

October 14, 1998
ILR 98-D

President R. Lane Beattie
Speaker Melvin R. Brown
Audit Subcommittee Members
State Capitol Bldg.
Salt Lake City, UT 84114

Subject: Staffing Levels in the State Operated Communications Centers

Audit Subcommittee Members:

We investigated concerns that the Salt Lake Communications Center (SLCC), a dispatch center operated by the Communications Bureau in the Department of Public Safety, is overstaffed and that they received four additional dispatchers in 1996 when other dispatch centers had greater needs. Although a complete staffing analysis of the SLCC was beyond the scope of our review, we did compare the staffing with other state operated centers. We found that staffing in the state operated dispatch centers does not appear equitable. The staffing inequity may become even larger because, according to the most recent five-year plan, the SLCC is scheduled to receive four more dispatchers before the other centers receive any new staff. We also found some funding policies and practices that may have contributed to the staffing inequities, and we provide alternatives that might help ease the staffing inequities. The state operated centers are only a small portion of the statewide 9-1-1 system. We believe there may be justification for a complete review of the entire 9-1-1 system to ensure that the system is operated efficiently and effectively.

We addressed the staffing concerns of the SLCC by reviewing available data from 1991 to 1997 and interviewing the center manager and the Communications Bureau chief. Additionally, we made several visits to the SLCC and visits to other state operated centers. Our work also included interviews with managers of other dispatch centers that the state does not operate.

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The Communications Bureau oversees the operation of six communications centers in Salt Lake, Ogden, Vernal, Cedar City, Price and Richfield. Five of these six centers are consolidated emergency public safety answering points (PSAPs) which means they answer all emergency calls and provide assistance for fire, injuries, crimes, road accidents and other public safety incidents for an entire region. The SLCC, the sixth center, dispatches for state agencies only. All six centers operate 24 hours a day, 7 days a week. All employees in these centers are civilian state employees. Figure I lists the six centers and the users for whom they dispatch.

**Figure I
 State Operated Centers
 and Agencies Provided Service**

Center	Salt Lake Communications Center (SLCC)	Weber Consolidated Primary PSAP	Uintah Basin Consolidated Primary PSAP	Cedar Consolidated Primary PSAP	Price Consolidated Primary PSAP	Sevier Consolidated Primary PSAP
State Agencies Provided dispatch service	Public Safety (DPS) Utah Highway Patrol (UHP) Transportation (UDOT) Correctional facilities Adult Probation & Parole (AP&P) Natural Resources Motor Vehicle	DPS/UHP UDOT Correctional facilities AP&P State Parks Wildlife Resources Weber State University	DPS/UHP UDOT Correctional facilities AP&P State Parks Wildlife Resources State Lands & Forestry	DPS/UHP UDOT AP&P Correctional Facilities State Parks Wildlife Resources Southern Utah University State Lands & Forestry	DPS/UHP UDOT AP&P Natural Resources College of Eastern Utah	DPS/UHP UDOT Correctional facilities AP&P Natural Resources Human Services Administrative Services
Federal Agencies and Others provided dispatch service	BLM U.S. Forest Service	BLM U.S. Forest Service Ace Ambulance Service	Ute Indian Tribe BLM U.S. Forest Service Gold Cross Ambulance Service FBI Bureau Interior/Parks	BLM U.S. Forest Service National Park Service	BLM U.S. Forest Service Ace Ambulance Service Security Alarm Company	BLM U.S. Forest Service Human Services
Cities, Counties provided fire and/or police dispatch service		Weber County Morgan County Harrisville Huntsville North Ogden Plain City Pleasant View Riverdale South Ogden Town of Uintah WashingtonTerrace	Daggett County Duchesne County Uintah County Vernal Roosevelt Naples Fruitland Jensen Lapoint Tridell Myton Naples Neola Tabiona	Iron County Parowan Washington County Sheriff Enterprise Cedar City Brian Head Paragonah Beryl New Castle Kanarraville New Harmony	Carbon County East Carbon Helper Price Scofield Sunnyside Wellington	Wayne County Garfield County Sanpete County Kane County Piute County Sevier County Antimony Aurora Bicknell Circleville Greenwich Hanksville Junction Koosharem Loa Lyman Marysvale Monroe Richfield Salina Sevier Sigurd Teasdale Torrey Caineville

