund balance to assist with those expenses. We

December 8, 1999

have also made substantial investment in our CPE "Custom Premise Equipment" in order to be certain it is fully Y2K compliant.

Having been involved in the E91 1 system since its inception in Weber County in 1987, I have had the opportunity to be involved in the growth and evolution of this life saving system. Every day in the state of Utah thousands of people utilize 911 to reach emergency services in their time of need. Our goal is to make this system dependable and cost efficient in order to meet our citizens needs. Please accept our offer to be of assistance as you continue to further analyze the 911 system.

Sincerely,

A handwritten signature in black ink that reads "Terry P. Ingram". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Terry P. Ingram
Executive Director

TPI\cw

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**UTAH POISON
CONTROL CENTER**

410 CHIPETA WAY, SUITE 230
SALT LAKE CITY, UT 84108-1274
VOICE (801) 581-7504
FAX (801) 581-4199

Director

Barbara Insley Crouch, PharmD, MSPH

Medical Director

Douglas E. Rollins, MD, PhD

Associate Medical Director

E. Martin Caravati, MD, MPH

Clinical Coordinator

Bradley D. Dahl, PharmD, CSPI

December 6, 1999

Wayne L. Welsh
Auditor General
Office of the Legislative Auditor General
130 State Capitol
PO Box 140151
Salt Lake City, UT 84114-0151

Dear Mr. Welsh:

Thank you for the opportunity to respond to the draft document of the Report to the Utah Legislature, Report Number 99-10, A Performance Audit of the 9-1-1 System in Utah. Although the primary focus of the audit was on the 9-1-1 System in Utah, this report may have a significant impact on the Utah Poison Control Center (UPCC). Two areas in the report that raise concern for me are oversight and the surcharge itself.

OVERSIGHT: On Page 13 there is a sentence that reads "Utah's current system has very little oversight over the telephone surcharge established to fund the poison control center." The UPCC has oversight on three levels: the UPCC Oversight Board, the University of Utah and the American Association of Poison Control Centers (AAPCC). First, following the passage of Senate Bill 221 that established funding for the UPCC, Dr. Mauger, Dean of the University of Utah College of Pharmacy, established a UPCC Oversight Board of Directors. The purpose of the board is to represent the interests of the public, the University of Utah and the State, and to provide fiscal oversight. The board meets on a quarterly basis and reviews the UPCC's budget, revenue and expenses in detail. Larry Dew, CPA, Assistant Vice President of the University of Utah Health Sciences, is a member of that committee. The Utah Department of Health has a representative on the Oversight Board as well. Second, as a program of the University of Utah College of Pharmacy, the UPCC is subject to the established policies and procedures of the University of Utah to ensure fiscal responsibility of its programs. Third, the AAPCC nationally recognizes the UPCC as a Certified Regional Poison Control Center. This designation indicates that the UPCC meets the highest quality standards for poison control services. Every five years the UPCC undergoes an extensive evaluation to determine if it meets these standards. In October 1999, the UPCC was granted a five-year extension of its certification following a thorough evaluation of the program.



A program of
University of Utah College of Pharmacy

and a cooperative public service of
Utah Department of Health
University of Utah Health Sciences

SURCHARGE: The UPCC presented a budget to the Utah Legislature that would provide the manpower necessary to provide a nationally accredited program to the citizens of Utah. Prior to that time, the UPCC struggled financially and did not have the infrastructure necessary to carry out its full mission, nor did it have adequate funds for staff training and outreach education. The budget established for the legislature addressed the manpower needs, but did not address the increased cost associated with developing an education program and training of dedicated staff. The UPCC is in its infancy with respect to establishing a high quality education program. A full-time health educator was not hired until September 1999. It will likely be another year before the education program is up and running at full capacity, and all of the costs associated with that program are realized. Because the UPCC did not have adequate funds to support the service prior to July 1998, staffing was at a bare minimum. No funds were available for training, nor were there enough people to cover the service if people went to training if the funds had been available. As the UPCC was accustomed to operating at a bare minimum budget, adequate funds for staff training were not placed in the \$1,200,000 budget.

The UPCC has become increasingly involved in situations that are outside the normal realm of activities for poison control centers but are important to the State of Utah. The UPCC has been an active member of the Chemical Stockpile Emergency Preparedness Plan, and it is becoming more and more involved in issues on a state level related to Weapons of Mass Destruction and the Metropolitan Medical Response System. These increased activities require extensive training of staff in areas that are not "routine" to poison center operations.