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Dispatchers in all centers receive calls and dispatch for state agencies as necessary. Their main state user is the Utah Highway Patrol (UHP). Dispatchers receive calls and dispatch UHP troopers to accidents. They also monitor and help troopers in the field by providing driver's license and registration checks. The second largest state user is the Department of Corrections. Dispatchers monitor prison transportation officers when they transport inmates and probation officers when they do home checks on probationers. Additionally, they provide dispatching as needed for the Department of Transportation, the Department of Natural Resources and various federal agencies. Finally, three of the centers answer *-1-1, a cellular service provided for non-emergency calls.

In addition to dispatching for state agencies, the five Primary PSAPs process all emergency 9-1-1 calls in their region. Citizens can dial 9-1-1 when life and property are in immediate danger, when they see smoke or a fire, when a crime is being committed, and when they need rescue or emergency medical assistance. All 9-1-1 calls are connected to a PSAP. Once the PSAP receives an emergency call, a dispatcher determines what emergency action is needed and notifies the appropriate response agencies such as police, fire crews, medical teams, and ambulances. Besides 9-1-1 calls, dispatchers process other emergency calls made by people dialing the seven-digit number of their local law enforcement or fire agencies. In dealing with emergencies, dispatchers must process calls quickly and accurately and are usually required to do several tasks simultaneously under pressure. In some centers, dispatchers also provide emergency medical instructions to callers before the arrival of medically trained personnel.

Each center has an Advisory Board made up of representatives of their users. Funding for the centers is provided by the state and by contract with counties. Counties receive 9-1-1 fees that are levied on all telephone users. These fees are collected by telephone companies and remitted to the counties, not to the PSAPs that provide the service.

Before 1989, all six centers were strictly state dispatch centers, primarily dispatching for the Utah Highway Patrol. When the 9-1-1 system was set up, some state centers became PSAPs, taking on the additional responsibilities for processing 9-1-1 emergency calls in their region. Because of the major increase in responsibility, the abilities and skills necessary to do the dispatch job expanded. Dispatchers must now go through rigorous training and certification in medical, fire and emergency operations and annual training and re-certification to maintain their positions. The SLCC remained strictly a state dispatch center because Valley Emergency Communications Center (VECC), a special service district, was already operating as the PSAP for Salt Lake County.

In this report we will review the staffing levels at the SLCC and other state operated centers. We also describe the funding policies and practices that may have contributed to the staffing inequities that we found in the centers. In the final section we provide a brief review showing the need for further study of the statewide 9-1-1 system.

Staffing Does Not Appear Equitable

Staffing levels among the six state operated dispatch centers do not appear to be based on any measurable indicator. When the best available workload indicator is used, staffing does not appear equitable. Other factors suggest that the SLCC may be overstaffed, and the Communications Bureau should evaluate the operation of the center in greater detail. Dispatch centers need to have an appropriate number of dispatchers to ensure prompt processing of emergency calls. Dispatchers help in saving lives, protecting property, stopping crimes and preventing major fire loss when they respond to 9-1-1 and other calls for service promptly. Finite resources need to be allocated based on appropriate workload measures. Figure II shows the current number of employees in each center.

Figure II				
Comparison of Staffing Levels				
1998				
Center	Dispatchers	Supervisors	Manager	Total Staff
SLCC	17	4	1	22
Weber	16	3	1	20
Price	8	2	1	11
Cedar City	7	2	1	10
Uintah Basin	8	1	1	10
Sevier	7	1	1	9

All center managers expressed concern that they were understaffed and needed additional dispatchers. Managers in Weber, Price, Cedar City, Uintah Basin and Sevier said they needed one or two more dispatchers, mainly to help in those periods when only one dispatcher is working. The manager in the SLCC said they were drastically understaffed and needed, at the very least, three new dispatchers.

Center managers in Price, Cedar City, Uintah Basin and Sevier expressed concern that they have periods when only one person is working in the communications center. These centers find it difficult to have two dispatchers always working when they are trying to cover a 24

hour, 7 day-a-week operation with a small staff. During the times that a single person is working, there is a risk that more than a single emergency may be presented within an overlapping period. These centers have documented several examples when only one dispatcher was working and medical calls, combined with serious traffic accidents with injuries, required dispatch and coordination of fire, police and medical units. A recent study by a professional public safety consulting company concluded that a dispatch center environment should always have a minimum of two persons working. The report also stated that agencies have a predictable level of potential liability for incorrectly or inadequately handling a call for service or radio messages when only one dispatcher is working. We did not verify how often one person worked alone in the PSAPs.

Some PSAPs report that their centers are neglecting their quality assurance reviews because the supervisors are spending 80% or more of their time dispatching instead of monitoring and supervising. An ongoing quality assurance review ensures that PSAP employees comply with the center's standard operating procedures and help meet its standards of service. A quality assurance program, ensuring the correct functioning of a PSAP, is especially important because citizens' health, safety, and well being may depend on it. To neglect quality assurance reviews could create serious problems. Centers need enough dispatchers to handle the daily work so that supervisors can supervise and complete quality assurance reviews.

Staffing is Not Based on Measurable Indicators

Staffing levels do not appear to be based on any measurable indicator. Although the centers maintain monthly statistics on population, number of agencies dispatched, number of officers dispatched, incidents and transactions handled, it does not appear that staffing is based on these indicators. Figure III compares the statistics maintained by the centers on a per total staff basis. We chose to use total staff because the centers have a different mix of supervisors and dispatchers, and some supervisors regularly dispatch.

Figure III
Comparison of Workload Factors
1997

Dispatch Center	Total Staff	Population Per Staff	Officers Per Staff	Agencies Per Staff	Incidents Per Staff	Transactions per Staff
Salt Lake	22	50,961	152	0.3	6,384	28,281
Weber	20	12,792	53	2.0	6,111	30,814
Price	11	4,763	54	3.0	10,035	54,531
Cedar	10	12,278	36	3.0	10,132	62,143
Uintah Basin	10	4,189	39	4.0	8,970	59,346
Sevier	9	5,768	86	5.0	7,078	42,125

There is no clear indication that staffing is based on any of these workload factors. The following is our analysis of the workload factors maintained by the centers:

1. **Population** - Population is a useful workload indicator in some situations. However, it is not helpful in comparing the staffing level of the six centers because SLCC does not have sole responsibility for all dispatch in their area while other centers have complete responsibility. The SLCC is not a primary PSAP and does not receive any emergency calls directly. Instead, VECC and Salt Lake City Police Dispatch process all emergency calls and transfer only those calls to the SLCC that require a response from the Highway Patrol. To a lesser degree, population is not a useful workload indicator for the Weber center because Ogden City and Roy City have their own police and fire dispatch centers.

2. **Number of Officers** - Although the number of officers could be a useful workload indicator, the current method used to count officers is questionable. For example, in 1997, the SLCC reported that they dispatched for a total of 3,347 officers. They reported that 2,122 (63%) were correctional officers and 686 (20%) were Utah Highway Patrol/DPS Agencies. Our review of personnel records show that these numbers include all Department of Corrections and Department of Public Safety employees. Since most employees do not use dispatch, we believe the current method of counting officers serves no useful purpose.