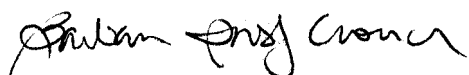
Your report draws attention to the important fact that poison control and 9-1-1 centers could work together more efficiently and effectively. I enthusiastically support this idea. However, as there are minimal transfers to the UPCC at this time and calls from health care facilities are quite low, it is likely that the increased cooperation will result in an increased call volume to the UPCC. Currently, the UPCC is close to the maximum number of calls per staff that can safely be handled. This cooperation, while welcome, will likely result in the need for additional staff and a subsequent budget impact. In addition, the salaries for the UPCC's specialists in poison information are below that of their peers. The University of Utah is currently evaluating the salaries of this group and will likely recommend a salary adjustment. Finally, the UPCC currently does not have the capability to transfer a caller to a PSAP with ANI and ALI. It is unknown what the cost for this equipment would be.

Your report also mentions public education. The UPCC is very pleased to now have a very talented full-time health educator on staff. I support the idea that education is needed on a local level regarding use of 9-1-1 services. The UPCC is willing and able to assist in this. However, as this may result in increased travel costs, personnel time and resources, this will have a budget impact.

Finally, as you are aware, the UPCC had significant difficulty in establishing a pattern of revenue transfer during the first year the surcharge was made available to us. The second payment received from the Tax Commission was received in May 1999 and covered the period from November 1998 through February 1999. My calculations of the amount collected by the Tax Commission during the first year (July 1998 through June 1999) of the surcharge were \$1,111,465. However, only \$905,087 was actually disbursed to the UPCC during that period. Disbursements now occur on a monthly basis but they are very inconsistent. For example, in October 1999 a transfer was made in the amount of \$114,111, whereas the November transfer was \$31,403. My calculations to date for 1999 are just under \$941,895 with one month left. The UPCC's expenses for FY99 were \$1,077,313--less than the \$1,200,000 budgeted. There are two reasons for the low expenditure. First, as the program was in a building stage, not all personnel was hired July 1, 1999. In fact, a full-time health educator was not brought on board until September 1999. Secondly, as the money flowed to the University in a slow and sporadic fashion, significant cost cutting measures were employed because we anticipated the revenue would fall short of the \$1,200,000. At this point in time, I think it is premature to estimate a budget surplus based on the numbers that I have and based on the budget items I have outlined above.

Again, overall I was pleased with the document and excited about the potential opportunities for increased collaboration. However, I do have significant reservations regarding your statement about oversight and the surcharge revenue. Please take the above comments into consideration in writing your final report. I would welcome the opportunity to discuss this with you further. Please do not hesitate to call if you have any questions or concerns about my comments.

Sincerely,



Barbara Insley Crouch, PharmD, MSPH
Director

cc: D. Rollins, MD, PhD, Medical Director
J. Mauger, PhD, Dean, College of Pharmacy
L. Dew, CPA, Assistant Vice President, Health Science Center
K. Wirthlin, Assistant to the Vice President for Health Sciences
M. Caravati, MD, MPH, Associate Medical Director



State of Utah

DEPARTMENT OF PUBLIC SAFETY

Michael O. Leavitt
Governor
Craig L. Dearden
Commissioner
Ferris E. Groll
Deputy Commissioner

Box 141775
Salt Lake City, Utah 84114-1775
(801) 965-4461

December 10, 1999

Wayne L. Welsh
Auditor General
Office of the Legislative Auditor General
412 State Capitol
Salt Lake City, UT 84114

Dear Mr. Welsh:

Thank you for the opportunity to review and respond to your recently completed audit of Utah's 9-1-1 system. I agree with the conclusions and recommendations of your staff who objectively looked into the weaknesses of the current system. The 9-1-1 system can certainly be improved but it is not broken, thanks largely to the dedicated individuals who have devoted themselves to making this system work.

The passage of federal 9-1-1 legislation which was signed by President Clinton this year validates the timeliness of this report. Kudos to the auditors for presenting their findings factually, absent criticism. Their recommendations make sense and can be implemented by collecting and utilizing lost revenues mentioned in the audit report.

An office providing statewide oversight and technical assistance is needed to ensure standards for equipment upgrades and training of personnel are equal for both rural and urban communities. The popularity of television shows such as "Emergency 9-1-1" have elevated the public's expectations and perceptions of how emergency calls are handled. Citizens want a trained professional to calm them down and talk them through lifesaving procedures, whether they are at home in the big city or vacationing in the hinterland.

It is prudent to recognize that rapidly expanding technologies in the telecommunications industry demand technical expertise to interface increasingly complicated communications systems. I agree that this can be accomplished through the creation of an agency charged with the responsibilities identified in this audit.

Sincerely,

A handwritten signature in cursive script that reads "Carol J. Groustra".

Carol J. Groustra
Communications Bureau Chief