3. **Number of Agencies** - The number of agencies that use a dispatch center can affect the workload. SLCC dispatches for state agencies while the PSAPs process calls for various cities and counties and coordinates many law enforcement agencies, fire departments, and medical personnel. The number of these agencies and the response units they operate varies for each PSAP.
4. **Incidents** - The centers define incidents as anything that changes an officer's location. The computer dispatch terminals in each center automatically count the incidents entered. Examples of common incidents include a medical emergency, a car accident, a fire, and a police dispatch to a home burglary. The time needed to handle an incident can range from a few seconds to answer a call from an officer stating he is going to dinner to several hours to complete a major incident. The number of incidents only quantifies the number of items. There is no qualitative measure as to the severity of the incident or amount of time needed to complete the incident. The number of incidents handled in a center appears to be the best measure of workload.
5. **Transactions** - The centers define transactions as everything (telephone calls and computer checks) required to handle an incident. The PSAPs determine the number of transactions by aggregating the number of incoming 9-1-1 calls, the number of incoming administrative calls, and the number of computer inquiries made by the dispatchers on the state computer. Separate computers automatically count each of these items. The SLCC does not count transactions because they do not receive any 9-1-1 calls and report they cannot count their incoming calls. Instead, the SLCC multiplies incidents by 4.43, which they calculate is the number of individual steps necessary to handle an incident, to arrive at the number of transactions. Since the SLCC cannot count transactions, it is not a good measure of workload.

Best Existing Workload Measure Indicates Staffing Inequities

Some centers are handling many more incidents per staff than the SLCC. In 1997, staff in Cedar City and Price handled almost 60% more incidents than staff at the SLCC. Incidents are the number of individual events processed in a center and may be the best measure of the workload in a center. Based on an analysis of incidents, it is unclear whether the SLCC is appropriately staffed and the other centers are understaffed or whether the SLCC is overstaffed.

The staffing inequity among the six centers has been in place for several years. The inequity worsened in 1996 when four new staff were placed in the SLCC. Figure IV shows the number of incidents per staff from 1991 to 1997.

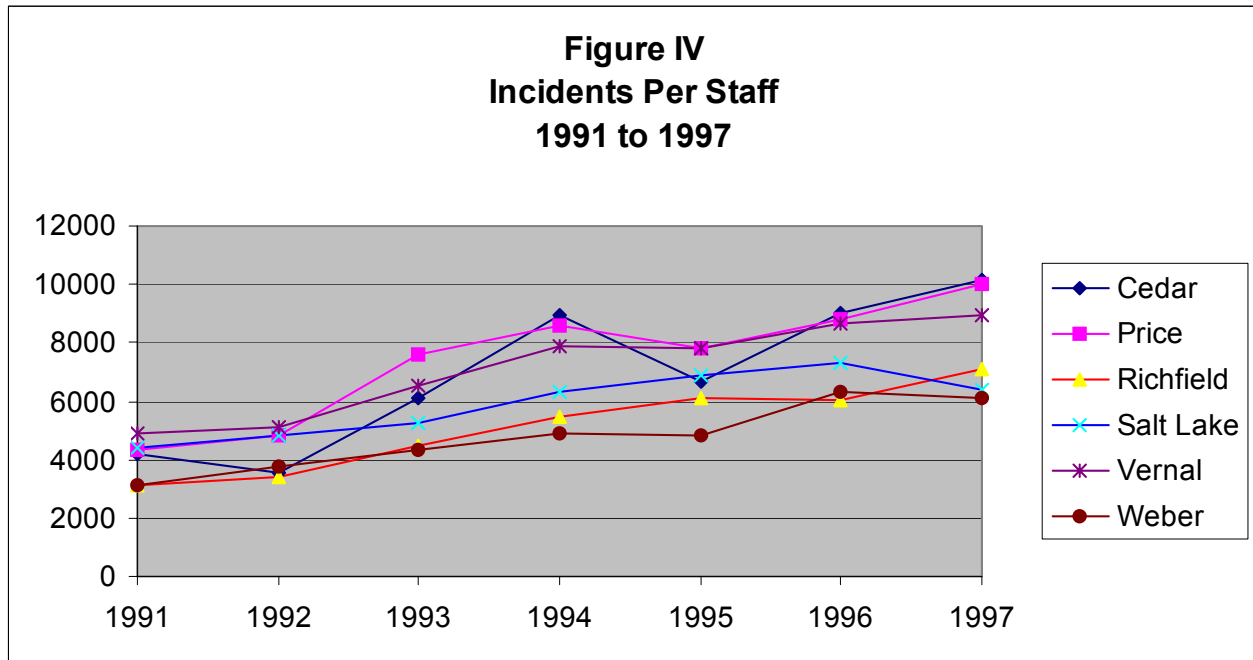


Figure IV shows that from 1991 to 1997, the number of incidents per staff has more than doubled for the consolidated PSAPs while only increasing 44% for the SLCC. However, of the 14 new FTEs placed since 1991, 30% were placed at the SLCC.

To get to the staffing level of the SLCC, Price and Cedar would each need six additional staff; Uintah Basin would need four additional staff; and, Sevier would need one additional staff.

The staffing inequity may be even bigger because a review of incident reports at SLCC showed that about 21% of all Salt Lake County UHP incidents were duplicate calls for the same accident. Most of the duplicates took less than one minute of time to complete and there was no further dispatch work to do. While we acknowledge that the dispatcher did some work on the duplicate call, it does not compare with the dispatch work necessary to coordinate the actual accident. Although we did not review incident reports at other centers, the rural centers would not have the same percentage of duplicate calls because of the lower traffic volume on those roads.

Comparisons to External Centers Should Be Done Cautiously. There is no industry-wide standard to gauge the number of incidents each staff should handle. Comparing incidents handled per staff with other centers not operated by the state is very difficult because other centers record their calls differently. Some track all calls; others do not track all calls, but instead track only those for which they file an initial report. Other centers record only those calls for which they dispatch a field unit.

Other centers define and count incidents differently than the state operated centers. VECC defines incidents as calls dispatched out of their center. VECC does not include calls from officers stating they are going to court appearances, traffic stops, lunch, or training as incidents. While VECC answers status report calls from officers, they do not count these calls as incidents. VECC does not count officer initiated dispatch work as incidents though they do the work that the officer requests. The Salt Lake City Police Dispatch tracks Calls for Service (CFS) defined as those items where they dispatch an officer out into the field. Officer initiated work, such as traffic stops, motorist assists, and accidents are not counted as a CFS. The Salt Lake County Sheriff Dispatch center defines incidents as anything dispatched out of their center or assigned a case number. They do not count officer initiated calls.

Since centers outside the state system record their calls differently, using those centers to make comparisons to state operated centers is difficult. The most useful comparison is among the state operated centers because their mission, roles, users, and equipment are similar.

Other Performance Measures Should Be Maintained. Other measures are available to help in determining the appropriate staffing levels of each center. Some measures also provide quantifiable information on the center's impact, efficiency and effectiveness. The following performance measures are based on recommendations of professional public safety industry groups found in a recent Minnesota Legislative Auditor report.

- Number of emergency calls (9-1-1 and other) received and processed annually.
- Number of non emergency calls (9-1-1 and other) received and processed annually.
- Number of calls requiring the dispatching of public safety or other response units.
- Service Response Times
- Number of Unanswered or Lost Calls
- Number of Abandoned calls
- Number of Calls Not Requiring Emergency Services
- Total calls per staff compared to other centers
- Emergency calls per staff compared to other centers
- Calls per staff compared to other centers
- Cost per 9-1-1 calls compared to other centers
- Cost per other calls (non 9-1-1) compared to other centers
- Cost per all calls compared to other centers

- Cost per capita compared to other centers
- Total Cost Per Call
- Total Cost per Emergency Call
- Number of 9-1-1 Equipment Malfunctions
- Percentage of Callers Satisfied with 9-1-1 Service
- Average Amount of Time Per Call

The PSAPs maintain the first two performance measures. The SLCC did not maintain any of these performance measures. In contrast, VECC and the Salt Lake City Police dispatch center maintained many of these performance measures. We believe gathering and using this type of information will allow the dispatch centers and the Communications Bureau to make strategic, better informed decisions about their operations.

Other Factors Indicate That the SLCC Staffing Level Is Questionable

Besides lower incidents per staff, there may be other indicators that the staffing level at the SLCC is questionable. First, the center is using dispatch resources to do some work that is inappropriate for a dispatch center. Second, the efficiency of the center should be increasing because of various equipment upgrades. Third, VECC contends that the SLCC is not operating efficiently and proposed taking over the center at a major savings to the state. Finally, our personal observations showed that the center may not be as busy as the other centers we visited. The bureau chief should review the SLCC operation in more detail to ensure that they are operating as efficiently and effectively as possible.

Some of SLCCs Work May Be Inappropriate for a Dispatch Center. Five to 10 percent of all incidents at the SLCC are for providing case management numbers to the Department of Corrections for inmate recordkeeping. Giving a case number is an administrative function and not a dispatching function. We question the appropriateness of calling very highly trained, highly specialized dispatchers to obtain case management numbers. We also question using sophisticated dispatch computers to track inmate information. Dispatchers should be focused on immediate dispatch work not providing routine file numbers. The telephone lines should also be free to ensure that critical calls can get through. We question why the SLCC is doing this work and why the work is not done on a personal computer in the Department of Corrections. No other centers we reviewed do this type of work.

Efficiency Should be Increasing Because of Equipment Upgrades. Recently, the SLCC was remodeled and new equipment was installed that should have increased the efficiency of the center. Also, the Highway Patrol is equipping trooper cars with Mobile Data Computer Terminals (MDCT) which allows officers in the field to search electronic databases and retrieve relevant information such as drivers' license information, warrants, and criminal histories instead of contacting the dispatch center. The bureau chief anticipates that incidents

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in the SLCC will decrease 15% to 30% because of these equipment upgrades. In 1997, the Weber dispatch center saw a decrease in their workload when MDCTs were installed in troopers' cars. Highway Patrol cars in Cedar, Price, Uintah Basin and Sevier are not scheduled to get MDCTs. Consequently, those troopers will continue to rely on the dispatch center for this information.

Another Dispatch Center Proposed Taking over SLCC for a Substantial Savings. In 1997, VECC proposed taking over the SLCC and saving the state \$200,000. The proposal came at the request of the Department of Public Safety commissioner. VECC reached their conclusions by reviewing SLCC records and having in-depth discussions with former employees. The proposal listed the following advantages of combining the SLCC and VECC:

- Improved Communications between troopers and fire/medical responding units
- Improved response times on freeway incidents
- Improved communications between troopers and municipal police units during pursuits
- Cost savings for combined services
- Faster broadcasts of information on inter-agency attempt to locate
- Improved communications during major incidents.

SLCC Did Not Appear as Busy as Other Centers. We made several unannounced visits to the SLCC and found several dispatchers, a supervisor and a manager working, but the telephones appeared relatively quiet. In contrast, we made one unannounced visit to three other centers and found only one or two dispatchers very busy answering calls and dispatching officers. Each time we visited the SLCC, the manager told us we should come back on a snowy day to see how busy his center can get. Center staffing, however, should not be based on peak usage days. Instead, staffing should be based on a normal workload, and then when they need additional resources, such as on snow days, they can call additional staff out using over time and flexible schedules.

In the next section we identify the contributing factors that have led to the staffing inequities discussed. In addition, we provide some alternatives to correct the problems.

Cost Allocation Should Be Based on Workload

In this section, we identify the funding policies and practices that may have contributed to the staffing inequities as described in the previous section of this report. There may be two main contributing factors for the inequity in the staffing. First, the state provides full funding for the SLCC while the consolidated PSAPs need funding from both the state and the local government. Getting additional funds from one source is easier than from several. Second, there is no formal cost allocation method to allocate costs between the state and counties to support the consolidated PSAPs. Instead, individual counties have negotiated fixed contracts with the Department of Public Safety (DPS) to provide dispatch services for their areas; but, these contracts are based on agreements or historical numbers, not on the workload. Dispatch centers, not operated by the state, allocate costs among users based upon the work completed for each user.

Consolidated Centers Need Both Local and State Support

One cause for the inequity in the staffing is that the SLCC gets full funding from the state, while consolidated PSAPs need support from both local and state government. Getting additional funds from one source is easier than from several. For example, in 1996 the SLCC got four additional dispatchers to monitor the service radio channel requested by the Utah Highway Patrol. The UHP asked that a service radio channel be set up to process requests, leaving the main UHP radio channel for priority traffic. SLCC was willing to set up a new radio channel if they received four additional dispatchers to monitor the new channel. Since the UHP wanted the service channel, they supported the SLCC's request for four dispatchers. DPS supported the request, and the Legislature funded four new positions.

In contrast, when the PSAPs request additional dispatchers, they must have local support before DPS will even consider the request. According to the bureau chief, the state believes the counties and cities receiving the service should pay their share for additional dispatchers' salaries and benefits. The system currently requires that the bureau chief and local manager secure commitment from the local user advisory board to support a request for additional dispatch personnel; then, they must gain support from each local political entity at city council or county commission meetings. The bureau chief then uses the local support and commitments to try to get a priority within the DPS budget request that is presented to the legislature at the next legislative session.

The current system for PSAPs to get additional staff has proven to be time consuming and extremely slow. The managers have to work two or three years toward approval for any new FTEs. The center managers feel that it is extremely frustrating to compete with each other and the SLCC for resources.

Contracts Are Not Based on Workload

The second cause for inequity is that the DPS has set up contracts in each region based on a fixed amount and not on the workload of each user. Consequently, as workload increases and additional resources are needed there is no way to get additional resources. Figure V shows the current state and local funding of each center.

Figure V					
State and Local Funding by Center					
1997					
Center	State Funding	State Percent	Local Funding	Local Percent	Total
SLCC	\$ 806,000	100%	\$ 0	0%	\$ 806,000
Sevier	302,000	92	28,000	8	330,000
Cedar City	265,720	73	98,280	27	364,000
Price	262,000	67	130,000	33	392,000
Weber	336,528	48	364,572	52	701,100
Uintah Basin	109,350	27	295,650	73	405,000
TOTAL	\$2,081,598		\$916,502		\$2,998,100

DPS, in behalf of the PSAPs, has negotiated five-year contracts with the county in each area and DPS is paid a fixed amount based on agreements or historical figures, not on workload. For example, in 1995 the DPS and Sevier County entered into a five-year contract where the county will pay \$28,000 per year for dispatch services. It is not clear how they agreed to this amount, but it seems inadequate to support dispatching services for 19 agencies including several sheriffs departments, police departments, fire departments, and other county agencies operating on public safety licensed frequencies. We have been told that the contract is not based on the workload but on a lower amount because of political pressure at the time of the negotiation. In the two years since the consolidation, the workload of the center has increased more than 67%. Neither the state nor the county is willing to pay for additional dispatchers, leaving the center with serious staffing problems.

In another example, Carbon County has a contract for dispatch services and pays \$130,000 per year, 33% of the total budget for the Price dispatch center. However, in 1997 about 55% of all incidents recorded by the dispatch center were attributable to the County Sheriff, the various city police and fire departments, and animal control. Carbon County's original contract was negotiated in 1989 for \$100,000; that figure was what the county paid for their own dispatch office. The contract was increased by \$30,000 in 1995 when the state and county each paid for one new dispatcher. The Carbon dispatch manager believes the center is understaffed and cannot get support from the county or from the state. The Carbon County dispatch center manager was not involved in the original contract negotiations in 1989 and did not know how this agreement was reached. In our opinion, contracts should be based on workload.

We believe dispatch centers should also allocate costs to state agencies based on the workload. For example, each year the SLCC reports they spend \$150,000 to provide dispatch services to the Department of Corrections (DOC) but the DOC only pays \$24,000 in the form of free office space. The SLCC should review the services they provide to ensure that they are providing the services for which the DOC will compensate them.

Other Centers Allocate Costs Based on Workload

Various approaches can be used to allocate costs to users. We found two approaches by other PSAPs in Utah. The first approach is to bill users on a cost per incident basis. VECC calculates the cost to operate their dispatch center and then allocates the cost based on the workload of each user. In 1997, VECC charged users \$5.79 for each police incident dispatched out and \$15.07 for each fire incident dispatched out. VECC only charges users for what they dispatch out of their center; they do not bill for officer-initiated incidents. Billing each entity served according to the cost per incident allows VECC to show the amount they require each user to pay to keep the center running. VECC's Executive Director told us that this method works well and allows the cities a clear cost breakdown that enables the cities to see precisely where their dollars are going.

Another approach to allocating the cost of a consolidated PSAP is to charge for the number of officers regularly dispatched. For example, the Tooele County Sheriff is a primary PSAP and dispatches for all law enforcement, fire and emergency medical personnel in their region. They charge each user based on the number of officers they dispatch. In 1997, the center charged \$3,200 for each officer. The sheriff told us that the participating agencies like this method because it helps agencies in budgeting. This agency charged the DPS more than \$55,000 for dispatch services for 19 UHP troopers and Wildlife Resource employees. The Summit County Sheriff uses the number of personnel regularly dispatched out of their center

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as an initial figure for compensation for a five-year contract. They use a 3 percent annual inflation factor to set the compensation in the remaining four years.

The need to allocate costs to users is very important in a consolidated environment where one group provides services to others. By renegotiating the county contracts based on the workload, the PSAPs can probably get additional funding and can hire the additional dispatchers they claim they need.

Issues for Further Study

Additional audit work could be done on the state operated dispatch centers. Our limited review only looked at staffing issues in the state-operated communications centers. However, if the DPS implements the recommendations in this report, it may not be necessary to do additional audit work on the state operated centers.

Further audit work could also be done of the entire 9-1-1 system to ensure that the whole system is operated efficiently and effectively. We did not review the operation of the 28 PSAPs operated by local government entities. Other states have audited their statewide 9-1-1 systems and have found room for improvement. The 9-1-1 system has been operating for approximately 10 years, yet we do not believe a comprehensive study has been done of the system. We have some concerns because, although there is a national trend to consolidate centers, the number of PSAPs in Utah is expanding as some cities and counties start their own PSAPs. Consolidation helps eliminate duplicate costs for emergency communications equipment, maintenance and personnel. Since all telephone users bear the cost of the 9-1-1 system (there is a monthly levy on each basic telephone line), it is critical that the system is operated efficiently and effectively.

Other states found opportunities to improve statewide 9-1-1 service. Both the Minnesota Legislative Auditor and the Wisconsin Legislative Audit Bureau conducted a "Best Practices Reviews" of 9-1-1 services in 1997 and 1998 and found opportunities for improvement. In July, 1998, the Texas State Auditor conducted a financial audit of 9-1-1 revenues and concluded that the statewide 9-1-1 organizational structure was inefficient. The audit found overlapping 9-1-1 service responsibilities resulted in duplicative administrative costs and 31 percent of 9-1-1 revenues could be saved annually. Further, the review found improvements were needed for contract administration, financial reporting, fixed asset controls, performance management, and oversight policies.

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Recommendations:

1. We recommend that the Bureau of Communications develop meaningful performance measures and base staffing decisions on appropriate workload measures.
2. We recommend that the Bureau of Communications complete a comprehensive study of the SLCC operation and implement corrective action as needed.
3. We recommend that the Bureau of Communications investigate the feasibility of renegotiating existing contracts and negotiate all future contracts to ensure that costs are allocated based on the workload.
4. We recommend that the Legislative Audit Committee consider whether further audit work is warranted on the state operated centers and whether an expanded audit should be commenced of the statewide 9-1-1 system.

We hope this letter addresses the concerns raised. A response letter from the Department of Public Safety is attached. If you need any further information, please feel free to contact our office at 538-1033.

Sincerely,

Wayne L. Welsh
Auditor General

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